

Metering policy

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Policy no. POL099

Purpose

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.

Since April 2017, all non-household customers have been 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. 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. All charges for non-household metering work are set out in our Wholesale Tariff Document and reflect the various requirements of the Water Industry Act 1991 ("the Act") and any other laws or regulations.

Scope

This policy is in place to ensure that all our meters are installed and maintained to the correct standards. It also sets out how metering 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 our revenue metering programmes which include:

- progressive metering programme our smart meter rollout across the Thames Water region.
- optant metering household customers that opt to be metered (outside of our progressive metering programme).
- proactive meter replacements replacement of meters due to age or other need.
- reactive meter replacements replacement of faulty or broken meters;.
- new connections.
- revenue bulk metering.
- change of occupier (household).

Key principles – describing our approach

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

a. Meter installation

Only contractors or developers that we have approved 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:
 - o concentric meters of size Q3 2.5 m3/hr in a meter manifold.
 - o in-line meters up to Q3 of 6.3 m3/hr where a stop valve is required before and after the meter and a drain valve immediately after the meter.
 - o in-line meters over Q3 of 6.3 m3/hr where a stop valve is required before and after the meter.
- external installation of:
 - o concentric meters of Q3 2.5 m3/hr that are fitted in a boundary box or multi-box .
 - o in-line meters of greater than Q3 2.5 m3/hr that are fitted in a meter chamber.

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 should 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 are modernising the way we manage water supplies by implementing 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 smart network communication system is available.

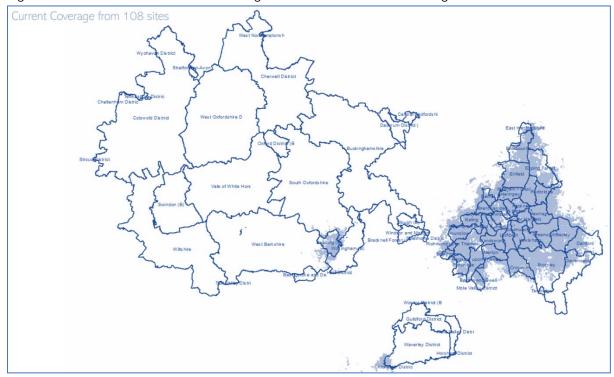


Figure 1: Current smart network coverage over the Thames Water Region:

The current smart network covers 95% of London, and parts of the Thames Valley (Reading and Guildford). As part of our metering programme, the Thames Valley will progressively move to a smart network from 2022 onwards.

We have improved our smart metering services through our Tech Refresh during 2022, which has brought greater resilience, choice of meters and technology, and faster flow of data. These improvements include:

- Head End Refresh: to get same day reads from our smart meters)
- Meter Agnostic Smart Point (MASP): enable a greater choice of meters, including pulse enabled smart AMI meters.

We will continue to implement additional improvements and technology including our Complementary Solution: AMI solution with an open protocol that aims to secure coverage using existing communication infrastructure (in addition to our existing masts and smart network).

For household customers we will always fit a digital meter. Where these meters are fitted in an area covered by our smart network we will provide household customers with information through our online account management. Where the meter is not connected to our smart network it will continue to be possible to read the new meter in AMR mode.

For non-household properties within our smart network we will aim to fit a digital meter for new installations and replacements. Where a digital meter is located in our smart network it can be read in AMI mode, which is also known as a Smart meter. It is not currently possible to physically connect remote logging equipment to our standard digital meters (without a pulse output), therefore where a standard digital meter (without a pulse output) has been fitted within

our smart network and a retailer or third party requires data from the meter, we can provide a digital data service with a one-off set up charge. Existing pulse meters will gradually be replaced as part of our reactive and proactive programme, but there may be some exceptions, and our installation policy will follow these principles:

