Sharing Electricity Meter Technical Details (MTDs)

A REC Code Manager User Guide

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Version History

Version	Date Published	Status	Reason for Change
0.1	12/06/2025	Draft	For industry consultation
0.2	02/07/2025	Draft	Post-consultation updates
1.0	09/07/2025	Approved	Baselined following approval at the REC Metering Expert Panel on 09 July 2025

Purpose of this User Guide

This guidance note provides additional information to support Suppliers', Meter Operator Agents' (MOAs), Distribution Network Operators' (DNOs) and Meter Asset Providers' (MAPs) understanding of the electricity Meter Technical Details (MTDs) sharing arrangements.

This guidance note should be read in conjunction with

- Schedule 14 - Metering Operations, which defines the key business processes which require the sharing of MTDs and the associated Market Participant obligations;
- Energy Market Data Specification (EMDS), which defines the format of the Market Messages used to share MTDs and any specific data population rules; and,
- BSCP706 'Supplier Meter Registration Service for MHHS Metering Systems' which defines the Supplier Meter Registration Service (SMRS) validation rules.

This guidance note has been developed to support the implementation of Market-wide Half Hourly Settlement (MHHS), which made significant changes to the systems and processes used for sharing MTDs. To support Market Participants during MHHS Migration, details have been included regarding the approach for sharing MTDs relating to both MHHS Metering Points and Non-MHHS Metering Points.

A further update to this guidance will be delivered at the end of MHHS Migration when legacy processes are removed from the REC.

Current Processes, Applicable to Non-MHHS Metering Points

Schedule 14 - Metering Operations Part E, defines the metering operations processes applicable to Non MHHS Metering Points, including:

- Metering Asset Installation
- Metering Asset Removal
- Metering Asset Exchange / Reconfiguration
- Switch with and without Concurrent Change of MOA
- Change of MAP
- Change of Energisation Status
- Change of Feeder Status
- Change of Data Collector
- Change of Measurement Class
- Fault Resolution
- Proving Test
- Safe Isolation Provider and Crowded Meter Room MOA arrangements

Metering Related DTN Market Messages for Non MHHS Metering Points

Each of these processes include the steps required to share MTDs. These scenarios require the MOA to share MTDs and other meter related data with relevant Market Participants using the following Market Messages sent via the DTN or other agreed means:

- D0149 ‘Notification of Mapping Details’ and D0150 ‘Traditional Meter Technical Details’ for sharing MTDs relating to Non Half Hourly (NHH) Metering Assets with Suppliers, DNOs, NHH Data Collectors and other MOAs (as part of a change of MOA scenario).
- D0139 ‘Confirmation or Rejection of Energisation Status Change’ or D0179 ‘Confirmation of Energisation/De-Energisation of Prepayment Meter’ for notifying a change of Energisation Status to Suppliers, Data Collectors and DNOs.
- D0268 ‘Advanced Meter Technical Details’ for sharing MTDs relating to Half Hourly Metering Assets with Suppliers, DNOs, Half Hourly Data Collectors and other MOAs (as part of a change of MOA scenario).
- D0313 'Auxiliary Meter Technical Details' as an additional flow for NHH Advanced, for auxiliary MTDs related to Advanced meters not included in the D0149 / D0150 flows’.
- D0312 ‘Notification of Meter Information to MPAS’ for sharing NHH or HH MTDs with the Electricity Retail Data Agent.
- D0303 ‘Notification of Meter Operator, Supplier and Metering Assets installed / removed by the MOP to the MAP’ for sharing meter related information with MAPs.
- D0304 ‘Notification of Meter Asset Provider’ for sharing MAP details with the Electricity Retail Data Agent.

In addition:

- Suppliers are required to share configuration details of Smart Metering Assets with the MOA via the D0367 ‘Smart Meter Configuration Details’.
- DNOs are required to share commissioning details relating their Measurement Transformers with the MOA via the D0383 ‘Notification of Commissioning Information’ which enables the MOA to commission the Metering Assets and send the D0383 and D0384 ‘Notification of Commissioning Information to Suppliers, DNOs and other MOAs (as part of a change of MOA scenario).
- DNOs are required to share Site Technical Details with the MOA to support the Metering Asset installation process, via the D0215 ‘Provision of Site Technical Details’.
- Where DNOs carry out a meter removal / exchange in an emergency situation, the DNO will share the MTDs with the MOA via the D0149/ D0150 or D0268.
- Where DNOs carry out a change of Energisation Status, the DNO will notify the MOA and Supplier via the D0139 ‘Confirmation or Rejection of Energisation Status Change’ or D0179 ‘Confirmation of Energisation/De-Energisation of Prepayment Meter’.

