CentralMarketAgency

Software Release March 2011

Software Release Note

March 2011

Version 1(Final)

Contents

Revision History

Rev.	Date	Description	Author	Reviewer
Version 1 (Draft)	03/03/2011	Draft	Gary Craig	Amanda Hancock
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Document Purpose

This Release Note sets out the changes included in CMA Central Systems Software Release March 2011. These changes have been introduced through the March 2011 Release Project and the version of the software being released is v2.4.

1. Background

The Release has been developed to deliver Market changes including Rollover, GIS Flow and Datalogger flags. The Release will also address the bulk of the known legacy System Bugs that reside on the CMA Issues List.

The March Release has been developed in response to a range of CMA Change Proposals (CMACPs) and associated Market Code Change Proposals (MCCPs).

2. Release Contents

The release consists of the changes listed in the table below:

MCCP/CMACP	CMA Issue Number	Bridgeall IA
MCCP037	228	Submission of Automated Meter Reads
MCCP040	229-31	Transfer Cancellations by Outgoing LP
CMACP043 (MCCP075)	156	T001.0 Blank OrgID & Gap Site Automation
MCCP070	258	Datalogger Functionality
MCCP072	071	T016.0 Effective Date & T005.0 changes
CMACP046	160	No T9 sent for erroneous DPID update of a water SPID
CMACP097	223	CS not sending a T005.2 to Outgoing Licensed Provider.
MCCP071	259	Meter X, Y flow
CMACP106	264	Unexpected error code is returned if the C read is prior to the I Read
CMACP099	239	T003.1 Error Message Enhancements
CMACP108	266	LVI Screen Corrections
CMACP107	265	No T017.1 sent when SPID not included in T017.0 transaction
MCCP053	003	Enduring Rollover Solution
CMACP103	241	T001.0 - 30 character limit in field
CMACP109	267	CS Timeout
CMACP110	268	Password Weakness
CMACP112	270	T016 not processed for SS SPID
CMACP104	245	Final Day Chunking
CMACP096	257	Database Transactional Issues
CMACP0116	272	MeterId: additional XML schema validation
CMACP118*	n/a	T009.0 in response to T032.0 Customer Names Transaction – wrong information being returned.
		LP Lookup No Longer Working – error with the page control.

*Introduced during the Project

3. Summary of Changes

4.1 Submission of Automated Meter Reads (MCCP037 / Issue 228)

4.1.1 Current Situation

Currently the system does not allow for the read type "Automated Meter Reads". The Central System only processes the following Read Types:

Meter Read Type	Meter Read Name
I	Initial Read
F	Final Read
E	End Read
O	Opening Read
X	Temporary Disconnection
Y	Reconnection
C	Regular Cyclic Read
U	Customer Read
T	Transfer Read

4.1.2 Change

The code has been changed so that Automated Meter Reads, Read Type (R), can be processed by the Central System, in addition to the existing Read Types. An Automatic Meter Read can only be submitted by Licensed Providers (LPs) and will be processed in the same way as an existing Cyclic (C) read.

Alterations to the existing capacity and threshold validation logic were not required.

4.2 Transfer Cancellations by Outgoing LP (MCCP040 / Issue 229-231)

4.2.1 Current Situation

At present the system allows the current Licensed Provider for a SPID to cancel the transfer request of an incoming Licensed Provider on the basis that there is in place a current or the customer has an outstanding debt. A cancelled transfer is reported to the incoming Licensed Provider, but no information is provided to explain the cancellation.

4.2.2 Change

The system has been changed so that text comments are provided by the existing Licensed Provider as part of the T010.1 Registration Cancellation transaction. The corresponding T011.0

notification transaction has also been updated to include the new D4003_Comment data item and the D4005_CancellationCode data item.

4.3   T001.0 Blank OrgID & Gap Site Automation (CMACP043 / Issue 156)

4.3.1   Current Situation

When sending a T001.0 transaction it should be possible to leave the LP field blank when the Connection Type is 'Gap Site'. However when T001.0 messages are submitted without the D4001_OrgId tag an error code of AC is returned. When using the LVI, if the LP is not specified the LVI still creates the D4001_OrgId tag within the message but with no value. In this situation the transaction does not fail. However when T001.0 transactions are submitted using the HVI and the D4001_OrgId tag is not supplied, then the error code is returned and the transaction fails.

In addition when a SPID has been created as a Gap Site with no LP the only way to assign the SPID to an LP is by way of a manual screen within the LVI.

4.3.2   Change

When submitting a T001.0 transaction, if the Connection Type is 'Gap Site', then the D4001_OrgId tag is optional in the message.   However it is still required if the Connection Type is not 'Gap Site'.

The manual LVI screen which allows the assignment of Gap Site SPIDS to LP's by the CMA Administrator has been removed, as well as the menu option which allowed navigation to this page. Instead of the manual LVI screen a 2-stage automated process now assigns Gap Site SPIDs to LPs. First, there is a process to assign a Gap Site SPID to the LP of its associated SPID, if appropriate. Then another process to allocate any remaining unassigned Gap Site SPIDs to a set of LPs in rotation. A new screen for managing the LPs to whom Gap Site SPIDs will be assigned has also been added.

4.4 Datalogger Provision (MCCP070 / Issue 258)

4.4.1 Current Situation

Currently the Central Systems has no concept of "dataloggers" against meters.

4.4.2 Change

The Central Systems have been modified to allow the recording of "dataloggers" against meters.

The Central Systems have been modified to contain two new flags against a meter. These represent whether SW has a datalogger against a meter and whether another party (non-SW) has a datalogger against the meter. It is possible for both SW and another party to have dataloggers against the same meter which is why 2 flags are required.

The T004.0, T004.1, T013.0 and T013.1 messages have been altered to accept 2 new Boolean flags datalogger_SW and datalogger_NonSW. The following messages have been altered to accept the following the data items:

Message Type	Data_Item	Optional Field (Y/N)	Maximum no Of Occurrences within the message
T004.0	D3015_datalogger_SW	Y	1
T004.1	D3015_datalogger_SW	N	1
T004.0	D3016_datalogger_NonSW	Y	1
T004.1	D3016_datalogger_NonSW	N	1
T013.0	D3015_datalogger_SW	Y	1
T013.1	D3015_datalogger_SW	Y	1
T013.0	D3016_datalogger_NonSW	Y	1
T013.1	D3016_datalogger_NonSW	Y	1

Alterations to the existing validation logic were required as Datalogger flags cannot be submitted for Pseudo Meters. The new error code below has been added to the XML schema.

- DY - Meter Is a Pseudo Meter

The presence of an SW and/or Non SW datalogger have a historical view and can show the status of the flags at various points in time.

The LVI screens which display customer name details and meter details have also been modified to display the value of these fields. The customer name details screen returns data at a SPID level rather than at meter level. The possibility does exist that several meters can exist under a single SPID. In this scenario the Customer Name Search screen will display true if the flag is set against any of the meters under the SPID.

The LVI screens which allow the creation of T013.0 and T004.0 transactions have also been modified to allow the editing of these fields against a meter.

