

Meter Reading Services Subgroup and the
Strategic Panels Metering Committee / 10.22

Meter Reading Standards

Market Guidance
Document

RWG



Guide Summary

Objective

Health and Safety

Principles

Reads

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Performance

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Target audience: Retailers, Wholesalers and Meter Reading Providers in the Water Market

This document has been deemed as a Water Retail Market Guidance or Good Practice Document by the Trading Parties involved in the Retailer Wholesaler Group (RWG). The document is designed to bring together in one simplified guidance/good practice document the different Wholesaler or Retailers Policies or Practices.

It is important to note that Wholesaler or Retailer policies and practices change from time to time and whilst effort is made to maintain the currency of this document if there is any doubt the current policy or practice should be checked with the relevant Wholesaler or Retailer.



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1.0 Objective

This document, authored by a sub-group of the Retailer Wholesaler Group (RWG), aims to provide market guidance in relation to meter reading services with a view to encouraging a standardised and consistent approach where possible. This document has been further enhanced following work with the Strategic Panels Metering Committee.

2.0 Principles

Meter read data is an integral part to both Retailer and Wholesaler operations, without meter read data one of the fundamental responsibilities for both trading parties, accurate billing, isn't possible.

Since market opening in April 2017 there's been an increased spotlight on meter reading, one of the reasons being the performance charges associated with failure to provide the required number of meter readings for a meter. There are numerous reasons why it can be difficult to obtain meter read data in the water industry, location of the meter, temporary or permanent obstructions to the meter chamber (e.g. vehicle parked over) or data issues such as inadequate location notes or incorrect meter serial number.

Whilst CSD0202 and CSD0203 provide guidance to both Retailers and Wholesalers on when a meter reading should be taken and how it should be verified before being submitted into Central Market Operating System (CMOS) there is no market guidance on how meter reading services should work to allow the market to function as intended.

This market guidance document aims to provide clarity on responsibilities and make recommendations as to how meter reading services should operate.

3.0 Responsibilities

3.1 Wholesaler Responsibility

- Responsibility to provide meter assets which can be located and read, and data items are up to date in CMOS, (e.g. Meter Serial Number, location details and accurate XY coordinates etc.).
- Responsibility to act upon meter related bilateral requests received from Retailers in a timely and co-operative way as set out in the Market Codes
- Where premarket opening long unread meters exist, Wholesalers have a responsibility to work with Retailers to resolve these issues.
- Wholesalers should look to provide a meter reading guidance document to be provided to Retailers at the onboarding stage when initiating a wholesale supply contract. The purpose of this document is to give guidance to Retailers about ways in which they can obtain meter readings in their respective area. e.g. whether remote readings can be collected and how, what equipment and training will be required to lift lids. As market guidance it's recommended a Wholesaler provide such a document whether or not they offer an in-house meter reading service.
- Wholesalers shall make it clear on their website whether they offer a meter reading service to NHH Retailers. It is advisable to publish terms and conditions on websites to improve transparency and ease procurement of services for Retailers.
- Wholesalers who offer a meter reading service should notify RWG if there are any changes to the existing document published on MOSL's website to support ease of procurement for Retailers.
- Wholesalers who choose to offer meter reading services to Retailers should ensure the service they provide allows Retailer to perform to the standards set out in the Market Codes (e.g. minimum read frequency requirements).
- Wholesalers should ensure assets are kept in working order to allow readings to be taken and all new meter installations, ensure the meter is easy to read. Where remedial works are required, Wholesalers should ensure Market Code SLAs are adhered to.
- Wholesalers to provide Non-Market Meter readings into CMOS in a timely manner.

