

Market Code Schedule 15

Code Subsidiary Document No. 0202

Meter Read Submission: Process

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## Change History

Version Number	Date of Issue	Reason For Change	Change Control Reference	Sections Affected
1.0	14/05/2007		Working Version	
1.1	31/08/2007		Go Live Version	
1.2	01/06/2008	Revised to permit customer reads to be used for Monthly reads	MCCP010	
1.3	01/12/2008	Revised to permit Re-Reads to be sent using T017.0	MCCP017	
1.4	17/08/2009	Re-assessed Charges	MCCP035-CC	Section 2
1.5	03/06/2010	Change to submission timescales	MCCP043	Section 3
1.6	27/09/2010	Inclusion of Automated Remote Reads as U Read Type Cyclic and Customer Reads for Domestic Meters T030 Meter Disassociations  T015 SS Supply Point Effective Date  Updating Effective/Connection Dates	MCCP037 MCCP059 MCCP061 MCCP062 MCCP063	Section 2.6 Section 2 Section 4.1
1.7	25/03/2011	Inclusion of new Automated Meter Read Type (R) Enduring Rollover Solution	MCCP037 MCCP053	Section 2.6 Sections 3,4
1.8	30/03/2012	Introduction of Deregistration	MCCP052-079	
2.0	28/09/2012	Updating I Read process diagram	MCCP114-CC	Section 4.2
3.0	2014-03-21	Distribution of notifications to reflect Meter Networks and DPIDs	MCCP128	Section 4
4.0	2015-03-31	Estimated T Reads	MCCP141	Section 2, 3 and 4
5	2016-05-05	Use of S reads for POLR	MCCP192	Section 2
6	2018-04-01	TTRAN and PPDISC	MCCP227-CC	Section 2
7.0	2019-10-24	Renaming Transactions  Changing refs from CSD0104 Section 7 to CSD0104 Part 2	MCCP242	Various
8.0	2020-03-26	Amendment to Meter read timescale Addition of T015.2	MCCP111 MCCP185	Section 3 Various

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# 1. Purpose and Scope

This document sets out the process for the submission of Meter Reads to the CMA (as required by the Market Code) in order to allow for the Settlement Process to take place.

In order to ensure that Meter Reads for meters related to Meter Networks are co-ordinated, the CMA will produce and distribute a meter reading schedule to Code Parties who in accordance with the Market Code will read and submit Meter Reads to the CMA to the agreed frequency.

## 2. Provision of Meter Read(s)

This section outlines the various circumstances in which Meter Reads are required to be submitted to the CMA under the Market Code.

Where Pseudo Meter arrangements are in place, Scottish Water and Licensed Providers shall ensure that they follow the requirements in CSD0104 Part 2 in respect of the provision of Meter Reads.

The available Meter Read Types are as follows:

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

Use of the different types of Meter Reads and Re-Reads is set out below.

### 2.1 Initial Reads

**Meter Read Type – I.** Initial Reads will be provided by Scottish Water in respect of New Connections and New Supply Points, and new meters will be installed in accordance with the Operational Code.

Initial Reads are required for Pseudo Meters, and shall be submitted in accordance with CSD0104, Part 2.

For meters created since market opening using the notify meter details process (T004.0, T004.3) no read (other than an Opening Read) will be accepted without the presence of an I read.

## 2.2 Final Reads

**Meter Read Type – F.** Scottish Water will be responsible for providing the Final Read(s) when an existing connection to Water Services or Sewerage Services is Permanently Disconnected or Deregistered, or when a meter is removed from a Multi Meter Supply Point.

Final Reads are required for Pseudo Meters, and shall be submitted in accordance with CSD0104, Part 2. However, it should be noted that the CMA will not store the Final Read for a Pseudo Meter and so will not use the Final Read in computing Pseudo Meter volumes in settlement calculations– see CSD0207.

**Meter Read Type – D.** Where a Deregistration or Permanent Disconnection is notified for a SPID that has one T17 Meter Chain associated to it, or to an associated SPID, in accordance with CSD0104 – Part 1, Scottish Water will be responsible for providing the Dereg Read.

## 2.3 End and Opening Reads

**Meter Read Type – E & O.** Where a meter is replaced at a Supply Point in accordance with the Operational Code, Scottish Water will be required to provide an End Read for the old meter that has been replaced, and an Opening Read for the replacement meter. These meters reads are provided together on a single Transaction flow: T017.0 (Submit Meter Swap)

End and Opening Reads are not permitted for Pseudo Meters and will be rejected as set out in CSD0104 Part 1.