4.5   T016.0 Effective Date & T005.0 changes (MCCP072 / Issue 071)

4.5.1   Current Situation

Since September 2010 a user can change the unmeasureable status of a SPID in the Central system in three ways:

1. A SPID is set to unmeasureable status using the T016.0 transaction which connects an unmeasureable service element. The date of the transaction, the "transaction date", becomes the date that the SPIDs status as unmeasureable becomes effective, the "effective date" i.e. the effective date cannot be back dated.

2. A SPID has its unmeasureable status removed using the T016.0 transaction which disconnects the unmeasureable service element. The date of the transaction, the "transaction date", becomes the date that the SPIDs service element is disconnected and becomes effective, the "effective date".

3. If a T005.0 (I Read) is notified against a meter at a SPID where previously there was an Unmeasureable Service Element and the I Read predates the T016.0 Effective To date, the I Read date updates the T016 effective to date (disconnection date) to be the day before the I Read date.

4.5.2   Change

An Effective From option has been added to the T016.0 data transaction which allows T016.0s to set/remove the SPIDs status as Unmeasurable i.e. connect or disconnect the Unmeasurable Service Element on the date specified in the T016.0 Effective From. This allows the status to be completely removed and backdated.

The T005.0 data transaction no longer changes the end date of disconnected Unmeasurable Service Elements i.e. set the end effective date of them. This is now achieved using the T016.0.

Alterations to the existing validation logic were required. An effective from date in the future is rejected when notifying the disconnection of an unmeasureable service element. If the data transaction fails validation it returns an Error/Notification data transaction (T009.1) with the new error code DK.

T005.0 – A T005.0 (I Read) notified against a meter for a SPID that has had an unmeasureable service element is rejected if the T005.0 effective to date is on or before the disconnection date of the T016.0. If the data transaction fails validation it returns an Error/Notification data transaction (T009.1) with a new error code ED.

4.6   No T9 sent for erroneous DPID update of a water SPID (CMACP046 / Issue 160)

4.6.1   Current Situation

DPIDs are associated with a specific Sewerage SPID and both the DPID and the SPID have to be defined in the T027.0 DPID Update message.   If a T027.0 message is received containing a sewerage SPID that is not associated with the DPID then a T009.1 Notification containing a "DO"

error code is returned to the Wholesaler. If, however, a T027.0 message is received containing a water SPID that is not associated with the DPID then the system returns no error message and the DPID is not processed.

4.6.2   Change

The System now validates that the Supply Point is **not** a Sewerage Supply Point; the system will return a T009.1 Notification with the error code "DO" to the Wholesaler and exit the process.

4.7   CS not sending a T005.2 to Outgoing Licensed Provider (CMACP097 / Issue 223)

4.7.1   Current Situation

Currently when a T005.1 Transfer Meter Read is received the Central Systems will send a T005.2 to the outgoing LP of the Supply Point. The Outgoing LP is calculated by retrieving a list of Registrations and getting the one before the last (i.e. the one before the current Registration). However the list of Registrations contains any Registrations that were cancelled before successfully transferring to the new LP. This means if there is an attempt to transfer the Supply Point to a new LP that is cancelled, then at a later date the transfer is reattempted and is successful, the LP to which the T005.2 is sent will be the LP associated with the cancelled Registration rather than the current Outgoing LP.

4.7.2   Change

The system has been altered so that the list of Registrations used in this process does not contain any Registration that does not have a status of completed. The result of this is that only Registrations that were active at some point will be included in the comparison to discover the Registration before last. Previously the system iterated through the Registrations and added them to a separate list in order of their start date. This will be extended to check the Registration's status is Completed before adding them to the ordered list.

4.8   GIS X, Y Flow (MCCP071, Issue259)

4.8.1   Current Situation

Currently the GIS X, Y and Free Descriptor fields are updated in the Central Systems via periodic data upload. This occurs quarterly whereby the Data Owner, Scottish Water, provides the CMA with a complete dataset to be uploaded to the Central Systems; this includes all updates that have occurred in the period.

4.8.2   Change

There are two existing Data Transactions (flows) that have been altered to allow the submission of GIS X, Y and Free Descriptor via the HVI and LVI.

- The flow for Physical Meter Creation (T004.0) has been altered to provide the submission of X, Y coordinates and the contents of GIS Free Descriptor data items. This will be an optional field but validation will require the GIS X, Y fields to be populated for all Chargeable Meter Sizes greater than 0.

- The flow for Physical Meter Updates (T013.0) has been altered to provide the submission of X, Y coordinates and the contents of GIS Free Descriptor data items. This will be an optional field.

The corresponding LP Notifications T004.1 and T013.1 will also include the new Data Items mentioned above. In the T004.1 they will be required fields and in the T013.1 they will be optional.

Validation for the two Data Transactions has been updated to provide validation of the X, Y and Free descriptor Data Items in terms of requirement and length. The XML Schema Definition file will be altered by this change:

- o D3017_GISX (Data Item Logical Type: String, length 8 applied to it at the schema)

- o D3018_GISY (Data Item Logical Type: String, length 9 applied to it at the schema)

- o D3019_GISZFreeDescriptor (Data Item Logical Type: String, length 255 applied to it at the schema)

Three new error codes will be created.

o   Error Code EA – "String does not conform to GIS Specification"

o   Error Code EC – "No GIS data provided"

o   Error Code DY – "Meter Is a Pseudo Meter"

4.9 Unexpected error code is returned if the C Read is prior to the I Read (CMACP106 / Issue 264)

4.9.1 Current Situation

Currently when receiving a T005.1 Meter Read the system will check to ensure the Meter Read type is not an Initial or Opening read type.   It will also check that the Meter Read date is after or on the same day as the Effective From date of the meter. If that is not the case a DF error code is returned. However, before this validation is carried out there is another piece of code that retrieves the last Meter Read from the database, and if the date of the new read is before or on the same date as the previous Meter Read date it will return an AC(Data is not a member of a valid set) error.

4.9.2 Change

The code that carries out the validation that returns the DF error has been moved to an earlier stage in the process so that the validation occurs before the validation that will return the AC error code

4.10 T003.1 Error Message (CMACP099 / Issue 239)

4.10.1 Current Situation

Currently the system has two error messages that are returned from a T003.1 Transfer Registration depending on the current state of the SPID.

An AR (Transfer Registration Rejected: Applicant already registered to SPID) is returned for 2 reasons:

- The SPID has no future transfers and the SPID already belongs to the LP requesting this transfer.

- The SPID has a future transfer and that future transfer is for the LP requesting this transfer.

An AQ (Transfer Registration Rejected: Registration already in progress) is returned only if the SPID has a future registration for another LP.

An issue has arisen because at present the error message does not match the reason the transfer is being rejected. The AQ error does not mention the registration that is with another LP and the AR error does not mention that the applicant may not be currently registered to the SPID but already has a transfer pending.

4.10.2   Change

The error messages have been changed to provide clarity to Participants. The error descriptions are:

AR - Transfer Registration Rejected: Applicant already registered to SPID or transfer to Applicant already pending.

AQ - Transfer Registration Rejected: Registration to other Applicant already in progress.