Rules for populating these Market Messages are included in the Energy Market Data Specification as either Message Notes, Group or Data Item Conditions or Data Item Notes.

MHHS Processes, Applicable to MHHS Metering Points

Schedule 14 - Metering Operations Part D, defines the metering operations processes applicable to MHHS Metering Points. The list of processes included in Part D are the same as Part E, with the following exceptions:

- Switch with and without Concurrent Change of MOA is replaced with MOA Appointment with and without Initial Registration / Switch. This reflects the MHHS arrangements whereby the MOA Appointment process must be followed for all Switch events, even if the same MOA is being appointed by the Gaining Supplier
- Change of Data Collector is replaced with Change of Advanced / Smart Data Service.
- Change of Measurement Class is replaced with Change of Market Segment. A separate guidance document is available providing further detail on the Change of Market Segment process.

For Non MHHS Metering Points, MTDs are provided to the Electricity Retail Data Service (ERDS) governed under the REC. For MHHS Metering Points, MTDs are provided to the Supplier Meter Registration Service (SMRS) governed under the BSC. In practice these services use the same underlying system (the Metering Point Registration System (MPRS) provided to DNOs by St Clements Services), it is only the governance that differs.

Metering Related DIP Market Messages for MHHS Metering Points

SMRS holds MTDs for all Metering Points within its distribution network area and will share these via the Data Integration PIatform (DIP) following a Switch event or where MTDs are updated as part of metering activity using the following Market Messages sent via the DIP:

- IF005 ‘MTD Updates to SMRS’ is sent by the MOA to the SMRS following Metering Asset installation, removal or exchange. The SMRS validates the IF005 and where validation is successful, MTDs are shared with other Market Participants via the IF006 ‘SMRS Notification of MTD Updates’. Depending on the event that the IF005 is being used for, the IF006 is shared with the appointed MOA, Data Service and Smart Meter Data Retriever, Supplier, DNO and the Electricity Enquiry Service. Details of the recipients for each scenario variant are included in EMDS.
- The IF005 is also sent by the MOA to provide more general MTD updates, including updates to MAP Id, updates following fault resolution and correction of erroneous data.
- IF007 ‘Change of Energisation Status’ is sent by the MOA to the SMRS following change of Energisation Status. The SMRS validates the IF007 and where validation is successful, notification of the change of Energisation Status is issued to other Market Participants via the IF008 ‘SMRS Notification of Change of Energisation Status’.
- IF002 ‘Notification to New Supplier of Site Information’ is sent by the SMRS to notify the Gaining Supplier of MTDs when a Pending Initial Registration or Switch notification is received from the Central Switching Service (CSS).
- IF036 ‘SMRS Notification of Supplier Agent Appointment & Supporting Info’ is sent by the SMRS to notify the Gaining MOA of MTDs when a change of MOA event is confirmed. This message is also sent to the Supplier, Data Service, DNO, BSC Central Systems and EES.

On receipt of the IF005 and IF007 from the MOA, the SMRS applies validation to retain the integrity of the data held centrally. Details of the validation rules applied by the SMRS are included in BSCP 706 ‘Supplier Meter Registration Service for MHHS Metering Systems’. Further guidance regarding the population of the IF005 is provided in section 8.

