Metering Policy
## Contents

1. Background ................................................................................................................................. 4  
2. Scope......................................................................................................................................... 5  
3. Definition of terms ...................................................................................................................... 5  
4. Principles ................................................................................................................................... 6  
5. Policy ......................................................................................................................................... 6  
   a. Meter installation .................................................................................................................... 6  
   b. Meter and LCE installation and commissioning ...................................................................... 7  
   c. Meter location......................................................................................................................... 7  
   d. Charging arrangements ........................................................................................................... 8  
   e. Impractical meter installation .................................................................................................. 8  
   f. Meter sizing ............................................................................................................................ 8  
   g. Meter relocation ...................................................................................................................... 9  
   h. Meter accuracy and testing ...................................................................................................... 9  
   i. Meter maintenance & replacement ......................................................................................... 9  
   j. Defective meter investigation and rectification ...................................................................... 10  
   k. Customer damage to meter .................................................................................................... 11  
   l. Reinstatement ...................................................................................................................... 11  
   m. Meter menu .......................................................................................................................... 11  
   n. Meter survey ........................................................................................................................ 12  
   o. Meter asset data capture ....................................................................................................... 13  
   p. Supply proving ..................................................................................................................... 13  
   q. Working hours ....................................................................................................................... 13  
   r. Appointments ....................................................................................................................... 13  
   s. Reschedules and cancellations .............................................................................................. 14  
   t. Enquiries and complaints ..................................................................................................... 14  
   u. Sensitive customers ............................................................................................................. 14  
   v. Capture of meter reading by retailers ................................................................................... 14  
   w. Logger / splitter installation ............................................................................................... 15  
   x. Provision of metering consumption data services ................................................................. 16  
   y. Contribution offer .................................................................................................................. 16  
   z. Powers of entry .................................................................................................................... 17  
6. Changes to policy ...................................................................................................................... 17  
7. References .............................................................................................................................. 17  
8. Appendices .............................................................................................................................. 17
1. Background

Thames Water is responsible for providing metering services within our supply area to enable demand to be measured which facilitates billing and leakage detection. These services include installation, accuracy testing, data capture, fault and repair, replacement and disposal. We provide these services for our household and non-household customers.

Metering is at the heart of our government approved plan to reduce demand for water and provide fairer billing. Therefore, it is our policy to meter all non-household properties wherever feasible and practical and we are also working to meter all household properties in our area.

We are modernising the way we manage water supplies by implementing a smart metering. This includes installing digital water meters as defined in our Meter Menu. These meters are set up as Automatic Meter Reading (AMR) devices and have the capability to be switched into Advanced Metering Infrastructure (AMI) mode when Local Communication Equipment (LCE) and a wide-area fixed network communication system is available.

For non-household properties within London or covered by our wide-area fixed network we will always fit a digital meter. It is not possible to physically connect remote logging equipment to a digital meter, therefore when we replace a meter which has logging equipment attached to it, the logging equipment will be removed. Where a digital meter has been fitted and a retailer requires data from the meter we can provide a chargeable digital data service. Two digital data services are available; where the meter is located in our wide-area fixed network.

For non-household properties not within our fixed area network and outside London and outside our wide area fixed network the installation of the digital meter will depend on the presence of logging equipment. If remote logging equipment is found we will always confirm this will be removed prior the installation of the digital meter. If logging equipment cannot be removed we will always install pulse meters. In all other cases we will install a digital meter.

You can ask us to exchange meters which cannot be logged. If the meter is located inside the fixed area network it will be replaced with a digital meter. You will not be charged if the meter is due for proactive replacement within the next 6 months or is 15 or more years old.

If the meter is located outside the fixed area network it will ordinarily be replaced with a digital meter which cannot be logged. If you need to attach logging equipment you can request us to install a pulse enabled meter. You will not be charged if the meter is due for proactive replacement within the next 6 months or is 15 or more years old. For household customers we will always fit a digital meter. Where these meters are fitted in an area covered by our wide-area fixed network we will provide an on-line consumption viewer. Where the meter is not connected to our fixed network it will continue to be possible to read the new meter in AMR mode.

As a wholesaler we have a responsibility for providing metering services within our supply area which includes installation, accuracy testing, data capture, fault and repair, replacement and disposal.