## 2.4 Temporary Disconnection and Reconnection Reads

**Meter Read Type – X & Y.** Scottish Water will be responsible for providing a Temporary Disconnection Read(s) (Type X) when an existing connection to Water Services or Sewerage Services is temporarily disconnected. Reconnection Read(s)(Type Y) will be provided by Scottish Water in respect of meter(s) related to a Supply Point reconnected in accordance with the Operational Code following Temporary Disconnection.

Temporary Disconnection and Reconnection Reads are not required for Pseudo Meters and will be rejected as set out in CSD0104 Part 2.

## 2.5 Regular Cyclic Reads

**Meter Read Type – C.**

Cyclic Reads are not applicable for Pseudo Meters and will be rejected as set out in CSD0104 Part 2.

A Licensed Provider will provide Regular Cyclic Reads to the CMA for all meters related to Supply Points Registered to the Licensed Provider to an agreed frequency (Market Code section 5.9.4), as follows:

- The minimum Regular Cyclic Read periodicity for Bi-annually Read Meters shall be at six month intervals; and
- The minimum Regular Cyclic Read periodicity for Monthly Read Meters shall be at monthly intervals.

Scottish Water will provide Regular Cyclic Reads to the CMA for all Non-Market Meters and for market Meters for SPIDs subject to a Temporary Transfer, as follows:

- The minimum Regular Cyclic Read periodicity for Biannually Read Meters that are Non-Market Meters shall be at six month intervals; and
- The minimum Regular Cyclic Read periodicity for Monthly Read Meters that are Non-Market Meters shall be at monthly intervals.

Where a Regular Cyclic Read is required in respect of Sewerage Services and there is a Related Water Supply Meter, the Regular Cyclic Read will be submitted by the Water Services Licensed Provider, on request by the Sewerage Services Licensed Provider.

Subject to validation under CSD0203, the CMA will inform each Registered Licensed Provider and Scottish Water of a Regular Cyclic Read, using Data Transaction T005.2 or T005.3, as relevant.

## 2.6 AMR Read

**Meter Read Type – R.** The Licensed Provider (or Scottish Water in respect of any SPIDs subject to a Temporary Transfer) may supply an AMR Read in place of a Regular Cyclic Read or Customer Read. In accordance with Sections 5.9.1A and 5.9.1B of the Market Code, a physical reading of the register of the Scottish Water asset meter must be submitted not less than once every two years.

AMR Reads must only be entered as 'R' type reads and should only be notified for SPIDs where an AMR unit / data-logger is in place.

AMR Reads will not be accepted under the following reads:

- Initial Read, Final Read, End Read, Opening Read, Temporary Disconnection, Reconnection, Transfer Read, Audit Read

AMR Reads are not applicable for Pseudo Meters and will be rejected as set out in CSD0104 Part 2.

## 2.7 Customer Meter Reads

**Meter Read Type – U.** The Licensed Provider (or Scottish Water in respect of any SPIDs subject to a Temporary Transfer) may supply a Customer Read in place of a Regular Cyclic Read on up to ten (10) occasions in any calendar year for a meter related to Supply Points designated as monthly read, and on up to one (1) occasion per calendar year for those meters related to Supply Points that are designated as biannually read.

Scottish water may supply a Customer Read in place of a Regular Cyclic Read for a Non-Market Meter in place of a Regular Cyclic Read on up to ten (10) occasions in any calendar year for Non-Market Meters designated as Monthly Read Meters, and on up to one (1) occasion per calendar year for Non-Market Meters that are designated as Biannually Read Meters.

Customer Meter Reads are not applicable for Pseudo Meters and will be rejected as set out in CSD0104 Part 2.

## 2.8 Transfer of Registration Meter Reads

**Meter Read Type – T or S.** Following a Transfer of Registration, it is the responsibility of the Incoming Licensed Provider to submit a Transfer Read(s) (T Read) to the CMA. Following the start of, or prior to the end of a Temporary Transfer, it is the responsibility of Scottish Water to submit a Transfer Read(s) (T Read) to the CMA. Where there is a Related Water Supply Meter, the Transfer Read for the associated Sewerage Services Supply Point will be submitted by the Water Services Licensed Provider, upon request by the Incoming Sewerage Services Licensed Provider.

Exceptions

- Where the Transfer relates to a Meter Network Supply Point, Meter Read submission is only required for the Main Meter; and
- Where the Transfer relates to a Supply Point where a Pseudo Meter is in place, no Meter Read submission is required and the CMA will deem the proportion of the Re-assessed volume applicable to the Outgoing and Incoming Licensed Providers based on the YVe as notified for the Supply Point by Scottish Water in the relevant T004.3 (Request Pseudo Meter)
- Where the following conditions apply, an Estimated Transfer Read(s) (S Read) may be submitted, instead of a T Read;



- A different meter is found onsite to that registered at the CMA, or the meter is inaccessible, or cannot be read (fogged glass etc), or no meter can be found onsite but a meter is registered with the CMA, or there is no access to the premises/site,
- The Incoming Licensed Provider has initiated remedial action, such as submitting an appropriate form to Scottish Water, in accordance with the Operations Code,
- The transfer has occurred as a result of a POLR process, in accordance with CSD0003.