MHHS SLAs for sharing MTDs

SMRS holds all MTDs required by Market Participants relating to Smart Metering Assets. For Traditional and Advanced Metering Assets, additional MTDs still need to be shared directly by the MOA using the D0149 / D0150 and D0268 respectively. For Advanced Metering Assets, commissioning data will also be shared via the D0383 and D0384. These DTN Market Messages are issued in the following scenarios:

- During a change of MOA scenario, MTDs should be sent by the Losing MOA to the Gaining MOA within 120 minutes of receipt of the IF035 'SMRS Appointment Status Notification' with Event Code IMS 'Send MTD'.
- During a change of Data Service scenario, MTDs should be sent by the MOA to the Gaining Data Service within 120 minutes of receipt of the IF035 'SMRS Appointment Status Notification' with Event Code IMS 'Send MTD'.
- Within 3 Working Days following metering activity (in parallel with the sending of the IF005, if required, to SMRS).
- During a Switch event, MTDs should be sent by the Gaining MOA to the Gaining Supplier, DNO, and Data Service within 60 minutes of receipt of the IF036 'SMRS Notification of Supplier Agent Appointment & Supporting Info' confirming its appointment.

Note: MAPs are not DIP Users, therefore the existing mechanism for sharing information with MAPs via the D0303 are retained for MHHS Metering Points.

Missing MTDs

During a change of MOA scenario, the Losing MOA is required to send MTDs to the Gaining MOA within 120 minutes of receiving notification that a new MOA appointment has been accepted. The Losing MOA is given some additional time before the Gaining MOA can chase any missing MTDs.

Where MTDs have not been received with 1 Working Day of the Gaining MOA receiving confirmation of its appointment acceptance via the IF035 'SMRS Appointment Status Notification', it can issue a D0170 'Request for Metering System Related Details' to the Losing MOA, requesting MTDs be shared. If the Losing MOA is unable to share MTDs they should escalate this to the Supplier who appointed them.

Guidance for Populating the IF005 ‘MTD Updates to SMRS’

This Market Message is used by MOAs to notify any changes required to metering technical information, for example, Metering Asset installations, removals and exchanges. The IF005 also allows for corrections to the currently installed Metering Asset data and the historical record of installed Metering Assets.

Rules for population of the IF005

Only the ‘currently appointed’ MOA can make updates to the current and/or historic metering history stored in the SMRS. The two exceptions to this rule are:

1. the previously appointed MOA may, for a period of 10 Working Days after they have been de-appointed, notify an install/exchange, removal or Meter Location update (but not a history update) which occurred within their period of appointment, where the de-appointment occurred prior to the MOA being able to issue the required IF005.

2. where a Metering Asset exchange is required as part of a change of Market Segment event, the MOA will need to accept a prospective appointment (with reason code SEG) and can issue an IF005 to the SMRS before the formal MOA appointment comes into effective.

Maintenance of historic meter history is the responsibility of the ‘currently appointed’ MOA. Where issues/queries relating to the accuracy of the meter history arise, the current MOA should liaise with interested participants e.g. the Supplier & previous MOA(s), before making updates to the meter history data.

The IF005 contains 5 Scenario Variants (SV):

SV Ref	Use Case	Purpose
Day to Day BAU Transactions		
SV20715	MeterInstall	Allows the 'addition' of a new Metering Asset, where the install date of the Metering Asset is within the submitting MOA's period of appointment.
SV20716	MeterRemoval	Allows the 'removal' of a currently active Metering Asset, where the removal date of the Metering Asset is within the submitting MOA's period of appointment.
SV20717	MeterExchange	Allows for the 'exchange' i.e. simultaneous removal of currently active Metering Asset, and installation of a new Metering Asset, within the submitting MOA's period of appointment.
History Maintenance Transactions		
SV20718	MeterUpdate	Allows currently appointed MOA to amend the details associated with a currently installed Metering Asset (including a MAP Id update). Allows currently appointed MOA to remove a Metering Asset with removal date prior to the current MOA's period of appointment. Allows previous MOA, within 10 Working Days, to update Meter Location.
SV20719	MeterHistoryUpdate	Allows currently appointed MOA to amend the meter history and/or the details associated with a previously installed but now removed Metering Asset. Allows currently appointed MOA to re-instate a removed Metering Asset by providing removal date of null. Allows currently appointed MOA to install a Metering Asset with installation date prior to the current MOA's period of ownership.

