

Detailed User Requirements for Datalogger Functionality

Background

As part of the Final Determination changes the Commission requires the introduction of functionality in the Central System that identifies meters where data logging devices (“dataloggers”) are present. Scottish Water as the meter asset owners will be the data item owners.

This document should be read as being supplementary to M CCP072-CC, and provides additional information and detail compared to the M CCP.

M CCP – Key Aspect of the Proposed Change

The M CCP noted that there were two key aspects to the proposed change:

1. Two flags within the Central System to indicate that a datalogger is present, with all data items being owned by Scottish water.
2. The ability for Scottish Water to notify and update the datalogger status.

Detail in respect of the above changes

Changes to the Database

Two new fields should be added to the database for all physical meters in the system to identify whether a datalogger or dataloggers are present at a meter. If a datalogger is present the field will be true and if a datalogger is not present the field will be false. The default status will be false.

Changes to the database are required to add fields to reflect:

- Datalogger(s) (SW) – True or False
- Datalogger(s) (“Non-SW”) – True or False

These fields will be populated via two transactions.

Changes to Transaction Flows

There is a requirement to introduce data transactions (flows) to allow for the notification of the presence or removal of:

- Datalogger(s) (SW)
- Datalogger(s) (“Non-SW”)

If more than one datalogger is present and owned by different party types e.g. one is an SW datalogger and one is Non-SW datalogger it should be possible for both the SW and Non-SW flags to be true for the same period.

If there is more than one datalogger owned by the same party type (SW or Non-SW) at a meter only one transaction need be sent to indicate this¹ (if the flag is already set to true the transaction should be rejected).

The flow to remove the datalogger from the meter, SW, Non-SW or both, should only be sent if no dataloggers owned by the same party type remain associated to the meter. These obligations will be reflected in the CSDs.

These data transactions should be able to be submitted via both the HVI and the LVI. There are two data transactions required:

1. Creating New Meters i.e. the initial provision of the datalogger data items when a new meter is notified to the Central Systems by the wholesaler. This will not require a new stand alone data transaction. The data transaction should be in the form of additional fields in the existing Notify Meter Details (T004.0) data transaction. These should be optional fields and in the absence of the field being populated the default will be False.

¹ The Commission has indicated that details of multiple loggers located at a meter should be discussed directly with SW and the appropriate owning parties. The Central System functionality is solely for indicating the presence of SW and Non-SW logger(s) at a meter.

2. Updating Meter Information i.e. the provision of updated data items by the wholesaler.
This will not require a new stand alone data transaction. The data transaction will be in the form of additional fields in the existing Update Meter Details (T0013.0) data transaction.
These should be optional fields and in the absence of the field being populated the default should be the value contained in the system which should continue to be applied.

This functionality should not apply to Pseudo meters.

Provision of information to LPs – Any changes made to the datalogger data item status should be notified to the LP that owns the SPID to which the meter is attached via Data Transaction T004.1 or T013.1, as is currently the case with the Notify Meter Details and Update Meter Details data transactions.

The fields created in the above data transactions need to conform to the following formats outlined below.

- Datalogger(s) (SW) – True or False
 - xml <datalogger_SW>
- Datalogger(s) (“Non-Scottish Water”) – True or False
 - xml <datalogger_Non-SW>

Validation

Transactions should be rejected for a pseudo meter. If the data transactions fail validation they should return an Error/Notification data transaction (T009). A new error code is required with the associated text “Meter is a Pseudo Meter”.

If the flag is already set to true for either SW or the Non-SW fields the transaction should be rejected. Other potential validation should be discussed with the CMA. If the data transactions fail validation they should return an Error/Notification data transaction (T009). A new error code is required with the associated text “Flag is currently set to True”

Changes to the LVI Display

The fields created in the above data transactions need to be displayed in the LVI in two places:

1. The Meter Details section
2. The Customer Names Search Details Section. For the avoidance of doubt no searching on data loggers is required.

The fields should conform to the following formats outlined below:

- Datalogger(s) (SW) – True or False
- Datalogger(s) (“Non-SW”) – True or False

The Impact Assessment should consider:

- Date functionality i.e. history of datalogger status. Consideration should be given to two options:
 1. Add the data to a table with no history i.e. no date functionality.
 2. Add the data to a table with no history to allow for a datalogger status being recorded in the database.

