Data Management Status Report

January 2023 to December 2023

Contents

Foreword

Maintaining and providing accurate data to the non-household retail market is essential for efficient market operations, positive customer experiences and reduced frictions for market participants. Poor data quality is an industry-wide concern and there is considerable focus from both Ofwat and MOSL on the need to improve data quality across the market.[1]

In that context we are continuing to publish this annual report providing an overview of our progress in this important area. Our aims are to reduce friction in the market and improve the quality of our services for customers and retailers. We hope the updated report will continue to provide a focal point and catalyst for conversations with customers and stakeholders to further drive improvements.

Our first Data Management Status Report was published in December 2021. This is our 2nd annual update following that original publication. Over the past 12 months, we have made significant improvements. These include achieving upper quartile performance in one more MOSL data quality metric, and improvement to our data quality scores in RMEX.

There are three key themes running through this report:

- **We said, we did** – We have delivered on the improvements we committed to last year.
- **We have improved** - Our focus on data quality has been reflected in MOSL metrics and improved market rankings for the targeted data items (VOA).
- **We still have more to do** – We continue to have challenges, in common with the rest of the market. Whilst we continue to deliver on the specific targets, we are focussed on working with MOSL on market wide approaches. These include: the Central Data Assurance service and first-time registration. We support these initiatives and the opportunities they may provide to drive enduring data quality improvements across the whole market.

We will continue to seek feedback from our customers, retailers and MOSL about how we can improve data quality through our operational channels, ongoing engagement and industry discussions.

We look forward to continuing to work with all market participants to drive improvements in customer and operational data to support the healthy functioning of the non-household (NHH) market.

Julian Tranter
Head of Wholesale Market Services

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[1] The poor quality of data has been highlighted as being one of the main sources of market friction by both Ofwat and MOSL. Ofwat (August 2020), State of the market 2019-20: Review of the third year of the business retail water market - Ofwat

Introduction

This report is the third in a series of annual reports[2] which provide an overview of our approach to non-household (NHH) data health, our current performance, and our plans to improve data quality performance.

This report is broken down into 4 sections:

- Section 1 discusses recent improvements made to strengthen our Data Management Framework and to improve performance on specific data issues.

- Section 2 summarises and comments on our current performance to the end of 2023. This section looks at data from a range of sources including MOSL's Data Quality Dashboard, Market Performance Standard (MPS) SLAs, the data quality component of the Retailer Measure of Experience (R-MeX) survey, complaints and escalations and our internal measures.

- Section 3 sets out our planned 2024 improvements to our Data Management Framework and specific data issues.

- Section 4 provides concluding remarks and contact details for any reader who wishes to engage around data issues.

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[2] Our 2022 DMSR report is published on our website at https://www.thameswater.co.uk/media-library/home/wholesale/document-library/data-management-status-reports/data-management-status-report-2022.pdf

1. Overview of recent improvements

To drive continuous improvement in our management of data and data quality, we have adopted a Data Management Framework, which has fully been described in our 2022 report and is not repeated here.[3].

This section provides an overview of a range of recent performance improvements which we have implemented during 2023.

- In Section 2.1 we summarise changes which have strengthened our grip on overall data management performance.
- In Section 2.2 we summarise changes made to specific data items.

1.1. Recent improvements to our overall data management approach

Details of the initiatives and their benefits are articulated in table 1 below:

Table 1 – Completed Improvement Initiatives

	Key				
1) Leadership & Governance	2) Operating Model	3) Culture and Capability	4) Processes & Controls	5) Insight	6) Technology & Systems

Initiative	Description	Reason for focus	Framework Pillar
Legacy Interface System Replacement.	In 2023, two legacy systems which interface between our core operational systems and CMOS have been replaced using additional modules in our core SAP system. This interface is responsible for converting our core system updates to transactions in agreed formats; and sending/receiving market updates.	Integrating this functionality within SAP removed several layers of technical architecture and has greatly simplified and standardised the processes involved in synchronising data between our internal core systems and the market. Additionally, this change has enhanced our capability for bulk updates including the submission of W Reads (smart meter reads) where previous systems only allowed to release transactions in batches of 500 at a time.	
Smart Meter Reads (W Reads) data sharing improvements.	In 2023, we've increased the number of monthly W reads submitted to the market by 26% compared to the previous year. With more smart active meters in our network than ever before, this number will continue to rise.	This improves the accuracy of billing, and helps to understand the end users usage, allowing for constructive conversations around water efficiency.	

