Market Code Schedule 12

Code Subsidiary Document No. 0104

Maintain SPID Data
(Part 2 – Meter Level Data)

Version: 11.0

Date: 2018-02-01

Document Ref: CSD0104
## Change History

<table>
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<tr>
<th>Version Number</th>
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<td>MCCP215</td>
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1. Purpose and Scope

The SPID Data held in the Central Systems should accurately reflect the circumstances at each Supply Point. Accordingly, under Section 5.5.1 of the Market Code, Data Owners have a duty to maintain and keep the SPID Data up to date.

This CSD covers data changes to Supply Points that are Tradable (or Reconnected), or Temporarily Disconnected and the creation of Pseudo Water Service Supply Points (for the purposes of enabling the application of re-assessed charges at a Sewerage Services Supply Point). This CSD excludes changes to data associated with other Supply Points that have a status of New, Partial, Rejected, Permanently Disconnected or Deregistered. This CSD also excludes any data submissions for meter reads and Supply Point transfers.

The obligation on Data Owners to submit a SPID data update will be triggered by certain key events, or on becoming aware of any need to correct existing data within timescales identified within this CSD where such data is subject to Error Rectification as defined in CSD0301.

Corrections to data where such data is subject to Error Rectification outside timescales identified in this CSD, or where such data is subject to Retrospective Amendment, should be dealt with via CSD0105.

For those data updates within the scope of this CSD, Data Owners should follow the processes identified in this CSD. Specifically, there are processes in this CSD for two broad scenarios.

CSD 0104 Part 1 covers data changes relating to the Supply Point generally. This includes:

- Changes to the status of a Supply Point;
  - From being Tradable to Temporarily Disconnected,
  - From being Temporarily Disconnected to being Permanently Disconnected,
  - From being Temporarily Disconnected to being Re-connected, or
  - From being Tradable, Re-connected or Temporarily Disconnected to being Deregistered.
  - Establishing a Pseudo Water Services Supply Point
  - Adding a water supply at a Pseudo Water Services Supply Point

- Changes to the Parameters of a Supply Point;
  - Changes to the Unmeasurable Status
  - Updates to Vacancy status
  - Updates to the Customer Name
  - Updates to the SAA Reference and UPRN data
  - Updates to the Service Elements
  - Updates to any special arrangements
o Updates to the Supply Point Address and other non-chargeable data.

CSD 0104 Part 2 covers data changes relating to metering arrangements at a Supply Point. This includes:

- **Meter Changes;**
  - Swapping a Meter
  - Adding a physical Meter, Pseudo Meter, or other virtual Meter
  - Removing a physical Meter, Pseudo Meter, or other virtual Meter

- **Meter Data Updates;**
  - Updating a Meter Network
  - Updating Meter Details
  - Updating Meter Location information
  - Updating Meter Chargeable Data
  - Notifications for faulty meters
2. Maintain Meter Level SPID Data - Overview

This CSD describes the processes associated with meter changes on a Water Services Supply Point and changes to meter related data at a Supply Point.

Meter Changes.

An existing physical meter may be replaced with a ‘like-for-like’ meter; i.e. there is no change to the meter configuration that would result in alteration to the Wholesale Charges. If any association exists between the meter to be removed and Trade Effluent Discharge Point(s) at the Supply Point, this association shall continue to exist following the “like for like” meter replacement such that the replacement meter shall inherit the same associations to Trade Effluent Discharge Points. In a “like for like” meter replacement the Meter Treatment of the removed meter and the replacement meter must be the same.

A meter may be added, or removed.

Where Re-Assessed charges are to apply, a Pseudo meter may be added and such meter may also be removed. Where Re-Assessed charges are applied to a Sewage Services only Supply Point, the Pseudo Meter will be added to a Pseudo Water Services Supply Point.

Combinations of the above processes may also be required. For example, for a change of meter including a change to a meter size (e.g. it is “right-sized” at replacement), then the Remove Meter and Add Meter processes should be followed. A Pseudo meter may be replaced by a physical meter, in which case the Remove Pseudo Meter process should be used, along with the Add Meter process. If an Unmeasured Supply Point becomes measured; i.e. a meter is added to the Supply Point, the Change to Unmeasured Status process given in CSD0104 Part 1 should be followed, along with the Add Meter process.

If a change of meter affects the Trade Effluent Services, the updated details for Trade Effluent Services shall be notified in accordance with CSD0206 (Trade Effluent Processes).

The addition of a physical meter to an existing Supply Point will be undertaken in accordance with Operational Code (Process 8). A change of meter is undertaken in accordance with the Operational Code (Processes 9, 10, 11, 12).

Meter Treatment and Associated Meter Details

When a meter is added to a Supply Point, a number of physical and chargeable details are notified to the CMA including Meter Treatment (Data Item D3022), which is set to one of the following:
I. An SW Water Meter (denoted by SW Water) recording water supplied to an Eligible Premises from the Public Water Supply System;

II. A Private Water Meter (denoted by Private Water) recording water supplied to an Eligible Premises from a private water supply i.e. a water supply other than the Public Water Supply System;

III. A Private Effluent Meter (denoted by Private Effluent) recording the volume of some or all, of the Sewerage Services discharged to the Public Sewerage System at an Eligible Premises;

IV. A virtual meter recording the volume of Tankered Effluent (denoted Tankered Effluent) imported into an Eligible Premises to be discharged to the Public Sewerage System from that Eligible Premises.

V. An Adjustment Meter or Modification Meter (denoted Logical Water) for the purposes of adjusting metered volumes. An Adjustment Meter is a virtual meter added or removed at an existing Supply Point for the purposes of adjusting metered volumes for matters such as fire-fighting, or burst allowances. A Modification Meter is a virtual meter added and removed at an existing Supply Point to facilitate changes to SPID Data,

VI. A Pseudo Meter (denoted Pseudo Water) is a virtual meter added for the purposes of facilitating reassessed charges.

When installing a Private Water Meter, Private Effluent Meter or Tankered Effluent virtual meter, the Chargeable Meter Size should be set to 0.

When installing a Private Effluent Meter or Tankered Effluent virtual meter, the Sewerage Chargeable Meter Size and Return to Sewer Allowance should both be set to 0.

An Adjustment Meter shall have the following properties:

- It is applicable to Measured Supply Points
- The meter ID should conform to one of the following configurations:
  a. 05BURSTYYnnnnnn - Burst Allowance
  b. 10BURSTNOWTRYYnnnnnn – Burst No water, used in conjunction with BURST in cases of Sewerage Only allowance. In such cases the reference YYnnnnnn shall be the same across both meters.
  c. 04FIREYYnnnnnn - Fire Fighting Allowance
  d. 07FIRESTNYnnnnnn - Fire Station (as special case of Fire Fighting Allowance)
  e. 06METACCYYnnnnnn – Meter Accuracy
  f. Others as agreed in a similar format:
where

- the first two digits denote the length of the meter name
- YY refers to the financial year in which the meter is created in the Central Systems, where for example, “08” refers to the financial year 2008-09.
- and nnnnnn is a unique identifier

- The Chargeable water size and Chargeable sewerage size should be 0. Setting the Chargeable Sizes to 0 is critical to ensure that there are no standing charges associated with the Adjustment Meter. However, a positive value should be chosen for the Physical Meter Size.
- The free descriptor should note “FIRE ADJUSTMENT METER”, “BURST ADJUSTMENT METER”, or similar in respect of other agreed names.
- The D3022 Meter Treatment should be set to Logical Water.
- Scottish Water shall submit one opening “I” read, and one closing “F” read in respect of the meter. It is likely that a re-read may have to be submitted in respect of the closing “F” read.
- The dates of the opening and closing reads shall reflect the dates for which the allowance has been granted. For Fire Stations, the start and end dates shall be 1st April and 31st March. For example, for a fire adjustment in respect of a fire on 20th July, the opening read shall be 20th July and the closing read shall be 21st July.
- For a positive adjustment, the two reads should be “0” and “r” respectively; for a negative adjustment, the two reads should be “r” and “0” respectively where “r” is equal to the size of the allowance.
- The RTS allowance shall be appropriately chosen. However, it should be noted that where the adjustment refers to a Sewerage SPID with a DPID which has a Non Domestic Allowance set, the Non Domestic Allowance takes precedence over the RTS allowance.