Table 1: Non-household meter installations policy principles

		A. Non-household properties within	B. Non-household properties outside		
		our smart network	of our smart network		
1.	New	We aim to fit a digital (smart AMI) meter and	We aim to fit a digital (AMR) meter. If a		
	installation of	LCE. If a customer has plans to install	customer has plans to install logging		
	a meter (B1s)	logging equipment * we will fit a pulse	equipment * we will fit a pulse enabled		
		enabled meter or digital (smart AMI) as	meter or digital (AMR) as required.		
		required.			
			You can request a digital (AMR) pulse		
		You can request a digital (smart AMI) pulse	enabled meter for 50, 80 and 100mm		
		enabled meter for 50, 80 and 100mm	meters as a non-standard request, there will be an additional charge (difference in the		
		meters as a non-standard request, but there			
		will be an additional charge (difference in the	cost of the meter) if this is required**.		
		cost of the meter) if this is required**.			
2.	Repair or	We aim to fit a digital (smart AMI) meter and	We aim to fit a digital (AMR) meter, unless		
	Replacement	LCE, unless there is a logger already fitted or	there is a logger already fitted or a customer		
	of a faulty or	a customer has plans to install logging	has plans to install logging equipment *. If		
	missing meter	equipment *. If so, we will fit a pulse enabled	so, we will fit a pulse enabled or digital		
	(B5s) and	meter or digital (smart AMI) as required.	(AMR) as required.		
	replacing meters	You can request a digital (smart AMI) pulse	You can request a digital (AMR) pulse		
	undergoing	enabled meter for 50, 80 and 100mm	enabled meter for 50, 80 and 100mm		
	Accuracy	meters as a non-standard request.	meters as a non-standard request.		
	Testing (B3s)	meters as a non-standard request.	meters as a non-standard request.		
	rooting (200)	If it is a new installation or the existing meter	If it is a new installation or the existing meter		
		is not currently logged, there will be an	is not currently logged, there will be an		
		additional charge (difference in the cost of	additional charge (difference in the costs of		
		the meter) if this is required**.	the meter) if this is required**.		
3.	Change of	We will follow the same rules a set out above	We will follow the same rules a set out		
	meter (size/	in 2A. Charges apply to exchanging meters.	above in 2B. Charges apply to exchanging		
	model/		meters.		
	location) (B7s)	Where you are requesting a change of meter			
		type to enable you to attach a logger or	Where you are requesting a change of		
		obtain smart meter data through our digital	meter type to enable you to attach a logger		
		data service you will not be charged for the	or obtain smart meter data through our		
		meter if it is due for proactive replacement	digital data service you will not be charged		
		within the next 6 months or is 15 or more	for the meter if it is due for proactive		
		years old***.	replacement within the next 6 months or is		
			15 or more years old***.		
4.	Proactive	We aim to fit a digital (smart AMI) meter and	We aim to fit a digital (AMR) meter as part of		
	replacement	LCE as part of our proactive replacement	our proactive replacement programme,		
	and roll out of	programme, unless there is a logger already	unless there is a logger already fitted or a		
	digital meters	fitted or a customer has plans to install	customer has plans to install logging		
	(B10s)	logging equipment *. If so, we will not	equipment *. If so, we will not replace the		
		replace the meter or logging equipment	meter or logging equipment proactively and		
		proactively and the existing meter will	the existing meter will remain.		
		remain.			

You can request a digital (smart AMI) pulse enabled meter for 50, 80 and 100mm meters as a non-standard request, but there will be an additional charge (difference in the cost of the meter) if this is required or we will not proactively replace the meter unless necessary.

If the meter is found to be broken and the logging equipment was still required, we would fit a pulse enabled meter as stated above in 2A.

You can request a digital (AMR) pulse enabled meter for 50, 80 and 100mm meters as a non-standard request, but there will be an additional charge (difference in the cost of the meter) if this is required or we will not proactively replace the meter unless necessary.

If the meter is found to be broken and the logging equipment was still required, we would fit a pulse enabled meter as stated above in 2B.

*Note: we will endeavour to check if there is an existing logger attached that is still required or if the customer has plans to install logging equipment. This will include checking CMOS for updated logger information, responses to our notifications to retailers or through direct communication with the business premises and retailers.

**If we have already replaced a logged analogue meter for a digital meter, which was flagged in CMOS as logged and a logger is still required or there is evidence that we were notified prior to the replacement, we can replace it with a loggable smart meter without charge.

***charges may apply if you do not fit a logger or do not apply for a digital data service within 6 months of the request to exchange the meter.

Throughout our meter replacement programme there are multiple opportunities for retailers and their customers to request a pulse enabled meter if a logger is present or will need to be fitted. We set out below the process for proactive and reactive meter replacements as these differ in their specific application:

Proactive metering (B10 in Table 1 above)

- we do not replace any meters proactively that are in CMOS as being logged or where
 we have received a list of logged meters directly from the retailer. We send an email to
 all retailers with an excel list of our planned proactive programme, over the next 3 6
 months, for them to notify us of any logging needs. We will not proactively replace any
 meters that are logged or due to be logged.
- we notify retailers (22 business days in advance) of our intention to replace a meter –
 they have the ability to flag that the meter is logged, or if they/the customer have a
 logging requirement in future. Any proposed exchange on a meter is cancelled if we are
 notified that a logger is required. We will not proactively replace any meters that are
 logged or due to be logged.
- to install the meter, we would then either write to the customer to make an appointment (we notify the retailer), or visit the site unappointed:
 - letters request customers to call us to make an appointment. Current and future logging needs are discussed with customer on phone.
 - o if unappointed, we would replace the meter for a digital meter unless a logger was already in place or the customer advised otherwise whilst on site.
 - o if we find a logger in situ, we will abort the proactive replacement.