4.11   LVI Screen Corrections (CMACP108, Issue 266)

4.11.1   Current Situation

- The LVI screen for T012.0 (Update SPID data) incorrectly displays "Meter Address".

- The Customer Name Search Page displays "Customer" under the search criteria.

- The Customer Name Search Page displays "Dependent Name" under the search criteria and detailed results.

- The LVI screen for "View SPID Screen" incorrectly displays Dependent Name.

4.11.2 Change

- The LVI screen for T012.0 (Update SPID data) has been changed to display "SPID Address".

- The Customer Name Search Page displays "Customer Name" under the search criteria.

- The Customer Name Search Page and Detailed results page has been changed to display "Dependent Thoroughfare Name" under the search criteria and detailed results.

- The LVI screen for "View SPID Screen" has been changed to display Dependent Thoroughfare Name.

4.12 No T017.1 sent when SPID not included in T017.0 transaction (CMACP107 / Issue 265)

4.12.1 Current Situation

4.12.2 Swapping of Market Main Meters with No SPID

1. Swapping Market Main Meters

In certain instances the Central Systems allow the swapping of market main meters when there is no SPID specified in the T017.0 transaction.

2. T017.0 Read Type Validation

Using the T017.0 Meter Swap process there is no specific check to ensure old and new meter meters have the appropriate read types, E and O respectively.

3. T017.0 Meter Swap Notification Validation

The T017.0 sends a meter swap notification to the LP of the SPID supplied in the meter swap, and also the LP of the Associated SPID if one exists. The code currently does not check if an LP actually exists and this causes an error when one does not.

4. T017.0 New Meter Classification

At present in order for the T017.0 to class the New Meter as a valid New Meter the following must be true.

- The Meter State must be Active OR Pending.

- The New Meter's RTS, Chargeable Meter Size and Sewerage Chargeable Meter Size must be the same as the old meter's RTS, Chargeable Meter Size and Sewerage Chargeable Meter Size

- The New Meter can belong to the SPID passed in with the Meter Swap process OR the New Meter can be the parent of a Market Meter under the SPID passed in with the Meter Swap Process.

- If the New Meter does not conform to the step above, it must belong to no SPID.

- The New Meter Read must pass the Validate Meter Read process.

4.12.3   Change

1.   Swapping Market Main Meters

The Central Systems have been changed to prevent the swapping of market main meters when there is no SPID specified in the T017.0 transaction. If such a meter swap is attempted, existing validation will check the old meter is not directly associated with a Supply Point and return an error code DE if the association exists. This validation will be extended further to make sure that the old meter does not have any child meters directly associated with a Supply Point.

A T009.1 notification with error code DE will be returned to the sender if the old meter is a market meter and no SPID is specified in the T017.0.The T017.0 transaction will only be processed for a main market meter if the SPID associated with the child virtual meter is supplied in the transaction.

2.   T017.0 Read Type Validation

The Meter Swap Process has been modified to specifically check that the read types of the New and Old meters are O and E respectively. If they are not, an error code of AT will be returned to the message sender.

3.   T017.0 Meter Swap Notification Validation

The T017.0 Meter Swap process has been modified to check an LP exists against both the SPID and Associated SPID before attempting to send a Meter Swap Notification. If an LP does not exist for the SPID or Associated SPID, the Central Systems will check if there is an Active

Registration present and send the Meter Swap Notification to the LP associated with the Active Registration.

4. T017.0 New Meter Classification

The state of a Meter which constitutes a valid New Meter has been modified. The requirements are now:

- The Meter State must be Active OR Pending

- The New Meter's RTS, Chargeable Meter Size and Sewerage Chargeable Meter Size must be the same as the old meter's RTS, Chargeable Meter Size and Sewerage Chargeable Meter Size

- The New Meter can belong to the SPID passed in with the Meter Swap (only possible if a SPID was passed in)

- If the New Meter does not conform to the step above, it must belong to no SPID.

- The New Meter must not exist within a Meter Network in any capacity. It can neither be a parent, nor have child meters.

- The New Meter must contain no pre existing Meter Readings.

- The New Meter Read must pass the Validate Meter Read process.

4.13   Enduring Rollover Solution (MCCP053 / Issue 003)

4.13.1 Current Situation

There is currently an algorithm within the Central Systems to deal with Rollover. Currently the Central Systems use only the strict upper/lower limit rollover detection algorithm to determine whether a Meter Read is a rollover.   However the current algorithm is not robust enough to detect all occurrences of rollovers.

4.13.2 Change

Users submitting Meter Readings are now given the option of supplying an additional field to specify whether they believe the read to be a rollover or not.

The Central Systems have been modified to compare the supplied indicator field with the results of a Revised Rollover Detection algorithm (RRD). If the result of this comparison is acceptable the Central Systems will store a definitive "Rollover Flag" value against a Meter Read. If the result of this comparison is not acceptable, the Meter Read will be rejected and an error returned to the sender.

The Central Systems have been modified in the following ways:

- 2 data items have been created on the schema.

  1) A new "D3020_Rollover_Indicator" data item has been created. This is a Boolean flag indicating whether the submitter of the read believes this to be a rollover read.

  2) A new "D3021_Rollover_Flag" data item has been created. This is a Boolean flag used to inform recipients whether the Central Systems have deemed the read to be a rollover or not.

- A number of messages were altered to use these new data items.

  Where the underlying message definitions are shared between incoming and outgoing Meter Read messages, incoming and outgoing messages now reference 2 unique underlying message definitions, one for incoming read and one for outgoing reads.

  1) Message definitions MeterReadType and MeterSWAPDetailsType have been extended to include the optional field D0320_Rollover_Indicator.

  2) Message definition DPMeterReadType has been altered to include the mandatory data item D0321_Rollover_Flag.

  3) Two new message definitions MeterReadNotificationType and MeterSWAPDetailsNotificationType have been created.

4) MeterReadNotificationType extends the message definition MeterReadType with the exception that MeterReadNotificationType includes the mandatory data item D0321_Rollover_Flag instead of the optional D0320_Rollover_Indicator data item.

5) MeterSWAPDetailsNotificationType extends the message definition MeterSWAPDetailsType with the exception that instead of the optional D0320_Rollover_Indicator data item, MeterSWAPDetailsNotificationType contains the mandatory D0321_Rollover_Flag data item

The following table outlines which message use which underlying message definition.

Message Type	Message Defintition Type
T005.0	MeterReadType
T005.1	MeterReadType
T005.2	MeterReadNotificationType
T005.3	MeterReadNotificationType
T017.0	MeterSWAPType
T017.1	MeterSWAPNotificaitonType
T030.0	DPMeterReadType
T030.1	DPMeterReadType

- Any LVI interface which allows the submission/viewing of Meter Reads has been altered to include these fields.
- All database tables which record Meter Reads have been changed to include 2 new fields, the values of which will map directly to the new "D3021_Rollover_Flag" and "D0320_Rollover_Indicator" data items.
- All database tables which record ignored Meter Reads have been changed to include a field, the value of which will map directly to the new "D3020_Rollover_Indicator" data item.

- The Central Systems rollover detection algorithm has been modified to return 1 of 3 states.

