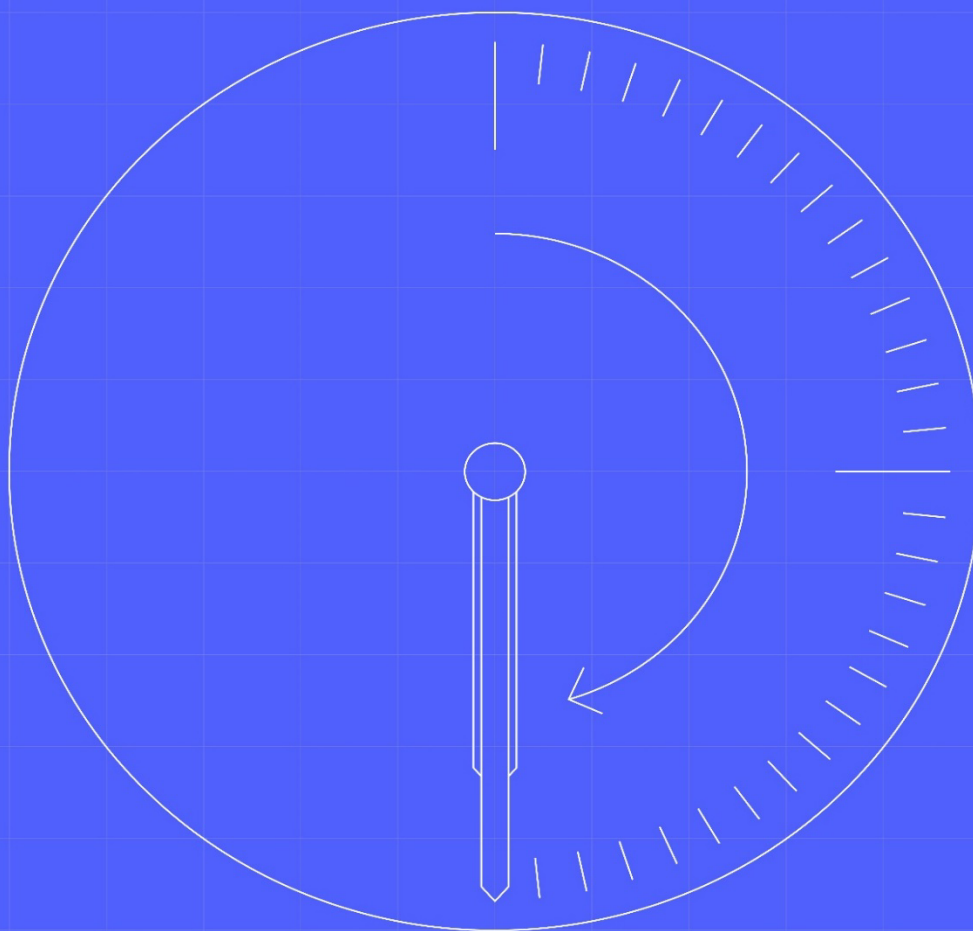


MHHS Programme Data Cleanse Closure Report



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1.1 Change Record

Date	Author	Version	Change Detail
10/10/2025	Data Cleanse Team	1.0	Issued to industry

1.2 References

Document	Publisher	Published	Additional Information
MHHS-DEL168 RAID Log	PMO Team	21/01/2022	
MHHS-DEL1181 Data Cleanse Plan v5.0	Data Cleanse Team	22/07/2025	

1.3 Terminology

Term	Description
CSS	Central Switching Service
EES	Electricity Enquiry Service
Forward Migration	The process through which MPANs will move from Legacy arrangements to MHHS arrangements.
ISD	Industry Standing Data
LDSO	Licensed Distribution System Operator
Legacy Arrangements	The existing arrangements set out under the BSC and REC. For the purposes of the Migration Design, this is primarily the REC Metering Services Schedule and the Balancing and Settlement Procedures related to Data Collection.
MCAG	Migration and Cutover Advisory Group
MHHS	Market-Wide Half-Hourly Settlement
MHHS Arrangements	The new MHHS arrangements as set out in the MHHS Core Design Artefacts.
Migration Period	The period denoted by the Programme as occurring between the M11 and M15 milestones.
MOP	Meter Operator
MPAN	Meter Point Administration Number
MPRS	Metering Point Registration System
Primary MPAN	The MPAN, within a Related MPAN arrangement, for which a Switch is initiated or a Forward Migration (via an IF-031) is initiated.
Qualified Supplier	A Supplier recognised in ISD as both having passed the relevant System Integration Testing (SIT) requirements or BSC qualification requirements; and declared that their service is operational within the MHHS arrangements.
Registration Service	The service operated by LDSOs
Secondary MPAN	The MPAN, within a Related MPAN arrangement, for which a Forward Migration occurs when an IF-031 is received for a Primary MPAN.
Switch	The process by which a new Supplier Registration supersedes an existing Supplier Registration, managed by the CSS.

1.4 Programme Milestones

The below Programme milestones are referenced throughout this document.

M9 – Start of Test Phase

- M10 – Central Systems ready for migrating MPANs
- M11 – Start of 18 month Migration for UMS / Advanced
- M12 – Start of 18 month Migration for Smart / Non-Smart
- M13 – Load Shaping Service switched on
- M14 – All Suppliers must be able to access MPANs under the new TOM
- M15 – Full transition complete

1.5 Reviewers

Reviewer	Role
SRO	Review and comment
Code Bodies	Review and comment

2 Introduction and Scope

2.1 Introduction

The MHHS Data Cleanse Plan, approved by TMAG in July 2023, sets out the data improvement activities that were required to be undertaken by Programme Participants and/or the MHHS Programme to ensure data was of the required quality and completeness prior to the cutover to the new arrangements at M10 and the start of migration at M11.