- Wholesalers are advised to follow best practice where an AMR has been added/changed or removed to ensure CMOS is updated within a reasonable timescale to inform Retailers.
- Wholesalers to work closely with Retailers to explore long term read solutions for those meters deemed to fit the 'Hard to Read' definition. <https://mosl.co.uk/document/market-improvement/4865-hard-to-read-meter-definitions/file>

3.2 Retailer Responsibility

- Responsible for providing timely and accurate meter reads to the Market Operator at the agreed frequency in accordance with section 4.9.6 of the Market Terms.
- Retailers to check CMOS for Wholesaler reads when the meter is AMI
- Responsibility to raise meter related bilateral requests to Wholesalers as soon as is reasonably practicable, in line with the Market Codes
- Work collaboratively with meter reading service providers and their customer where encountering blockers to obtaining read data (e.g. access refusal, ID requirements & H&S restrictions).
- Work with their customers to obtain customer read data, where it is safe to do so, when unable to acquire meter reads from a meter reading service provider.
- Responsibility to ensure CMOS data items are kept up to date (e.g. location notes).
- Responsibility to ensure that chosen meter reading service provider has necessary information to safely and effectively carry out meter reading activity (e.g. MSN, locations notes and XY coordinates etc.).
- Responsibility to ensure that chosen meter reading service provider has necessary capability, permits and qualifications to safely and effectively carry out meter reading activity (e.g. risk assessments, safe ways of working, trained staff, PPE, etc.)
- Ensure meter read data provided by meter reading service provider or their customer is submitted to CMOS within necessary timeframes and as frequently as needed as per Market Code requirements.
- Where remedial activity is required as per feedback from meter reading service provider or their customer, this should be acted on in a timely manner in order to rectify the issue and prevent meters becoming 'long unread'.

- Retailers to work closely with Wholesalers to explore long term read solutions for those meters deemed to fit the 'Hard to Read' definition created by the SMR Metering Committee and to work with Wholesalers in reducing the number of long unread meters. <https://mosl.co.uk/document/market-improvement/4865-hard-to-read-meter-definitions/file>

3.3 Meter Reading Service Provider Responsibility

- Meter reading service providers must make best endeavours to collect timely and accurate meter read data, on behalf of contracted Retailers, either remotely or visually as per the read types in the codes (visual, remote etc.)
- Where it is not possible to collect a reading via either means, meter reading service providers will provide contracted Retailers with skip code data.
 - The skip code data should be accompanied by a trouble code, photograph or additional commentary where applicable.
 - In circumstances where read data is unattainable, the feedback provided should offer clarity on what remedial action is required, if any.

A Wholesaler or third party who wishes to provide a meter reading service to Retailers must ensure the following:

- Employees are adequately trained and equipped with the relevant equipment and knowledge to safely procure meter read data.
- Employees understand when dealing with an NHH customer they must not discuss anything relating to the billing of a customer or any other activity classed as Retailer responsibility unless authorised to do so by the Retailer.
- Read or skip data is passed back to Retailers in a timely manner to allow Retailers to submit read data into CMOS or raise a request to the bilateral hub within the necessary timeframes.
- Where the service provider is responsible for scheduling meter readings, as a minimum this is scheduled to allow Retailers to meet Market Code guidelines for frequency of read data submissions.
 - Meter reading service providers may wish to enhance their service offering to allow increased or decreased meter reading frequency at Retailer request (see Cyclic Meter Read Scheduling).

- In addition to cyclic meter readings it is recommended meter reading service providers offer ad-hoc read mechanisms as a part of their service offering to allow for additional customer requests, transfer read requests etc.
- Employees to leave the meter and meter pit in a safe condition once a meter reading has been taken and provide any updates to meter location etc back through the agreed reporting lines.