    1) Rollover

    2) Not A Rollover

    3) Indeterminate

- Return of the submitted read and the associated Rollover Flag to the sender is as below:

    1) Scottish Water – T017.1 (new) and T005.3 (re-use)

    2) Licensed Provider – T05.2 (re-use)

- When processing a Meter Read the Central Systems have been modified to return an error if the read type is either I or O and the Rollover Indicator has been specified.

- The meter advance logic has been altered to examine the meter's Rollover_Flag rather than using the old Rollover detection algorithm when calculating usage.

- The CMA LVI interface which allows the editing of Meter Reads has been amended to allow the editing of the rollover flag.

- The error codes outlined below have been added to the schema.

  o Error Code EE - Central Systems disagree with Rollover_Indicator provided

  o Error Code EF - Unable to determine Rollover Status. Please supply Rollover Indicator

  o Error Code EH - All other values with the exception of Rollover Indicator matched a previous read

  o Error Code EI - The Rollover Indicator may not be present on an O or and I read.

4.14   T001.0 – 30 characters limit in field (CMACP103 / Issue 241)

4.14.1 Current Situation

The LVI Interface for the New Connection process allows 32 characters in the Scottish Water Ref Field. The XML Schema also allows 32 characters for the corresponding transaction field D2009. However, the database table SupplyPointCores contains the variable swRef which has a field

length of 30 characters. The result is a "red script error" if a transaction containing more than 30 characters is submitted to the database.

4.14.2   Change

The CMA requires consistency between the LVI Interface, XML schema and the database. Therefore swRef in the database table SupplyPointCores has been changed to character 32 length.

4.15   CS Timeout (CMACP109 /Issue 267)

4.15.1   Current Situation

If a user has failed to logout correctly or if an attempt to log in "times out" and the user tries to login again by navigating to and submitting the login page they are often shown an error - "This account is already logged in, please log other session off before trying to access with this account on another machine".   The same issue occurs if a browser is closed without logging out and a user tries to log back onto the system.

4.15.2   Change

The system has been changed so that a user attempting to log will be permitted to do so, but that the previous session already in the system will be logged out and returned to the login page.

4.16   Password Weakness (CMACP110 / Issue 268)

4.16.1   Current Situation

Login screen refreshed

The LVI interface for the login screen requires the user to enter three randomly selected characters of their password. If the login screen is refreshed, the indices of the password characters prompted for are randomly generated again. This refresh can happen in a number of different ways, including pressing the F5 key. The refresh can be run an unlimited number of times.

This is a security weakness. If a malicious person carefully watches a legitimate user log on, three particular characters of that legitimate user's password can be determined fairly easily.

A malicious person could then try to log on as a legitimate user, by continuously refreshing the login screen until a particular three characters of the password are prompted.

Password entered incorrectly

A similar weakness occurs when the password is entered incorrectly. The user gets another chance to login but the password character indices are randomly generated again.

Non-existent username entered

When a non-existent username is entered the system randomly selects password character indices between 1 and 16 inclusive. Using the screen refresh weakness described above it is possible to receive password indices of up to 16 on any refresh. Since most users are likely to choose passwords of the minimum length 8, it is possible to deduce if the user entered does not exist by determining the indices displayed for a given username.

Change Password Message

The requirement message displayed in the Change Password screen only states that the password must be of a length between 8 and 16 characters.

4.16.2   Change

The following changes were completed for the LVI interface:

Login Screen Refreshed

The indices randomly chosen are stored and reused on subsequent attempts until the user successfully logs in, the password is changed (including account reactivation) or when the password is set for the first time. The stored indices are regenerated if any of these occur.

Maintain Character Indices for Incorrect Password Attempt

When a valid user enters their password incorrectly, further attempts will prompt for the same character indices. For the avoidance of doubt, the previous behaviour of locking out an account after three attempts still applies.

Shorten range of Character Indices for Non-existent Usernames

The system will randomly generate indices between 1 and the minimum password length inclusive for users that do not exist. The generated indices for the entered user name will be maintained in the system for future attempts.

Change Password Message

The requirement message on the Change Password screen for not meeting the password requirements haves been extended to include the current message followed by the text:

o "It must contain one character from each of the following groups: a-z, A-Z, 0-9, punctuation."

The same above text has also been added to the red error message that appears when the new password that has been entered is invalid.

4.17 T016 not processed for SS SPID (CMACP112 / Issue 270)

4.17.1 Current Situation

Currently the Central Systems will validate that the SPID specified in the T016.0 Declare Unmeasurable message belongs to a Water Supply Point. If the SPID does not belong to a Water Supply Point the process will exit returning a T009.1 Notification to the sender with error code DC.

4.17.2 Change

The Central System has been changed to allow the creation of Unmeasurable Sewerage Service elements using the T016.0 workflow when the SPID in the message relates to a Sewerage Supply

Point. This has been achieved by amending the T016.0 workflow process so that it no longer specifically checks the SPID being sent in with the message relates to a Water SPID.

It is also possible to declare an Unmeasurable Sewerage Supply Point as Measurable again using the T016.0, and this will update the Unmeasurable Sewerage Service Elements for that Supply Point as is currently the case with Unmeasurable Water Service Elements on Water Supply Points.

4.18 Final Day Chunking (CMACP104 / Issue 245)

4.18.1 Current Situation

Currently the Central Systems has an algorithm when processing settlements for a supply point that will split the charge period into separate chunks, each representing the state of the supply point at that period. Three issues have been identified with the algorithm that produces incorrect chunking.

Issue 1: Final Day Chunking

The algorithm that is used to work out the list of chunks contains a defect which results in a change to the state of the supply point not being considered if it occurs on the last day of the year for RF or invoice period for IP. This can result in incorrect charges being applied to the Supply Point on the final day.

Issue 2: In Period Disconnection

An In Period Disconnection is assigned the wrong period of chunking when a previous change to the Supply Point occurs within a couple of days before it e.g. a disconnection occurs two days after a connection, a chunk of one day is created. A similar problem occurs if the disconnection date occurs within a couple of days of the invoice start date. Connection and Disconnection within the same day is a subset of this issue.

Issue 3: DPID Issue

Creating a charge chunk based on the DPIDs disconnection date the chunk begins on the date of the disconnection date, rather than the day after the disconnection date. The process actually creates the charge chunk beginning the day after the disconnection date.

4.18.2   Change

The process that handles the creation of charge chunks for each Supply Point has been altered to take into account changes that occur on the final day of an RF or IP settlement run. The algorithm used to work out dates of changes has been altered and by result the charges on the final day will be corrected and in the cases of disconnection on the final day, no charge should be applied on the day.

4.19   Database Transactional Issues (CMACP096 / Issue 257)

4.19.1   Current Situation

The Central System has experienced a number of instances where transactions have failed to process either due to a failure in the application or a failure in the database. The transactions with the vast majority of application and database failures are:

1. **T015.0 Disconnection Declaration**

   The T015.0 Disconnection Declaration work flow attempts to send a T015.1 notification to a Licensed Provider without checking if a LP exists for the Supply Point. An error occurs if no LP exists for the Supply Point. Timeout issues that could not be processed due to failure to retrieve a MID from the database also occurred.