A Modification Meter should have the following properties:

- The meter ID should be:
  - 03MOD YYnnnnnn

where

- the first two digits denote the length of the meter name (three)
- YY refers to the financial year in which the meter is created in the Central Systems, where for example, “08” refers to the financial year 2008-09.
- and nnnnnn is a unique identifier
• The Chargeable water size and Chargeable sewerage size should be 0. Setting the Chargeable Sizes to 0 is critical to ensure that there are no standing charges associated with the Modification Meter. However, a positive value should be chosen for the physical meter size.

• The free descriptor should note “MODIFICATION METER”.

• The D3022_Meter Treatment should be set to Logical Water.

• Scottish Water shall submit one opening “I” read, and one closing “F” read in respect of the meter. Both reads should be “0”.

• Where an unmeasurable Service Element is being stopped, the initial read should correspond to the date of cessation of the unmeasurable Service Element. The final read should be for the next Day. There should be minimal delay between sending the relevant transactions.

A Pseudo Meter will have the following properties:

• The meter ID format must conform to the following configuration:
  o 06PSEUDOYYnnnnnn
  where YY indicates the calendar year and nnnnnn denotes the unique numeric identifier for the Pseudo Meter

• The Meter Read Frequency must only be value ‘N’. Any other value included within the T004.3 will be rejected.

• The YVE equivalent to the Re-assessed volume confirmed under the Operational Code should be notified to the CMA. Whilst the YVE is a required field in the T004.3, a zero value is not appropriate and should not be used.

• For the avoidance of doubt, the YVE value in a T004.3 is not restricted to the permitted annual water volume(s) and Scottish Water shall ensure that they only populate the T004.3 with the relevant values as set out in the Wholesale Charges Scheme.

• The free descriptor D5001 shall note “PSEUDO METER”

• Scottish Water will also provide the CMA with an Initial Read for the Pseudo Meter using Data Transaction T005.0 (Meter Read), which shall:
  o be sent within 2 Business Days of the T004.3 above; and
  o notify no other read value than zero.
Trade Effluent Metering

At some Trade Effluent premises, it is not possible for the volume of effluent to be calculated via the standard mechanisms of the CMA deducting allowances from the metered water supplied to the site, and it is also not possible for an effluent meter to be installed. In such cases a non-standard meter is added to the Supply Point for the purpose of reflecting Trade Effluent volumes. The categories of premises are described further below along with details of the meter naming convention that should be used in each case.

- **Contaminated run-off and leachate (PCONT)**
  This category of premises discharges contaminated leachate, or run-off to sewer (e.g. landfill sites) where it is not feasible to install an effluent meter. Because the waste has not arisen from the water supplied to the premises, it is not possible to calculate the effluent volumes from the metered water consumption. A meter with a Meter Treatment of Private Effluent is created in the Central Systems to reflect the volumes discharged which will be derived from customer records or third party data by a methodology agreed with Scottish Water. The meter will have a Meter ID which will conform to the configuration 05PCONTnnnn, where the first two digits denote the length of the meter name and nnnnnn is the Discharge Point ID.

- **Delayed release (PDR)**
  This category of premises discharges effluent periodically from a tank and the customer retains records of the volume of effluent in the tank and frequency of discharge. A meter with a Meter Treatment of Private Effluent is created in the Central Systems to reflect the volumes discharged which will be derived from customer records by a methodology agreed with Scottish Water. The meter will have a Meter ID which will conform to the configuration 03PDRnnnn, where the first two digits denote the length of the meter name and nnnnnn is the Discharge Point ID.

- **Other estimated volumes (PFIX)**
  There are certain premises where the configuration of the site is such that the standard mechanism of calculating Trade Effluent volumes via the deduction of allowances from metered water consumption is not appropriate and where installation of an effluent meter is not feasible. A meter with a Meter Treatment of Private Effluent is created in the Central Systems to reflect the volumes discharged which will be derived from production or other relevant data by a methodology agreed with Scottish Water. The Meter ID will conform to the configuration 04PFIXnnnnnn, where the first two digits denote the length of the meter name and nnnnnn is the Discharge Point ID.
• **Tankered Effluent (PTAN)**
  Where Trade Effluent is imported into an Eligible Premises, the imported volumes are recorded in the Central Systems by means of a meter, with a Meter Treatment of Tankered Effluent. The Meter ID will conform to the configuration 04PTANnnnnnn, where the first two digits denote the length of the meter name and nnnnnn is the Discharge Point ID.

In all cases, the relevant data and methodology for deriving Trade Effluent volumes will be notified to the Licensed Provider by Scottish Water. The arrangements for notifying the CMA of Trade Effluent volumes for the Private Effluent and Tankered Effluent Meters listed above are set out in section 4.

A meter associated with Trade Effluent (with a Meter Treatment of either Private Effluent or Tankered Effluent) shall be set up using the standard T004.0 flow, by Scottish Water, which shall have the following properties:

- The meter ID should conform to one of the configurations listed above.
- The Chargeable Meter Size and Sewerage Chargeable Meter Size should be 0.
- The Free Descriptor should provide details of the nature of the arrangements for calculating Trade Effluent volumes at the Discharge Point; and,
- The Return to Sewer allowance should be 0.
- Scottish Water shall submit an opening “I” read of 0.

**Meter Networks**

A Meter Network applies where two meters are to be associated, such that one meter becomes a Main Meter and the other meter becomes a Sub-Meter.

**Other Meter Updates**

The following updates may also be required:

- Meter Details,
- Meter Location,
- Meter Chargeable data,
- Faulty Meter Notification.
3. Meter Changes on a Supply Point

3.1. Meter Swap

3.1.1 Meter Swap Process

This description should be read in conjunction with the Process Diagram in Section 3.1.2 and the Interface and Timetable Requirements in Section 3.1.3. The ‘step’ and ‘decision’ references appear to the bottom left of each step or decision symbol in the Process Diagram.

Step a: Licensed Provider requests meter change
Where a Licensed Provider wishes to initiate a meter change, it will submit a request to Scottish Water in accordance with the relevant process in the Operational Code.

Step b: Scottish Water notifies Licensed Provider of requirement to replace meter
If the requirement to replace the meter originates from Scottish Water, it will advise the Licensed Provider of the meter replacement in accordance with the relevant process in the Operational Code.

Step c: Replacement meter installed
Scottish Water will replace the meter in accordance with the relevant process in the Operational Code.