From April 2017, all non-household customers are able to choose their water retailer for customer related activities. To allow this to happen, the government has developed a set of binding processes (or codes) for water companies to follow when providing services that include metering. We are committed to conducting our metering activities in accordance with the Wholesale Contract/Wholesale – Retail Code.

All charges for metering work are set out in our Wholesale Tariff Document and reflect the various requirements of the 1991 Act and any other Law.
2. Scope

This policy is in place to ensure that all of our meters are installed and maintained to the correct standards. It also allows customers to be charged fairly for their water usage. It sets out the commitments we will make to our customers and retailers for the way in which we implement our metering services.

For the avoidance of doubt, this policy applies to all household and non-household customers within our supply area.

This policy applies to all of our revenue metering programmes which include:

- progressive metering programme;
- optant metering;
- proactive meter replacements;
- reactive meter replacements;
- new connections;
- revenue bulk metering;
- change of occupier (Household).

3. Definition of terms

**Automatic Meter Reading meters (AMR)** - The automatic meter reading technology mobile system, used either in walk-by or drive-by mode, for automatically collecting consumption, diagnostic, and status data from digital water meters and transferring that data to a central data base for billing, trouble shooting and analysing.

**Building Management System** - Computer based controlled system installed in buildings that controls and monitors buildings mechanical and electrical equipment.

**Bulk meter** - Bulk meters may be revenue or non-revenue meters.

**Consumption/usage data** - The amount of water used as recorded by the meter during a defined period.

**Digital Meters in Advanced Metering Infrastructure mode (AMI)** - Advanced Metering Infrastructure (AMI) consisting of a system of digital meters, two way communications (fixed network), and data management systems implemented to enable metering and other information exchange between utility companies and their customers.

**Dumb meters** - Mechanical meters with an analogue register and no communication capabilities. Basic mechanical measuring instrument for water consumption that can be read by taking an “eyeball” reading.

**Eyeball reading** - A visual reading of the meter and recording using a paper or handheld system.

**Logger** - Recording device installed at a customer site to enable collection of water usage data.

**Local Communication Equipment (LCE)** - Two-way communication hardware also referred to as a communication smart-point. It is wirelessly installed adjacent to the meter and enables transfer of data from the meter to our systems utilising a wide-area fixed network infrastructure.

**Meter menu** - Table that provides a list of meters that will be installed in the TWUL area, which are compatible with the wide-area fixed network system, comply with the Measuring Instruments Directive (2004/22/EC) and must have equivalent certification to BS EN ISO 4064:2014 class 2.
**Meter reading data** - The physical recording on the meter during a defined period.

**Metering service delivery documents** - These are a suite of documents that define all of the relevant services related to metering and in order to be compliant with the Wholesale Contract/Wholesale – Retail Code.

**Non-revenue bulk meter** - Meter on the supply to a multi occupancy building that measures the water supplied to the whole building to understand consumption in the whole building, including communal use, leakage etc. Individual premises within the building may have individual meters on which they are billed.

**Revenue bulk meter** - Meter on the supply to a multi occupancy building that measures the water supplied to the whole building. In this case the landlord or managing agent will be billed for the whole building based on the bulk meter readings. Thames Water will not have meters installed on individual premises within that building.

**Splitter** - Hardware devise that allows pulse information from meters to be used by a number of ancillary devises such as loggers and wired AMR.

**United Kingdom Accreditation Service (UKAS)** - The national body for the accreditation of testing and calibration laboratories, certification and inspection bodies.

### 4. Principles

Our metering programmes are driven by our commitment to fairer and accurate billing as well as conserving water resources. We will achieve this through:

- proactive customer engagement
- consistent high quality of meter installation
- robust fixed asset data capture
- new metering technology
- enhanced systems and processes for data management.

### 5. Policy

#### a. Meter installation

Only contractors that we have approved or developers are permitted to install our meters.

When installing a meter, new installations must comply with our standard approach for the installation of permanently sited water meters in our supply area used for billing purposes and non-revenue bulk meters.

- Standard installations include:

  - internal installation of:
    - concentric meters of size Q3 2.5 m3/hr in a meter manifold
    - in-line meters up to Q3 of 6.3 m3/hr where a stop value is required before and after the meter and a drain valve immediately after the meter
    - in-line meters over Q3 of 6.3 m3/hr where a stop value is required before and after the meter

  - external installation of:
    - concentric meters of Q3 2.5 m3/hr that are fitted in a boundary box or multi-box
    - in-line meters of greater than Q3 2.5 m3/hr that are fitted in a meter chamber

Thames Water Utilities Limited
Wherever feasible and practical, we will install a meter at individual premises. For new and converted properties a meter should be installed. Where it is impractical to install a meter, this situation should be agreed with Thames Water Wholesale in advance.