SMRS validation of the IF005

- For Install, Remove or Exchange event codes, metering activity, as determined by the Install / Remove Date(s), must take place within the MOA period of ownership (or proposed period of ownership in the case of a prospective SEG appointment), and must not be in the future.
- Metering activity, as determined by the Install Date, must have taken place on or between the Metering Point creation and Metering Point disconnection dates (validation allows for Metering Asset removal at a point following disconnection, if required)
- The MAP Id for newly installed Metering Assets must be provided, must be valid in ISD, and must become effective, in alignment with the Meter Installation Date.
- There is no validation in relation to ‘Meter Type’ and the Market Segment/type of the MOA appointed, as this may prevent the update of metering information. For example, if a Smart MOA were to discover an Advanced Metering Asset in place (or vice versa). However, the ‘Meter Type’ used must be valid in ISD.
- Unless the Removed Meter Information group (B039) is explicitly provided in the message, then only an install/meter update is possible i.e. change of removal date / un-removal is only possible when the Removed Meter Information group (B039) is provided/contained in the message.
- The MHHS design allows for the implementation of the use of ‘exact times’ for events at some point in the future. However, under the current design the time element of ‘Effective From’ data items should be populated as midnight on the relevant UTC Day; or where a non-midnight time is provided, this should be deemed to be midnight on the relevant UTC day, as is the convention under the pre-MHHS processes.

Use Cases for Scenario Variants

The following section provides an example(s) for each Scenario Variant, as well as any specific points relevant to that Scenario Variant.

In the examples, Install and Removal Dates in the case of meter exchanges, are shown as being the same date to ensure no gaps in data.

Example 1: SV20715 – MeterInstall

- Usage: the MeterInstall Event should be used to notify SMRS when a new Metering Asset has been installed.
- Example: The example below shows the addition of Meter ID ZZ99Z12345, to MPAN 1315001165123, on 21st March 2025. Ownership of the meter resides with MAP1 from the date of installation. Smart Meter IHD in-home display information is shown here, but population of this data is optional subject to agreement between a Supplier and the MOA.

Starting Position

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
0	No Meter History					

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterInstall
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ99Z12345
B033	DI20020	modifiedMeterID	[blank]
B033	DI50230	meterType	S2CDE
B033	DI50191	manufacturersMakeAndType	SIEMENS ZMD120AR44.0200.C4
B033	DI51599	ESMEGUID	SC-12-34-56-78-90-12-34
B033	DI50194	meterLocation	A
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2025-03-21T00:00:00+00:00

B034	DI51003	meterAssetProviderID	MAP1
B034	DI20268	meterAssetProviderEffectiveFromDate	2025-03-21T00:00:00+00:00
B039	Removed Meter Information not included in message		
B030	DI51132	IHDInstallStatus	D
B030	DI20277	IHDEffectiveFromDate	2025-03-21T00:00:00+00:00

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Installed	21/03/2025		21/03/2025	MAP1

Example 2: SV20716 – MeterRemoval

- Usage: the MeterRemoval Event should be utilised for removing a currently active Metering Asset.
- Example: MPAN 1315001165123 already has two active Metering Assets installed. The example below would affect the removal of Metering Asset ZZ99Z12345 on date 1/11/2025.

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Installed	01/01/2000		01/01/2000	MAP1
2	XX99X12345	Installed	01/02/2002		01/02/2025	MAP1

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterRemoval
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	New / Revised Meter Information not included in message		
B034	Meter MAP Information not included in message		
B039	DI20267	meterIDRemoved	XX99X12345
B039	DI20270	meterRemovalDate	2025-02-01T00:00:00+00:00
B030	MPAN IHD Information not included in message		

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Removed	01/01/2000	01/11/2022	01/01/2000	MAP1
2	XX99X12345	Installed	01/02/2002		01/02/2025	MAP1

Example 3: SV20717 – MeterExchange

- Usage: the MeterExchange Event should be utilised for simultaneous removal for an existing Metering Asset and installation of a new Metering Asset. This same outcome can be achieved using two separate MeterRemoval and MeterInstall events.
- Example: MPAN 1315001165123 already has meter ZZ00Z12345 installed from date 01/01/2000. The example below would effect the exchange of meter ZZ99Z12345 for meter XX99X67890 on date 10/11/2025.