Step d: Update data to CMA: [T004.0, T017.0]
Within 5 Business Days, for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, of the meter replacement, Scottish Water will provide the CMA with the new meter details, using Data Transaction T004.0 (Notify Meter Details). Scottish Water will also include within this transaction, the meter location and data logger flags to indicate the presence or absence of data loggers at a meter. The meter location should be notified in the form of OSGB X, Y co-ordinates in an all numeric format and should also include the Meter Location Code. The meter location must be provided for meters which have either a Chargeable Meter Size greater than zero, and/or a Sewerage Chargeable Meter Size greater than zero. The provision of the meter location is optional, otherwise. Data loggers can be either Scottish Water data loggers or non-Scottish Water data loggers. Both data logger types can be present at a meter at the same time.

Within 1 Business Day of receiving the T004.0 (Notify Meter Details), the CMA will validate the transaction, including a check that the GISX and Gisy co-ordinates provided are not clearly out with the boundaries of Scotland before processing the transaction in the Central
Systems. In the event that this is not the case, or that another aspect of validation fails, the CMA will issue a T009.1 (Error Notification) to Scottish Water.

Scottish Water will then issue the CMA with Data Transaction T017.0 (Notify Swap Meter), which includes details of the End and Opening Meter Reads. Failure to include a SPID in the T017.0 transaction when swapping a market meter will result in the transaction being rejected and the CMA will issue a T009.1 (Error Notification) to Scottish Water.

Scottish Water should note that the T017.0 must be sent after the T004.0, otherwise the new meter will not be recognised in the Central Systems and will result in a Data Transaction T009.1 (Error Notification) being issued to Scottish Water.

**Step e: Update Central Systems and notify Licensed Provider(s) [T004.1, T017.1]**

The End Read will be subject to the validation requirements set out in CSD 0203 (Meter Read Submission: Validation). The CMA will then update the Central Systems, and notify the Licensed Provider(s) of the new meter information using the Data Transaction T004.1 (Notify Meter Details) and the End Read and Opening Read, in accordance with CSD0202, using Data Transaction T017.1 (Notify Swap Meter).

In the case of a meter replacement at a Supply Point where the meter is in respect of the Water or Sewerage Services only, the CMA will only send notification of the new meter details and the Meter Reads to the Licensed Provider Registered to that Supply Point, using Data Transaction T004.1.

In the case of a meter replacement where that meter is a Related Water Supply Meter, the CMA will notify the Sewerage Services Licensed Provider Registered to that Supply Point of the new meter details and the Meter Reads, at the same time that it notifies the Water Services Licensed Provider, using the Data Transactions listed above. If a Meter is replaced during a Transfer period, notifications will be sent to the incoming LP as well as the outgoing LP.
3.1.2 Meter Swap Process Diagram

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<th>Scottish Water</th>
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<tr>
<td>a</td>
<td>If change req. by LP Submit request to SW</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>If change req. by SW Notify LP of requirement to change meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>Replace meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>Provide meter details, swap info, End &amp; Opening Reads</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T004.0 T017.0</td>
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<td></td>
<td>Meter Read Submission Validation CSD0203</td>
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<td>Update CMA System &amp; notify LP(s) of Reads &amp; new meter details</td>
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<td>T004.1 T017.1</td>
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### 3.1.3 Meter Swap Interface and Timetable Requirements

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<th>Clause</th>
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<td>a</td>
<td>S</td>
<td>Submit request to SW</td>
<td>LP</td>
<td>SW</td>
<td></td>
<td></td>
<td>Operational Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>S</td>
<td>Notify LP of requirement to change meter</td>
<td>SW</td>
<td>LP</td>
<td></td>
<td></td>
<td>Operational Code</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>S</td>
<td>Replacement Meter installed</td>
<td>SW</td>
<td>internal</td>
<td>within 30 BD of confirmation</td>
<td>Operational Code</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>S</td>
<td>Provide meter details, swap info, End &amp; Opening Reads</td>
<td>SW</td>
<td>CMA</td>
<td>within 5/8 BD of meter change</td>
<td>All transactions must be present and must be sent in this order: T004.0 Meter details for new meter T017.0 Swap notification (old, new)</td>
<td>5.5.1</td>
<td>i</td>
<td>T004.0</td>
</tr>
<tr>
<td>e</td>
<td>S</td>
<td>Update Central System &amp; notify LP(s) of reads &amp; new meter details</td>
<td>CMA</td>
<td>LP</td>
<td>1BD</td>
<td>If Related Water Supply Meter, also advise SS LP of WS meter change and End &amp; Opening Reads</td>
<td></td>
<td></td>
<td>T004.1</td>
</tr>
</tbody>
</table>
3.2 Addition of a Meter to an Existing Supply Point

This section applies when a physical meter is added to an existing Supply Point under Process 8 of the Operational Code. It does not apply when a Pseudo Meter is added to an existing Supply Point or Pseudo Water Services Supply Point pursuant to the application of Re-assessed Charges, which is covered in Section 3.4, nor if another form of virtual meter is added to an existing Supply Point, which is covered in section 3.6. Where a meter is part of a Meter Network then the Meter Network should be updated following the addition of the meter, the process for which is outlined in Section 4.1.

This description should be read in conjunction with the Process Diagram in Section 5.2 and the Interface and Timetable Requirements in Section 5.3. The 'step' and 'decision' references appear to the bottom left of each step or decision symbol in the Process Diagram.

3.2.1 Meter Addition Process

Step a: Scottish Water installs meter
This step represents the point at which a physical meter is installed at an existing Supply Point in accordance with Process 8 of the Operational Code.

Step b: Update SPID Data to CMA: [T004.0, T005.0, T009.1, T033.0, T016.0]
Within 5 Business Days, for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, of the installation, Scottish Water will provide the CMA with the new meter details, using Data Transaction T004.0 (Notify Meter Details). This shall include the Meter Treatment Type. Scottish Water will also include within this transaction, the meter location and data logger flags to indicate the presence or absence of data loggers at a meter and the Physical Meter Size. The meter location should be notified in the form of OSGB X, Y co-ordinates in an all numeric format and should also include the Meter Location Code. The meter location must be provided for meters with a Meter Treatment Type of SW Water, Private Water or Private Effluent. The provision of the meter location is optional, otherwise. Data loggers can be either Scottish Water data loggers or non-Scottish Water data loggers. Both data logger types can be present at a meter at the same time. The Physical Meter Size must be provided for meters with a Meter Treatment Type of SW Water, or Private Water. Otherwise, the provision of the Physical Meter Size is optional.

Within 1 Business Day of receiving the T004.0 (Notify Meter Details), the CMA will validate the transaction, including a check that the GISX and Gisy co-ordinates provided are not clearly out with the boundaries of Scotland before processing the transaction in the Central Systems. In the event that this is not the case, or that another aspect of validation fails, the CMA will issue a T009.1 (Error Notification) to Scottish Water.
Scottish Water will also provide the CMA with an Initial Read for that meter using Data Transaction T005.0 (Meter Read) within 5 BD, for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, of the installation of the meter, in accordance with CSD 0202 (Meter Read Submission: Process). Scottish Water should note that the T005.0 must be sent after the T004.0, otherwise the new meter will not be recognised in the Central Systems and will result in a Data Transaction T009.1 (Error Notification) being issued to Scottish Water.

Within 5 Business Days, for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, of the installation, Scottish Water will notify the CMA of any change to the Metered Building Water status using Data Transaction T033 (Notify/Update Metered Building Water).