All newly installed meters that are used to calculate the consumption at an individual property will be reasonably accessible to the customer and will not require the permission of a third party to gain access.

There are no charges for ‘standard’ installations, but there are charges for ‘non-standard’ as set out in our Wholesale Tariff Document.

b. Meter and LCE installation and commissioning

We will always fit a digital meter and Local Communication Equipment (LCE) device for meters fitted within the London area. Meters and LCE shall be commissioned as part of the installation process. At the same time we are rolling out our fixed network data capture system in London on an area by area basis. This process is underway but will not be fully deployed until 2025. Meter fitted in fixed network areas will be read using the fixed network system other meters can be read in AMR mode.

For non-household properties not within our fixed area network and outside London the installation of the digital meter will depend on the presence of logging equipment. If remote logging equipment is found we will always confirm this will be removed prior the installation of the digital meter. If logging equipment cannot be removed we will always install pulse meters. In all other cases we will install a digital meter.

c. Meter location

The following hierarchy of meter locations must be adhered to:

1. external fit by screw in to existing boundary box
2. external installation in public highway
3. external installation on private property
4. internally in a common service area (flats only)
5. internally within the customer’s property

As an alternative to the stated hierarchy, we may install an internal meter when requested by ‘sensitive’ customers with specific requirements or where requested by their retailer on their behalf in compliance with our Customer Guarantee Scheme (CGS).

For new connections to large blocks of flats it is our policy to fit single internal meters for each flat and fit a bulk meters at the point of supply. Where it is impractical to install a meter at the individual flats, this situation should be agreed with Thames Water Wholesale in advance. For more details please refer to the Water Meter Installation Policy for Property Developers, on the Developer Services website.

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1 any customer who is vulnerable for the purposes of the Security and Emergency Measures Direction, i.e. any customer for Premises occupied by: (i) the sick; (ii) the elderly; (iii) the disabled; or (iv) other vulnerable sections of the population; and/or which is (v) a hospital; or (vi) a school
For existing properties where the supply connects to multiple properties, Thames Water may choose to install a bulk meter for demand monitoring purposes. In this case, the consumption will not be used for billing purposes.

d. Charging arrangements

Where it is practical and feasible it is Thames Water policy to charge all individual properties in relation to the water consumption at that property. Water consumption will be measured from a water meter installed on the water supply connection at that property. Properties that do not have a meter will be charged for their consumption based on an unmetered tariff.

For existing properties where it is impractical to install a meter we will charge the customer or retailer on the basis of a Business Assessed (for non-household properties) or Assessed Household Charge (for household properties)

For new connections where:

- all the properties in a block of flats are impractical to meter it will be the responsibility of the developer to organise a common billing arrangement. It is the responsibility of the developer to provide details of the management agent before completion of the development.
- we discover newly converted properties that have not made provision for meters to be installed we will either:
  - seek to recover infrastructure charges to allow us to install meters; or,
  - survey the property for appropriate meter installations and if they do not exist request the developer to fit them
- it is impractical to fit a meter we will charge on the basis of a Notional Value (for non-household properties) or Assessed Household Charge (for household properties)

e. Impractical meter installation

Properties falling outside of the above meter locations, or, properties that are prohibitively expensive, or that lead to a health and safety risk to provide an installation, are generally considered to be impractical.

Also, it is our policy not to meter existing properties under the following circumstances where:

- more than two water meters per supply are required to calculate the consumption;
- it is unreasonably expensive to do so which is defined where the total cost exceeds a 50% uplift on the standard cost;
- the installation would create an unacceptable health and safety risk.
- there is a communal hot water supply

f. Meter sizing

All meters must be correctly sized, according to their application and the meter metrology. Meters must accurately (please refer to section H of this policy) record the amount of water delivered to a property to enable effective leakage detection and fair billing.

Meter right sizing will apply for:

- new connections
- new installations
- meter replacement
- customer or retailer requests for a different size meter

Where properties have firefighting or a sprinkler system, the meter has to be appropriately sized to allow for required firefighting flows or fitted after the take-off for the fire supply.
Please note, while we have permitted notional downsizing in the past this will now not be allowed. It is our policy to change the meter to the relevant size for all new installations as agreed with the customer to ensure appropriate meter accuracy.