2. **T005.1 Meter Read (LP)**

Timeout issues occurred that could not be processed due to failure to retrieve a MID from the database.

3. **Message Processing Dashboard**

Messages are processed by the Central Systems, and responses are sent to the database in order to be viewed by participants, via the Message Processing Dashboard of the LVI. A separate table is used for displaying these messages on the LVI, but occasionally messages are not copied to this table, and participants are not able to view these messages. The code to copy the messages to the table used by the LVI is not within a database transaction and this can lead to inconsistent data.

4. **CMA MID**

The database table that allocates the CMA MID for a response message is not indexed. This causes an issue with the code allocating MIDs, resulting in "Could not get MID from the Database" errors. The code to get the next available MID is not within a database transaction and this can also lead to inconsistent data.

5. **Meter Readings Table**

Occasionally when processing a transaction sent in by a Trading Party, the Central Systems reports the error "NHibernate.ADOException: could not initialise a collection". This results in the transaction being marked as failing to process its attempt. All found occurrences of this error are the result of a retrieval of a list of Meter Readings for a specific meter. The Meter Readings retrieval eventually times out resulting in the error.

4.19.2 Change

We have made the following changes as solutions to the issues identified above.

1. **Solution 1 - T015.0 Disconnection Declaration Validation**

The issue with the T015.0 Disconnection Declaration transaction has been resolved with validation: Added validation to the Disconnection workflow which validates the Supply Point has an LP and if not, only sends the T015.1 to the Active Registration's LP.

2. **Solution 2 - T005.0 & T005.1 Timeouts**

A primary key has been added to the table that generates the MIDs for responses from the Central Systems. This will ensure that the table is indexed for improved performance.

In order to ensure that message processing either succeeds completely or that no data is updated on failure, the Data Access Layer code has been modified to call the relevant stored procedure from NHibernate. This places the stored procedure within a database transaction.

3. **Solution 3 – Message Processing Dashboard**

The code to copy the messages to the table used by the LVI has been placed within a database transaction.   The stored procedure that gets the details of these messages to display them in the LVI has been changed to use a table hint ensuring that it places no locks on the table. Related database code that gets the messages from the table and returns them to the LVI has also been changed to use the no lock table hint.

4. **Solution 4 – CMA MID**

The table that is used to generate the MIDs for responses from the Central Systems has been changed so that the table has a primary key. This will ensure that the table is indexed, and will improve performance.   The code to get the next available MID has been placed within a database transaction.

5. **Solution 5 – Meter Readings Table**

The Meter Readings table in CS contains a field called meter. The field holds the meter id of the meter that the Meter Reading belongs to. At the moment this is a foreign key but it is

not indexed. The field meter in the Meter Readings table has been indexed to improve performance of queries made to the table by the Central Systems.

4.20 MeterId: additional XML schema validation (CMACP116/ Issue 272)

4.20.1 Current Situation

Currently there are no restrictions on the Meter ID, other than it being required for certain transactions. The HVI client, i.e. the Licensed Providers could send a Meter ID with control characters, such as \n (line feed), \r (carriage return), \t (tab) or | (pipe). The HVI will accept these transactions without error but later on in the process, for example generating reports, these characters may cause problems.

In addition to this, the Meter ID does not have any requirement to be greater than 0 characters.

4.20.2 Change

The completed change will alter the XML schema to add in both a requirement that the Meter ID is greater than zero, and that the characters \n, \r, \t and | are not allowed. The regular expression to handle this is: [^\r\n\t\|]+

4.21 T009.0 in response to T032.0 Customer Names Transaction – wrong information being returned (CMACP118)

4.21.1 Current Situation

When receiving a T0032.0 Update Customer Name transaction the system will send a T009.0 in four separate situations, namely

1. Successful processing of the transaction
2. The Supply Point does not exist or belong to the Sender
3. The SPID provided is from a paired Sewerage Supply Point
4. The Customer Name is not valid

However, the D1008 field is not being correctly populated in each of these 4 cases.

4.21.2 Change

To solve this issue the correct value is now inserted in to the D1008 field, i.e. the D1008 field will contain the following values

1. 'D2001_SPID'
2. 'D2001_SPID'
3. 'D2001_SPID'
4. 'D2027_CustomerName'

where the numbers 1-4 above correspond to the cases described in the Section above.

4.22 LP Lookup No Longer Working – error with the page control (CMACP118)

4.22.1 Current Situation

The LP Lookup page uses a grid control to display results. This grid has been configured to display a pager whenever there are more than 12 results. However, any use of the pager produces an error. The reason for this is that whenever the user interacts with the pager the browser posts the page back to the web server to retrieve the next set of visible results. However, the current server-side logic to retrieve the results is defective, generating an exception.

4.22.2 Change

The code behind the LP Lookup page has been refactored to correctly retrieve the LP lookup results. The generation of the LP lookup data can be a time-consuming process so it is not sensible to regenerate the report after each pager event. Also, the report could be quite large so is not a sensible candidate for storing in ViewState. Instead, the report is cached in session.

4. Impact on System Functionality

Functional Area	Impact (Y/N)	Description
Wholesaler User Interface (LVI)	Yes	**(CMACP043):** Correct handling of empty OrgId input box on T001.0. **(MCCP070):** Added Datalogger SW and Datalogger Non-SW fields to T004.0 New Meter and T013.0 Meter Update screens. **(MCCP072):** Added Effective From date picker to T016 Unmeasurable Declaration screen. **(MCCP071):** GISX, GISY and GISZ Free Descriptor fields added to NewMeter.aspx with validation. **(MCCP053):** Radio buttons added to T005.0 Meter Read and T017.0 Meter Swap pages to represent Don't Know, Yes or No for the value of the Rollover Indicator. **(CMACP109):** If a user attempts to log in to the LVI while that account is already logged in, the existing user will be logged out and the new user allowed to login. **(CMACP110):** The letters required for a user to log on to the LVI will be the same until the next time that user logs on successfully. Attempting to log in as a non-existent user will ask for password letter indices up to the minimum password length. **(CMACP0116):** A pattern restriction has been added to the XML schema to prevent line feed, carriage return, tab or pipe characters being used in a Meter ID. **(CMACP118):** The paging of results on the LP Lookup page now works correctly. Results of the search are stored in the Session prior to being displayed. A new session key to store the search results is created for each new visit to the page.

Functional Area	Impact (Y/N)	Description
LP User Interface (LVI)	Yes	**(MCCP037):** Added the read type "R" to the list of Meter Read types.
		(MCCP040): Added comment box to T010.1 page and support for displaying description of EB return code.
		(MCCP070): Datalogger SW and Datalogger Non-SW fields added to MeterView.aspx, ViewMeterHistory.aspx and CustomerNamesSearch.aspx pages
		(MCCP053): Radio buttons added to T005.1 Meter Read page to represent Don't Know, Yes or No for the value of the Rollover Indicator.
		(CMACP102): LVI improved to prevent data issues caused by having more than one tab/window open at a time.
		(CMACP109): If a user attempts to log in to the LVI while that account is already logged in, the existing user will be logged out and the new user allowed to log in.
		(CMACP110): The letters required for a user to log on to the LVI will be the same until the next time that user logs on successfully. Attempting to log in as a non-existent user will ask for password letter indices up to the minimum password length.
		(CMACP0116): A pattern restriction has been added to the XML schema to prevent line feed, carriage return, tab or pipe characters being used in a Meter ID.