An estimated Transfer Read (S Read) must be derived using equivalent logic to that identified for estimated meter advances in CSD0207.

## 2.9 Re-Reads

**Re-Reads.** In the event that a Meter Read submitted to the CMA fails validation in accordance with CSD0203 (Meter Read Submission: Validation) because the Meter Read is out with the allowable Volume Limits Threshold either Scottish Water or the Licensed Provider may submit a Re-Read if the Meter Read is believed to be valid after investigation.

The Re-Read Meter Read submission must contain all the same Data Item Values as the previously failed Meter Read submission that it replaces and also be flagged as a Re-Read in the T005.0, T005.1, or T017.0 Transaction flow, as applicable. (In the T017.0 a Re-Read will only apply to Read Types O and E).

For the avoidance of doubt, if after investigation of a rejected meter read it is found that the wrong meter reading value or meter reading type was sent then this must be resolved by sending a meter reading with the correct reading value and read type. The correction must not be submitted as a Re-Read as it would not comply with the requirement for the resubmitted values to be identical.

## 3. Meter Read Submission

### 3.1 Process description

#### **Step a – Submit Meter Read [T005.0, T005.1, T015.2 and T017.0]**

All Meter Reads (with the exception of Meter Read Types E, O and D) should be submitted to the CMA using Data Transaction T005.0 (Submit Meter Read (SW)) or T005.1 (Submit Meter Read (LP)), which must contain the Data Items listed against that Data Transaction under Section 4.3 of the Data Transaction Catalogue.

Meter Read Types E and O should be submitted to the CMA using Data Transaction T017.0 (Submit Meter Swap), which must contain the Data Items listed against that Data Transaction under Section 4.3 of the Data Transaction Catalogue.

Meter Read Type D should be submitted to the CMA using Data Transaction T015.2 (Back-dated Dereg/PDISC), which must contain the Data Items listed against that Data Transaction under Section 4.3 of the Data Transaction Catalogue.

The Rollover Indicator is optional for all Meter Read Types except for Meter Read Types O and I. If a Rollover Indicator is submitted with a Meter Read of either Types O or I, the Meter Read will be rejected. The CMA will send a Data Transaction T009.1 with the Error Code EI: 'The Rollover Indicator may not be present on an O or an I read.'

Although the Rollover Indicator is generally an optional field on the Meter Read, following the rejection of a Meter Read with error code EF in accordance with CSD 0203 Section 2.2.2, the CMA will not accept the resubmitted Meter Read containing otherwise identical Data Items unless the Rollover Indicator is specified. For the avoidance of doubt, such a Meter Read should be resubmitted without the Re-read flag being specified.

The timescale for the submission of Meter Reads is,

- i. in the case of Regular Cyclic Reads, Customer Reads and AMR Reads within 5 Business Days from the date the Meter Read is taken; and
- ii. in the case of all other Meter Read Types, within 5 Business Days for activities undertaken by Scottish Water and 8 Business Days for activities undertaken by an Accredited Entity, from the point of collection, which in the case of S Reads and D reads will be the point at which an estimate shall have been established.