If a customer or retailer wishes to request a change to the size of a meter, it must be supported by appropriate evidence as set out in our Guidance for Right-sizing a Meter (available on request). This is a chargeable service as defined in our Wholesale Tariff Document.

g. Meter relocation

Existing meters shall not be relocated as part of any replacement or maintenance activity except in the following circumstances:

- the meter location is such that to carry out maintenance represents a health and safety issue; or,
- the chamber is in a state of disrepair and is hazardous.
- where a retailer requests the relocation of a meter, this would need to be approved by us, and if approved, it will be treated as chargeable.

h. Meter accuracy and testing

There are two reasons for why we would undertake a meter accuracy test:

1) where a customer is concerned about accuracy of their bill
2) where we would like to better understand the performance of our asset base

When carrying out a meter accuracy test, it is our policy to remove the meter and send it to a UKAS certified test house. A new meter will be fitted at the same time.

An accuracy test shall not be conducted if one has been completed in the preceding three months.

For operational performance the meter will be considered to be working correctly if the accuracy is within the following bands as defined by ISO 4064:2014:

- For ‘lower range’ flow rates the accuracy level is + / - 6%.
- For ‘upper range’ flow rates the accuracy level is + / - 2.5%.

The meter will be tested at flow rates which are required by law to determine whether a meter has passed the operational accuracy requirements. We may also specify additional test points to help determine meter accuracy.

Meter accuracy and testing on request of a customer or retailer is a chargeable service but only if the meter is found to be accurate. This is defined in our Wholesale Tariff Document.

We proactively test a sample of our meters on an annual basis so that we can understand and monitor their performance. We use this information to guide our proactive replacement programme.

i. Meter maintenance & replacement

It is our policy to replace any of our meters that have stopped recording completely, are visibly damaged, or that we deem to be faulty. This applies to all associated meter assets, pits, lids, boundary boxes. Such issues may be brought to our attention by customers / retailers or through our own day-to-day activities.

We do not consider the asset to be faulty if the meter is readable and the asset is safe to read.
For clarity, if the failure is related to an AMR or AMI communications device, connected to a
meter, the meter may not necessarily be changed if it can continue to be read by an “eyeball”
method.

We expect competent meter readers to use reasonable endeavors and appropriate control
measures to, clean out meter pits so that the meter dial is visible, have equipment to lift heavy
lids/covers or the manpower to do so and use appropriate guarding/signage and/or other control
measures as required by the location to enable them to read meters located in the pathway,
crossway or an area there is likely to be vehicle movements but not in the highway. This should
always be carried out safely and without risk to meter readers or others.

Where a meter is not capable of being read remotely and is in a location that is unsafe to read, a
risk assessment shall be submitted clearly identifying the risk and proposed mitigation for review
along with photographic evidence. In the event the risk is unacceptable the meter will be
relocated or exchanged for a meter that can be read remotely.

There will be no additional charge to customers / retailers for such replacement services unless

- the existing asset has been damaged by the customer’s or retailer activities. In this
  instance, the customer / retailer will be liable for the cost of replacement.
- we determine that the meter can be read remotely or is in a safe location. In this
  instance you will be charged for an abortive visit

Charges can be found in our Wholesale Tariff Document.

From time to time we may implement programmes of meter replacement. Under these
circumstances there will be no additional charge to customers / retailers for the meter
replacement services. Outside of these activities, retailers are allowed to request replacement
services for an existing meter. These are chargeable services as defined in our Wholesale Tariff
Document.

j. Defective meter investigation and rectification

It is our policy to replace any of our meters that have stopped recording completely, are visibly
damaged, or that we deem to be faulty. Defective meters may be brought to our attention by way of:

- customers/retailers telling us of a fault
- our own data capture information
- our own operatives / contractors in the field

Faults include the following categories:

- physically damaged and broken meters
- total mechanical / electrical failure
- meter leaking
- theft of meter and/or meter chamber and boundary box lids
- incorrect installation including lids that cannot be closed completely

In the following circumstance we do not consider the meter to be faulty:

- where the meter chamber/boundary box has water ingress. In such situations we would
  expect the responsible retailer (or meter reading contractor) should provide a safe
  service and pump the water out of the chamber to enable the meter to be read.
- where the meter chamber/boundary box contains soil or debris
- the meter can be eyeball read.