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Installed	01/01/2000		01/01/2000	MAP1

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterExchange
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	XX99X67890
B033	DI20020	modifiedMeterID	[blank]
B033	DI50230	meterType	S2CDE
B033	DI50191	manufacturersMakeAndType	SIEMENS ZMD120AR44.0200.C4
B033	DI51599	ESMEGUID	SC-12-34-56-78-90-12-34
B033	DI50194	meterLocation	A
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2025-11-10T00:00:00+00:00
B034	DI51003	meterAssetProviderID	MAP1
B034	DI20268	meterAssetProviderEffectiveFromDate	2025-11-10T00:00:00+00:00
B039	DI20267	meterIDRemoved	XX99X12345
B039	DI20270	meterRemovalDate	2025-11-10T00:00:00+00:00
B030	DI51132	IHDInstallStatus	D
B030	DI20277	IHDEffectiveFromDate	2025-11-10T00:00:00+00:00

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Exchanged	01/01/2000	10/11/2025	01/01/2000	MAP1
2	XX99X12345	Installed	10/11/2025		10/11/2025	MAP1

Example 4: SV20718 – MeterUpdate

- Usage: the MeterUpdate Event should be utilised for making changes to currently installed Metering Assets only.
- General Principles:
    - It is anticipated that MeterUpdate, and MeterHistoryUpdate transactions will be used much less often than other IF005 Scenario Variants.
    - Given these transactions operate on an individual Metering Point at a time, several transactions may be required in order to effect the desired change/changes required to the meter history. These transactions can be 'clubbed together' and sent as a group in a single overarching message/API transaction. When multiple transactions are required, transactions should be time-stamped to reflect the correct sequencing order.
    - General validation principles, in additional to those for all IF005 Scenario Variants:
        a. Meter Serial Number/Meter ID cannot be updated in the same transaction as a change in Install and/or Removal Date
        b. When maintaining the MAP History, the MAP history provided should commence either with a MAP Effective From Date matching the existing Install Date of the meter OR be greater than the most recent, already existing, MAP Effective From Date.
    - Even when amending a meter history, it shall not be possible for two meters with the same 'Meter ID' to be installed, at the same time for the same Metering Point.
    - MeterUpdate Event possible actions:
        - Update Meter Serial Number / Meter ID (n.b. cannot be undertaken in conjunction with a change in Installation Date/removal of the meter)
        - Update Meter Installation Date
        - Set Meter Removal Date (to a date prior to the current MOA's period of ownership)
        - Populate missing Meter Technical Details e.g. Location, Manufacturer, Displayed Digits
        - Update/change existing Meter Technical Details e.g. Meter Type, GUID, Location, Manufacturer, Displayed Digits
        - Replace/ extend existing MAP
        - Update IHD Status
    - Whilst there is a constraint on changing both the Meter ID and Installation/Removal Date within the same transaction, other actions can be realised through a single message, with all data items updated to match those provided in the update message (n.b. all data items within submitted groups should be provided in each message even where these data items are not changing or are null)
    - Caution should be exercised when setting the Meter Removal Date, as this will have the effect of deleting any existing MAP history that extends beyond the requested Removal Date.
    - Setting the Removal Date to equal the Installation Date will have the effect of 'deleting' the meter, all associated data items and the existing MAP history.

Example 4A – Update Meter ID

MPAN 1315001165123 already has meter ZZ99Z12345 installed from date 01/01/2000, but the Meter Serial Number needs to be corrected to ZZ88Z12345. Example below would affect the update of Meter ID ZZ99Z12345 to ZZ88Z12345. The Install Date (protected) would remain the same, but any other

data items/MAP history (if provided) would also be amended to match the content of the update message.

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ99Z12345	Installed	01/01/2000		01/01/2000	MAP1

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterUpdate
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ99Z12345
B033	DI20020	modifiedMeterID	ZZ88Z12345
B033	DI50230	meterType	S2CDE
B033	DI50191	manufacturersMakeAndType	SIEMENS ZMD120AR44.0200.C4
B033	DI51599	ESMEGUID	SC-12-34-56-78-90-12-34
B033	DI50194	meterLocation	A
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2000-01-01T00:00:00+00:00
B034	DI51003	meterAssetProviderID	MAP1
B034	DI20268	meterAssetProviderEffectiveFromDate	2000-01-01T00:00:00+00:00
B039	Removed Meter Information not included in message		
B030	DI51132	IHDInstallStatus	D
B030	DI20277	IHDEffectiveFromDate	2000-01-01T00:00:00+00:00

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ88Z12345	Installed	01/01/2000		01/01/2000	MAP1

Example 4b - Update Data Item(s):

Example below would affect the update of any/all off the meter characteristics of Meter ID ZZ99Z12345, in that data items/MAP history (if provided) would be amended to match the content of the update message. In the example below the data items in green would be updated to the values contained in the message.