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[3] Microsoft Word - Data management status report - 2022.docx (thameswater.co.uk)

Initiative	Description	Reason for focus	Framework Pillar
Data Digital Service (Smart meter granular data sharing)	The digital data service grew by 316% during 2023, this was helped by the introduction of bulk tariffs that have been utilised by retailers and third parties alike.	Allowing access to the granular data collected by our smart meters into our network has allowed for billing continuity and accuracy, and better informed conversations around the usage of the end user.	
Support and engage with MOSL's Data Assurance Service initiatives (Previously known as Central Data Cleanse)	In support of MOSL's aspiration to develop a centralised data assurance and enrichment service, we led the Wholesaler input to the Project TIDE[4] proof of concept (POC) during 2022. In 2023 we nominated our Data Integrity Manager to the Data Assurance Service Working Group. We participated in shaping the eligibility criteria by detailed analysis and feedback of sample data. This has resulted in the identification of over 13k SPIDs to be reviewed and assured. These have been split into three priority groups, with Priority 1s the most likely to be ineligible to be in the market, and Priority 3s the least likely. The aim is to review all priority 1s before the end of November 2024.	We see potential benefits from economies of scale, avoidance of duplication and access to a wider range of external datasets and agreement on common validation rules if this function is performed centrally through a centre of excellence rather than distributed across multiple individual Trading Parties.	
Support and engage with MOSL to refine data quality reporting validation rules	In 2022, We supported MOSL's drive to further refine data quality reporting, engaging in the development of the "assured" process.

The process provides a mechanism to avoid "false positives" by allowing Trading Parties to assure that their data for a particular data item has been checked and is correct when it would otherwise fail the standard MOSL data quality validation.

In 2023 we have continued supporting MOSL to refine the process and proposed two further assurance categories which were adopted by MOSL. | This improves the accuracy of both Holistic Reporting and the Data Quality Dashboard, eliminating "false positives" from the reports and thus allowing Trading Parties to focus on real issues.

For example, if a VOA reference is duplicated across multiple properties, this is flagged as a failure by the standard MOSL validation rules.

However, VOA references are not unique across different councils.

The "assured" process allows the Wholesaler to confirm they have checked and confirmed that the VOA reference used is the correct one despite its duplication and that the false positive should be excluded from the validation failures list. | |
| Continued to Improve our position on MOSL Data Dashboard | In 2023, we focused on improving our VOA references in the market as planned in our last report. Please refer to section 2.2. of the reports which details the step change we made on this specific metric. | It is essential that we focus on improving our data quality performance. Following retailers and MOSL feedback, UPRN and VOA references have been key candidates for improvement. | |

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[4] Project TIDE stands for Transformation In Data Enrichment, and more details can be found on the MOSL website at https://mosl.co.uk/news-and-events/news/mosl-begins-work-to-define-case-for-change-for-a-central-cleanse-and-enrichment-service

Initiative	Description	Reason for focus	Framework Pillar
Commitments to Ofwat	Following Ofwat's Competition Act and Water Industry Act investigations, we have continued to provide focus on our overall Data Quality and improve our Data Management Framework. In January 2023, we wrote to Ofwat with our view that we had met all the commitments[5] we made as a result of our data handling.	It is important to keep our focus on data quality and demonstrate that we have responded to Ofwat's concerns by ensuring that all the commitments we have made have been delivered to the expected high standard.	

5 Ofwat (December 2021),
https://www.ofwat.gov.uk/wp-content/uploads/2021/12/Notice_Ofwats_Decision_Financial_Penalty_Thames_Water_Utilities_Limited.pdf

1.2 Improvements to specific data issues

For the specific data issues listed below in table 2 we have:
- Successfully implemented a range of specific data resolutions along with process changes to address root causes; and
- Established rigorous monitoring for those areas which are awaiting a permanent root cause resolution fix. This allows us to track and efficiently address any subsequent data issues that arise whilst we continue to resolve the true root cause.

Table 2 – Recent Improvements to specific data issues[6]

Description	Issue Description	Actions taken to address root cause
Valuation Office Agency References (VOA)	During 2023 we achieved a step change in our VOA data quality. We increased the proportion of our properties passing MOSL's VOA validation from 61.4% (Nov-2022) to 90% (Dec-2023). This improvement helped Retailers with meter read, billing accuracy and overall customer service.	• We carried out a series of exercises to match our property address details against the Valuation Office Reference (VOA) data to fill in missing VOAs and to establish the correct one for each property to resolve duplicate VOAs and postcode mismatch issues. • We resolved VOA issues for over 66k individual premises during this project, transforming our performance against this measure and lifting our market ranking from 8th to 3rd.
RTS updates from 100% to 95%	In line with the industry efforts to simplify charging arrangements for retailers nationally, we took the decision to align our approach to sewerage tariffs with the RWG tariff standardisation recommendations[7]. Consequently, we needed to change how we calculate our 2023/2024 wastewater tariffs, and to make changes to data in CMOS for all sewerage SPIDs. The changes included an update to: • the RTS percentage in CMOS for 241k metered SPIDs. • and the Assessed Volumetric Rate (AVR) for 39k unmetered SPIDs.	• All 241k meters were updated in CMOS through the Medium Volume Interface (MVI) process. • Updates were split into 5k batches to minimise system impact. • CMOS transaction responses were suppressed upon retailer requests. • The updates were completed before the end of April, ahead of the set target. Following the project, Thames Water received positive feedback on the way the project was handled. Below are a couple of feedback we've received: *"From our perspective the communication from you guys gave us a clear indication of the timing of when the transactions were expected to be worked so we were very well informed. They were all completed in the first week of the month and they all had reference to RTS within the transaction as the same transaction is used for many data updates within CMOS. We also appreciated that Gerard checked in with us to confirm our preference in terms of supressing or not on these messages. This was well received."* (Wave)