The MHHS Programme has been managing the successful delivery of the Data Cleanse Plan and working with Industry Participants to carry out the required data cleansing / population activities required to support the migration to the MHHS arrangements. With migration approaching, the MHHS Programme has created a closure report to share with industry participants and Code Bodies outlining the current state of each data item, the total number of issues and recommendations for moving forward post-M10.

2.2 Scope

The scope of the Data Cleanse Closure Report is to outline the current state of each data item included within the Data Cleanse Plan and what has been done. The MHHS Programme will be using reporting to identify the total number of issues outstanding, and the materiality of these issues. In addition, a set of recommendations will be proposed for the Code Bodies to determine how they would like to move forward.

The data items include:

- Meter Technical Details
- Connection Type and Market Segment
- Domestic Premises Indicator
- Linked MPANs (including import/export and related)

Following the approval of the Closure Report, the responsibility of data cleansing activities will continue to be the responsibility of Programme Participants. In addition, the Code Bodies may choose to monitor these activities or define additional activities under their own performance assurance measures.

2.3 Design Issues

Several design issues were identified because of participants' data cleansing activities. These issues will need to be resolved via changes to the MHHS design, initiated via the REC or BSC change management processes. Until those changes are implemented, impacted MPANs should not be migrated by Suppliers.

The MHHS Programme expectation is that all REC and BSC changes will be progressed via the respective code change management process as quickly as possible, which will enable the maximum amount of time for Suppliers to migrate those MPANs, prior to M15. Changes should be implemented within the February 2026 industry change release if possible (for low impact change) or by the June 2026 industry change release at the latest (for higher impact change).

2.4 MPAN Exclusion from Migration

This document sets out a “MPAN Migration Exclusion List” which should be referenced by Suppliers when they establish their migration management processes and controls. Those individual MPANs should be excluded from their migration activities until the data quality issue is resolved by the Supplier. In addition, other MPANs should be excluded until the design issue is resolved via a code change.

Most categories of MPAN exclusion identified within this report will be, pro-rata, very low volumes per Supplier and within the range of hundreds or low thousands across the entire industry. Whilst these volumes will not materially impact Suppliers migration plans, they will require resolution prior to M15 for Suppliers to achieve their M15 obligations to have migrated 100% of their portfolios by this time.

The programme will continue to monitor each issue via the MHHS RAID processes. For reference, the programme RAID ID is documented within the list.

3 MTDs

3.1 ESME ID Population Overview

The ESME ID is required, under the new MHHS arrangements, as it will be utilised by Data Services or Suppliers acting as Meter Data Retrievers (MDRs) to identify and communicate with a specific meter in DCC’s Smart Metering systems.

The MOA is currently responsible for the ongoing maintenance of this data within the SMRS, where they are required to ensure that for all new smart meters installed, they populate the ESME ID via the sending of a D0312 data flow to the Registration Service.

For Smart Meters installed prior to the 29 June 2023, a population activity was required for SMRS to populate the ESME ID for each MPAN. This activity led to exceptions in which Suppliers investigated and fixed with the MOA, sharing a monthly progress update with the MHHS Programme.

Population was undertaken via an extract of the ESME ID from DCC systems and a subsequent load of this data by LDSOs within their SMRS system. For any smart meters which did not appear within the DCC extract the LDSO back populated the ESME ID for that meter with a defaulted value as per the MHHS design.

Data Cleanse Outcome

The population exercise was successful resulting in 19,784,359 meters being populated with an actual value and 1,323,565 populated with a defaulted value. To further improve this position, Suppliers and their Agents were requested to review meters with defaulted values and, where possible, populate an actual value. Suppliers populated this value where they had access to this data, e.g. they installed the meter. For scenarios where Suppliers did not have access to this data e.g., another Supplier installed the meter or a site visit was required, it was agreed that no further activities were justified, as the materiality of a defaulted ESME ID value was low in terms of any impact to either MHHS migration activities or ongoing MHHS business processes. This additional exercise led to Suppliers resolving more than 1,200,000 meters.

It was identified that a design issue existed related to the implementation of the validation of the D0312 when a meter was installed on a new MPAN that had been previously installed on another MPAN. This issue prevented MPRS accepting the D0312, with the same ESME ID as had been previously used on the other MPAN, resulting in the MOA being unable to update the correct meter details within MPRS. It also meant the D0312 validation did not match the IF-005 validation.

A REC change (R0222) was raised to resolve this issue and was implemented at M8, and the validation now matches the IF-005.

The Programme believes that this activity has achieved a successful outcome in meeting the aims of the initiative by ensuring that ESME ID is populated for all smart meters held within all SMRS systems. This will ensure that smart meters can be migrated as no MPANs will be blocked by a null value of ESME ID.

Future Initiatives for Consideration by Code Bodies

The REC may consider the need for activities post-M10 which could include the following initiatives:

- 1) Following the implementation of R0222 the REC may wish to provide guidance related to the actions participants can take to resolve any outstanding issues.
- 2) The REC is currently monitoring, under their performance assurance monitoring, that for new meter installations the actual ESME ID is populated and not the default value. The REC may continue to monitor that meter operators, and metering services under the MHHS arrangements, are populating this value.

Note: Suppliers, via their MOAs, should ensure that the meter details held within SMRS are correct before migrating the MPAN, in the context of this issue, they should ensure that the correct meter is held within SMRS and was not blocked by the ESME ID issue.

3.2 Meter Location and Number of Displayed Register Digits Population

3.2.1 Meter Location Population

Meter Location is required to be stored in the SMRS, under the new MHHS arrangements, as Smart meters will no longer utilise the D0150. The MEM is currently responsible for the ongoing maintenance of this data within the SMRS, where they are required to ensure that for all new Smart Meters installed, they populate the Meter Location via the sending of a D0312 data flow to the Registration Service.