Scottish Water must take account of the implications of such an installation at a Supply Point and shall ensure that any other SPID Data which requires modification following the installation, is notified to the CMA, in particular; the impact on any Service Element(s) arising from the installation of a meter(s) or where the meter relates to Trade Effluent Services at a Supply Point (in which case the process in CSD0206 (Trade Effluent Processes) should be followed) and shall ensure that all relevant updates are notified to the CMA.

Where a meter is installed at a Water Services Supply Point previously designated as Unmeasurable, Scottish Water shall, within 5 Business Days, for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, of the meter installation, notify the CMA that the SPID has become measurable using Data Transaction T016.0 (Set SPID Unmeasurable Status). Where there is an associated Sewerage Services Supply Point, that Supply Point shall be deemed similarly measurable. The modification of the Unmeasurable status must take place prior to notifying the meter details. The effective date in the T016.0 shall be same date as the Initial Read notified in the T005.0 Data Transaction above.

If the meter is to form part of a Meter Network, Scottish Water should notify the CMA accordingly, as described in Section 4.1.

**Step c: CMA notifies Licensed Provider(s) [T004.1, T005.2, T033.1, (T016.1)]**

Within 1 Business Day of receipt of the T004.0 (Notify Meter Details), the CMA will load the relevant data to the Central Systems and notify the Licensed Provider(s) of the meter details, using Data Transaction T004.1 (Notify Meter Details) and of the Meter Read using Data Transaction T005.2 (Meter Read). If applicable the Metered Building Water status will be notified using Data Transaction T033.1 (Notify Metered Building Water).
If a Meter is added during a Transfer period, notifications will be sent to the incoming LP as well as the outgoing LP.

In the case of an addition of a meter where that meter is a Related Water Supply Meter, the CMA will notify the Sewerage Services Licensed Provider Registered to that Supply Point of the new meter details, Meter Reads, and other details as above (if applicable), at the same time that it notifies the Water Services Licensed Provider, using the data transactions listed above.

Within 1 Business Day of Data Transaction T016.0 (Set SPID Unmeasurable Status) being accepted, the CMA will notify the Licensed Provider(s) using the Data Transaction T016.1 (Notify SPID Unmeasurable Status).
### 3.2.2 Meter Addition Process Diagram

<table>
<thead>
<tr>
<th>Time</th>
<th>Licensed Provider</th>
<th>CMA</th>
<th>Scottish Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>within 5/8 BD of installation</td>
<td><strong>Install meter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>within 1 BD of T004.0 timestamp</td>
<td><strong>Send meter details &amp; Initial Read</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Advised: T004.1, T005.2
- Advised: T033.1, T016.1

- Advised: T004.0, T005.0, T033.0, T016.0

- Load to Central Systems & notify LP of updated meter data
### 3.2.4 Meter Addition Interface and Timetable Requirements

<table>
<thead>
<tr>
<th>step ID</th>
<th>Action/Decision</th>
<th>Process Step</th>
<th>From</th>
<th>To</th>
<th>Time parameter</th>
<th>Comments</th>
<th>(indicative) Txn ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S</td>
<td>Install meter</td>
<td>SW</td>
<td>internal</td>
<td></td>
<td>Operational Code</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>S</td>
<td>Send meter data &amp; Initial Read</td>
<td>SW</td>
<td>CMA</td>
<td>within 5/8 BD of meter installation</td>
<td>Ensure that Meter Read Type is Initial. Update any associated Service Elements, e.g. Trade Effluent in accordance with CSD0206 If meter installed at a SPID previously declared Unmeasurable, revise Unmeasurable status prior to notifying meter installation.</td>
<td>T004.0 T005.0 (T033.0) T016.0</td>
</tr>
<tr>
<td>C</td>
<td>S</td>
<td>Update Central Systems &amp; notify LP of updated meter data</td>
<td>CMA</td>
<td>LPs</td>
<td>1 BD</td>
<td>If Related Water Supply Meter, also advise SS LP of WS meter addition &amp; Initial Read. X,Y Co-ordinates should be provided</td>
<td>T004.1 T005.2 (T033.1) T016.1</td>
</tr>
</tbody>
</table>
3.4 Removal of a Meter from an Existing Supply Point

This section applies when a physical meter is removed from an existing Supply Point under Process 8 of the Operational Code. It does not apply when a Pseudo Meter is removed from an existing Supply Point or Pseudo Water Services Supply Point pursuant to the application of Re-assessed Charges, which is considered in Section 3.5, nor does it apply when another form of virtual meter is removed from an existing Supply Point, which is covered in Section 3.6.

This description should be read in conjunction with the Process Diagram in Section 6.2 and the Interface and Timetable Requirements in Section 6.3. The 'step' and 'decision' references appear to the bottom left of each step or decision symbol in the Process Diagram.

3.4.1 Meter Removal Process

Step a: Remove Meter

This step represents the point at which Scottish Water removes or permanently shuts off the meter.

If the meter to be removed is associated with Trade Effluent Discharge Point(s) at the Supply Point, Scottish Water shall terminate all such associations using Data Transaction T024.0 (Notify Meter De-association) before sending the T005.0 (Meter Read). If the meter is part of an existing Meter Network, Scottish Water should terminate the Meter Network using Data Transaction T036.0 (Submit Meter Network Data) setting the D0326_MeterNetwork Association to FALSE before sending the T005.0 (Meter Read).

Step b: Update SPID Data to CMA [T005.0]

Within 2 BD of the removal/permanent shut off, Scottish Water will send a Final Read for that meter to the CMA, using Data Transaction T005.0 (Meter Read). Provision of a Final Read constitutes notification that the meter has been removed from the Supply Point.

Where the removal relates to Trade Effluent Services, and such removal modifies the data regarding a Discharge Point, Scottish Water shall also send the CMA notification of this in accordance with CSD0206, Trade Effluent Processes. Where the Final Read T005.0 (Meter Read) transaction is for a meter on an existing Meter Network, the transaction will be rejected.
**Step c: CMA notifies Licensed Provider [T005.2]**

The Final Read will be subject to the validation requirements set out in CSD 0203 (Meter Read Submission: Validation). Within 1 Business Day of receipt of the T005.0, the CMA will update the Central Systems, and notify the Licensed Provider(s) of the Final Read, using Data Transaction T005.2 (Meter Read).

In the event that the CMA also received any update of Trade Effluent Services it will notify the Licensed Provider using Data Transaction T026.1 or T027.1 within 1 Business Day.

In the case of meter removal where that meter is a Related Water Supply Meter, the CMA will notify the Sewerage Services Licensed Provider Registered to that Supply Point of the removal and the Meter Read as well at the same time that it notifies the Water Services Licensed Provider, using the data transactions listed above.
3.4.2 Meter Removal Process Diagram

<table>
<thead>
<tr>
<th>Time</th>
<th>Licensed Provider</th>
<th>CMA</th>
<th>Scottish Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>within 2 BD of removal</td>
<td></td>
<td>Remove or permanently shut off meter</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Send Final Read</td>
</tr>
<tr>
<td></td>
<td>within 1 BD of T005.0 timestamp</td>
<td></td>
<td>Load to Central Systems &amp; notify LP of final read</td>
</tr>
</tbody>
</table>