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[6] Whilst some of this activity occurred prior to 2023, the data cleanses or root cause resolution for the items listed here all continued into 2023.
[7] https://mosl.co.uk/document/groups-and-committees/retailer-wholesaler-group/rwg-guidance-1/3294-return-to-sewer-allowances-good-practice-guide/file

Description	Issue Description	Actions taken to address root cause
		"RTS Updates was good where we picked up failures and dealt with them as it hasn't gone as smoothly with other Wholesalers. Process was seamless with Thames Water. Any advanced updates on data improvement would be really beneficial as well. RTS was a good example as this was done before billing." (Business Stream)"
Inaccurate Internal / external meter locations in CMOS.	The flag to identify if a meter is installed internally or externally was sometimes captured inaccurately. This affected approx. 17k meters which were flagged as being external rather than internal meters.	• An error was identified in an internal code conversion routine. • Code fix has been applied to prevent new mismatches being generated. • Data fixes for mismatches already in the market have been identified and updated. • The majority of the 17k corrections were made in January 2023, with a small batch corrected later in the year, ~600 identified following a further CMOS review.
MOSL Audit	Following MOSL's Audit in 2022, we continued addressing any inconsistencies found and reporting back to MOSL on our progress. Some of the updates included the meter location described above as well as minor ones, such as charge sizes showing as 12 in internal systems instead of 15.	• We resolved most of the inconsistencies identified. • Small number of issues have been added to our BAU cleanse activities.

2. Our current performance

This section contains commentary on our current performance against a range of internal and external measures including:

- Section 2.1 - MOSL Data Quality Measures
- Section 2.2 - Retailer Measure of Experience (R-MeX) data scores
- Section 2.3 - Market Performance Standards (MPS)
- Section 2.4 - Complaints and Escalations

2.1 MOSL Data Quality Measures

Graph 1 below summarises Thames' absolute performance against MOSL data quality measures as of November 2023 vs November 2022, illustrating the progress we have made during 2023.

Graph 1 – MOSL Data Quality Measures – percentage of each data item passing all validation checks.
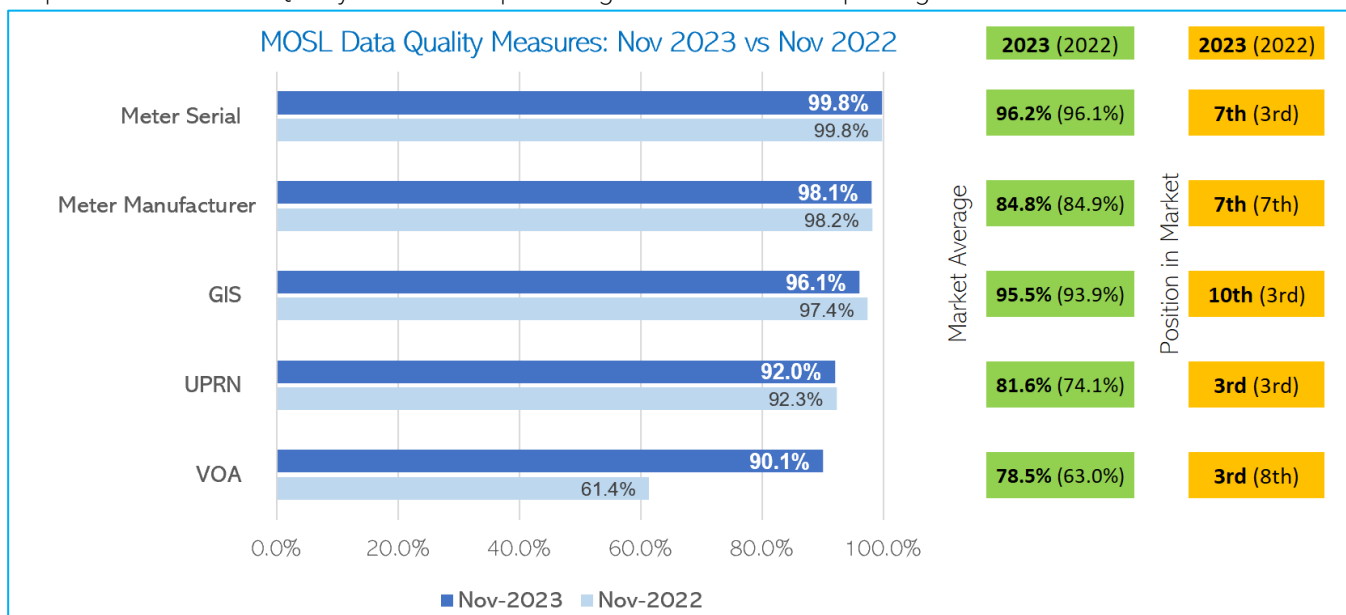
The above graph demonstrates that we have broadly maintained our existing high scores for the first 4 measures over the past year.