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An enquiry can be raised for the issue to be rectified, if after reasonable effort has been made to remove the debris and the meter cannot be read remotely or the debris is preventing the operation of the outside stop valve.

We will repair or replace any defective meter under the terms of our meter replacement policy (Policy I). In such circumstances it will not be possible to undertake a meter accuracy test.

**k. Customer damage to meter**

The customer shall be liable for any damage to a meter fitted at the customer premises. When a customer moves in to a premise they shall report any damage to a meter within 14 business days of move in. The customer shall not be liable for any damage to a meter during this period.

Damage includes physical damage to the meter body, register and ancillary equipment connected to the meter so that it causes water leakage from the meter and installation or that it impairs or prevents the meter from correctly registering consumption. Under these circumstances, the charge to replace a damaged meter will be in accordance with our Wholesale Tariff Document.

**l. Reinstatement**

All reinstatement shall be carried out and conform to the requirements in:

- New Roads and Street Works Act 1991,
- Traffic Signs Manual Chapter 8;
- BS 7533-4:2006 Pavements constructed with clay, natural stone or concrete pavers. Code of practice for the construction of pavements of precast concrete flags or natural stone slabs;
- BS 7533-7:2010 Pavements constructed with clay, natural stone or concrete pavers. Code of practice for the construction of pavements of natural stone paving units and cobbles, and rigid construction with concrete block paving;
- Specification for the Reinstatement of Openings in Highways (SROH);
- The HAUC specification.

**m. Meter menu**

Only pulse and digital meters that comply with the specifications set out in our meter menu may be used. These meters are listed in Table 1.

Thames Water will not adopt newly installed meters that are outside of this list.

Meters must have equivalent certification to BS EN ISO 4064:2014 class 2.

In accordance with meter regulations meters with a size designation Qn will not be brought into service after 30 October 2016.
<table>
<thead>
<tr>
<th>Permanent flow rate (Q3) m³/hr</th>
<th>Meter DN (mm)</th>
<th>Meter Length (mm)</th>
<th>Connection Type</th>
<th>Notes</th>
<th>Thames Water Approved Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5</td>
<td>15</td>
<td>134</td>
<td>G 3/4 B</td>
<td>Preferred 15 mm</td>
<td>Sensus 640C</td>
</tr>
<tr>
<td>2.5</td>
<td>15</td>
<td>134</td>
<td>G 3/4 B</td>
<td></td>
<td>Sensus iPERL</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>165</td>
<td>G 1 B</td>
<td>Preferred 20 mm</td>
<td>Sensus 640C</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>165</td>
<td>G 1 B</td>
<td></td>
<td>Sensus iPERL</td>
</tr>
<tr>
<td>6.3</td>
<td>25</td>
<td>199</td>
<td>G 1 1/4 B</td>
<td></td>
<td>Sensus iPERL</td>
</tr>
<tr>
<td>10</td>
<td>30</td>
<td>260</td>
<td>G 1 1/2 B</td>
<td></td>
<td>Sensus iPERL</td>
</tr>
<tr>
<td>16</td>
<td>40</td>
<td>300</td>
<td>G 2 B</td>
<td></td>
<td>Sensus iPERL</td>
</tr>
<tr>
<td>25</td>
<td>50</td>
<td>Variation allowed</td>
<td>Flanged</td>
<td></td>
<td>Sensus MeistreamRF Plus (digital) and Meistream Plus (pulse)</td>
</tr>
<tr>
<td>63</td>
<td>80</td>
<td>Variation allowed</td>
<td>Flanged</td>
<td></td>
<td>Sensus MeistreamRF Plus (digital) and Meistream Plus (pulse)</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
<td>Variation allowed</td>
<td>Flanged</td>
<td></td>
<td>Sensus MeistreamRF Plus (digital) and Meistream Plus (pulse)</td>
</tr>
<tr>
<td>250</td>
<td>150</td>
<td>Variation allowed</td>
<td>Flanged</td>
<td></td>
<td>Sensus MeistreamRF Plus (digital) and Meistream Plus (pulse)</td>
</tr>
<tr>
<td>&gt;250</td>
<td></td>
<td></td>
<td></td>
<td>The type of meter will be determined on individual circumstances</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 - Meter menu & specification

n. Meter survey

Each property to be metered shall be surveyed to:

1) determine whether it is technically feasible to meter;
2) determine the most appropriate meter installation type;
3) obtain the required details pertaining to the property.