For Smart Meters installed prior to the 29 June 2023, a population activity was required for LDSOs to populate the Meter Location for each MPAN based on data provided by MOAs. This activity led to exceptions in which Suppliers investigated and fixed with the MEM, sharing a monthly progress update with the MHHS Programme.

Data Cleanse Outcome

3,718,683 MPANs were populated with a value of “Not Known” due to either the data not being provided by the MOA or the MOA not holding that value within their system. MOAs were requested to review all of these MPANs and provide an exact value for the meter location if that information was held within their systems.

As of October 2025, for smart meters, 2,590,621 MPANs have a value of “Not Known” whilst 20,120,372 MPANs have a known value populated.

Future Initiatives for Consideration by Code Bodies

The REC Code Manager may determine that further industry activities are required, post-M10, to continue the population of exact values for location. However, the materiality should be considered low from a Programme perspective, as the “Not Known” value is not expected to cause migration issues or result in higher instances of process failures than currently experienced within current metering activities.

The requirement for the population of precise values for all new metering systems installed could be considered along with supporting performance monitoring, although the materiality should be deemed to be low.

3.2.2 Number of Displayed Register Digits Population

The Number of Displayed Register Digits data item was added to MPRS as part of R0032, populated by meter operators via the D0312 data flow. This data item is utilised by Smart Data Services when processing meter reads, so should be populated to a high level of accuracy.

A data migration activity was required between MOAs and LDSOs to populate the Number of Displayed Register Digits for each MPAN within SMRS. This activity led to exceptions for which Suppliers investigated and fixed with the MOA, sharing a monthly progress update with the MHHS Programme.

Data Cleanse Outcome

All SMETS1 and SMETS2 meters (21,107,918 MPANs) were populated with a Register Digit. As of October 2025, there are currently only 9 MPANs that have a null Register Digits, these are invalid records which have been created since the initial data migration and population in September 2024.

It was identified that a design issue, related to the implementation of the validation of the D0312 and the IF-005, incorrectly associated a fixed value for the number of digits associated to each SMETS2 meter type. In practice, Suppliers have installed meters which do not conform to these validation requirements, nor are there any technical requirements outside of those documented within the data validation requirements which specify that meters should be configured with those fixed register lengths.

To resolve the MHHS design issue a post M10 BSC change is required, a consequential REC change would then be required to amend the legacy D0312 population rules.

This design issue is highly material as over 250,000 smart meters have been identified by Suppliers as being impacted resulting in those MPANs not being able to migrate until resolved. Equally, for each of these meters an incorrect value will have been populated within SMRS when the initial data population activities were undertaken.

The Programme believes that this activity has achieved a generally successful outcome, by ensuring that the required data is populated for all smart meters held within all SMRS systems.

Future Initiatives for Consideration by Code Bodies

The BSC and/or REC may consider the need for activities post-M10 which could include the following initiatives:

- 1) The REC may wish to issue guidance to support processes corrective action taken by meter operators to update those smart meters with Register Digits which were previously populated incorrectly. Incorrect digits could lead to billing and settlement issues if the MPAN is migrated as MTDs (which currently contain the correct value) will be replaced with data held within MPRS (which is currently incorrect).
- 2) The REC may wish to include corrective activities within their performance assurance framework.
- 3) As referenced above, the BSC will need to implement a change to revise the validation rules within SMRS.

Note: Suppliers should not migrate MPANs where this issue is identified until the Register Digits have been corrected by their MOA within SMRS. This will require a code change and change to MPRS before this can be undertaken.

3.3 D0312 Maintenance – Existing Data Items

Inaccuracies in existing MTD data will cause migration failures if not resolved prior to M10. The Market Segment creation will not be possible if Meter Type is not populated, which will lead to errors appointing Agents as part of Migration.

MOAs, as the master of this data, were required to verify that it is of a good quality prior to migration start.

Data Cleanse Outcome

The Programme has been tracking the number of MPANs within each LDSOs' SMRS system that is energised but currently has no meter data populated, meaning a D0312 has not been sent by the MOA when a meter has been installed. REC performance assurance has been tracking and monitoring this issue.

Currently 16,659 MPANs are energised without meter data in SMRS. Those MPANs will potentially be set with an invalid Market Segment in September 2025 as the population logic will default to advanced Market Segment if no meter type is populated within SMRS.

Suppliers and their MOAs should continue to resolve this missing data issue whilst the MPAN is in a legacy state. Once the MOP sends a D0312 to SMRS, the Market Segment will be re-evaluated based on the combination of meter type and connection type. Following this activity, the Supplier will be able to migrate the MPAN and appoint the agents appropriate for that Market Segment.

Future Initiatives for Consideration by Code Bodies

It is recommended that the REC continue to monitor missing D0312 data, via EES reporting, through their existing performance assurance techniques. The issue remains for a small number of MPANs, although most of the exceptions are the responsibility of a small number of Suppliers.

As the D0150 will no longer be utilised for the transfer of smart meter MTDs, once a meter is migrated, the REC could consider applying performance assurance techniques to validate that the metering data held within SMRS and EES is consistent with the latest D0150 data held by Suppliers and MOAs. Once an MPAN is migrated and a subsequent change of meter operator occurs, then data quality issues could arise if SMRS doesn't hold the latest MTDs. This is covered by the suggested MHHS Performance Assurance changes in the updated PARC which will compare data in EES against that held in MOA systems, introduced by REC change R0202.