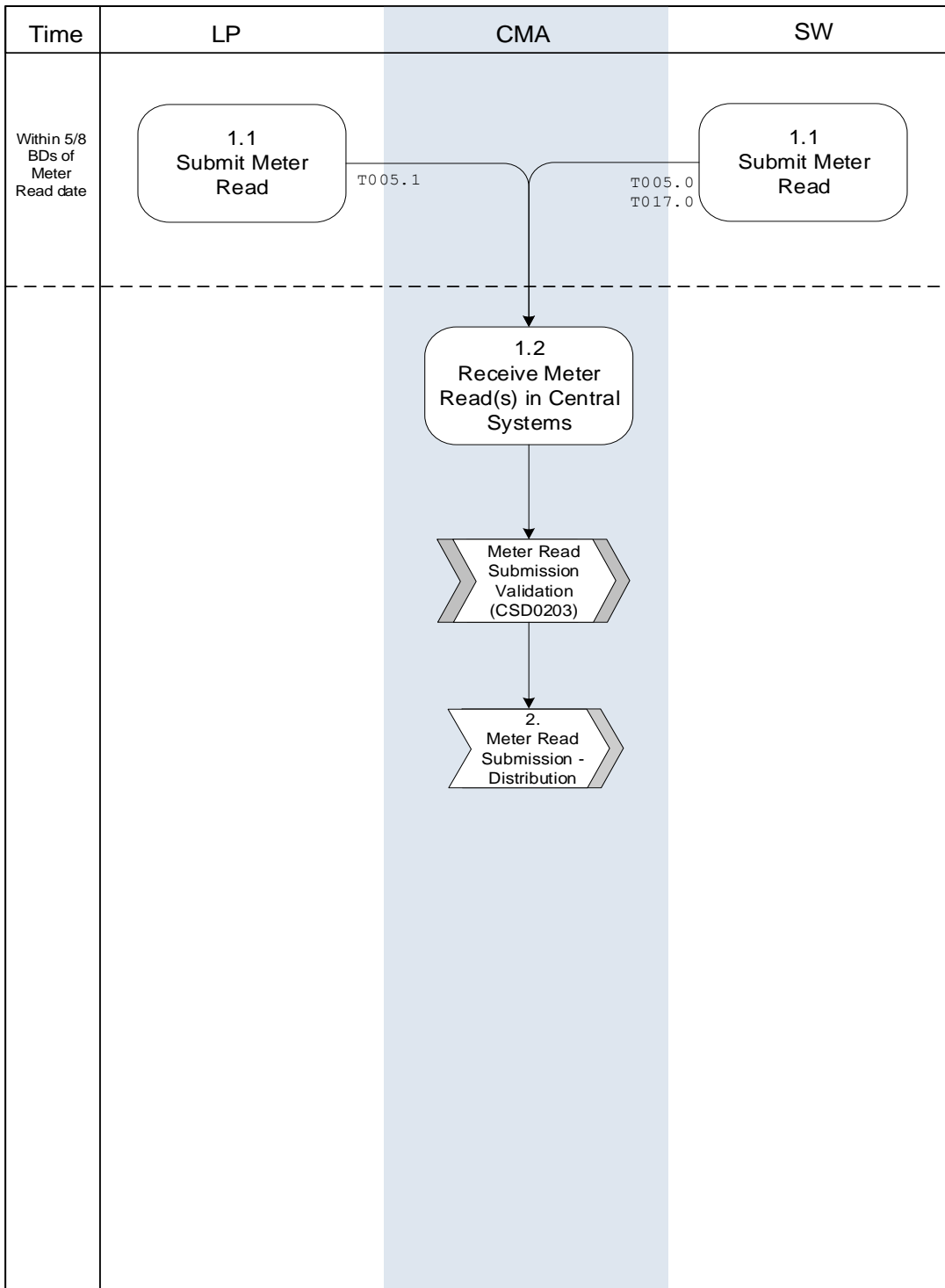
#### **Step b – CMA actions**

The CMA will receive the Meter Read(s) and apply validation in accordance with CSD0203 (Meter Read Submission Validation). Meter Read(s) which pass registration and content validation will then be subjected to rollover detection and validation. The CMA will then distribute Meter Read(s) for which the rollover status can be validated to the appropriate Trading Parties as detailed in Section 4 below.

## 3.2 Process Diagram

### 1. Meter Read Submission

Updated 26 March 2020



### 3.3 Interface and Timetable Requirements

#### CMA Meter Read Submission Process

Step Ref	When	Requirement	From	To	Information
1.1	Within 5/8 BD of Meter Read Provider taking a Meter Read	On taking a Meter Read, the Meter Read must be submitted to CMA for processing <b>(Step a)</b>	LP or SW	CMA	For each Meter Read (T017.0 and T005.0 or T005.1)
1.2	On receipt	Receive the Meter Reads <b>(Step b)</b> Meter Reads go to validation under CSD0203 (Meter Read Submission: Validation)	CMA		

## 4. Meter Read Distribution

### 4.1 Meter Read distribution description

Within 1 Business Day of receipt of a T015.2 (Submit Back-dated SPID Status), T017.0 (Submit meter swap), T005.0 (Submit Meter Read (SW)) or T005.1 (Submit Meter Read (LP)) Meter Read, as applicable and upon successful registration and content validation as well as successful rollover detection and validation in accordance with CSD 0203 (Meter Read Submission: Validation), the CMA will forward the relevant Meter Reads to the appropriate Trading Parties, using Data Transaction T015.3, T017.1, T005.2 or T005.3 Meter Read, as applicable, as follows<sup>1</sup>: The CMA will include the value of the Rollover Flag as determined by the rollover detection and validation process.