Functional Area	Impact (Y/N)	Description

Web Services (HVI)	Yes	**(MCCP037):** New Meter Read Type "R" accepted from LPs only.
		
		(MCCP040): Cancellation Comment is required field on T010.1. The T011.0 transactions will reuse two existing fields:
		
		  o D4003_Comment.
		
		  o D4005_CancellationCode.
		
		(CMACP043): When sending a T001.0 it is possible to supply no LP when the Connection Type is 'Gap Site'.
		
		(MCCP070): Datalogger_SW and Datalogger_NonSW fields added to T004.0, T004.1 and T013.0, T013.1 notifications. New Error code DY added.
		
		(MCCP072): A D4006_EffectiveFrom date can be sent with a T016.0 to control the date from which a SPID is Unmeasurable or Measurable.
		
		(MCCP071): New GISX and GISY values must be supplied if the supplied chargeable water or sewerage meter sizes are greater than 0 on a T004.0, T004.1 and T013.0, T013.1. New Error Codes: EA, EC, DY
		
		(MCCP053): T005.0 and T005.1 now include an optional D0320_Rollover_Indicator data item. T005.2, T005.3, T017.0, T017.1, T030.0 and T030.1 include the mandatory D0321_Rollover_Flag data item. New Error Codes: EE, EF, EH, EI.
		
		(CMACP0116): A pattern restriction has been added to the XML schema to prevent line feed, carriage return, tab or pipe characters being used in a Meter ID.

Aggregation and Settlements	Yes	**(CMACP104):** Changes in the state of a SPID are no longer ignored if they occur on the last day of an Invoice Period (for IP) or the last day of the year (for RF). In Period Disconnections are now assigned to the correct period when there is a previous change within the previous few days.

Functional Area	Impact (Y/N)	Description

Registration	Yes	**(MCCP040):** Cancellation Comment is required field on T010.1. The T011.0 transactions will reuse two existing fields:
		
		      D4003_Comment.
		      D4005_CancellationCode.
		
		(CMACP043): New Gap Site algorithm implemented in T001.0 workflow. OrgId is optional if T001.0 is for a Gap Site.
		
		(MCCP070): Datalogger_SW and Datalogger_NonSW fields added to T004.1 and T013.1 notifications. New Error code DY added.
		
		(MCCP072): Effective From date on Unmeasurable Service Elements now using the value from the T016.0. Meter Reads no longer alter the Effective To date on any previous Unmeasurable Service Elements – the Meter Read Date must be after any unmeasurable Effective To date.
		
		(MCCP071): New GISX and GISY values must be supplied if the supplied chargeable water or sewerage meter sizes are greater than 0 on a T004.0 or T013.0.
		
		(MCCP053): New optional Rollover Indicator added to Meter Read (T005.0, T005.1 T030.0, T030.1) and Meter Swap (T017.0) messages. New validation step added to Meter Read process to use new algorithm to determine if the value of the Rollover Indicator will be accepted.
		
		(CMACP112): Can now use a T016.0 to make Sewerage Supply Points unmeasurable or measurable again, so long as they do not have an associated Water Supply Point.

Functional Area	Impact (Y/N)	Description
Work Flows	Yes	**(MCCP037):** Modify Meter Read Process to accept the new read type "R" for LPs only
		(MCCP040): Add validation to check for empty comment field on T010.1, and save value if present. Comment and cancellation code should be sent in T011.0.
		(MCCP070): Save Datalogger_SW and Datalogger_NonSW values in T004.0 New Meter and T013.0 Meter Update workflows.
		(MCCP072): Added validation to ensure that the EffectiveFrom date on a T16.0 is in the past. Send T016.1 notifications to the LP for the SP as well as any associated SP. Validate Meter Read Dates are later than the Effective To date on any Unmeasurable Service Element.
		(CMACP046): A T009.1 with response code DO is now returned if a T027.0 is sent with a Water SPID.
		(CMACP097): T005.2 now sent to correct outgoing LP after receiving T005.1
		(MCCP071): Validate that valid GISX and GISY values, if any, have been provided in a T004.0 or T013.0. Save these values along with the GISZ Free Descriptor if so. Also validate that a T013.0 Meter Update cannot be sent for a Pseudo Meter. T004.1 and T013.1 responses will now contain supplied GIS values.
		(CMACP106): Ensured that a T005.1 Meter Read date is not before the Effective From date of that meter.
		(CMACP096): WorkflowMessageStatus database is no longer used and has been removed.

Functional Area	Impact (Y/N)	Description
Work Flows (Cont...)	Yes	**(CMACP107):** Use new method of determining whether a meter is a domestic meter in the T017.0 Meter Swap Notification workflow. Ensure T017.1 notification is sent correctly to the correct LP. New validation also introduced to ensure that the apparently new meter belongs to the correct SPID, does not exist within a Meter Network, has no meter readings and that the reading is of the correct type. **(CMACP112):** T016.0 workflow now operates on water and sewerage SPIDs but will validate that any specified sewerage SPID does not have an associated water SPID before processing. **(CMACP096):** T015.0 Disconnection Declaration now succeeds when a Supply Point has no associated LP. Also, the GetMID method on the MessageStatus class now uses the GetNextMID method on the CMA_MsgDao DAO to retrieve the next MID from within an NHibernate transaction. **(CMACP118):** The T009.0 sent in response to a T032.0 Update Customer Name transaction now has a correctly populated D1008 Data Item field.

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Functional Area	Impact (Y/N)	Description
Data Model	Yes	**(MCCP037):** Add the read type "R" to the XML schema
		(MCCP040): Added new type to XML schema and model for T010.1 with new required comment field. Maximum length set for Comment data item. Added comment and cancellation fields to T011.0. Added cancellation comment field to Registration class. New Error Code "EB" created.
		(CMACP043): EnumTypes updated to include new Audit Trail Action. Two new classes GapSiteLP and GapSiteAudit. Created GapSiteLPDao and GapSiteAuditDao DAO objects. New Error Code: EG.
		(MCCP070): New Boolean datatypes added to the schema D3016_datalogger_NonSW and D3015_datalogger_SW and to the PhysicalMeterInfo class, interface and historical view. New Error Code: DY.
		(MCCP072): D4006_EffectiveFrom added to T016.0 and T016.1. New Error Code "ED" created.
		(MCCP071): Added 3 new optional fields, GISX, GISY and GISZ Free Descriptor to T004.0, T004.1, T013.0 and T013.1. Also three new Error Codes added: EA and EC for incorrect or no GIS data provided and DY for sending the SPID of a pseudo meter.
		(CMACP093): Clarified error code descriptions for AQ and AR return codes.
		(CMACP107): New processes for determining if a meter is a domestic meter or whether it exists within a Meter Network added to the Virtual Meter DAO.