3.4 Missing or Incomplete Data in D0149 / D0150 / D0268 / D0313

Missing MTD data will cause operational issues when the MPAN is migrated to MHHS arrangements as processes will fail if the MTDs are not known to the Advanced / Traditional MS and DS. In addition, MPANs without MTDs will not be able to settle correctly, impacting the ability of Data Collectors to closed out reading for Legacy settlements.

MOAs were required to review their current processes and data, identifying issues and resolving exceptions, completing prior to migration start at M10.

Data Cleanse Outcome

Suppliers should continue to monitor the quality of data within their portfolio, ensuring that each MPAN is in a fit state to migrate based on their own data quality standards.

Future Initiatives for Consideration by Code Bodies

The MHHS Programme SI does not have access to the data to report on this issue. The MTD Reconciliation under the REC may help reduce this risk.

4 Advanced Meters

4.1 Time Change

Based on guidance issued by Elexon, there is no requirement for Advanced Meters to have their clock changed from Local Time to UTC as data can be collected from the meter in local time and converted to UTC before submission into Settlements.

Data Cleanse Outcome

No action was taken within the Data Cleanse Plan once Elexon guidance was issued that changes to meters were not required.

Future Initiatives for Consideration by Code Bodies

No action required.

4.2 Conversion of D0149 / D0150 / D0313 to D0268

At the point of migration NHH Advanced MTDs will need to be converted to a D0268 format, as part of each Migration transaction. To achieve this, the MOA will be required to have met their current REC obligations and have a valid set of NHH MTDs (D0149 / D0150 / D0313).

Data Cleanse Outcome

Suppliers should continue to monitor the quality of data within their portfolio, ensuring that each MPAN is in a fit state to migrate based on their own data quality standards.

Future Initiatives for Consideration by Code Bodies

The MHHS Programme SI does not have access to the data to report on this issue.

5 Registration Data

5.1 Energy Direction

The population of Energy Direction occurred in June 2023 when CP1558 was implemented. LDSOs were required to ensure that this activity has occurred successfully. This data was then required populated within the ESS utilising the 'Full Refresh' functionality that exists between those services.

Data Cleanse Outcome

The Programme validated the Energy Direction utilising the value of the Line Loss Factor ID for all MPANs and comparing this to the MDD file Line_Loss_Factor_Class and the data item MS Specific LLF Class Indicator for each MPAN. Each MPAN with an Energy Direction of 'I' was validated to have a MS Specific LLF Class Indicator of 'A' or 'C'; and each MPAN with an Energy Direction of 'E' was validated to have a MS Specific LLF Class Indicator of 'B' or 'D'.

Future Initiatives for Consideration by Code Bodies

Reporting demonstrated that each MPAN has had an Energy Direction populated and the values populated align to the LLFC ID assigned to each MPAN. No further action is required.

5.2 Connection Type

The Connection Type is a key data item which determines which Market Segment an MPAN is operated within under the new MHHS arrangements. The population of this data item was undertaken utilising existing legacy data held within SMRS and other industry systems, leading to a staged approach due to the high level of complexity.

5.2.1 Automated Population of Connection Type for Measurement Classes 'B', 'D', 'F' & 'G'

LDSOs were required to:

1. Assign Unmetered Measurement Classes to an Unmetered Connection Type
2. Assign Whole Current Measurement Classes to a Whole Current Connection Type
3. Populate Measurement Class F

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.2.2 BAU Population of Connection Type for Site Specific LLFCs within Measurement Classes 'C' & 'E'

LDSOs assigned a Connection Type of 'E', 'H' or 'L' to Measurement Classes C and E based on the site specific LLFC ID.

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.2.3 Automated Population of Connection Type for Smart Meters within Measurement Class 'A'

LDSOs undertook an automated population of Connection Type 'W' for Metering Systems with a Smart Meter Type.

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.2.4 Population of Connection Type for Traditional and Advanced Meters within Measurement Class 'A'

LDSOs and Suppliers were required to assign NHH Metering Systems to the correct Connection Types. Following LDSOs populating the Connection Type, Suppliers investigated and resolved outstanding exceptions from the activity.

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.2.5 Connection Type Population for MPANs with More than One Meter Fitted

LDSOs populated the Connection Type for MPANs with more than one meter fitted. In cases where both CT and WC Connection Types were present, the MPAN should've always be denoted as WC (Connection Type Value 'W').

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.2.6 Automated Population of Null Connection Type

LDSOs undertook an automated population of Connection Type 'W' for MPANs that have a Null Connection Type, including MPANs that have no meter record within SMRS.

Data Cleanse Outcome

The data population was successfully completed by LDSOs, with the Connection Type populated for every MPAN.

Future Initiatives for Consideration by Code Bodies

No action required.

5.3 Market Segment

The Market Segment is important to populate accurately so that the correct Agents can be appointed for an MPAN under the new MHHS arrangements.

The requirement was for each LDSO to populate this data item for each MPAN following the deployment of MPRS 9 and ahead of M10.

Data Cleanse Outcome

All MPANs were populated with a Market Segment.

Invalid Market Segments have been created based on mismatches between Connection Type and Meter Type, which have been discussed within different sections of this report.

Functionality within SMRS will auto align the Market Segment to the correct value once either the Connection Type or Meter Type is changed. In the case of MPANs with no meters installed, SMRS will change the Market Segment from a defaulted value of Advanced to Smart (if a smart meter is installed).

MPANs created prior to M10, that did not have a meter installed at the point of the initial Market Segment population, will have a defaulted value of Advanced applied to them. For those MPANs, Suppliers should register those MPANs using the Legacy process, appointing Legacy MOA, DC and DA agents. The MOA should then send a D0312 to MPRS once the meter is installed which will then exercise the functionality within SMRS to re-evaluate the Market Segment. This will ensure that the correct value is set and enable the MPAN to be successfully migrated after this event.