Our main data-improvement focus for 2023 was on VOA references. In the last report we committed to a step change in VOA data quality (improving from 61.4% passing MOSL validation at the end of 2022 to 90% by the end of 2023) and this was achieved by the end of October 2023.

We have maintained data quality scores above the market average for the first 4 measures and transformed our VOA data quality score from just below market average to well above market average, resulting in a jump in market ranking from 8th to 3rd.

Despite broadly maintaining or improving our own high data quality scores, our market rankings have slipped on a couple of data items due to a general market-wide improvement in data quality.

2.1a Meter Serial data quality

We have maintained our Meter Serial data quality score at 99.8% (unchanged from 2022) and the market average has only improved marginally (from 96.1% to 96.2%) however, our market ranking has slipped from 3rd to 7th due to other Wholesalers making improvements in this metric.

Our continued high data quality on this data item is the result of routine activity to internally measure the accuracy of our meter asset data by comparing CMOS data against data from the meter manufacturer and rectifying the data when needed[8] .
The case study below demonstrates how our performance in these measures is underpinned by internal metrics and controls.

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[8] When we purchase a meter, we are provided with a record of its physical attributes including its physical size, serial number, make and number of dials. If any of this data is not accurately recorded in our systems, we can identify the discrepancy.

Case Study 1

Our robust performance in meter serial data relies on internal metrics and controls.

Every month we assess the data quality of our meter base against an internal grading system to gauge the overall health of our meter base, displayed below in graph 2.

Graph 2 – Internal Review of Meter Asset Data Quality

Meter Asset Data Quality: December 2023
Count of meters: 182k

3.56%
2.58%
0.08%
12.68%
81.10%

■ A ■ B ■ C1 ■ C2 ■ D
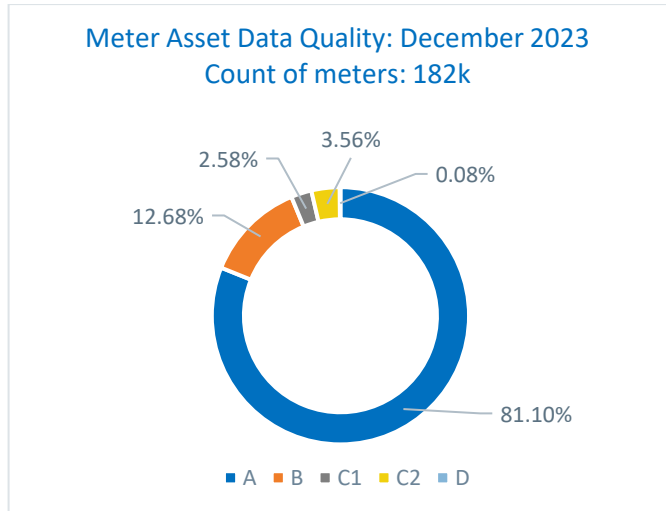
Continuous improvement in data quality

As shown in the table below we have continued to make steady progress in increasing the proportion of meters classed as Grade A (no data issues), and reducing the proportion of meters classed as Grades B-D (varying levels of data issues)

	Grade A	Grades B-D
2019 (Dec)	76.0%	24.0%
2020 (Dec)	77.5%	22.5%
2021 (Dec)	78.5%	21.5%
2022 (Oct)	79.3%	20.7%
2023 (Dec)	81.10%	18.90%

Each NHH meter in CMOS is checked and rated using the following internal grading system:

Grade	Meaning	Meter Standing Data Confidence Grade
A	The serial number in CMOS can be matched to a serial number provided by our suppliers and other asset details match.	Data is viewed to be correct based on this assurance, and no faults have been found.
B	The data formats for serial number, model, size and dials in CMOS match a known list of valid formats.	Data is probably correct but there is no direct check possible against supplier details. This is mostly applicable to older meter details
C1	The serial number in CMOS matches a supplier record but some other element (make, size, dials) does not match.	The implication is that there is definitely an error for at least one meter asset attribute in the CMOS data.
C2	The serial number in CMOS does not match supplier data and also does not match a known data format	There is probably an error in the CMOS data or the meters is very old or of an unknown format.
D	The meter serial number duplicates at more than one SPID	Genuine duplicate meter serial numbers are very rare. The implication is that one or both of the serial numbers is incorrect.