For properties that are already served by a meter we will provide verification of meter details on request by the retailer.

Thames Water Utilities Limited
o. Meter asset data capture

Digital meters connected to our wide area fixed network in AMI mode, send automatic reads through a secure wireless network. For full details on how we collect, use and protect this data please see our smart metering data protection page or our company privacy policy.

p. Supply proving

Supplies shall be proved when installing a new meter to establish a direct relationship between the meter and the premises to be billed on the basis of that meter. For meter replacements no proof shall be required unless specifically requested by the customer / retailer. For new connections the proof will be against the property address and not the plot number.

We will provide verification of supply arrangements for currently metered properties if requested by the customer / retailer. This may be a chargeable service as set out in our Wholesale Tariff Document.

q. Working hours

Normal working hours are Monday to Friday 8am to 5pm and Saturdays 8am to 1pm. Metering related work may be carried out ‘outside our normal working hours or on a “customer specific” basis where there is request to do so by a customer / retailer. However, this is subject to individual circumstances and would need to be agreed between us and the customer / retailer in advance. This may be a chargeable service as defined in our Wholesale Tariff Document.

r. Appointments

- Household customers

Appointments with our customers will be available during our normal working hours between 8am and 5pm. Appointments that we have with our customers are subject to our Guaranteed Standards Scheme (GSS).

Please note that appointments are not usually made for emergency callouts as this could cause delays in dealing with the problem.

From time to time we may need to make unannounced visits to customer premises to deal with specific metering related requirements.

- Non household customers

There are two categories of working hours:

1. normal working hours (Monday to Friday 8am to 5pm and Saturdays 8pm to 1pm for which this is no additional charge);
2. outside our normal working hours
   1. outside our normal working hours (Saturday 1pm to 5pm, Sunday 8am to 5pm, Monday to Friday evenings 5pm to 9pm. There is a standard rate for work outside our normal working hours);
   2. customer specific hours (Work outside of the above times can be arranged subject to a quote agreed with the customer / retailer).

Metering related work may be carried out ‘outside our normal working hours or on a “customer specific” basis where there is request to do so by a customer / retailer. However, this is subject to individual circumstances and would need to be agreed between us and the customer / retailer in advance.
Where we need to make an appointment to carry out a site visit we will try to make contact with the non-household customer or their retailer (if their retailer has not provided us with consent to contact the customer) on 3 separate occasions. If we are unable to make contact, we will notify their retailer that an appointment has not been booked and will ask their retailer to make contact with the non-household customer to confirm a date and time suitable for us to attempt to arrange the appointment. If their retailer responds in writing (via email) within 5 business days, providing us with a suitable date and time (alternative contact details can also be included) and provide approval that we can extend the SLA we will continue with the service request. This date must be within 44 business days of the initial request. If we receive no response within 5 business days we will close the job and we will email their retailer to notify them of the closure.

If the customer fails to turn up for an appointment then we will close the job and leave a card confirming this action asking the customer to get in touch with their retailer if another visit is still required.

Appointments with our customers or retailers will be available during our standard working hours between 8am and 5pm. Appointments that we have with our customers or retailers are subject to our Guaranteed Standards Scheme (GSS).

Please note that appointments are not usually made for emergency callouts as this could cause delays in dealing with the problem.

When contacting a customer as directed by a retailer we make three attempts and if there is no answer we will close down the service request.

From time to time we may need to make unannounced visits to customer premises to deal with specific metering related requirements.

s. Reschedules and cancellations

For more information on rescheduling and cancellations, please refer to our Wholesale Tariff Document.

t. Enquiries and complaints

Any enquiries or complaints that we receive from our customers or retailers, either by email or letter, will receive a substantive response within 10 business days for enquiries and 8 business days for complaints. If we’re unable to provide a substantive response within this timescale then we’ll explain why and give an estimate of when we’ll be able to provide it.

u. Sensitive customers

We offer a variety of extra care services for our “sensitive” customers. They are set out in detail on our website at the following link:

Sensitive Customers

v. Capture of meter reading by retailers

Retailers may capture meter readings from our meters depending on the metering technology installed as follows:

- dumb meters (eyeball meter reading);
- digital & Automatic Meter Reading (AMR) meters (eyeball meter reading or radio based data capture using appropriate equipment as specified by Thames Water Wholesale on request and by agreement);

Thames Water Utilities Limited
digital meters in Advanced Metering Infrastructure (AMI) mode (eyeball meter reading).