4.0 Health and Safety

- Minimum PPE requirements for working in the carriageway should include, but are not limited to, the following: gloves, safety boots, high visibility jackets or long-sleeved vests. (Please refer to the NRSWA Red Book latest edition, link is below under Carriageway & Vehicles)
- Additional PPE may be required to access certain meters (these could be meters that are in a confined space and may also require a gas tester) (e.g. hard hat, goggles, face mask etc.). Please refer to the Confined Regulations - <https://www.hse.gov.uk/confinedspace/legislation.htm>
- Meter reading service providers should ensure all employees are fully aware of safe working procedures, appropriate regulations and the need to carry out risk assessments when undertaking meter reading activity.
- When a health and safety issue is identified by a meter reading service provider, Retailers must be notified as soon as possible in order to allow them to make safe, including through contacting either the NHH customer or Wholesaler through a bilateral request.
- Responsibility to ensure full training is provided and relevant permits are held by all employees working in the field.
- Responsibility to ensure all employees are provided with the necessary equipment to safely obtain meter read data (may differ in different wholesaler areas).
- If a meter reading service provider was to act in a way that was deemed to be unsafe in accordance with the guidance above the Wholesaler could not be held liable for any injury or other incurred as a result of unsafe activity.

- Meter reading service providers must flag all health and safety issues that cannot be readily mitigated with relevant Retailer to allow rectification. If the rectification work is down to the Wholesaler, then the appropriate bilateral request must be raised.

Some examples of safe working practices relating to reading meters are described here. This is not exhaustive, and each meter reading service provider will need to carry out their own detailed risk assessment before carrying out work. Some meters may require additional measures in order to be read, and it is expected that, even if not all meter readers are equipped to read these, that there is additional capability that can be drawn upon by each meter reading service provider in order to read meters in harder to access locations.

- Chambers and Lids
 - Where a chamber lid is to be lifted, the appropriate barriers, signage, lighting and guarding should be erected to protect members of the public and the operative from trip hazards
 - Where chamber lids require two people to safely lift, it is expected that this is facilitated by sending two operatives, or arranging alternative safe lifting practises
 - Within deep chambers, gas monitors and confined space training and equipment may be required
- Carriageway and vehicles
 - Within the carriageway, a National Code of Practise on Short Duration works sets out the vehicle, signing, lightening and guarding requirements for safely reading meters in the carriageway: Please refer to this link for the Red Book (Safety at Street Works and Road Works A Code of Practice) <https://www.gov.uk/government/publications/safety-at-street-works-and-road-works>
 - Similar practices, including agreeing arrangements with customers, may be needed in order to safely read meters in customers' driveways, loading bays or other areas subject to vehicle movements
 - It is expected that out of hours working is available as a risk mitigation tool to enable safe reading of meters where necessary in footways or carriageways

- Temporary conditions
 - If there is a temporary obstruction – e.g. bush that has grown over the pit/chamber, the meter reader should be equipped to remove the obstruction
 - Meter readers should be equipped with basic equipment for removing and disposing of water, slurry or mud from chambers e.g. hand pump, trowel, brush, sponge etc.
 - If Sharps are found, these should only be removed if the meter reader has been trained on how to clear and has the correct equipment to be able to dispose of these, if unable to do so these need to be reported to someone with the correct training or the local council.

5.0 Reads

5.1 Cyclic Meter Read Scheduling

Retailers are required to upload accurate and timely meter readings into CMOS at specified intervals defined by the meter size annual consumption or relation to Trade Effluent consents. Meter reading service providers should be willing to read to the market minimum frequency to allow Retailers to meet their obligations.

- Monthly meter readings are required for any meter which carries
 - 80mm Tariff or above (including all appropriate Sub Meters); or
 - supplies subject to agreements under section 142(2)(b) of the Water Industry Act 1991; or
 - supplies to a Supply Point taking more than 100,000m³ per annum
- Meter reading service providers may wish to offer an enhanced service to allow Retailers to upgrade the meter read frequency for example 'biannual to quarterly' or 'biannual to monthly' to meet their customers' needs.
- Some Retailers may choose to share the responsibility to provide meter readings between one or more meter reading service provider and their customer, therefore may wish to opt for a frequency lower than the market minimum requirements. In cases such as these any failure to meet market requirements should not be deemed the responsibility of the meter reading service provider as may otherwise be in the case in their contract with their respective Retailer

5.2 Ad-hoc Meter Readings

Meter reading service provider should be prepared to offer ad-hoc meter readings for a variety of different reasons.