As a result of this activity, we can also:

- Distinguish between data issues arising on new meters updated to CMOS as a result of 'new' processes, i.e., those put in place since Retail Market Opening, from legacy data issues generated by pre-market processes. This allows us to target root causes from data handling in our current market processes as well as tacking legacy meter issues.
- Use improvements in the accuracy of our meter manufacturer and serial data to cross-reference all meter asset data against the original manufacturer's data at purchase. In this way, by fixing issues with one data attribute (meter serial) we can uncover more data issues and fill in previously unknown information about meter sizing or the number of dials.

2.1b Meter Manufacturer data quality

We have continued to maintain a data quality score above 98% for this data item, comfortably ahead of the market average rate of approximately 85%.

This performance is largely attributed to our internal metrics and controls including our monthly meter reviews.

2.1c GIS or Meter location co-ordinates

In our 2021 report we confirmed our commitment to achieving a step change in our performance, such that 97% of our meters would pass the GIS validation measure by the end of September 2022. This commitment was achieved and exceeded, with 97.5% of our meters passing this measure at the end of September 2022.

During 2023, our performance has dipped slightly, with the level of meters passing MOSL validation at 96.1% in December 2023 against an Industry average of 95.5%. A process issue was identified that caused the drop; that has now been rectified and performance is expected to return to above 97% in March 2024.

2.1d UPRN Data Issues

Following the step change in data quality last year, data maintenance for UPRNs has continued. We have maintained a data quality score above 92%, comfortably ahead of the market average performance (81.6%), and we have maintained 3rd place in the market rankings for this measure.

To continue to maintain this pass rate and resolve the now much smaller number of UPRNs failing validation, we have established a process to update UPRNs on a quarterly basis.
There is some minor fluctuation in the monthly data quality score between updates, but overall quality has been maintained[9].

During 2024 we expect to transition to using the MOSL Data Assurance Service[10] as the source of our periodic updates to UPRNs.
This will be achieved by either utilising the outputs of the Data Assurance Service matching of addresses to external sources such as ABP and VOA or through the address cleanse exercise that will be launched in 2024.
We expect to improve our ability to match addresses to external sources which in turn will enable us to obtain the most recent and accurate UPRN and VOA references.

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[9] Post report end date another batch of UPRN updates have been applied in the market and our data quality score for UPRNs as at 31/1/24 sits at 92.6% - the highest level we have so far achieved.
[10] Formerly known as Central Data Cleanse, described in Table 1.

2.1e VOA[11] Data Issues

Trading Party Timeline – Premises <u>failing</u> MOSL VOA validation.
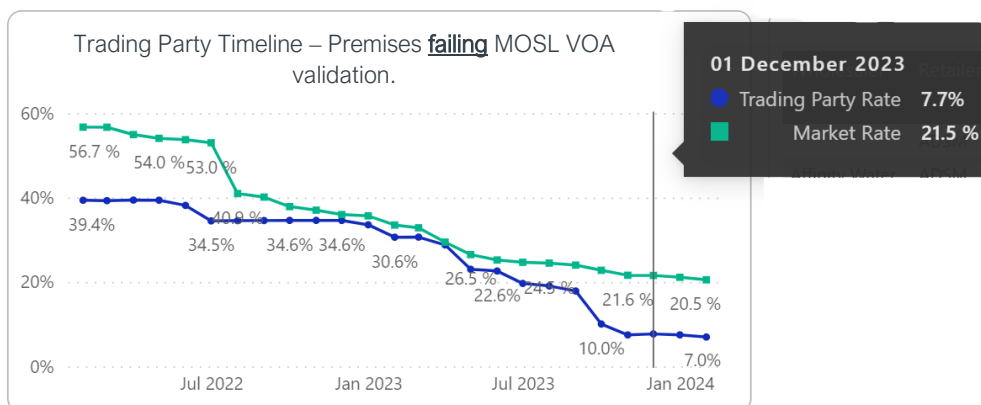
As stated in the 2022 DMSR report, our main focus for data quality improvement in 2023 was on VOA references. We committed to lifting our VOA validation pass rate from 61.4% to 90%, and to improving our market ranking from 8th to 3rd. Both of these targets were successfully achieved by the end of October.

To achieve this level of performance we have resolved VOA issues for over 66k premises so far, and we continue work to identify resolutions for the remaining 21k premises.

VOA data updates into the market are now infrequent (roughly quarterly), so there is some minor fluctuation in the data quality score between updates[12.]

During 2024 we expect to transition to using the MOSL Data Assurance Service as the source of our periodic updates to VOAs.