- Where an Initial Read is submitted by Scottish Water, the CMA will forward it to the Registered Licensed Provider(s);
- Where a Dereg, Final, Opening, End, Temporary Disconnection or Temporary Reconnection Read is submitted by Scottish Water, the CMA will return the Read to Scottish Water and forward it to the Registered Licensed Provider(s);
- Where a Transfer Read, or Estimated Transfer Read, is submitted by an Incoming Licensed Provider, the CMA will return the Read to the Incoming Licensed Provider and forward it to the Outgoing Licensed Provider and Scottish Water. If the SS Licensed Provider is a different Licensed Provider, then the CMA will also forward it to the SS Licensed Provider;
- Where a Transfer Read, or Estimated Transfer Read, is submitted by the Water Services Licensed Provider on request by the Incoming Sewerage Service Licensed Provider, the CMA will return the Read to the Water Services Licensed Provider and forward it to the Incoming Sewerage Services Licensed Provider, the Outgoing Sewerage Services Licensed Provider and Scottish Water;
- Where a C, U or R Read is submitted by the Water Services Licensed Provider. the CMA will return the Read to the Water Services Licensed Provider and forward it to Scottish Water. If the Sewerage Services Licensed Provider is a different Licensed Provider, the CMA will also forward it to the SS Licensed Provider; and

Where a Re-Read is submitted for any of the above Meter Read Types, the CMA will forward this to Scottish Water and the relevant Licensed Providers.

The CMA will check whether there is an associated Discharge Point on a Meter's Sewerage Service Supply Point when it receives a Meter Read Submission from the Water Service

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<sup>1</sup> The exceptions are Non-Market Meters where no reads are forwarded to Licensed Providers.

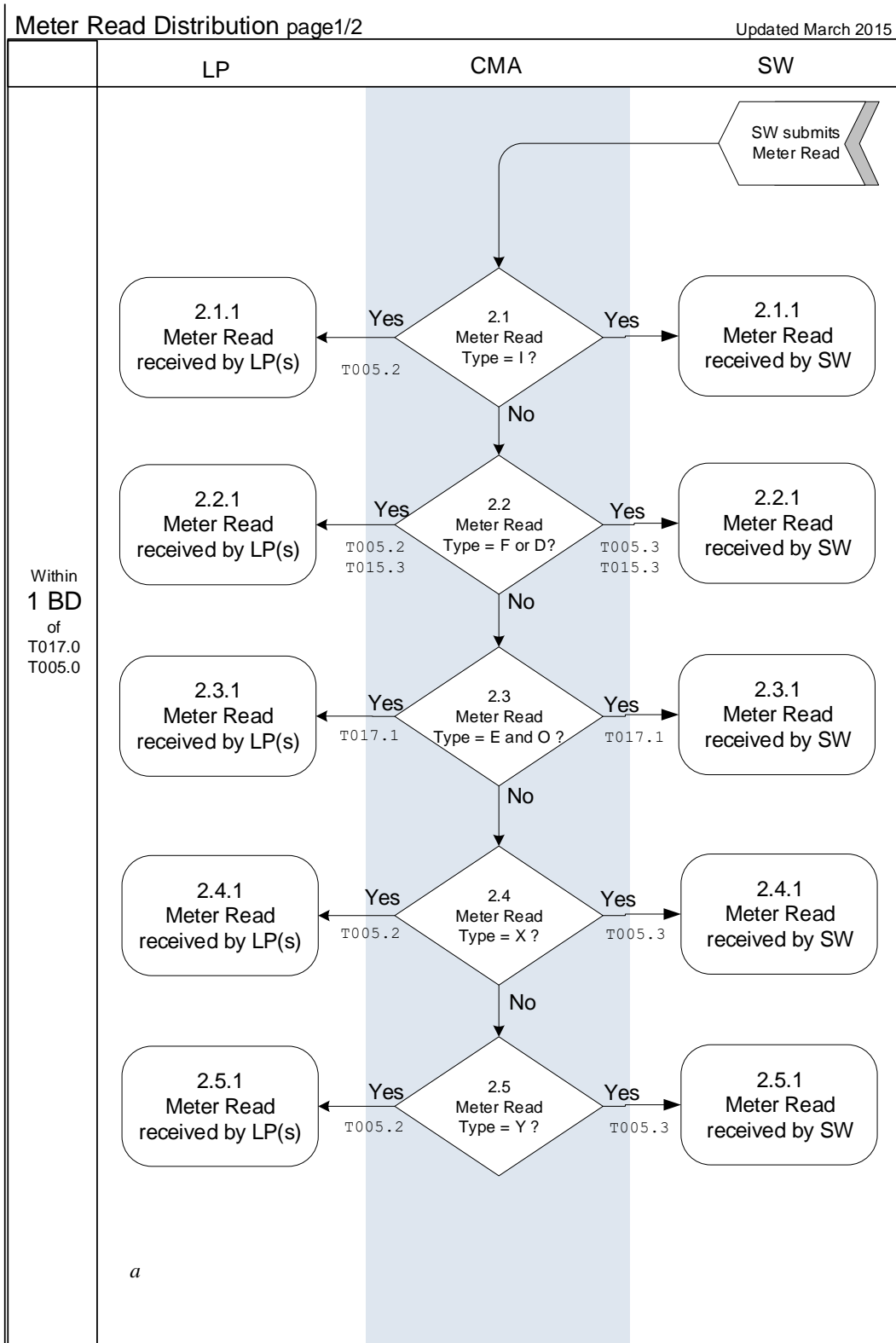
Licensed Provider for the associated Water Service Supply Point on the T005.1. Where an associated Discharge Point exists, the CMA will provide Scottish Water and the registered Sewerage Service Licensed Provider with the Meter Read detail for the Discharge Point on the T030.0 and T030.1, respectively, within 1 Business Day of receipt of the T005.1 Meter Read submission.