Advised

T005.0

T005.2
### 3.4.4 Meter Removal Interface and Timetable Requirements

<table>
<thead>
<tr>
<th>step ID</th>
<th>Action/Decision</th>
<th>Process Step</th>
<th>From</th>
<th>To</th>
<th>Time parameter</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>S</td>
<td>Remove or permanently shut off meter</td>
<td>SW</td>
<td>internal</td>
<td></td>
<td>Any associated DPIs must be de-associated, via a T024.0 prior to submitting a T005.0. Any Meter Network Associations must be de-associated via a T036.0 prior to submitting the T005.0.</td>
</tr>
<tr>
<td>b</td>
<td>S</td>
<td>Send Final Read</td>
<td>SW</td>
<td>CMA</td>
<td>within 2 BD of meter removal</td>
<td>Ensure that Meter Read Type is Final If Meter Chargeable Size at the SPID modified, update SPID Data If TE Meter, also notify any modified SPID Data at the Discharge Point (go to CSD0206)</td>
</tr>
<tr>
<td>c</td>
<td>S</td>
<td>Update Central Systems &amp; notify LP of Final Read</td>
<td>CMA</td>
<td>LP</td>
<td>1BD</td>
<td>If Related Water Supply Meter, also advise SS LP of WS meter removal &amp; Final Read</td>
</tr>
</tbody>
</table>
3.5 Addition of a Pseudo Meter to an Existing Supply Point

This section applies when a Pseudo Meter is added to an existing Supply Point, to allow for the application of Re-assessed Charges at the Supply Point(s) after the charging arrangements for the Supply Point(s) have been confirmed.

This description should be read in conjunction with the Process Diagram in Section 7.1.2 and the Interface and Timetable Requirements in Section 7.1.3. The 'step' and 'decision' references appear to the bottom left of each step or decision symbol in the Process Diagram.

3.5.1 Pseudo Meter Addition Process

Step a: Confirmation of Re-assessed Charges

This step represents the point following confirmation by Scottish Water that Re-assessed Charges are to apply and the CMA must therefore be notified.

Within 2 Business Days of confirming the Re-assessed Charges, Scottish Water shall notify the CMA as follows.

Step b: Review existing SPID Data

Where the Water Services Supply Point has previously been declared Unmeasurable by Scottish Water (i.e. using a T016.0 notification or as part of the dataset provided under the Transitional Duties [Schedule 5 of the Market Code]); Scottish Water shall, within 2 Business Days of Step a, notify a revision to this status, using the T016.0 Data Transaction (Set SPID Unmeasurable Status) before proceeding to notify the Pseudo Meter information in Step c below. The effective date in the T016.0 shall be the same date as the date of the Initial Read notified in the T005.0 in Step c below.

Where the T016.0 update is accepted, the CMA will notify the Licensed Provider(s) using the Data Transaction T016.1 (Notify SPID Unmeasurable Status).

Step c: Update Pseudo Meter information to CMA: [T004.3, T005.0]

Within 2 Business Days of Step a, Scottish Water will update the CMA with the relevant details by means of providing Pseudo Meter information, as follows:

i. Pseudo Meter details will be updated using Data Transaction T004.3 (Notify/Update Virtual Meter Details)

ii. An initial meter read of 0 will be provided using Data Transaction T005.0 (Submit Meter Read)
**Step d: CMA notifies Licensed Provider(s) [T004.1, T005.2]**

Within 1 Business Day of receipt of the T004.3 (Notify/Update Virtual Meter Details), the CMA will load the relevant data to the Central Systems and notify the Licensed Provider of the Pseudo Meter information, using Data Transaction T004.1 (Notify Meter Details). Within 1 Business Day of receipt of the T005.0 (Meter Read), the CMA will load the relevant data to the Central Systems and notify the Licensed Provider using Data Transaction T005.2 (Meter Read).

In the case of a Pseudo Meter which is also a Related Water Supply Meter, the CMA will notify the Sewerage Services Licensed Provider Registered to that Supply Point of the new Pseudo Meter information, at the same time that it notifies the Water Services Licensed Provider, using the data transactions listed above.

**Step e: Licensed Provider(s) actions**

Licensed Providers will take account of the Meter Read Frequency being established as ‘N’ and shall update their systems and processes accordingly such that they are aware that a Pseudo Meter arrangement is in force and consequently:

i. Meter Reads submitted by an LP and an LP provided YVE are not required and will be rejected by the CMA; and

ii. The volumes derived from the Scottish Water YVE (as notified in the T004.1 above) will be used in the Settlement Reports;
### 3.5.2 Pseudo Meter Addition Process Diagram

<table>
<thead>
<tr>
<th>Time</th>
<th>Licensed Provider(s)</th>
<th>CMA</th>
<th>Scottish Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td></td>
<td></td>
<td>** Confirm Re-assessment Charges and revise SPID Data if appropriate **</td>
</tr>
<tr>
<td>Within 2 BD of Step a</td>
<td>Notified</td>
<td></td>
<td>** Process Data **</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>** Valid data? **</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>** Update CS Notify LP &amp; SW **</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>** Notified **</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>** Send Error Message **</td>
</tr>
<tr>
<td>Within 1 BD of Step c</td>
<td>Process Data</td>
<td></td>
<td>** Valid data? **</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>** Notified **</td>
</tr>
</tbody>
</table>

**Notes:**
- **T004.3**
- **T009.1**
- **T016.0**
<table>
<thead>
<tr>
<th>Time</th>
<th>Licensed Provider(s)</th>
<th>CMA</th>
<th>Scottish Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2 BD of Step d2</td>
<td>Notified</td>
<td>Process Data &amp; Notify LP</td>
<td>T005.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Update CS Notify LP &amp; SW</td>
<td>T004.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FROM PAGE 1</td>
<td>T009.1</td>
</tr>
<tr>
<td>Within 1 BD of Step d2</td>
<td>Notified</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Send Initial Meter Read</td>
<td></td>
</tr>
</tbody>
</table>

Within 1 BD of Step c
Send Initial Meter Read
### 3.5.3 Pseudo Meter Addition Interface and Timetable Requirements

<table>
<thead>
<tr>
<th>step ID</th>
<th>Action/Decision</th>
<th>Process Step</th>
<th>From</th>
<th>To</th>
<th>Time parameter</th>
<th>Comments</th>
<th>Market Code Ref</th>
<th>(indicative) Data Txn ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>D</td>
<td>Confirm Re-assessed Charges.</td>
<td>SW</td>
<td>internal</td>
<td></td>
<td>Operational Code</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b</td>
<td>S</td>
<td>Revise SPID Data if appropriate</td>
<td>SW</td>
<td>CMA</td>
<td>After step a, and before step c</td>
<td>If Pseudo Meter arrangements apply • at a SPID previously declared Unmeasurable by Scottish Water, revise Unmeasurable status to False prior to sending T004.3 at step c below; or • at an SS only SPID, refer to Part 1 of this CSD and follow the create Pseudo WS SPID process before sending any T004.3.</td>
<td>5.16.1</td>
<td>(T016.0)</td>
</tr>
<tr>
<td>c</td>
<td>S</td>
<td>Send Pseudo Meter data &amp; Initial Read</td>
<td>SW</td>
<td>CMA</td>
<td>T004.3 - following step b above and within [2.] BDs of step a T005.0 – within 2 BDs of T004.3</td>
<td>Ensure that the Pseudo Meter information complies with the requirements in CSD0104. Ensure that Meter Read Type is Initial (I) in order to activate the Pseudo Meter information.</td>
<td>T004.3 T005.0</td>
<td></td>
</tr>
<tr>
<td>d1</td>
<td>S</td>
<td>Process T004.3 and T005.0 and notify SW</td>
<td>CMA</td>
<td>SW</td>
<td>Within 1 BD of step c</td>
<td>If invalid, send error.</td>
<td>T009.1</td>
<td></td>
</tr>
<tr>
<td>d2</td>
<td>S</td>
<td>Update Central Systems &amp; notify LP of updated meter data</td>
<td>CMA</td>
<td>LPs</td>
<td>Within 1 BD of step c</td>
<td>If Related Water Supply Meter, also advise SS LP of Pseudo Meter Information &amp; Initial Read</td>
<td>T004.1 T005.2</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>D</td>
<td>LPs update their processes to ensure Meter Reads submitted by an LP are not sent to the CMA and take due</td>
<td>LPs</td>
<td>Internal</td>
<td>Following step d</td>
<td>D3011 Meter Read Frequency ‘N’ shall be the primary indicator that a Pseudo Meter is in place. Other factors are: • D5001 Free Descriptor information highlights that it is a Pseudo Meter.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>step ID</td>
<td>Action/Decision</td>
<td>Process Step</td>
<td>From</td>
<td>To</td>
<td>Time parameter</td>
<td>Comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>------------------</td>
<td>------</td>
<td>--------</td>
<td>----------------</td>
<td>-----------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• If T027.1 received, take note of Non-Domestic Allowance.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note of the YVE to be applied.
3.6 Removal of a Pseudo Meter from an Existing Supply Point