Functional Area	Impact (Y/N)	Description
Data Model (Cont...)		**(MCCP053):** 2 new Boolean data items D0320_Rollover_Indicator and D0321_Rollover_Flag added. These are used across T005.0,T005.1, T005.2, T005.3, T017.0, T017.1, T030.0 and T030.1. New Error Codes EE, EF, EH and EI have been defined. The Rollover Flag value will now be used to determine if the read is a rollover. **(CMACP096):** The FetchGUIMsgs method on the CMA_MsgDao DAO now uses the NOLOCK table hint when accessing the Msg_GUI table for performance. A new method has been introduced on the DAO to retrieve the next MID for a message, which executes the InsertMessage Stored Procedure from within an NHibernate transaction.
Database	Yes	**(MCCP040):** The Registrations table requires a new column for cancellation comments. **(CMACP043):** Two new tables, GapSiteLPs and GapSiteAudit are required. **(MCCP070)**: The MeterInfo table needs to be altered to include two new Boolean fields to identify the presence of data loggers. **(MCCP053):** Meter Readings and Ignored Meter Readings tables have a new Boolean Rollover Indicator column. The MeterReadings table also has a boolean RolloverFlag column. There is an SQL script to set the RolloverFlag on existing reads. **(CMACP103):** swRef column on SupplyPointCores table modified to character length 32. **(CMACP110):** A new table PasswordIndices has been created to track password indices of registered and non-existent users. **(CMACP096):** Message Status table in the Workflow Message Status database has been moved to the CMAdbDev database. The WorkflowMessageStatus database is no longer used and has been removed. A new index has been added to the MeterReadings table to improve performance. Stored Procedure Msgs_GUI_GetByID uses the NOLOCK table hint for performance, and Msgs_CloneToGUI now operates inside a transaction.

Functional Area	Impact (Y/N)	Description
Reporting	No	
Hardware and Infrastructure	No	

5. Impact on Configured/Change Items

There are no changes to the Operational Code.

There are changes to the Market Code, including the CSDs. These are detailed in the MCCPs that are identified in this document.

Configured/Change Item	Change Impact
Market Code	Yes
CSDs	Yes
Schema (HVI) & CSD0301 Annex A	Yes

6. Implementation

6.1 Promotion of Release to the Central Systems

The upgrade of the Central Systems to Version v2.4 is currently provisionally scheduled across the various environments as set out below.

Environment	Release Date	Available for use
Production	Thursday 24/03/2011	Friday 25/03/2011

The Central Systems will close promptly at 18:00 on Thursday 24/03/2011 to allow the Release to be applied to the Production Environment.

6.2. Environments included in this Release

For the avoidance of doubt, the following environments will be impacted by this release:

- Production Environment (Dundee One)

- CMA Service Provider Scenario Test Environment (Dundee Three)

- Scottish Water Test environment (Dundee 2)

6.3. Environments included pre-release

The software has been pre-released to the following environments for testing purposes:

- System Test (SIT)

- User Acceptance Testing (UAT)

6.4. Web Browser Compatibility

The Low Volume Interface (LVI) is configured for operation with most available browsers. The browsers that are supported by our Service Provider are:

a. Internet Explorer 6

b. Internet Explorer 7

c. Internet Explorer 8

d. Mozilla Firefox Version 3.5

e. Mozilla Firefox Version 3.6

f. Google Chrome Version 4

7. Changes to LVI User Interface

7.1. T004 Notify Meter Details, T013 Update Meter Details and SPID List

Radio buttons have been added to the T004.0 and T013.0 LVI interfaces for the Datalogger_SW (D3015) and Datalogger_NonSW (3016) flags.

The value of the Datalogger_SW and Datalogger_NonSW flags is displayed under the Meter Details section of a SPID, when displaying meter details. The CMA can add and edit meter reads from this page also.

The status of Datalogger_SW and Datalogger_NonSW flags will be displayed in the 'more details' section of a SPID when using customer name search. This screen currently returns data at a SPID level rather than meter level. The possibility does exist that several meters can exist under a single SPID. In this scenario the Customer Name Search screen will display true if the flag is set against any of the meters under the SPID.

When editing a Meter Read from the SPID List, the value for Rollover Indicator is visible, and the value for Rollover Flag is editable.

Optional fields for GIS X, GISY and GIS Free Descriptor have been added to the T004.0 and T013.0 LVI interfaces.

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T013.0 - Update Meter Details

Required Information

Supply Point ID		Must be 12 numbers and a valid SPID
Meter ID		*
Effective From	/ /	*
Make		
Serial Number		
Physical Meter Size (mm)		
Number of Digits		
Read Frequency	○ B ○ M	
Comments		

Meter Address

Free Descriptor	
Sub Building Name	
Building Name	
Building Number	
Dependent Thoroughfare Name	
Dependent Thoroughfare Descriptor	
Thoroughfare Name	
Thoroughfare Descriptor	
Double Dependent Locality	
Dependent Locality	
Post Town	
County	
Post Code	
GIS X	
GIS Y	
GIS Free Descriptor	

Optional Information

Data logger SW	○ True ○ False
Data logger Non SW	○ True ○ False

[Update Meter]

Meter Details

Effective From	29/12/2010 00:00:00
Effective To	
Meter Serial No	TestingThisOneOut01
Meter Make	L&G
Manufacturer Serial No	1234567890
Physical Meter Size (mm)	10
Chargeable Meter Size (mm)	5
Sewerage Chargeable Meter Size (mm)	10
No Of Digits	4
Read Frequency	B
State	Active
Return to Sewer Allowance (%)	95.00
YVe	
Meter Comments	
Meter Read Comments	Original Initial Read Date:- 29/12/2010 00:00:00
GIS X	
GIS Y	
GIS Description	
Data Logger SW	False
Data Logger Non SW	False

Location

¬Free Descriptor	Mellow
¬Sub Building Name	One
¬Building Name	Two
¬Building Number	3
¬Dependent Thoroughfare Name	Bob
¬Dependent Descriptor	Balmer
¬Thoroughfare Name	Anything
¬Thoroughfare Descriptor	Goes
¬Double Dependent Locality	Nearby
¬Dependent Locality	Near Again
¬Post Town	Clydebank
¬County	Dunbartonshire
¬Post Code	G18 2AB

View this Meter's Change History

Meter Readings

Read Date	Read Type	Read Value	Rollover		
29/12/2010 00:00:00	I	1	False	edit	delete

[Create New Reading]

Edit Meter Reading

<< cancel

Edit Detailed Meter Information	
Meter Read	_____ *
Meter Read Date	/ / 🗓 *
Meter Read Type	O ▼ *
Rollover Indicator	
Rollover Flag	☐ *

Customer Name Search

Back to search results

Customer Name Details and History

Details:
SPID: 100074590108
Customer Name: John Smith & Co
Customer Name Type:
Vacant: No
Datalogger (SW): False
Datalogger (Non-SW): False

Address:
¬Free Descriptor
¬Sub Building Name
¬Building Name
¬Building Number   25a
¬Dependent Thoroughfare Name
¬Dependent Descriptor
¬Thoroughfare Name   Alva Street
¬Thoroughfare Descriptor
¬Double Dependent Locality
¬Dependent Locality
¬Post Town   EDINBURGH
¬County
¬Post Code   EH2   4PS

Customer Name	Customer Name Type	Effective Date
John Smith & Co		26 May 2010

7.2. T005.0 Meter Read, T005.1 Meter Read and T017.0 Notify Meter Swap

A user is able to supply the presence of a Rollover Indicator, which will be labelled Rollover on all relevant LVI pages.