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterUpdate
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ99Z12345
B033	DI20020	modifiedMeterID	[blank]
B033	DI50230	meterType	S2A
B033	DI50191	manufacturersMakeAndType	L&G E240 Smart v1
B033	DI51599	ESMEGUID	MF-12-34-56-78-90-12-34
B033	DI50194	meterLocation	B
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2000-01-01T00:00:00+00:00
B034	DI51003	meterAssetProviderID	MAP1
B034	DI20268	meterAssetProviderEffectiveFromDate	2000-01-01T00:00:00+00:00
B039	Removed Meter Information not included in message		
B030	DI51132	IHDInstallStatus	A
B030	DI20277	IHDEffectiveFromDate	2000-01-01T00:00:00+00:00

Example 4c – Extend MAP History

MPAN 1315001165123 Meter ZZ88Z12345 currently has the MAP history as shown below. Example below would extend the existing MAP history to include an additional, MAP ‘MAP6’ effective from 01/12/24

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ88Z12345	Installed	01/01/2000		01/01/2000	MAP0
					01/08/2021	MAP4
					01/11/2022	MAP5

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterUpdate
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ88Z12345
B033	DI20020	modifiedMeterID	[blank]
B033	DI50230	meterType	S2A
B033	DI50191	manufacturersMakeAndType	L&G E240 Smart v1
B033	DI51599	ESMEGUID	MF-12-34-56-78-90-12-34
B033	DI50194	meterLocation	B
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2000-01-01T00:00:00+00:00
B034	DI51003	meterAssetProviderID	MAP6
B034	DI20268	meterAssetProviderEffectiveFromDate	2024-12-01T00:00:00+00:00
B039	Removed Meter Information not included in message		
B030	MPAN IHD Information not included in message		

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ88Z12345	Installed	01/01/2000		01/01/2000	MAP0
					01/08/2021	MAP4
					01/11/2022	MAP5
					01/12/2024	MAP6

Example 5: SV20719 – MeterHistoryUpdate

- Usage: Allows currently appointed MOA to amend the meter history and/or the details associated with a previous installed but now removed meter.
- Notes: A meter can either be created (added with install date prior to current MOAs appointment) or 'un-removed' using this method, where the Meter Removal Date is set in the message as <NULL>, using [MeterHistoryUpdate].

Example 5a – Amend Meter ID

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ88Z12345	Removed	01/01/2000	01/11/2000	01/08/2000	MAP0
2	XX99Z54321	Installed	01/11/2000		02/11/2000	MAP6

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterHistoryUpdate
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ88Z12345
B033	DI20020	modifiedMeterID	ZZ99Z12345
B033	DI50230	meterType	S2A
B033	DI50191	manufacturersMakeAndType	L&G E240 Smart v1
B033	DI51599	ESMEGUID	MF-12-34-56-78-90-12-34
B033	DI50194	meterLocation	B
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2000-01-01T00:00:00+00:00
B034	Meter MAP Information not included in message		
B039	Removed Meter Information not included in message		
B030	MPAN IHD Information not included in message		

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ**99**Z12345	Removed	01/01/2000	01/11/2000	01/08/2000	MAP0
2	XX99Z54321	Installed	01/11/2000		02/11/2000	MAP6

Example 5b – Meter Deletion

The action of setting the Removal Date to equal the Installation Date has the effect of deleting the meter instance, including its associated attributes and MAP history.
In the case of meter and MAP 'removals', the SMRS will only 'logically' remove the entries – i.e. they will be marked as inactive and not deleted physically from the database.