Both options should include displaying this information on the LVI in both the Meter Details screen and the Customer Names Search Details screen.

Simplicity

In the interests of minimising the impact of the change on other system processes the following is not currently required:

- Linkage to meter read types e.g. R – Automatic reads.

User Requirement Table

UR001	<p>Two new fields should be added to the database for all physical meters in the system to identify whether a datalogger or dataloggers are present at a meter. If a datalogger is present the field will be true and if a datalogger is not present the field will be false. The default status will be false. Changes to the database are required to add fields to reflect:</p> <ul style="list-style-type: none"> • Datalogger(s) (SW) – True or False • Datalogger(s) (“Non-SW”) – True or False
UR002	<p>A data transaction for creating new meters i.e. the initial provision of the datalogger data items when a new meter is notified to the Central Systems by the wholesaler. This will not require a new stand alone data transaction. The data transaction should be in the form of additional fields in the existing Notify Meter Details (T004.0) data transaction. These should be optional fields and in the absence of the field being populated the default will be False.</p>
UR003	<p>A data transaction for updating Meter Information i.e. the provision of updated data items by the wholesaler. This will not require a new stand alone data transaction. The data transaction will be in the form of additional fields in the existing Update Meter Details (T0013.0) data transaction. These should be optional fields and in the absence of the field being populated the default should be the value contained in the system which should continue to be applied.</p>
UR004	<p>The fields created in the transaction in UR002 and UR003 need to conform to the following formats outlined below:</p> <ul style="list-style-type: none"> • Datalogger(s) (SW) – True or False <ul style="list-style-type: none"> ○ xml <datalogger_SW> • Datalogger(s) (“Non-Scottish Water”) – True or False <ul style="list-style-type: none"> ○ xml <datalogger_Non-SW>
UR005	<p>The transaction in UR002 and UR003 should have the following characteristics:</p>

	<ol style="list-style-type: none"> 1. These data transactions should be able to be submitted via both the HVI and the LVI 2. If more than one datalogger is present and owned by different party types e.g. one is an SW datalogger and one is Non-SW datalogger it should be possible for both the SW and Non-SW flags to be true for the same period. 3. If there is more than one datalogger owned by the same party type (SW or Non-SW) at a meter only one transaction need be sent to indicate this (if the flag is already set to true the transaction should be rejected). 4. The flow to remove the datalogger from the meter, SW, Non-SW or both, should only be sent if no dataloggers owned by the same party type remain associated to the meter. These obligations will be reflected in the CSDs. 5. This functionality should not apply to Pseudo meters.
UR006	<p>Any changes made to the datalogger data item status should be notified to the LP that owns the SPID to which the meter is attached via Data Transaction T004.1 or T013.1, as is currently the case with the Notify Meter Details and Update Meter Details data transactions.</p>
UR007	<p>The transactions in UR002 and UR003 should be rejected:</p> <ol style="list-style-type: none"> 1. For a pseudo meter. If the data transactions fail validation they should return an Error/Notification data transaction (T009). A new error code is required with the associated text “Meter is a Pseudo Meter”. 2. If the flag is already set to true for either SW or the Non-SW fields the transaction should be rejected. Other potential validation should be discussed with the CMA. 3. If the data transactions fail validation they should return an Error/Notification data transaction (T009). A new error code is required with the associated text “Flag is currently set to True”

UR008	<p>The fields created in the above data transactions need to be displayed in the LVI in two places:</p> <ol style="list-style-type: none"> 1. The Meter Details section 2. The Customer Names Search Details Section. For the avoidance of doubt no searching on data loggers is required. <p>The fields should conform to the following formats outlined below:</p> <ul style="list-style-type: none"> • Datalogger(s) (SW) – True or False • Datalogger(s) (“Non-SW”) – True or False
UR009	<p>The Impact Assessment should consider:</p> <p>Date functionality i.e. history of datalogger status. Consideration should be given to two options:</p> <ol style="list-style-type: none"> 1. Add the data to a table with no history i.e. no date functionality. 2. Add the data to a table with no history to allow for a datalogger status being recorded in the database. <p>Both options should include displaying this information on the LVI in both the Meter Details screen and the Customer Names Search Details screen.</p>