2.2 Retailer Measure of Experience (R-MeX)

Our retailer customers provide feedback on their experience of our performance on a routine basis by scoring us out of 10 in a range of key categories including on the 'quality of data maintenance and improvements'. This section will specifically address our data quality scores listed in table 3 below:

Table 3 – Summary of R-MeX scores 'Quality of Data' [13]

Area	February 2022	August 2022	February 2023	October 2023	Difference (February 2023 to October 2023)	Market Average October 2023
Quality of data maintenance and improvement	6.27	6.57	6.92	7.50	+0.58	7.87
Ranking (out of 15)	14th	14th	13th	13th	0	

Our Data Quality score has seen a steady improvement since February 2022, an increase of 1.23 between February 2022 and October 2023.

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[11] VOA stands for the Valuation Office Agency and the reference stored in CMOS for a Premises is the Billing Authority Reference (also known as VOA BA Reference)

[12] Post report another batch of VOA updates have been applied in the market and our data quality score for VOAs as at 31/1/24 sits at 90.9% - comfortably ahead of our 90.0% commitment and the highest level we have so far achieved.

[13] MOSL (October 2023) Retailer Measure of Experience (R-MeX) Outputs file (mosl.co.uk), pg2

In 2023, we are pleased to report an improvement of 0.58 between February and October 2023. Although the gap between our score and the market average has decreased, showing as 0.37 difference in 2023 compared to 0.7 in 2022, we recognise that there is still further to go. This is underlined by the wide range of scores we received (between 4 and 10).

We do however believe this movement provides visible confirmation that we are moving in the right direction. This is reinforced by the fact that 6 retailers scored us higher on this measure than in the previous survey, with only 1 retailer scoring us lower than before.

Retailer engagement remained steady with 14 retailers providing us a score in this survey, and we will use the feedback to follow up on specific concerns.

There is also a qualitative aspect to R-MeX which we receive as part of the survey itself in response to a series of questions and flesh out with follow up account management calls with our retailer customers. The most recent feedback highlighted the following points should be focused upon:

1. Issues with SPID eligibility.
2. Process time of transactions into market - in particular metering transactions (e.g. Meter exchanges)
3. The speed of resolution of any queries relating to data quality

We are taking steps to address all the above concerns, many details of which are listed in this report.

2.3 Market Performance Standards (MPS)

Several retailers have highlighted via R-MeX feedback and other routes a need for us to improve the speed of our market data updates. In this section, we comment on our MPS performance which measures the speed of market data updates for several key operational service outcomes. Whilst these do not cover all market updates, they cover many key areas including deregistration, meter installations and meter exchanges. Our MPS performance also contributes to our performance against CMOS data update SLAs in accordance with CSD 104.

A comparison of our MPS performance across all measures is listed in table 4 below:

Table 4 – December 2022-2023 comparison[14]

Area	December 2022 Performance	December 2023 Performance	Difference	Market Average April – Sept 2022
Performance	73.2%	83.9%	+10.7%	88.5%
Rank (out of 15)	14th	10th	+4 places	N/A

MPS scores have been impacted in the middle of the year as we outsourced our operational processes but have since had an improved grip over the last few months of 2023, these were further enhanced by the introduction of a de-registration process by MOSL which is described in section 2.3a.

Although our MPS performance has improved over this period, increasing by nearly 11% since the corresponding period last year, we remain behind the market average by 4.6% and the highest performer by 15.9%.

2.3a Metering specific performance

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[14] These timescales have been used to remain consistent with the dates used throughout this report, which are reported up to December 2023. Progress is measured using MOSL's Holistic Reporting. December 2022 report covers reporting period of September and November 2022. December 2023 report covers reporting period of September and November 2023.
MOSL https://moportal.mosl.co.uk/live/moportal/powerbi-report/3

The largest contributor to our performance issues is MPS 7.

MPS 7 (initial and final meter reads) is a measure of our ability to meet service levels set out in CSD104 for data updates following the physical change of a meter asset and continued to be a focus during 2023.

Performance against MPS7 in Financial Year 2023/2024 has seen a dip in the summer of 2023 but recovered, reaching 86% by the end of the year, an improvement of 3% from the start of 2023.

The dip in performance has been mainly attributed to outsourcing our operational processes in the summer of 2023. The improvement registered since is partly attributed to improved operational grip and our introduction of the workaround process developed by MOSL for the deregistrations that have not been notified to us within the appropriate timescales.

When trading parties are not notified by customers of a change of use, wholesalers will unlikely be able to obtain a visual final read. Instead, and because they cannot use an estimated read, wholesalers have to use a visual read that is in the past as the final read. This will inevitably result in an MPS7 failure and fine.