Future Initiatives for Consideration by Code Bodies

Code Bodies should continue to monitor the timeliness of the sending of D0312s to SMRS by the MOA to ensure that the correct Market Segment is maintained within SMRS.

5.4 Domestic Premises Indicator

The SMRS did not hold the Domestic Premises Indicator (DPI), therefore there was a requirement for this data item to be populated prior to the start of migration.

The DCC shared an extract from the CSS and provided it to the MHHS Programme SI for them to share with each LDSO, to load the data item into their Registration Services.

Data Cleanse Outcome

The purpose of the DPI population within each SMRS and EES was to ensure that this value was populated with the exact value held within the CSS, to ensure that those systems were aligned prior to the start of MPAN migration activities. This activity has been completed successfully.

Following the population of DPI, there will be many MPANs with a DPI which does not conform to the DPI referenced within the ISD Entity 17 "DUoS Tariff ID" for a given DUoS tariff. Upon further analysis, these data misalignments to the ISD will not cause any issues to migration or MHHS processes. However, LDSOs may wish to investigate those MPANs and change the DUoS Tariff.

Based on a sampling of the data mismatches, this could be caused by scenarios such as premises which are domestic in nature (e.g. a unit in a block of flats) but the Supplier has a contract with a non-domestic organisation (e.g. a developer or housing association), in which case this is a valid scenario where the LDSO has assigned a correct tariff and the Supplier has correctly applied the DPI.

As the DPI set within CSS is now available to Suppliers via EES, Suppliers may wish to validate that the correct value is set and maintained for those MPANs as Domestic and Non-Domestic MPANs will be subject to different load shapes which will change the estimated consumption. The DPI is maintained as set out within the Supply Licence Conditions.

Future Initiatives for Consideration by Code Bodies

The primary reason for the misalignment of DUoS Tariff is that the DPI value is set within CSS, by the Supplier, based on the customer type which is defined within the Supply Licence Conditions. The ISD DUoS tariff assignment to a premises type is based on the actual tenant that resides within the premises. This misalignment in the context of the DPI will continue to cause a high number of mismatches, Participants may wish to consider future changes, if a benefit exists, to resolve this issue, although this would require a change to the Licence where the DPI is defined.

Based on our analysis 700k+ MPANs currently have a DPI and DUoS Tariff assigned that does not conform to the DPI referenced in ISD for that given tariff ID. Code Bodies may wish to assure that Suppliers understand their obligations in respect to the setting of the DPI and that this is being maintained correctly.

The REC may also wish to utilise the data transferred from CSS to EES to undertake analysis of both datasets to determine if EES and CSS MPAN and registration data is aligned correctly, as the data migration has identified that some MPANs and/or registrations exist within one of the systems and not the other.

5.5 Connection Type and Meter Type Misalignments

Following the completion of the population of Meter Type as set out in Section 4, and Connection Type in Section 5, the Programme conducted analysis using EES data to identify misaligned Connection Types and Meter Types that would lead to an invalid Market Segment when this population activity takes place. Analysis using the February 2025 EES extract identified 21,392 MPANs where the combination of meter type and connection type was not a valid combination set out in ISD Entity M7 "Valid Market Segment Connection Meter Type Meter Group" file.

5.5.1 Traditional Meters installed on Current Transformers

It was identified that 11,155 traditional meters were installed on CT Connection Types. The MHHS Design does not support Traditional Meters (denoted by Meter Type N, T, S, NSS, SPECL or K) installed on a Connection Type other than Whole Current (W). Where an MPAN is migrated with these combinations, various Agent appointment and Settlement processes would fail. Suppliers were requested to investigate MPANs with these invalid combinations to determine if each MPAN was a data quality issue or an actual physical installation on site.

Data Cleanse Outcome

As of October 2025, there are 6,032 traditional meters installed on CT Connection Types. The instances are believed to not be data quality issues but actual meter installations where the Supplier has been unable to change the meter as per their license obligations.

Those meters cannot be migrated until they are either:

- 1) Replaced for an advanced meter; or
- 2) A code change is made to support those meters within the MHHS design

Future Initiatives for Consideration by Code Bodies

A BSC managed change will be raised following solution development by the BSC MHHS Expert Group which would enable these metering systems to be supported within the design. This change should be implemented as soon as possible to ensure that these MPANs can then be migrated before M15.

5.5.2 CHECK Meters

It was identified that several meters, 329 MPANs in total, had been incorrectly referenced within the D0312 sent by MOAs to SMRS. CHECK meters should not be sent within MTDs and their presence within SMRSS is not supported within the MHHS design. However, SMRS does not reject D0312 messages which contain CHECK meters, meaning if the MOA includes those meters within the D0312 they will be recorded within SMRS. Check meters will not be accepted by the IF-005 so this issue will only exist for Legacy MPANs.

Data Cleanse Outcome

MOAs were requested to remove CHECK meters from SMRS via sending an updated D0312 message. As of October 2025, there are 51 CHECK meters.

There is a risk that MOAs, through error, could continue to send CHECK meter data to SMRS. This will cause migration exceptions. Suppliers should adopt controls to ensure that they investigate the presence of CHECK meters, removing this incorrect data before attempting to migrate an MPAN.

Future Initiatives for Consideration by Code Bodies

The REC may wish to evaluate both the legacy and MHHS design to determine if a change is required to remove "CHECK" from the valid set of meter types. CHECK meters should not be sent within industry messages so the presence of this value within the valid set is not required.