Where there is a fixed network and a digital meter has been installed and activated in AMI mode, we are able to provide a data digital data service to the retailer. This is a chargeable service as defined in our Wholesale Tariff Document.

The customer is able to take an eyeball reading of the meter at any time by visual inspection of the meter.

w. Logger / splitter installation

It is our policy to provide services for customers and retailers by capturing consumption data from our meters. However, this will be dependent on the technology installed.

Retailers can connect a logger to an existing meter in accordance with our terms and conditions set out in our Data Logger Installation for Revenue Meters Guidance.

Our Data Logger Installation for Revenue Meters Guidance should be observed when installing a data logger on any of our meters. Table 2 shows the allowable options for logger/splitter installations:

<table>
<thead>
<tr>
<th>Type</th>
<th>Existing meter arrangement</th>
<th>Additional equipment that can be fitted and other requirements</th>
<th>Who can make the installation</th>
</tr>
</thead>
</table>
| 0    | Dumb meter with no facility to enable a pulsed output | Not applicable  
The meter will need to be exchanged. | Not applicable                  |
| 1    | Pulse compatible meter only | Fit a pulsed pick-up device and logger owned by the customer | Any competent installer subject to the conditions listed. |
| 2 a) | Pulse compatible meter with snap on AMR Trak | Remove the Homerider snap on Trak unit, without damaging the TW meter.  
The Homerider snap on Trak should be removed from site and correctly disposed of. Fit a pulsed pick-up on the meter. | Any competent installer subject to the conditions listed. |
| 2 b) | Pulse compatible meter with pulse pick-up and wired AMR device | Remove the Homerider snap on Trak unit, without damaging the TW meter.  
The Homerider snap on Trak should be removed from site and correctly disposed of. Fit a pulsed pick-up on the meter. | Any competent installer subject to the conditions listed. |
| 2 c) | Pulse compatible meter with pulse pick-up and Thames Water leakage logger | a) Fit a splitter  
b) Connect a logger owned by the Applicant | Any competent installer subject to the conditions listed |
| 2 d) | Pulse compatible meter with | a) Disconnect and remove the existing wired Homerider AMR Trak unit at the splitter.  
b) Connect a logger owned by the Applicant | Any competent installer subject to the conditions listed |

Thames Water Utilities Limited
<table>
<thead>
<tr>
<th>Type</th>
<th>Existing meter arrangement</th>
<th>Additional equipment that can be fitted and other requirements</th>
<th>Who can make the installation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Digital meter</td>
<td>Request a digital data service from TWUL wholesale which will depend on whether there is fixed network coverage.</td>
<td>Thames Water Wholesale</td>
</tr>
</tbody>
</table>

Table 2 – Allowable options for logger / splitter installations for data collection

Please note:

Where we have fitted a digital meter and you require consumption data you could install a sub-meter downstream compatible with logging equipment.

Where a non Thames Water installer fits the logging equipment and our equipment stops working then we will rectify it and charge the Retailer/3rd Party.

Where a digital meter has been installed it is not physically possible to connect a logger or any other form of remote equipment to this type of meter.

It will not be possible to connect a digital meter to a building management system in order to obtain real-time data about water usage. In such purposes secondary stand-alone device should be fitted downstream of the Thames Water meter.

x. Provision of metering consumption data services

It is our policy to provide consumption data or meter digital data for our retailers where available on request.

A data service can be provided for retailers as described by Table 2 in two separate arrangements:

- type 3 as a digital data service
- type 2c or 2d as a consumption service where a Thames Water logger is installed.

These are chargeable services as defined in our Wholesale Tariff Document.

y. Contribution offer

Other than the standard costs of meter installation, as defined in our Wholesale Tariff Document, it is not our policy to make a contribution offer towards the costs of supplementary works to install a meter at a property that has been assessed as impractical.
z. Powers of entry

We may use our powers of entry to install, maintain or read meters and Retailers may be charged as defined in our Wholesale Tariff Document.

6. Changes to policy

This policy will be updated periodically as required.

7. References

- Wholesale Contract/Wholesale – Retail Code
- Wholesale Service Offering
- T/013 Data Logger Installation for Revenue Meters – Terms, Conditions and Guidance, July 2016
- Thames Water Privacy Policy

8. Appendices

There are no appendices to this document.