To address this issue, MOSL have introduced a new guidance[15] where wholesalers can submit a final read obtained on the date of the visit, rather than the change of use date which is in the past. They will then deregister the property with the same date as the final read date. The service component however will be switched off as per the date of change of use, which is in the past.

This work around ensures no negative impact on settlement as the service component would be switched off from the date of change of use and also avoids unnecessary MPS 7 failures as the final read and deregistration effective from dates will be recent ones.

Although this has provided a significant improvement to our MPS7 scores, we are unable to process all the cases using this guidance. This is due to internal system constraints where dates clash between the non-household final read, which would be a recent one, and the initial meter read for the household account, which should be in the past. We are currently seeking a system solution to resolve this issue and further improve our MPS7 score.

2.4 Complaints and Escalations

We take complaints very seriously and strive to resolve these as quickly and effectively as possible. In the unfortunate circumstance that we receive a complaint, we see it as a valuable source of insight to alert us to potential patterns of data quality issues. We have therefore embedded complaints data analysis in our overall data management approach, as a key trigger and priority for investigation and resolution processes.

All complaints are handled and investigated by a dedicated NHH complaints team, with a view to prioritise resolution of the specific customer issue. They also class each complaint by its root cause enabling us to focus on data specific issues.

The Data Integrity Manager routinely reviews all received and actioned complaints alongside the Complaints Manager to ensure that root cause learnings are shared, and that appropriate action is taken. This process is part of our standard investigation methodology which ensures that our investigation of these data related complaints is carried out in a rigorous and consistent manner.

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[15] https://mosl.co.uk/documents-publications/4741-guidance-for-final-meter-read-following-change-of-use/file

We have provided a case study below which looks at the volume and key themes from recent complaints.

Case Study 2 – Analysis of data related

The proportion of data related complaints from NHHS customers/ retailers has increased over the last 12 months from 12% to 14%.

Graph 3 – Proportion of Data related Complaints vs Total

Data related Complaints vs Other Complaint Types

■ Incorrect Data in CMOS ■ Total Received
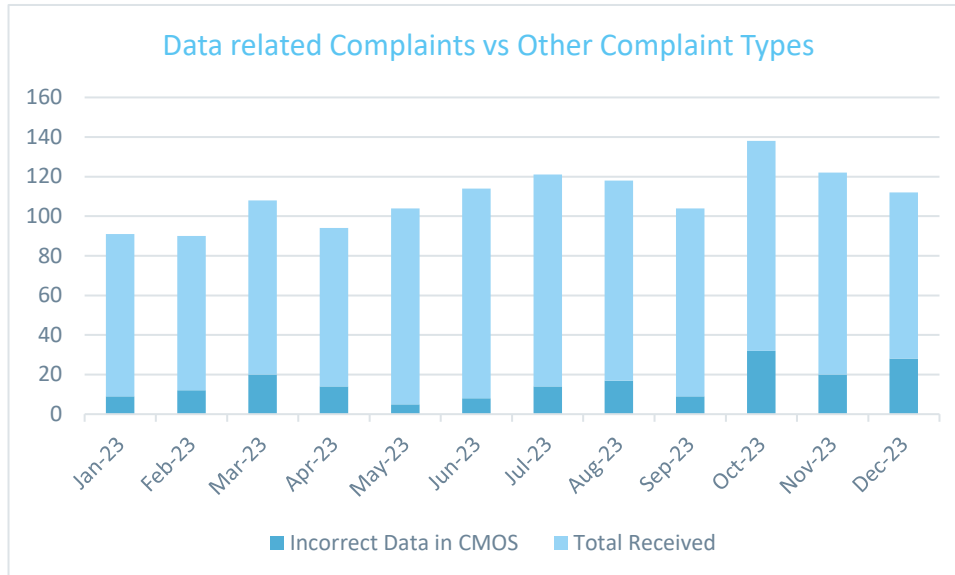
Data related complaints averaged 17% of the total received in 2023, compared to the 19% reported in last year's report, however, we have seen an increase to the volume of data related complaint over the last 3 months. Continued focus is required to bring these numbers down.

Our analysis of the data complaints received during 2023 shows that these data complaint relate to issues of which we are already aware and are currently addressing via quality monitoring or market updates. These include some of the following:

- Review of F reads after a meter exchange.
- Service component data incorrect affecting ability to invoice customer.
- Meter Exchange not updated.

The findings show a need for a sustained focus on our metering and tariff processes to ensure that all data attributes are handled with care and appropriately validated.

3. Planned Improvements – Overall Roadmap

This section provides an overview of a range of performance improvements planned for 2024.

- In Section 3.1, we summarise changes planned which seek to strengthen our grip on overall performance through improvements to our management framework.
- In section 3.2, we summarise changes planned to specific data items. These are not exhaustive lists of all changes planned but highlight key planned improvements.