The REC may also wish to adopt performance assurance reporting to validate that no CHECK meter data is present within EES data. Although the volumes of MPANs with CHECK meters incorrectly recorded is very low, so the materiality of the issue is very low, there is a risk that CHECK meters will continue to be incorrectly notified to SMRS via the D0312 which will then prevent that MPAN from being migrated and cause an exception of that MPAN is migrated in error.

5.5.3 Smart Meter Types Installed on CT Connection Types

It was identified that 13,890 smart meters were installed on CT Connection Types.

Data Cleanse Outcome

LDSOs were required to investigate and fix the Connection Type where appropriate. As of October 2025, there are 606 smart meters installed on CT Connection Types. Most of these exceptions were caused by the incorrect population of connection types for new connections, by a small number of LDSOs, following the introduction of this new data item in September 2023.

The MHHS programme has validated that since January 2025 only a small number of new connections have been created where the connection type has been created incorrectly by the LDSO. This indicates that the scale of the issue should remain low but ongoing exceptions are likely to be created throughout the migration period (until an MPAN is migrated), so will require ongoing monitoring and corrective action taken as required.

Future Initiatives for Consideration by Code Bodies

BSC and REC should consider ongoing reporting of this issue, as smart meters cannot be installed on CT connections, any MPANs with these attributes are data quality issues and will require either the correction of the meter type by Supplier or the connection type by LDSO.

Whilst most issues have been resolved, there is a risk that the number of exceptions could start to increase, without the appropriate oversight by Code Bodies, as the legacy design doesn't include controls which would prevent the creation of those exceptions.

5.6 Linked Import / Export MPANs

An initial activity was undertaken by LDSOs and Suppliers for the population of each Import / Export association. During this activity, 296,514 export MPANs were linked to import MPANs and 63,509 export MPANs remained unlinked. Any exceptions, as part of the activity, were raised with Suppliers to investigate and resolve.

Additional analysis of Import / Export MPANs was conducted by the Programme to examine the differences between meter types and meter groups within relationships, and how these differences determine the Market Segment. This led to new data cleanse activities for LDSOs and Suppliers to undertake.

Linked Import / Export MPANs with Different Connection Types	2,040
Linked Import / Export MPANs with meters in the Advanced and Traditional, Advanced and Smart Meter Groups	328
Linked Import / Export MPANs with Different Meter Serial Numbers	2,562

66,759 MPANs have different meter types, but within the same Market Segment, and 2,562 MPANs have different Meter Serial Numbers (MSN), indicating a data quality issue, as the MPANs should not be linked. These scenarios will not cause migration exceptions so are not considered material to that activity.

5.6.1 Linked Import / Export MPANs with Different Connection Types

LDSOs reviewed MPANs in this category and either:

- 1) Corrected the Connection Type because they should match as they have the same physical supply connection between Distribution Network and customer premises; or
- 2) De-linked the MPANs because they have determined that the physical supply connection is not the same.

Based on EES reporting 2,040 MPANs continue to be linked which have different connection types. If MPANs are linked and one MPAN is a CT Connection Type, then all linked MPANs will default to a Market Segment of Advanced. This will in turn create an invalid combination of data and prevent the successful migration of the MPAN.

LDSOs should ensure that either action 1 or 2 is carried out for these MPANs.

5.6.2 Linked Import / Export MPANs with meters in the Advanced and Traditional or Smart Meter Groups

328 MPANs also have Meter Type mismatches which Suppliers will be required to correct prior to migration, as those scenarios will also create exceptions and prevent successful migration.

5.6.3 Linked Import / Export MPANs with meters in Smart and Traditional or both in Smart Meter Groups

For MPANs that are within the same meter group, or linked MPANs where one is traditional and one is smart, no action is required. It will be more appropriate to correct these misalignments under the MHHS arrangements, as each MPAN will have the same Metering Service, import and export MPAN data will be shared across the relevant Suppliers and Agents, and there will be the new MHHS processes in place to do this. This will ensure that triage can be undertaken in a more effective manner.

5.6.4 Linked Import / Export MPANs with Different Meter Serial Numbers

The Legacy design does not support an effective means of resolving MSN mismatches because the MOAs may be different, and MOAs do not have access to data that sets out which MPANs have been linked or not. As such, it would be better to undertake a data cleansing exercise post-migration.

Future Initiatives for Consideration by Code Bodies

Code Bodies may wish to consider ongoing performance assurance monitoring related to the linking of import and export metering. This is an area of risk as the arrangements are complex and currently subject to large volumes of MPANs where Suppliers and or MOAs are not following the requirements of existing code obligations to utilise the same MOA for import and export MPANs. This is assumed to be a significant contributing factor to poor data quality as the different MOAs are stating different meter types for the same asset, or meter exchanges are not being reflected across linked MPANs where the same asset exists.

The MHHS design will resolve this issue but there is a high probability risk that further errors will be created whilst the linked MPANs remain within the legacy arrangements. MPANs should not be linked if the serials numbers are not identifying the same meter.

The charging mechanisms for Import/Export MOPs are being looked at through REC Change R0207, Export Suppliers inability to sign contracts with the appointed import MOP is seen as a key driver of MOA appointment discrepancies.

5.7 Related MPANs

5.7.1 Related MPANs with Different Connection Types

LDSOs were required to review MPANs in this category and either:

- 1) Corrected the Connection Type if one of the Connection Types was incorrect because they should match; or
- 2) If the Connection Types were different because the MPANs have two different types of physical connection, then the LDSO was required to raise an SDEP to the Supplier to un-relate the MPANs.

Data Cleanse Outcome

There are 303 MPANs within this category that remain, of which 116 primary MPANs are impacted, and will require resolution prior to the MPAN being migrated.

