

GIS X,Y Flow Detailed User Requirements

Background

MCCC048 provided for the introduction of X, Y meter coordinates in the market. Fields were introduced in the “meter details” table to record:

- GIS X Co-ordinate
- GIS Y Co-ordinate
- GIS Free Descriptor

This is visible in the LVI under “meter details” for each meter in the market. Currently these data items are updated in the Central Systems via periodic data upload.

MCCP – Key Aspect of the Proposed Change

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

1. The provision of the GIS data items when a new meter is notified to the Central Systems by the wholesaler.
2. The updating of these GIS data items by the wholesaler.

Detail in respect of the above changes

Changes to Transaction Flows and associated LVI Changes

There is a requirement to introduce data transactions (flows) to allow for the submission of:

- GIS X Co-ordinate
- GIS Y Co-ordinate
- GIS Free Descriptor

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

1. The provision of the GIS data items when a new physical meter is notified (new Meter creation) 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 an additional field in the existing Notify Meter Details (T004.0) data transaction. This should be an optional¹ field (Section 4.3.1 of the FDS). This data item should not be required in order to complete the SPID connection process.

The above field will be optional but validation should be introduced so that the system can ensure that the majority of new physical meters have GIS data included. This system should reject the T004.0 data transaction if no GIS data is included and the chargeable meter size is greater than 0 (All adjustment meters have a chargeable size of 0mm).

This functionality should not apply to Pseudo meters.

2. The updating (updating existing meters) of these GIS data items by the wholesaler. This will not require a new stand alone data transaction. The data transaction should be in the form of an additional field in the existing Update Meter Details (T0013.0) data transaction. (Section 4.3.5 of the FDS). This should be an optional field.

This functionality should not apply to Pseudo meters.

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

GIS X – The format for X is a minimum of 5 characters being required if no decimal place is submitted and a maximum of 8 characters if a decimal is submitted (including the decimal point). All characters, apart from the decimal point, should be numeric.

¹ The CSDs will require the provision of GIS data for new physical meters. The field has to be optional as GIS data should not be required for “adjustment” meters. These are currently used for the fire fighting allowance and “bursts” and are physical meters in the system.

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GIS Y - The format for Y is a minimum of 5 digits being required if no decimal is submitted and a maximum of 9 characters if a decimal is submitted (including the decimal point). All characters, apart from the decimal point, should be numeric.

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The requirement here is to allow the entry into the database the exact figures that are provided, with or without the decimal.

GIS Free Descriptor - The format for the free descriptor is that it can contain a maximum of 255 characters. This should exclude control characters/ carriage returns/ line feeds.

Provision of information to LPs - Any changes made to the GIS 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.

Validation

Validation should be introduced to ensure:

- The T004.0 is rejected if no GIS data is included and the chargeable meter size is greater than 0. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. A new error code is required with the associated text “No GIS data provided”
- Length of GIS X is a minimum of 5 significant decimal digits if no decimal point is submitted is a maximum of 8 if a decimal point is submitted. All characters are numeric apart from the decimal point. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. A new error code is required with the associated text “Incorrect number of characters provided”
- Length of GIS Y is a minimum of 5 significant decimal digits 6 if no decimal point is submitted is a maximum of 9 if a decimal point is submitted. All characters are numeric apart from the decimal point. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. The error code specified in the previous bullet can be applied.
- Length of GIS Z Free Descriptor is not between 0 and 255 inclusive and has no control characters/ carriage returns/ line feeds. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. Two new error codes are

required with the associated text “Incorrect number of characters provided” and “Contains invalid characters”.

- Transactions are rejected for a pseudo meter. If the data transaction fails validation it should return an Error/Notification data transaction (T009). A new error code is required with the associated text “Meter is a Pseudo Meter”².

Other potential validation should be discussed with the CMA.

User Requirements

UR001	A data transaction for the provision of the GIS data items when a new physical meter is notified (new Meter creation) 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 an additional field in the existing Notify Meter Details (T004.0) data transaction. This should be an optional field (Section 4.3.1 of the FDS). This data item should not be required in order to complete the SPID connection process.
UR002	A data transaction for the updating (updating existing meters) of these GIS data items by the wholesaler. This will not require a new stand alone data transaction. The data transaction should be in the form of an additional field in the existing Update Meter Details (T0013.0) data transaction. (Section 4.3.5 of the FDS). This should be an optional field.
UR003	The transactions in UR001 and UR002 should have the following characteristics: <ol style="list-style-type: none"> 1. These data transactions should be able to be submitted via both the HVI and the LVI. 2. This functionality should not apply to Pseudo meters.
UR004	<i>Provision of information to LPs</i> - Any changes made to the GIS 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

² If the Datalogger change is approved this error code has also been specified for this change.

	Meter Details and Update Meter Details data transactions.
UR005	<p>The fields created in the above data transactions need to conform to the following formats outlined below:</p> <p>GIS X – The format for X is a minimum of 5 digits being required if no decimal place is submitted and a maximum of 8 characters if a decimal is submitted (including the decimal point). All characters, apart from the decimal point, should be numeric.</p> <p>NNNNNN.N</p> <p>GIS Y - The format for Y is a minimum of 5 digits being required if no decimal is submitted and a maximum of 9 characters if a decimal is submitted (including the decimal point). All characters, apart from the decimal point, should be numeric.</p> <p>NNNNNNN.N</p> <p>The requirement here is to allow the entry into the database the exact figures that are provided, with or without the decimal.</p> <p>GIS Free Descriptor - The format for the free descriptor is that it can contain a maximum of 255 characters. This should exclude control characters/ carriage returns/ line feeds.</p>
UR006	<p>Validation - The T004.0 should be rejected if no GIS data is included and the chargeable meter size is greater than 0. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. A new error code is required with the associated text “No GIS data provided”</p>
UR007	<p>Validation - Length of GIS X is a minimum of 5 significant decimal digits if no decimal point is submitted is a maximum of 8 if a decimal point is submitted. All characters are numeric apart from the decimal point. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. A new error code is required with the associated text “Incorrect number of characters provided”</p>
UR008	<p>Validation - Length of GIS Y is a minimum of 5 significant decimal digits 6 if no decimal point is submitted is a maximum of 9 if a decimal point is submitted. All characters are numeric apart from the decimal point. If the data</p>

	transaction fails validation an Error/Notification data transaction (T009) should be returned. The error code specified in UR007 can be used.
UR009	Validation - Length of GIS Z Free Descriptor is not between 0 and 255 inclusive and has no control characters/ carriage returns/ line feeds. If the data transaction fails validation an Error/Notification data transaction (T009) should be returned. Two new error codes are required with the associated text "Incorrect number of characters provided" and "Contains invalid characters".
UR010	Validation - Transactions are rejected for a pseudo meter. If the data transaction fails validation it should return an Error/Notification data transaction (T009). A new error code is required with the associated text "Meter is a Pseudo Meter".