- Transfer readings – these should be managed in line with the Market Code requirements ((two Business Days before the registration start date and seven business days from the registration start date)) to allow Retailers to meet their obligations
 - Where transfer readings are taken on behalf of a Retailer, timely feedback of read data where attainable is required to allow the Retailer to submit into CMOS within 8 Business Days of the read being taken.
- General ad-hoc – Retailers or their customers may request an off cycle reading for various reasons such as to calculate an allowance, monitor usage more closely or validate reports of damage. Meter reading service providers should consider offering appointments where possible so Retailers can provide their customers with clear expectations.
- Types of reading – transfer readings or general ad-hoc readings can be either remote (where applicable) or visual, to provide a greater level of assurance meter reading service providers should allow Retailers to specify the read type.

5.3 Manual Meter Reading

In many wholesale areas the majority of meters will require manual readings, meter reading service providers have a responsibility to ensure they are correctly equipped to access these meters/chambers safely and effectively.

- Relevant PPE for working in the carriageway (gloves, safety boots, & high visibility jacket or long-sleeved vest as a minimum, additional items may be required in certain circumstances e.g. confined chambers).
- Lid lifting equipment e.g. keys. Lid types may vary in different wholesale areas therefore it's recommended meter reading service providers have access to a variety of different tools. Caution should always be taken to use the correct lifting equipment for each specific lid.
- Light sources (such as a torch).
- Pry bars or other hand tools which may be used to help loosen stuck lids etc.

- A soft brush (for removing loose debris from meter register).
- Equipment for removing and disposing of water, slurry or mud from chambers e.g. hand pump, trowel, bucket & sponge.
- Equipment for removing temporary obstructions where feasible and growth impedes access on public land such as bushes (e.g. loppers, secateurs) & picking tongs along with a safe sharp box for removal of sharps as long as training has been given
- Equipment to record the meter read feedback and potentially see previous reads/meter location information.

5.4 Remote Meter Reading

Where Wholesalers have automated meter reading devices (AMR) fitted to their assets, meter reading service providers may be able to procure read data without needing to enter the chamber or customers premises.

- A remote meter reading is taken without the need to visually check the meter in situ.
- Remote meter reads may be collated via walk-by, drive-by solutions.
- The benefits of a remote reading include:
 - Improved productivity and rate of return for meter reading collection.
 - Reduction in skipped meter reads, where otherwise access or other such issues would remain.
 - Telemetry and alarms for continually registered flow to identify possible leakage.
 - Eliminates errors in keying reading data and avoiding the need to arrange access with customers.
- It may not always be possible to collect a remote meter reading from an asset with AMR functionality, this may be attributed to the reasons below.
 - Distance between handheld device and asset
 - Weather
 - Flooded Chamber
- Where a remote meter reading cannot be obtained meter reading service providers should make every effort to collect a manual meter reading.
- If a Wholesaler would like to remove a remote read device fitted by the Retailer, they must consult the Retailer before removal?

5.5 Skipped Reads

Where a meter reading service provider is unable to obtain meter read data a Retailer will be provided with a skip code.

The skip code should identify the reason a meter reading was unobtainable and should be clear enough for a Retailer to determine what course of action to take to ensure a reading can be taken in future. This could include making further attempts to read the meter, that communication is needed with a customer to arrange access to take action or that a fault needs to be raised with a Wholesaler through a bilateral form.

Meter reading service providers may wish to consider the following:

- A suite of skip codes that clearly identify the reason for no meter reading being provided e.g. customer not providing access to chamber. (Please see RWG Standard Skip Code and Process mosl.co.uk/services/market-improvement/programmes-and-projects/strategic-metering-review)
- A suite of trouble codes that can be used to provide additional information with a skip or meter reading e.g. leak in chamber.
- In addition to a skip and trouble code it's recommended meter reading service providers allow their employees to provide free text feedback where necessary to provide greater insight.
- Photographs may also be provided to Retailers (see below).