Reactive metering (B1, B3, B5 & B7 in Table 1 above)

- we expect the retailer to confirm with their customer their current/future logging needs and for this to be highlighted when a retailer raises a meter replacement using a standard 'B01' Market Form. There is a mandatory question on the form to select Y/N if a meter is logged. There is also a free text field in which the retailers can request a "pulse enabled meter required due to logging" if required.
- all reactive replacements that have been triggered by the wholesaler are first checked
 against CMOS and retailer logger lists, plus an additional email is sent to the retailer
 (who is asked to respond within 5 business days) to confirm the customer's logging and
 meter requirements. If we don't hear back from the retailer, we would then install a
 meter as per the metering policy if there is no logger on site.
- to install the meter, we would either write to the customer to make an appointment (and copy the retailer), or visit the site unappointed:
 - o if an appointment is sought, letters are issued to request customers to call us to make an appointment. Current and future logging needs are discussed with customers on the phone (this should confirm information provided to us in advance by the retailer as explained above).
 - o if unappointed, we would replace the meter for a digital meter unless a logger was already in place or the customer advised otherwise whilst on site.
 - o if we find a logger in situ when on site, that was not flagged in CMOS or on the retailer's logger list provided to us, the following applies:
 - retailer led request we will abort the replacement and contact the customer three times (by phone/email & letter 7 days apart) to book an appointment and also confirm logger status (we notify the retailer). If we don't hear back from the customer, we send an email to the retailer to respond within 5 business days to confirm meter type requirement, and if no response is received we would then reject the job back to the retailer and close the job.
 - wholesaler led reactive job we will replace the meter for a pulseenabled meter, leaving any logger in situ to be reconnected in a follow up job.

c. Meter location

The following hierarchy of meter locations must be adhered to:

- 1. external fit by screw in or inline fitting into existing boundary box
- 2. external installation in the 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 meter 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.

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:
 - o 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)

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

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 as 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 facilities or a sprinkler system, the meter must be appropriately sized to allow for required firefighting flows or fitted after the take-off for the fire supply.

If a customer or retailer wishes to request a change to the size of a meter, it must be supported by appropriate evidence. This is a chargeable service as defined in our Wholesale Tariff Document.

Please note that it is our policy to physically change the meter to the relevant agreed size for all new installations or meter replacements to ensure appropriate meter accuracy. We do not allow notional downsizing of a meter unless the pipe is oversized solely for the purposes of providing water for firefighting purposes.

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 why we would undertake a meter accuracy test:

- 1) where a customer is concerned about the 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 and 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 adhere to the Retailer Wholesaler Group Meter Reading Standards which can be found on the MOSL website.

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 circumstances 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.

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.

I. 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 7533-3:2005+A1:2009 Pavements constructed with clay, natural stone or concrete pavers. Code of practice for laying precast concrete paving blocks and clay pavers for flexible pavements.
- 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 2.

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 2 - Meter menu & specification

Permanent flow rate (Q3) m3/hr	Meter size (DN) mm	Meter length mm	Connection Type	Notes	Meter Model
2.5	15	WIS 4-37-01 Concentric		Digital only	Sensus 640 MC
2.5	15	134	G ¾ B	Digital only	Sensus 640 C
4.0	20	165	G 1 B	Digital only	Sensus 640 C
6.3	25	199	G 1 1/4 B	Digital only	Sensus iPerl
10	30/32	260	G 1 ½ B	Digital only	Sensus iPerl
16	40	300	G 2 B	Digital only	Sensus iPerl
25	50	Variation		Pulse &	Sensus Cordonel
63	80			Pulse &	Sensus Cordonel
100	100			Pulse &	Sensus Cordonel
25	25 50		Flanged	Digital only	Sensus MeiStreamRF
63	80	allowed		Digital only	Sensus MeiStreamRF
100	100]		Digital only	Sensus MeiStreamRF
250	150			Digital only	Sensus MeiStreamRF
2.5	15	WIS 4-37-01 Concentric		Pulse only	Sensus 620 MC
2.5	15	134	G ¾ B	Pulse only	Sensus 620 C
4.0	20	165	G 1 B	Pulse only	Sensus 620 C
6.3	25	199	G 1 1/4 B	Pulse only	Sensus 620
10	30/32	260	G 1 ½ B	Pulse only	Sensus 620
16	40	300	G 2 B	Pulse only	Sensus 620
25	50	Variation allowed	Flanged	Pulse only	Sensus MeiStream+
63	80			Pulse only	Sensus MeiStream+
100	100			Pulse only	Sensus MeiStream+
250	150			Pulse only	Sensus MeiStream+
>250	>150			, ,	eters will require a special t with Thames Water.