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
1	ZZ88Z12344	Removed	01/01/2000	01/08/2000	01/01/2000	MAP0
2	ZZ88Z12345	Removed	01/02/2000	01/08/2000	01/02/2000	MAP0
					01/07/2000	MAP1
3	ZZ88Z12345	Removed	01/08/2000	01/11/2000	01/08/2000	MAP1
4	XX99Z54321	Installed	01/11/2000		02/11/2000	MAP6

Group	Data Item Id	Data Item YAML Name	Value
S0	DI20000	InterfaceId	IF-005
S0	DI20227	schemaVersion	1.1.1
S0	DI20234	eventCode	MeterHistoryUpdate
S1	*S1 Sender Block Content (removed for* ease of reading*)*		
D0	*D0 DIP Info Block Content (removed for ease of reading)*		
A0	*A0 Routing Block Content (removed for ease of reading)*		
M0	DI50003	MPANCore	1315001165123
M0	DI20046	distributorDIPID	9876054321
M0	DI50028	GSPGroupID	K
B033	DI50004	meterID	ZZ88Z12344
B033	DI20020	modifiedMeterID	[blank]
B033	DI50230	meterType	S2A
B033	DI50191	manufacturersMakeAndType	L&G E240 Smart v1
B033	DI51599	ESMEGUID	MF-12-34-56-78-90-12-34
B033	DI50194	meterLocation	B
B033	DI50228	numberOfDisplayedRegisterDigits	6
B033	DI20269	meterInstallationDate	2000-01-01T00:00:00+00:00
B034	Meter MAP Information not included in message		
B039	DI20267	meterIDRemoved	ZZ88Z12344
B039	DI20270	meterRemovalDate	2000-01-01T00:00:00+00:00
B030	MPAN IHD Information not included in message		

Outcome

	Meter ID	Status	Install Date	Remove Date	MAP Eff From	MAP ID
~~1~~	~~ZZ88Z12344~~	~~Deleted~~	~~01/01/2000~~	~~01/01/2000~~	~~01/01/2000~~	~~MAP0~~
2	ZZ88Z12345	Removed	01/02/2000	01/08/2000	01/02/2000	MAP0

					01/07/2000	MAP1
3	ZZ88Z12345	Removed	01/08/2000	01/11/2000	01/08/2000	MAP1
4	XX99Z54321	Installed	01/11/2000		02/11/2000	MAP6

Frequently Asked Questions

Q1. What DTN Market Messages should be sent when there are no meters present?

A: As set out in the Metering Operations Schedule:

- For Advanced Metering Assets, the D0268 is to be sent in all circumstances, even if no Metering Asset is present on site, unless the MOA does not have sufficient information to fully populate group 01A.
- For Traditional Metering Assets, the D0150 is to be sent in all circumstances. The D0149 would not be issued where there is no Metering Asset.
- For Non MHHS Metering Points, the MOA must send a D0313 in all cases where the MOA sends a D0150 and where the meter type is either NCAMR, RCAMR or RCAMY, except where there are no meters at the Metering Point and/or all meters have been removed, in which case only the D0150 is sent.

Q2. How is a rejection by the DNO to change the energisation status of a Metering Asset communicated back to the requesting Supplier?

A: The MHHS Design requires the DNO to send Energisation Status communications to the MOA. Therefore, where the DNO rejects the request for a change of Energisation Status, they will notify the MOA via the D0139, and the MOA will issue an IF007 rejection to the Supplier.

Q3. How are MTDs shared following meter works during migration?

A: Where meter works take place following the initiation of MHHS Migration, the resulting D0312 to the SMRS will be rejected. The Gaining MOA will not be aware that a meter update has taken place and therefore will receive and store inaccurate MTDs from the SMRS.

Q4. Should information regarding ‘Check’ meters be shared with the SMRS?

A: Under the MHHS, the valid set for the Meter Type Data Item (J0483) in Swagger does not include an enumeration of ‘Check’ and therefore details of ‘Check’ meters should not be shared with the SMRS via the IF005.

Q5. Are there any circumstances where it is not necessary to send an IF005 but sending DTN flows is required?

A: Yes, for Traditional and Advanced meters if a change is made to an item held in the DTN flows only (e.g. a change to the communication method for Advanced meters) then in this instance only the DTN flows would be sent. These would be sent in the same timeframe as the IF005 (3 WD).