Not all data improvement activities for the forthcoming year can be planned at this stage as new issues will be identified during the year. Our approach to assessing and prioritising issues is described in detail in our 2021 report.[16]

3.1 Planned improvements to our overall data management approach

Each improvement we plan to undertake in 2023 is highlighted against the pillar(s) of our overall approach in table 5 below:

Table 5 – Planned Initiatives to be completed in 2024

Initiative	Description	Reason for focus	Framework Pillar
Legacy ETL system replacement	Thames continues its digital transformation in a bid to simplify its architecture and allow for more streamlined systems. Part of modernisation of data flow to provide for greater responsiveness and deal with market data needs.\n\nIn 2024, TW is planning to replace an internal system (Infosphere) with a cloud-based solution.	Simplifying our system architecture will allow for better response to changes and fewer points of failure, which in turn will improve data flows and increase resilience.	
Support and engage with MOSL Data Assurance Service initiatives (Formerly known as Central Data Cleanse)	We remain supportive of MOSL's aspirations to provide a centralised data cleanse and enrichment service for premises data (address, UPRN, VOA, status, etc). Having actively participated in the first phase of the project (SPID Eligibility) we will continue to engage in 2024, to help to define and refine the proposed direction of travel for a central data cleanse assurance service.	We anticipate potential benefits from economies of scale, avoidance of duplication and access to a wider range of external validation datasets if this function is performed centrally through a centre of excellence rather than distributed across multiple individual Wholesalers and Retailers.\n\nWe believe that one benefit of a centralised data approach comes from the opportunity for MOSL to establish a set of transparent validation criteria for	

Initiative	Description	Reason for focus	Framework Pillar
		key data items and work with trading parties to refine and improve this over time. At this time there are no clearly defined validation rules for 'good' or 'not good' address data and external address benchmarks for the same property can all give different addresses/postcodes without any impact to retailer billing, meter reading or other operations.	
Move Wholesale Market Services under the leadership of Billing and Financial Customer Care	During 2023 we established a new organisational structure reporting into the leadership of Financial Customer Care.	The change in leadership provides greater strength by bringing together insights from a variety of areas, including bringing together household and non-household data expertise.	

3.2 Planned improvements - Specific Data Issues

During 2024, we plan to specifically address the data issues listed below as a priority.

3.2a Tariff Code Updates - 0.5ML Threshold

In 2023 The RWG[17] Wholesale Tariff Simplification Subgroup put forward a proposal to align Wholesale Tariff structures more closely with the Retail Price Control Customer Groups. This has been supported by most wholesalers including ourselves.

The RWG Wholesale Tariff Simplification Subgroup recommended that from the 2024-2025 financial year wholesalers should introduce a tariff threshold at 0.5 ML to align with the Retail Price Controls.

We will ensure that:
- Retailers will be able to identify all SPIDs with 0 to <0.5ML consumption as they will be provided their unique Thames Water tariff code banding.
- Charge impacting updates will be considered and flagged separately.
- We will ensure that the proposed solution will be the least impacting to retailers.
- Retailers will be consulted with our proposal prior to CMOS updates.

3.2b Eligibility Assurance:

The recent Eligibility phase from the Data Assurance Service described in Section 1.1 has identified 13,612 SPIDs which require their Eligibility reviewed and assured. As a result, the SPIDs are either to be deregistered or left in the market with the assurance that they are correctly set up in the market.

Sagacity[18] have identified three confidence levels for their analysis and assigned a priority for each group. The 13,690 have been split into three groups, with Priority 1s having the highest confidence of being incorrectly included in the market, and Priority 3s having the lowest confidence.
Below is the split of Thames Water's SPIDS by Priority group, as identified in the first report shared by Sagacity in November 2023:
- Priority 1: 678 SPIDs
- Priority 2: 1,020 SPIDs
- Priority 3: 11,914 SPIDs

A target has been set up by MOSL for TW to resolve all Priority 1 group before the end of November 2024. TW has committed to also address Priority 2 to ensure a step change in our Eligibility issues by the end of 2024.

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[17] RWG Wholesale Tariff Simplification Subgroup was established to explore options for Wholesale Tariff structure harmonisation and simplification within the NHH market with the aim of reducing complexity and improving the efficiency of operation across the market.

[18] 3rd Party selected by MOSL to drive the analyses of address data and Eligibility criteria for the Data Assurance Programme.

4. Concluding Remarks

This report aims to provide transparency of our current performance in relation to data quality and the plans we have in place to continue to achieve improved performance.

We have made significant strides in 2023 but remain focused on the ongoing challenges, including those highlighted in our complaints and RMEX feedback.

We expect to continue to drive forward our own changes, at the same time working alongside MOSL and other trading parties to make the Data Assurance Service a success which complements and enhances work we already have underway.

If you wish to provide any feedback on this report or to engage over any of the issues highlighted, please contact us below:

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