Future Initiatives for Consideration by Code Bodies

These MPANs will fail to migrate successfully. The BSC and REC should consider ongoing performance assurance reporting to ensure that these exceptions are resolved. Where the LDSO has identified that the Supplier should de-link the MPANs, then ongoing monitoring should be in place to ensure that Suppliers have undertaken this remedial activity.

5.7.2 Related MPANs with meters in the Advanced and Traditional or Smart Meter Groups

Suppliers were required to investigate Related MPANs within different meter groups and verify that they were correct or request that their Meter Operators update the Meter Types where they are incorrect.

Data Cleanse Outcome

There are 8,426 MPANs within this category that remain, of which 3,093 primary MPANs are impacted. Whilst a small number of MPANs within this pot were identified to have data quality issues, such as the same meter being described as both a smart and advanced meter across the primary and secondary MPANs, most exceptions within this pot were not data quality issues but actual physical metering configurations within a consumers' premises.

Upon further investigation, a large percentage of these sites are related to premises which have multiple meters installed, many of which are switching load. For example, the “primary” meters appear to have been historically changed for advanced meters, whilst the “secondary” meters have remained as traditional meters. Potentially this is because those meters are switching load, and the MOA may not have had advanced meter variants with internal contactors or external contactors available to replace those meters.

Most of these sites appear to be non-domestic in nature with complex metering configurations as per the example provided above. Most are currently NHH measurement class ‘A’ and all are whole current connection types. For whole current connection types, the meter type will determine the Market Segment that an MPAN will operate within.

Future Initiatives for Consideration by Code Bodies

The current design doesn’t support related MPANs which have different Market Segments. Until resolved, these MPANs should not be migrated as they will result in appointment errors which will result in billing and settlement issues. A solution will need to be agreed with industry before these MPANs can be migrated.

Solutions could include:

- 1) A design change which would support related MPANs existing within different Market Segments or the alignment to a single Market Segment but the ability to support meters associated to a Market Segment they would not normally operate within.
- 2) The replacement of traditional meters for advanced meters (or replacement of advanced meters for smart meters) to align the Market Segment across all MPANs within a relationship. Whilst this would require site visits, the traditional meters should have been replaced as per Suppliers licence conditions for either smart or advanced meters.

REC Issue I0275 has been raised to review options to resolve this issue.

5.7.3 Related MPANs with meters in Smart and Traditional Meter Groups

For MPANs that are within the same meter group or where one is traditional and one is smart, no action was required as the MHHS design supports this configuration.

Data Cleanse Outcome

This category was not actioned within the plan as no exception will be created when the MPAN is migrated.

Future Initiatives for Consideration by Code Bodies

No action required.

6 Other known issues which will prevent the migration of an MPAN until resolved

This section captures other known issues, outside of the Data Cleanse Plan, which are known to prevent an MPAN migrating successfully from the Legacy to MHHS arrangements.

6.1.1 NHH Unmetered Supplies

The MHHS design doesn’t support the migration of NHH Unmetered MPANs. The design is dependent on Suppliers meeting their obligations under BSC modification P434 to have changed all unmetered Supplies from NHH to HH by M11. In addition to NHH MPANs, the design does not support related unmetered MPANs.

To provide visibility of this dependency and the negative impact to migration activities, should a migration be attempted for an MPAN, these MPAN types have been added to the MPAN migration exclusion list within this document.

6.1.2 Domestic Unmetered Supplies

A small number of unmetered MPANs (50) have a DPI set by the Supplier as Domestic. The MHHS design doesn't support unmetered domestic premises so migrations will fail if attempted. Feedback from industry indicated that this scenario is not valid and that data cleansing is required post M10 DPI data migration to change those MPANs to a DPI of non-domestic.

As the DPI is maintained under REC processes, it is proposed that REC monitor this issue going forward.

7 MPAN Migration Exclusion List

The below list sets out the MPAN types which should be excluded from migration until the issue impacting that MPAN has been resolved. The Supplier is accountable for ensuring that they resolve each MPAN with a data cleanse issue prior to M15 to ensure that they achieve their M15 obligations.

Doc. Ref.	MPAN Type	Description	Remedial Action	Owner	MHHS RAID ID
3.2.2	SMETS 2 Incorrect Number of Digits	~250,000 MPANs impacted MPANs have a "number of register digits" value that is different to the value populated within MPRS. Currently the D0150 will contain the correct value but this information will not be present once an MPAN is migrated as the D0150 is no longer used.	1. BSC change required to change SMRS to be able to accept the correct "number of register digits" value via the IF-005 and D0312 data flow (which will be REC change) 2. MOAs identify meters within their portfolio which will have an incorrect "number of register digits" held within SMRS (this can be achieved by comparing the value they hold to the previous SMRS validation rules) 3. MOAs to send corrected value to SMRS via the D0312 data flow 4. Supplier can migrate the MPAN once correction made	1. BSC/ REC & LDSOs 2. Supplier & MOA 3. Supplier & MOA 4. Supplier	i211
3.3	Missing Meter Data within MPRS	~17,000 MPANs impacted MPANs which do not have meter data populated within SMRS at the point of Market Segment population in September 2025 will be set to a Market Segment of advanced. In many instances, a smart meter is installed on this site, unless the correct meter data is populated by the MOA in SMRS only advanced agents could be appointed when the MPAN is migrated. The Supplier	1. Supplier and MOA identify MPANs with missing meter data within SMRS. Utilising the REC performance assurance reporting or other reporting utilising EES data 2. MOA sends correct D0312 to SMRS 3. If the D0312 meter type is smart or traditional SMRSS will re-evaluate the Market Segment from advanced to smart 4. Supplier can migrate the MPAN once correction made	1. Supplier & MOA 2. Supplier & MOA 3. LDSO (automated process) 4. Supplier	i145