In the event that the Assigned Annual Water Volume(s), the Assigned Annual Foul Sewerage Volume or both are revised following any appeal, change of tenancy or otherwise, then Scottish Water is required to update the Pseudo Meter information by closing the existing Pseudo Meter and replacing it with a revised Pseudo Meter with updated information as follows. This process also applies for any discontinuation of Re-assessed charges at a Supply Point, following which, the relevant add meter process should be followed for any replacement of the Pseudo Meter by another meter.

For the avoidance of doubt, this process can be used at WS Supply Points and Pseudo WS Supply Points.

3.6.1 Pseudo Meter Removal Process

Step a: Revised Assigned Annual Water Volume(s) confirmed by Scottish Water

This Step represents the point following confirmation by Scottish Water of; a revised Assigned Annual Water Volume, the Assigned Annual Water Volume, or both, or a discontinuation of Re-assessed charges.

Step b: Close superseded Pseudo Meter [T005.0]

Within 2 Business Days of step a, Scottish Water shall close the Pseudo Meter to be replaced by submitting a Final Read using Data Transaction T005.0, as follows;

i. the Reading Date for the Final Read shall be the date that the previous D2010 YVE notified by Scottish Water is to cease, and

ii. the value of the Final Read will be zero (0).

Step c: CMA processes Final Read and notifies Scottish Water and LPs [T009.1, T005.2]

The CMA will process the T005.0 within 1 Business Day of Step a, and will acknowledge this to Scottish Water using the T009.1. In the event that the T005.0 is rejected, and Scottish Water do not resubmit a corrected T005.0 which is successful prior to proceeding to Step e, CMA will use the information for both Pseudo Meters until the Final Read is processed.

If the T005.0 is accepted, the CMA will notify the Licensed Provider and, if the Pseudo Meter is a Related Water Supply Meter, will also notify the Licensed Provider Registered to the associated Sewerage Services Supply Point.

CMA will discontinue the Pseudo Meter where the T005.0 is accepted, but the value of the Final Read provided therein will not be used in volume calculations, which shall continue to be based on the YVE provided for that Pseudo Meter.
Step d: Licensed Provider actions

Licensed Providers shall update their records to the effect that the Pseudo Meter has been discontinued by notification of a Final Read. Licensed Providers shall consider the information in any subsequent T004.1, which will indicate the replacement of a Pseudo Meter (see Step f below). It should also be noted that receipt of a Final Read could also indicate that a physical meter will replace the Pseudo Meter, in which case Section 7.4 of this CSD will apply.

The value of the Final Read should NOT be relied upon by the Licensed Provider(s) to calculate any meter advance as the value is a ‘dummy’ value (see Step b above). Licensed Providers should refer to the next following Settlement Report for the relevant Invoice Period for the volume calculated by the CMA up to the discontinuation of the Pseudo Meter.
### 3.6.2 Pseudo Meter Removal Process Diagram

<table>
<thead>
<tr>
<th>Time</th>
<th>Licensed Provider(s)</th>
<th>CMA</th>
<th>Scottish Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td></td>
<td></td>
<td>Revised Assigned Water Volume / Assigned Annual Water Volume (or both), or discontinuation</td>
</tr>
<tr>
<td>Within 2 BD of Step a</td>
<td></td>
<td></td>
<td>Close Pseudo Meter with Final Meter Read</td>
</tr>
<tr>
<td>Within 1 BD of Step b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Process Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Valid Data?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Send Error Message</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Update CS then Notify LP &amp; SW</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T005.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T009.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T009.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T005.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T005.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>T005.2</td>
<td></td>
</tr>
</tbody>
</table>
### 3.6.3 Pseudo Meter Removal Interface and Timetable Requirements

<table>
<thead>
<tr>
<th>step ID</th>
<th>Action/Decision</th>
<th>Process Steps</th>
<th>From</th>
<th>To</th>
<th>Time parameter</th>
<th>comments</th>
<th>Market Code Ref</th>
<th>(indicative) Data Txn ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>D</td>
<td>SW confirm modification to the annual volume(s) to be applied to the Supply Point, or discontinuation of Re-assessed charges.</td>
<td>SW</td>
<td>internal</td>
<td></td>
<td>Pursuant to the Operational Code.</td>
<td>5.16.1</td>
<td>-</td>
</tr>
<tr>
<td>b</td>
<td>S</td>
<td>Close-down existing Pseudo Meter information by notifying an F Read to WS SPID or Pseudo WS SPID</td>
<td>SW</td>
<td>CMA</td>
<td>within 2. BD of step a</td>
<td>Send F Read using WS/Pseudo WS SPID as appropriate.</td>
<td>-</td>
<td>T005.0</td>
</tr>
<tr>
<td>c</td>
<td>S</td>
<td>Process T005.0 &amp; notify SW and LPs</td>
<td>CMA</td>
<td>SW</td>
<td>Within 1 BD of step b</td>
<td>If invalid send error using existing processing. CMA will not use the F Read value to calculate Actual Daily Volume</td>
<td>-</td>
<td>T009.1 T005.2</td>
</tr>
<tr>
<td>c</td>
<td>A</td>
<td>Update Central Systems</td>
<td>CMA</td>
<td>Internal</td>
<td>Following Step c1</td>
<td>Discontinue Pseudo Meter</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>step ID</td>
<td>Action/Decision</td>
<td>Process Steps</td>
<td>From</td>
<td>To</td>
<td>Time parameter</td>
<td>comments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
<td>---------------</td>
<td>------</td>
<td>----------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>A</td>
<td>LPs shall note that the Pseudo Meter has been discontinued and that the CMA will cease charges for that meter in the next following Settlement Report for the relevant Invoice Period,</td>
<td>LPs</td>
<td>Internal</td>
<td>On receipt of T005.2</td>
<td>LPs will not know at this stage whether it is to be replaced with a physical meter or a revised YVE and Non Return to Sewer Allowance. The choice of subsequent add meter process shall indicate which circumstance applies. The value of the F Read should NOT be relied upon to calculate any meter advance as the value is a ‘dummy’ value. The applicable volume for the period will be set out in the relevant Settlement Report</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LPs shall note that the Pseudo Meter has been discontinued and that the CMA will cease charges for that meter in the next following Settlement Report for the relevant Invoice Period.
3.7 Addition and Removal of a Logical Meter