In the event of a T005.1 meter read being received for a meter disassociated with a Discharge Point, a Discharge Point Meter Read Notification will only be sent if on the Effective Date of the Meter Read the meter still had an association at that Effective Date i.e. if a meter association was not active on the Effective Date of the Meter Read then a Discharge Point Meter Read Notification will not be sent.

In the event of a meter read being received for a Sub Meter in a Meter Network and the Licensed Provider submitting the Sub Meter read differs from the Licensed Provider responsible for the Main Meter, the CMA will send the Sub Meter reading to the Licensed Provider responsible for the Main Meter.

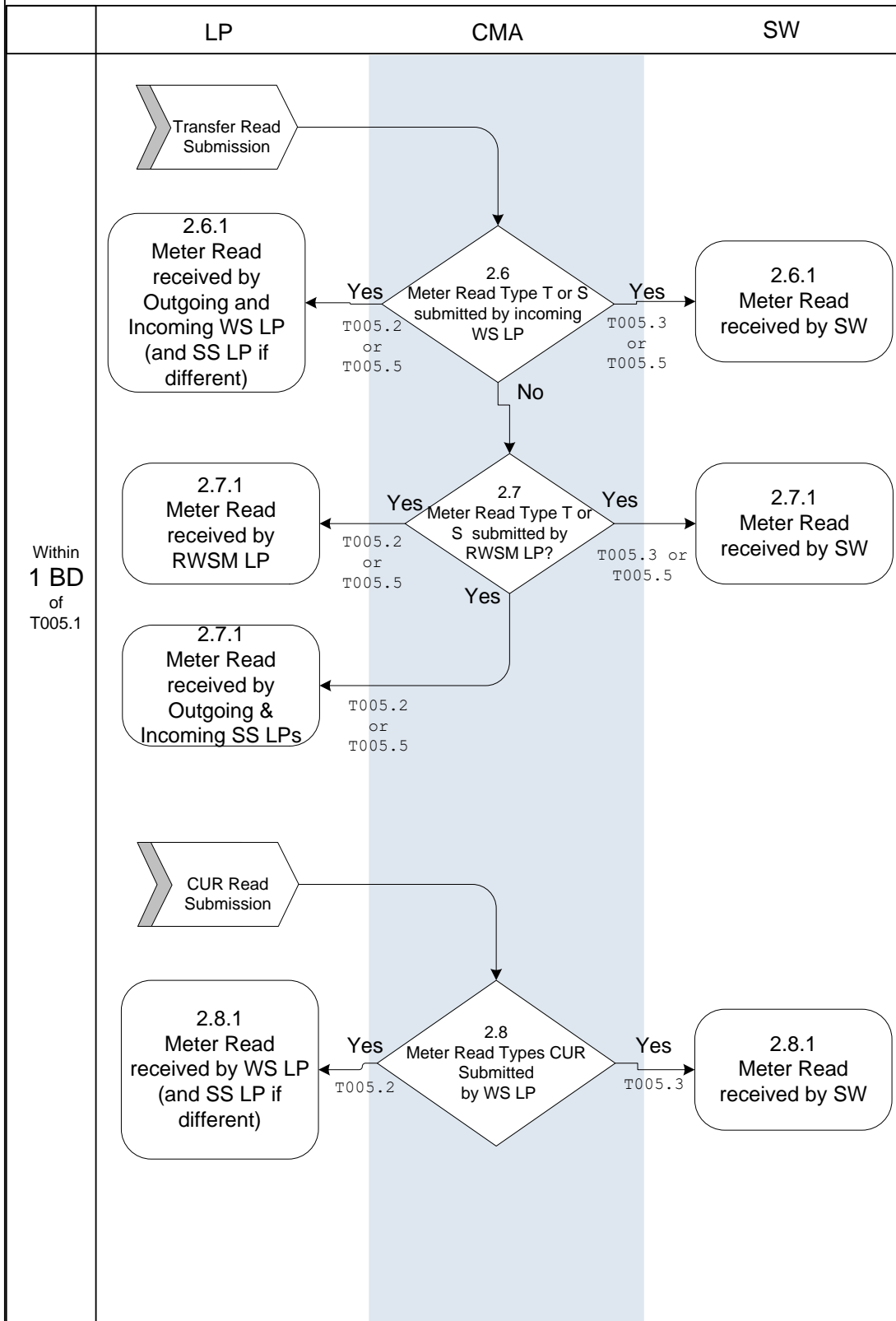
Where a Main Meter associated to a Discharge Point is part of a Meter Network and the Sewerage Service Licensed Provider responsible for the Discharge Point differs from the Licensed Provider responsible for the Sub Meter, the CMA will send the Sub Meter reading to the Sewerage Service Licensed Provider responsible for the Discharge Point the Main Meter is associated with.