It will not be possible for the user to specify a value for Rollover_Indicator for a new meter in the T017.0 transaction, the field will have a default value of false. This is because it is invalid for a new meter to have rolled over.

The Meter Details page allows viewing of Meter Readings by LPs but not the ability to edit them. This functionality will remain and will allow LP's to also view the value of the RolloverFlag field but not edit it.

The T005.1 Meter Read screen that is available to the Licensed Providers in the LVI has been changed to include Read Type 'R' as an available read type.

T005.0 - Meter Read

Required Information	
SPID	
Meter ID	*

Detailed Meter Information	
Meter Read (m³)	*
Meter Read Date	/ / *
Meter Read Type	Choose ▾ *
Rollover	◉ Don't know ○ Yes ○ No *

Submit New Meter Reading

Contact the CMA | About the CMA

T005.1 - Meter Read

Required Information	
SPID	
Meter ID	*

Detailed Meter Information	
Meter Read (m³)	*
Meter Read Date	/ / *
Meter Read Type	Choose ▾ *
Re-read	
Rollover	

Choose
C
T
U
R

T017.0 - Notify Meter Swap

Required Information	
Supply Point ID:	
Meter Re-Read:	○ Yes ○ No

Old Meter	
Meter ID:	*
Meter Read (m³):	*
Meter Read Date:	/ / *
Meter Read Type:	E - End Read
Rollover	◉ Don't know ○ Yes ○ No *

New Meter	
Meter ID:	*
Meter Read (m³):	*
Meter Read Date:	/ / *
Meter Read Type:	O - Opening Read

Swap Meters

Meter Details

Effective From	12/10/2010 00:00:00
Effective To	
Meter Serial No	04TEST2xx12.4
Meter Make	04TEST
Manufacturer Serial No	2xx12.4
Physical Meter Size (mm)	25
Chargeable Meter Size (mm)	25
Sewerage Chargeable Meter Size (mm)	25
No Of Digits	5
Read Frequency	B
State	Active
Return to Sewer Allowance (%)	50.00
YVe	
Meter Comments	
Meter Read Comments	Original Initial Read Date:- 12/10/2010 00:00:00
GIS X	
GIS Y	
GIS Description	
Data Logger SW	False
Data Logger Non SW	False

Location

¬Free Descriptor	Test
¬Sub Building Name	
¬Building Name	Test
¬Building Number	
¬Dependent Thoroughfare Name	
¬Dependent Descriptor	
¬Thoroughfare Name	
¬Thoroughfare Descriptor	
¬Double Dependent Locality	
¬Dependent Locality	
¬Post Town	Stirling
¬County	
¬Post Code	FK7 7UF

View this Meter's Change History

Meter Readings

Read Date	Read Type	Read Value	Rollover
12/10/2010 00:00:00	I	0	False

7.3. T016.0 Unmeasurable Declaration

A new mandatory "Effective From" date field is available on the T016.0 Unmeasurable Declaration screen.

T016.0 - Declare SPID Unmeasurable

Required Information		
Effective From	/ / [ ]	*
Supply Point ID	[ ]	*
Unmeasurable	○ Yes ○ No	*

[Declare Unmeasurable]

7.4. T010.1 Registration Cancellation

The T010.1 screen has a new additional comments field added

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T010.1 - Registration Cancellation

General Information

Supply Point ID:	*
Cancellation Registration Code:	Choose ▼ *
Comments:	*

Object to Registration

7.5. T012.0 Update SPID Data, Customer Name Search, View SPID Screen

The LVI screen for T012.0 (Update SPID data) has been changed to display "SPID Address".

The Customer Name Search Page now displays "Customer Name" under the search criteria.

The Customer Name Search Page and Detailed results page have been changed to display "Dependent Thoroughfare Name" under the search criteria and detailed results.

The LVI screen for "View SPID Screen" has been changed to display Dependent Thoroughfare Name.

T012.0 - Update Misc SPID Data

Required Information

Supply Point ID	*
Customer Classification	○ LIC ○ SST ○ N/A
Effective From	21/01/2011 📅 *
SIC Code	
Comments	*

SPID Address

Free Descriptor	
Sub Building Name	
Building Name	
Building Number	
Dependent Thoroughfare Name	
Dependent Thoroughfare Descriptor	
Thoroughfare Name	
Thoroughfare Descriptor	
Double Dependent Locality	
Dependent Locality	
Post Town	
County	
Post Code	

Update SPID

Customer Name Search

Enter Customer Name Search Criteria	
SPID:	
Customer Name:	☐ Use exact match
Building Name:	
Building Number:	
Dependent Thoroughfare Name:	
Thoroughfare Name:	
Double Dependent Locality:	
Dependent Locality:	
Post Town:	
Post Code:	

[Clear] [Search]

Customer Name Search

Back to search results

Customer Name Details and History

Details:
SPID: 100074590108
Customer Name: John Smith & Co
Customer Name Type:
Vacant: No
Datalogger (SW):   False
Datalogger (Non-SW): False

Address:
¬Free Descriptor
¬Sub Building Name
¬Building Name
¬Building Number   25a
¬Dependent Thoroughfare Name
¬Dependent Descriptor
¬Thoroughfare Name   Alva Street
¬Thoroughfare Descriptor
¬Double Dependent Locality
¬Dependent Locality
¬Post Town   EDINBURGH
¬County
¬Post Code   EH2   4PS

Customer Name	Customer Name Type	Effective Date
John Smith & Co		26 May 2010

View SPID 200109780101

General SPID Information

		Address:
SPID	200109780101	¬Free Descriptor
Service	WaterService	¬Sub Building Name
Status	Partial	¬Building Name
Created On	22/12/2010	¬Building Number
Connection Date	22/12/2010	¬Dependent Thoroughfare Name
Disconnection Date		¬Dependent Descriptor
Croft / Farm	N/A	¬Thoroughfare Name
Connection Ref.	GJM221210-01	¬Thoroughfare Descriptor
Connection Type	NEW	¬Double Dependent Locality
		¬Dependent Locality
		¬Post Town
		¬County
		¬Post Code

⊟ Effective From 22/12/2010

Rateable Value	0.00	**Settlement Exempt_29e**	0.00
Surface Area	0.00	**Vacant**	False
Customer Classification	NA	**Large Volume Agreement**	False
SIC Code		**Scottish Executive Exemption Flag**	False
Metering Programme	False	**Schedule 3**	0.00
Comments			

Service Elements

Unmeasurable Water

Status History

Effective From Date	New Status
22/12/2010	Partial
22/12/2010	New