		should not attempt migration until the correct data is populated via the D0312 flow.			
5.5.1	Traditional meters Installed on CT Connection Types	~6,000 MPANs impacted The design does not support traditional meters installed on CT connections. Migration should not be attempted for these specific MPANs until this issue is resolved. The traditional meter should be exchanged for an advanced meter prior to migration, or if the meter cannot be exchanged the MPAN should not be migrated until a BSC change to support this scenario is implemented.	1a. Supplier and MOA identify MPANs with a traditional meter on a CT connection and replace that meter for an advanced meter; or 1b. Supplier and MOA follow process set out within the BSC change (when implemented); or 1c. Supplier and MOA determine that connection is not CT and request LDSO amend the connection type to W 2. Following 1a or b MOA sends D0312 to SMRS 3. Following 1c LDSO sends DB02 to SMRS, SMRS will re-evaluate the Market Segment from advanced to smart 4. Supplier can migrate the MPAN once correction made	1a. Supplier & MOP 1b. Supplier & MOP 1c. Supplier & MOP & LDSO 2. Supplier & MOP 3. LDSO 4. Supplier	i217
5.5.2	CHECK Meter Types in MPRS	~50 MPANs impacted MOAs should not send CHECK meters within a D0312 to MPRS. CHECK meters are not supported within the design and will cause migrations to fail if attempted. CHECK meters will need to be removed via the D0312 prior to that MPAN being migrated.	1. MOA removes CHECK meter from SMRS via D0312 2. Supplier can initiate migration for MPAN once correction made	1. Supplier & MOA 2. Supplier	i230
5.5.3	Smart Meters and CT Connection Types	~600 MPANs impacted It is not possible for smart meters to be installed on CT connection types, so a clear data quality issue exists. These MPANs will not migrate successfully and will cause exceptions if migration is attempted before they are fixed.	1. Supplier checks that smart meter installation is valid, if valid 2, if not valid 3 2. Supplier raises a request with the LDSO to correct connection type to WC via SDEP 3. MOA update meter type to valid value which is supported by CT connection type and send new D0312	1. Supplier & MOA 2. Supplier & LDSO 3. Supplier & MOA 4. Supplier	i231

			4. Supplier can initiate migration for MPAN once correction made		
5.6.1	Linked Import / Export MPANs with Different Connection Types	~2000 MPANs impacted The design doesn't support linked MPANs within different Market Segments. Exceptions will be created preventing the successful migration of an MPAN if attempted. The data misalignment should be resolved if the linkage is correct, or the linkage should be removed if the data for the respective MPANs is correct.	1. LDSO check the connection types and amends connection types if incorrect or de-links the MPANs if correct. 2. Supplier can then migrate the MPAN	1. LDSO 2. Supplier	i232
5.6.2	Linked Import / Export MPANs with Different Meter Types	~330 MPANs impacted The design doesn't support linked MPANs within different Market Segments. Exceptions will be created preventing the successful migration of an MPAN if attempted. The data misalignment should be resolved if the linkage is correct, or the linkage should be removed if the data for the respective MPANs is correct.	1. Supplier investigates the linked MPANs and changes the meter type if incorrect via the D0312, if the other MPAN is with another Supplier and that Suppliers meter type is incorrect then they should raise an SDEP to that Supplier to update; or 2. Supplier believes the MPANs should not be linked and requests, via SDEP, that the LDSO de-links them 3. Following 1 or 2 completion the MPAN can be migrated	1. Supplier / MOA 2. Supplier / LDSO 3. Supplier	i218
5.7.1	Related MPANs with Different Connection Types	~300 MPANs impacted Related MPANs with different connection types will cause exceptions if the MPAN migration is attempted. The design doesn't support related MPANs with two different Market Segments.	1. LDSO investigates exceptions and corrects connection type if incorrect, or 2. LDSO raises SDEP and instructs the Supplier to unrelate 3. Supplier unrelates if instructed to by LDSO, by sending the D0386 4. Supplier can migrate MPAN following step 1 or step 3	1. LDSO 2. LDSO 3. Supplier 4. Supplier	i233
5.7.2	Related MPANs with meters in the Advanced	~8400 MPANs impacted Related MPANs with different meter groups which create different Market Segments (e.g.	1. Supplier unrelates MPANs if relationship not valid, by sending the D0386; or	1. Supplier 2. Supplier 3. Supplier & MOA	i234

	and Traditional or Smart Meter Groups	smart and advanced) will cause exceptions if the MPAN migration is attempted. The design doesn't support related MPANs with two different Market Segments.	2. If valid; Supplier must not migrate until 3 or 4 is completed: 3. Meter exchanges are completed to align the meter group across all MPANs; or 4. Industry change (I0275) to MHHS design implemented to support different related MPANs in different market segments 5. Supplier can migrate MPAN following step 1, 3 or 4	4. Code Body 5. Supplier	
6.1.1	NHH Unmetered MPAN	~2500 MPANs impacted (of which ~1,500 energised) NHH MPANs cannot be migrated to MHHS, only HH MPANs can be migrated.	1. Change measurement class of MPAN from NHH to HH 2. Migrate MPAN	1. Supplier 2. Supplier	R897
6.1.1	NHH Unmetered Secondary MPAN	Unmetered secondary MPANs cannot be migrated to MHHS.	1. Unrelate NHH unmetered MPANs 2. Change measurement class of primary MPAN from NHH to HH 3. Disconnect secondary MPAN(s)	1. Supplier 2. Supplier 3. LDSO	R897
6.1.2	Domestic Unmetered MPANs	~50 MPANs impacted Domestic Unmetered MPANs cannot be migrated to MHHS.	1. Change DPI to Non-Domestic as per process set out in REC 2. Migrate MPAN	1. Supplier 2. Supplier	i224