This section applies when:

- An Adjustment Meter is added and removed at an existing Supply Point for the purposes of adjusting metered volumes for matters such as fire-fighting or burst allowances.
- A Modification Meter is added and removed at an existing Supply Point to facilitate other changes to SPID data.
- A virtual meter with a Meter Treatment of Private Effluent or Tankered Effluent is added or removed at an existing Supply Point

Adjustment Meters

Scottish Water shall notify agreed volume adjustments to the CMA by use of an "Adjustment Meter". Such adjustments will apply to the volume at Measured Supply Points (water and sewerage). The volumes applicable to the water and sewerage SPIDS can be adjusted by independently varying the magnitude of the opening water meter reading, the closing water meter reading, and the return to sewer allowance. Such adjustments should normally be submitted to the CMA by Scottish Water at least 10 Business Days before the planned date of the Tariff Year Settlement Run to allow Licensed Providers time to confirm that the submissions have been made correctly. However, all submissions made before the RF Settlement run will be taken into account by the CMA. Accordingly, Licensed Providers shall apply for such allowance to Scottish Water in accordance with the Operational Code and in sufficient time to allow them to be processed and submitted in accordance with this schedule.

Modification Meters

There are circumstances where it had been previously impossible to directly effect a desired change of SPID Data – for example the removal of an Unmeasurable Service element from a Supply Point at a fixed date. In some circumstances, it proved possible to effect the removal of such a Service Element from by temporarily adding and removing a virtual Modification Meter.

Following the introduction of an effective date in the T016 Data Transaction, the use of such meters is deprecated. In any circumstances in which they are used, it should be by agreement between Scottish Water, the CMA and the applicable Licensed Provider.

Virtual Private Effluent and Tankered Effluent Meters

In all cases Trade Effluent volumes will be derived in accordance with the methodology agreed with Scottish Water and notified to the Licensed Provider and using the relevant customer or third party data.
When a new Trade Effluent volume is derived for the Discharge Point, the Licensed Provider should submit a cyclic read to the Central Systems using the standard T005.1 transaction. The Meter Read should reflect the cumulative volume since the installation date of the Logical Meter (as indicated by the date of the opening ‘I’ read of 0 recorded in the Central Systems). The cumulative volume would be calculated by adding the volume discharged since the date of the last Meter Read to the value of the last Meter Read.

The Meter Read Date would indicate the date up to which the latest Trade Effluent volumes had been discharged.

**Step a: Update SPID Data to CMA: [T004.0, T005.0]**

When a virtual meter (other than a Pseudo Meter) is to be established at a Supply Point, Scottish Water will provide the CMA with the new meter details, using Data Transaction T004.0 (Notify Meter Details).

Scottish Water will also provide the CMA with:
- When establishing a virtual meter (other than a Pseudo Meter), an Initial Read for that meter, using Data Transaction T005.0 (Meter Read). Scottish Water should note that the T005.0 must be sent after the T004.0, otherwise the new meter will not be recognised in the Central Systems and will result in a Data Transaction T009.1 (Error Notification) being issued to Scottish Water.
- When closing a virtual meter (other than a Pseudo Meter), a Final Read for that meter, using Data Transaction T005.0 (Meter Read).

**Step c: CMA notifies Licensed Provider(s) [T004.1, T005.2]**

Within 1 Business Day of receipt of the T004.0 (Notify Meter Details), the CMA will load the relevant data to the Central Systems and notify the Licensed Provider(s) of the meter details, using Data Transaction T004.1 (Notify Meter Details) and of the Meter Read using Data Transaction T005.2 (Meter Read).

If a Meter is added during a Transfer period, notifications will be sent to the incoming LP as well as the outgoing LP.

In the case of an addition of a meter where that meter is a Related Water Supply Meter, the CMA will notify the Sewerage Services Licensed Provider Registered to that Supply Point of the new meter details, Meter Reads, and other details as above (if applicable), at the same time that it notifies the Water Services Licensed Provider, using the data transactions listed above.
4. Meter Data Updates

4.1. Meter Network Creation and Removal Process

This section applies where a new Meter Network is to be established, or an existing Meter Network is to be terminated.

It should be noted that where a like for like meter exchange is undertaken by Scottish Water in accordance with Section 3 of this CSD, all Meter Network associations are maintained and propagated through the Central System and no further updates are required.

Where the meter exchange is not like for like, then the process would require the removal of the existing Meter Network association and the re-establishment of the Meter Network association with the new meter, following the meter exchange.

Meter Networks capture the relationship between a Main Meter and a Sub Meter within a Meter Network to ensure correct calculation of consumption at a specific Supply Point.

Step a: Update CMA with Meter Network relationship data [T036.0]

Scottish Water will establish, or terminate a Meter Network by submitting a T036.0 (Submit Meter Network Data) transaction to the CMA. The T036.0 should include the D3026 Meter Network Association set to;

- True, thereby establishing the association, or
- False, thereby terminating the association.

Prior to submitting the T036.0 both the Main Meter and Sub Meter must already exist in the Central Systems with a valid status. Main Meter(s) must be associated to a Main SPID. Sub Meter(s) must be associated to a different Sub SPID unless the Sub Meter is a Non-Market Meter, in which case there must be no Sub SPID.

Step b: Update Central Systems

The CMA will validate the T036.0 transaction and accept or reject the submitted transaction. Where the transaction fails validation Scottish Water will be sent a T009.1 with the appropriate error code.

Step c: CMA confirms Meter Network association [T036.1]

Within 1 Business Day of acceptance by the CMA of the T036.0 (Submit Meter Network Data) the CMA will notify the Licensed Provider(s) affected by the Meter Network update using data transaction T036.1 (Notify Meter Network Data). The transaction will contain the D3026_MeterNetworkAssociation data item with the value True, or False, as appropriate.
4.2. Other Meter Data Update Processes

Where maintenance of meter related data is required and does not fall within any of the processes outlined above, the processes set out in this Section should be followed.

CSD 0301 (Data Transaction Catalogue) contains the specific Data Items that can be updated in these Maintain SPID Data transactions.

Scottish Water Updates Certain Meter Details [T013.0]

Scottish Water is able to update certain meter data on an ad hoc basis, using Data Transaction T013.0 (Update Meter Data).

**Step a: Scottish Water Submits Meter Details Update [T013.0]**

Within 2 Business Days of becoming aware of a change in data logger status Scottish Water shall also notify the presence or removal of data loggers at a meter using Data Transactions T013.0 (Update Meter Data), A data logger is either a Scottish Water data logger or non-Scottish Water data logger. Both data logger types can be present at a meter at the same time.

Within 2 Business Days of becoming aware of a change in meter location OSGB X, Y co-ordinates, Scottish Water shall also notify the change to the meter location using Data Transactions T013.0 (Update Meter Data),

In the case of a Trade Effluent Services, the sequence and timing of updates to the CMA are set out in CSD 0206 (Trade Effluent Processes).

**Step b: CMA updates Central Systems**

Within 1 Business Day of receiving the T013.0 (Update Meter Data) the CMA will check that the data is consistent before processing the update in the Central Systems. In the event that the data is not consistent, the CMA will issue a T009.1 (Error Notification) to Scottish Water.