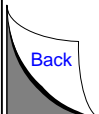
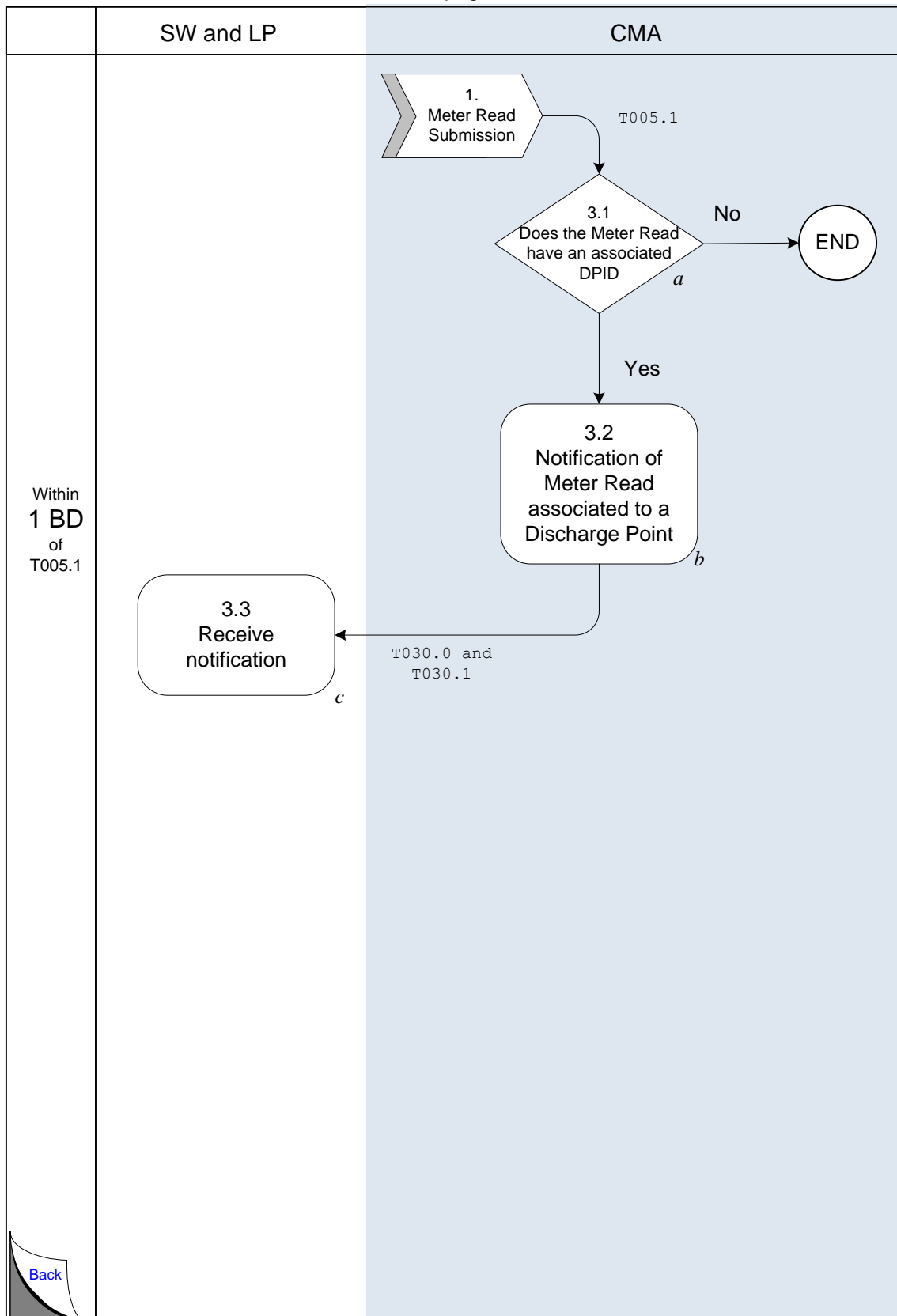
## 4.2 Process Diagram \*



\*The numerical references in the diagrams in this section correspond to those in the table in Section 4.3 below. Alpha references refer to the recipients as per Section 4.1 above.