5.6 Photographs

Where meter reads are skipped or a problem encountered with reading a meter, this is highlighted by the meter reader with a skip and trouble code along with a text description of the problem. Photographs can be an important piece of evidence to assist the Retailer to determine what steps need to be taken to try to ensure the problem is resolved and not repeated. Photographs allow us a clearer understanding of a specific issue; this is not always the case from a skip code and meter reader description.

Photographs that identify the problem clearly can be included by Retailers with bilateral forms to give a clear picture of a problem that needs to be resolved by the Wholesaler or used as information when a request is made to the customer to carry out some work or take action.

Retailers may request photographs are provided to evidence meter readings e.g. at the time a transfer reading is taken.

Meter reading service providers should ensure employees are equipped with hardware which allows a photograph to be taken.

6.0 Performance

6.1 SLAs

The SLA is a statement of the business objectives of the contract and what is to be achieved through the provision of the services. In basic terms it describes what needs to be completed and how it will be achieved in terms of the level of performance expected.

It should therefore describe in detail the service deliverables and define the performance standards the Retailer expects in the provision of the services by the meter reader.

It should also include an ongoing reporting mechanism for measuring the expected performance standards and what happens when these are not met in full. Any performance standards need to be well thought out to ensure they promote appropriate behaviours that enhance the efficiency and effectiveness of the meter reading operation so that requirements are achieved.

The SLA can also provide a remedial mechanism and compensation regime where performance standards are not achieved, whilst incentivising the meter reader to maintain a high level of performance. It should also provide a mechanism for review and change to the service levels over the course of the contract. Ultimately it will give the Retailer the right to terminate the contract where performance

standards fall consistently below an acceptable level.

The basic requirement of any meter reading contract is to provide timely and accurate meter reads to a Retailer allowing them to achieve the requirements set out in the Market Codes and to meet their obligations per market guidance. Compensation should be considered if the service does not deliver this.

The Market Code requirements for biannual cyclic reads have an interval between 100 and 200 business days and requires a minimum of two reads in a twelve-month period. To achieve this, its recommended meter readings service providers work to a shorter window for the meter reader to give time for submission to the Retailer, review of the read, any action required and ultimately submission of the read into CMOS. A window of 100 to 130 business days should help achieve this in most cases.

For cyclical monthly reads the interval is between 15 and 25 business days with 10 reads required in 12 months. A window of 15 to 20 days is recommended for the meter reader to provide a reading.

Reporting of performance provides the data and information used by both parties to actively manage the performance of meter reading services. Reporting for cyclic read performance should be provided to the contracted Retailer every quarter unless agreed otherwise e.g. some Retailers may require more frequent visibility of performance.

It is recommended reports should track the number of reads required/planned, delivered, skipped, skip reasons, reads late to market, reasons for late submission and be split between monthly and biannual reads. Where a meter reading service provider offers ad-hoc meter readings as a part of their service offering reports should include adherence to any agreed SLAs.

Meter reading service providers should agree reasonable targets with Retailers for the percentage of reads achieved and meters skipped. Failure to achieve these levels in any month may trigger an improvement plan for the meter reading service provider, that clearly sets out the remedial actions to be taken by both parties. Targets should be reviewed as process improvements and data quality are improved.

6.2 Data Formats

There are a variety of ways in which a meter reading service provider can pass data to a Retailer, it's recommended data files be sent via secure means such as SFTP or similar.

Regardless of how data is shared with Retailers, meter reading service providers should ensure data includes the below as a minimum:

- SPID/DPID
- Premises address
- Meter Serial Number
- Reading or skip code
- Date & time of reading/skip code
- Type of reading (visual or remote)
- Any changes to meter location/XY co-ordinates

Meter reading service providers and Retailers may wish to agree additional information or different formats to suit their own needs.