**Step c: CMA notifies Licensed Provider [T013.1]**

Within 1 Business Day of accepting the T013.0 the CMA will notify the Licensed Provider of any changes made, using Data Transaction T013.1 (Update Meter Details),
Licensed Provider or Scottish Water Updates Meter Location Notes and/or Preferred Meter Location data [T013.2]

Step a: Meter Location Data Update [T013.2]
Within 5 Business Days of becoming aware of a change in meter location, the Licensed Provider (in respect of market meters) or Scottish Water (in respect of non-market meters) shall also notify the change to the meter location using Data Transaction T013.2 (Update Meter Data).

Step b: CMA Updates Central Systems
Within 1 Business Day of receiving the T013.2 (Update Meter Location) the CMA will validate the GIS Z location notes and the Meter Location Code before processing the update in the Central Systems. In the event that validation fails, the CMA will issue a T009.1 (Error Notification) to Scottish Water for submissions made by Scottish Water, or a T009.0 (Error Notification) to the Licensed Provider for submissions made by a Licensed Provider. Following successful validation, a T009.0 OK, or T009.1 OK will be issued to the sender, as appropriate.

Step c: CMA Notifies other appropriate parties [T013.3]
Within 1 Business Day of accepting the T013.2 from a Licensed Provider, or from Scottish Water, the CMA will notify Scottish Water, or the relevant LP, as the case may be and where applicable the Sewerage Services Licensed Provider of any changes made using Data Transactions T013.3 (Notify Meter Location).

Scottish Water Updates the Meter Chargeable Details

Step a: Scottish Water updates meter chargeable details [T014.0]
If the Chargeable Meter Size or the Non Return to Sewer Allowance at a Supply Point changes, Scottish Water shall notify the revised details to the CMA using Data Transaction T014.0 (Update Meter Chargeable) within 2 Business days of becoming aware of the changed circumstances.

The sequence and timing set out in CSD0206 (Trade Effluent: Processes) should be followed for updating the CMA regarding Trade Effluent Services if the revised meter chargeable details affect those Services.

Step b: CMA Accept or Reject Updates
The CMA will accept or reject the SPID Data updates within 1 Business Day of receipt of the update.
In the event of a rejection, Scottish Water will be notified using the Data Transaction T009.1 (Error/Notification).
Step c: Notify changes [T014.1]

If the T014.0 is accepted, the CMA will upload the relevant data to the Central Systems and notify the Licensed Provider(s) that the changes have been made, using the Data Transaction T014.1 (Notify Meter Chargeable) within 1 Business day of receiving the Data Transaction. In the event that any updates to Trade Effluent Services are also provided, these will be notified to the Licensed Provider(s) in accordance with CSD0206 (Trade Effluent Services).

Correcting inaccurate consumption from a Faulty/Damaged Meter

Where a faulty meter is identified following a meter fault investigation arising under Process 10 of the Operational Code, or where Scottish Water become aware of a damaged meter, Scottish Water will confirm this to the Licensed Provider(s) and the CMA. The period and extent of the under or over recording from the faulty or damaged meter will be determined by the CMA and Scottish Water shall provide information from their investigation on request to the CMA.
4.3. Meter Data Update Process Diagram

- **Licensed Provider**
  - Update Meter Location
  - Notified

- **CMA**
  - Update Central Systems
  - Notify of Update of certain Meter Details advised by SW

- **Scottish Water**
  - Update Meter Network, Meter Chargeable or Meter details or Meter Location(non-mrk)
### 4.4. Meter Data Update Interface and Timetable Requirements

<table>
<thead>
<tr>
<th>Process</th>
<th>Process Step</th>
<th>From</th>
<th>To</th>
<th>Time Parameter</th>
<th>Comments</th>
<th>Indicative Data Transaction ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meter Network Updates</strong></td>
<td>Update Meter Network details</td>
<td>SW</td>
<td>CMA</td>
<td>Within 2BDs</td>
<td>Main Meter and Sub Meter must already exist in the Central Systems. Main Meter(s) must be associated to a Main SPID. Sub Meter(s) must be associated to a different Sub SPID unless the Sub Meter is a Non-Market Meter, in which case there must be no Sub SPID</td>
<td>T036.0</td>
</tr>
<tr>
<td></td>
<td>Accept or reject</td>
<td>CMA</td>
<td>Internal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notify changes</td>
<td>CMA</td>
<td>LP</td>
<td>Within 1 BD</td>
<td></td>
<td>T036.1</td>
</tr>
</tbody>
</table>
| **Meter Data Updates** | Update revised details            | SW   | CMA   | For Meter details; 2 BDs. For Meter Chargeable; 2 BDs. For Meter Location; 5 BDs | If TE, go to CSD0206 (Trade Effluent Processes). | T013.0  
|                     |                                   |      |        |                |          | T014.0  
|                     |                                   |      |        |                |          | T013.2  |
|                     | Accept or reject                  | CMA  | Internal | Within 1 BD for Meter Location | If rejected, send T009.1 | T013.0  
|                     |                                   |      |        |                |          | T014.0  
|                     |                                   |      |        |                |          | T013.2  |
|                     | Notify changes                    | CMA  | LP     | Within 1 BD of validation | If accepted inform LP | T013.1  
|                     |                                   |      |        |                |          | T014.1  
<p>|                     |                                   |      |        |                |          | T013.3  |
| <strong>Correcting information</strong> | Following meter fault investigation or becoming | SW   | CMA   |                | CMA to determine the extent and period of under or over recording. | Direct contact with CMA |</p>
<table>
<thead>
<tr>
<th>Process</th>
<th>Process Step</th>
<th>From</th>
<th>To</th>
<th>Time Parameter</th>
<th>Comments</th>
<th>Indicative Data Transaction ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>from a faulty meter</td>
<td>aware of a damaged meter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Appendix 1 – Process Diagram Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Step" /></td>
<td>Step</td>
<td>An action step. It appears in the “swimlane” of the party responsible for performing the action.</td>
</tr>
<tr>
<td><img src="image" alt="Decision" /></td>
<td>Decision</td>
<td>A decisive question rather than an action. Followed by Yes or No, or occasionally WS (Water Service) or SS (Sewerage Service) the process splits depending on the answer to the question in the decision diamond.</td>
</tr>
<tr>
<td><img src="image" alt="To another process" /></td>
<td>To another process</td>
<td>A flow in, or input to, another documented process</td>
</tr>
<tr>
<td><img src="image" alt="From another process" /></td>
<td>From another process</td>
<td>A flow in, or output from another documented process.</td>
</tr>
<tr>
<td><img src="image" alt="To and from another process" /></td>
<td>To and from another process</td>
<td>Used where a process is embedded within another. At this point, go to the embedded process chart before returning to the one in which it is embedded.</td>
</tr>
<tr>
<td><img src="image" alt="End" /></td>
<td>End</td>
<td>Used after a decision diamond, generally to mean “do nothing” as it is the end of the process.</td>
</tr>
<tr>
<td><img src="image" alt="Advised/Invoiced" /></td>
<td>Advised/Invoiced</td>
<td>Used after a process step to show “passive” action on the part of a data flow receiver e.g. to represent “Advised” or “Invoiced”</td>
</tr>
<tr>
<td><img src="image" alt="Step/Decision reference" /></td>
<td>Step/Decision reference</td>
<td>An alphabetic reference beside each step and decision. This reference appears on the table in each section to facilitate reading the table against the process flowcharts.</td>
</tr>
<tr>
<td><img src="image" alt="Transaction reference" /></td>
<td>Transaction reference</td>
<td>Reference to the Data Transaction occurring as an output from the step it appears next to.</td>
</tr>
</tbody>
</table>