Notes: Thames Water installs 'digital' meters as standard. These meters do not provide a pulse output with the exception of the Cordonel meter. The Cordonel and Pulse output meters are available on request. Thames Water does not provide 65mm or 125mm (DN) meter sizes.

We regularly review our meter menu and may amend it to include new types of meters as they become available.

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.

o. Meter asset data capture

Digital meters connected to our smart 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. Appointments

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

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.

r. Reschedules and cancellations

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

s. Capture of meter reads

We do not offer a meter read service. We'll provide one monthly read for each meter connected to our smart network, where data is available. These will be entered as wholesaler reads into CMOS. We do not charge for the provision of these reads.

Regardless of meter type, location or additional equipment, you should always be able to visit the site and visually take a reading from a Thames Water meter.

Other options are also available:

- for digital meters installed in our smart network, you can ask us to provide meter data through our digital meter data service. Charges apply. Details of these services can be found in our Wholesale Service Offering and our Wholesale Tariff Document.
- for digital meters installed outside our smart network, you can read the meter in AMR mode.
- for analogue meters, where the meter is compatible, you can attach your own reading equipment.

Further information can be found in our Getting data from Thames Water meters guidance on our <u>website</u>.

t. Logger / splitter installation

If a logger is fitted on a Thames Water non-household meter, then it is the obligation of the retailer or third party to notify Thames Water it has been fitted and CMOS should be updated appropriately. This data will then be used as a check before we replace any meter. If a logger is no longer required or removed, then the retailer or third party shall also notify Thames Water so that it can be removed from CMOS.

Where there is already a logger attached to the meter you can fit a splitter that will allow you to install your own logger next to it, at your cost.

Please note, where a retailer or third party fits logging equipment and our own logging equipment stops working then we will rectify it and charge the retailer/third party.

Further information can be found in our Getting data from Thames Water meters guidance on our website.

u. Provision of metering consumption data services

It is our policy to provide consumption data to customers where available on request.

We offer digital meter data provided from digital meters inside our smart network. This is a chargeable service as defined in our Wholesale Tariff Document.

Further information can be found in our Guidance on Getting Data from Thames Water Meters on our website.

v. 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.

w. Powers of entry

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

Performance and management

This policy will be reviewed annually and any changes to the policy will be signed off by the Retail Director.

Compliance with this policy will be monitored through

- o compliance audits and/or
- monitoring of complaints and customer feedback through customer experience satisfaction surveys etc and/or
- o monitoring of service levels

Responsibilities

- Thames Water employees, contractors, developers and self lay providers must comply with this
 policy
- The Head of Wholesale Services is responsible for the review and monitoring of compliance with this policy

Contacting us

For questions, comments or feedback relating to this policy, you can contact us

If you have any concern about any issues relating to our metering performance or management arrangements, you can contact the policy sponsor.

For concerns regarding dishonest or unethical behaviour, please contact us on any of the following:



If you are an employee of Thames Water, you can also speak with your Line Manager.

Useful references

- BS EN ISO 4064:2014, Water Meters for Cold Potable Water & Hot Water Part 1 Metrological & Technical Requirements
- Getting data from Thames Water meters guidance
- Retailer Wholesaler Group Meter Reading Standards
- Retailer Wholesaler Group Data Logging Good Practice Guide
- Wholesale Contract/Wholesale Retail Code
- Wholesale Service Offering
- Wholesale Tariff Document
- Thames Water Privacy Policy

Definitions

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.

Advanced Metering Infrastructure (AMI) mode - see 'Digital Meters in Advanced Metering Infrastructure (AMI) mode' below

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.

CMOS – The Central Market Operating System, which is the core IT system for the non-household market

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

Analogue Meter (pulse enabled) - Mechanical meter with an analogue register and some form of communication capability or pulse output for logging.

Analogue Meter (not pulse enabled) - Mechanical meter with an analogue register but no communication capability or pulse output for logging.

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 smart network infrastructure.

Meter menu - Table that provides a list of meters that will be installed in the TWUL area, which are compatible with the smart 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.

Pulse enabled – a type of meter which has a pulse output signal which can be used to measure water consumption by attaching a logger. This may be an analogue pulse enabled meter or a digital (smart AMI or AMR) pulse enabled meter.

Q3 - the constant flow rate is the maximum flow rate within nominal operating conditions at which the meter is required to operate satisfactorily without exceeding the maximum permissible error value. Generally, at this flow rate, the manufacturer guarantees that the meter can operate continuously.

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 device that allows pulse information from meters to be used by a number of ancillary devises such as loggers and wired AMR.

Tech Refresh - Meter Technology Refresh. This is a series of improvements to our Smart Metering systems and smart data.

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