### 4.3 Interface and Timetable Requirements

#### CMA Meter Read Distribution Process

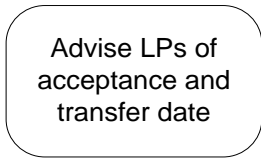
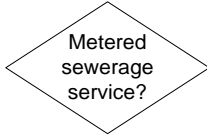
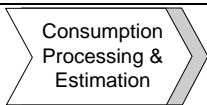
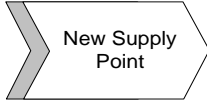


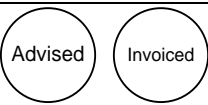
Step Ref	When	Requirement	From	To	Information	Method
2.1	On receipt	If the Meter Read Type = 'I' go to 2.1.1, otherwise go to 2.2	CMA		CMA Internal.	
2.1.1	On receipt	Send the Meter Read to the Registered LP(s) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Initial Meter Read is passed to the Registered LP(s) and SW	
2.2	On receipt	If the Meter Read Type = 'F' or 'D' perform 2.2.1, otherwise go to 2.3	CMA		CMA Internal.	
2.2.1	On receipt	Send the Meter Read to the Registered LP(s) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Final Read is passed to the Registered LP(s) and SW	
2.3	On receipt	If the Meter Read Type = 'E' and 'O' go to 2.3.1, otherwise go to 2.4	CMA		CMA Internal.	
2.3.1	On receipt	Send the Meter Read to the Registered LP(s) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated End Read is passed to the Registered LP(s) and SW	
2.4	On receipt	If the Meter Read Type = 'X' go to 2.4.1, otherwise go to 2.5	CMA		CMA Internal.	
2.4.1	On receipt	Send the Meter Read to the Registered LP(s) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Temporary Disconnection Read is passed to the Registered LP(s) and SW	

2.5	On receipt	If the Meter Read Type = 'Y', go to 2.5.1, otherwise go finish.	CMA		CMA Internal.	
2.5.1	On receipt	Send the Meter Read to the Registered LP(s), SW	CMA	LP, SW	If applicable and upon successful validation, the validated Reconnection Read is passed to the Registered LP(s) and SW	
2.6	On receipt	If the Meter Read Type = 'T' or 'S' is submitted by an incoming WS LP go to 2.6.1, otherwise go to 2.7	CMA		CMA Internal.	
2.6.1	On receipt	Send the Meter Read to the Outgoing Registered LP, Incoming Registered LP (and SS LP if different) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Transfer Read is passed to the Registered Outgoing WS LP, the Incoming WS LP, (the SS LP if different) and SW	
2.7	On receipt	If the Meter Read Type = 'T' or 'S' is provided by the Related WS LP go to 2.7.1 otherwise finish	CMA		CMA Internal.	
2.7.1	On receipt	Send the Meter Read to the Incoming and Outgoing Registered SS LP, the Related WS LP and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Transfer Read is passed to the Registered Incoming SS LP, the Registered Outgoing SS LP, the Related WS LP and SW	
2.8	On receipt	If the Meter Read Type = 'C', 'U' or 'R' is submitted by the WS LP go to 2.8.1 otherwise finish.	CMA		CMA Internal	
2.8.1	On receipt	Send the Meter Read to the WS LP, the SS LP(if different) and SW	CMA	LP, SW	If applicable and upon successful validation, the validated Transfer Read is passed to the WS LP, the SS LP (if different) and SW	

CMA Meter Read Distribution for TE DPIDs

Step Ref	When	Requirement	From	To	Information	Method
3.1	On receipt	Does the Meter Read have a Discharge Point associated to it? If no end process, if yes go to 3.2.	CMA		CMA Internal.	
3.2	On receipt	Notify Scottish Water of the Meter Read for the DPID	CMA	SW and LP	Notification of Meter Read associated to a Discharge Point (T030.0 and T030.1)	
3.3	On receipt	Receive Notification of Meter Read associated to a DPID	SW and LP		As above.	

## Appendix 1 – Process Diagram Symbols

Symbol	Name	Details
	Step	An action step. It appears in the “swimlane” of the party responsible for performing the action.
	Decision	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.
	To another process	A flow in, or input to, another documented process
	From another process	A flow in, or output from another documented process.
	To and from another process	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.
	End	Used after a decision diamond, generally to mean “do nothing” as it is the end of the process.
	Advised/Invoiced	Used after a process step to show “passive” action on the part of a data flow receiver e.g. to represent “Advised” or “Invoiced”
g	Step/Decision reference	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.
T005.2	Transaction reference	Reference to the Data Transaction occurring as an output from the step it appears next to.