

Leakage and metering information workshop

Cost assessment working group
23 June 2021

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Background

- Leakage and consumption levels remain a key area of concern for all stakeholders.
- Understanding efficient costs for leakage and metering activities and the benefits they deliver is an essential part of developing best value plans to ensure future resilience.
- It will be necessary to continuously track changes in benefits and efficient costs over time as companies deliver strategies to meet long-term targets.
- Costs and benefits will be impacted by new technologies and the factors such as prevalence of pressure management and smart meter penetration.
- The CMA identified a need to gather more detailed data on the efficient costs of leakage prevention, detection, and reduction.
- We concluded that we need consistent, more granular information than we have been collecting to date in order to understand the efficient costs of maintaining/reducing leakage levels and metering in company networks.
- We have proposed additional leakage and metering information collection in the current [consultation on regulatory reporting for 2021-22](#) with consultation responses due by 8 July 2021.



Annual performance reporting 2015–20

- For the 2015–20 period, the table below reviews for both metering and leakage activities if separate specific information was reported in terms of scale (eg number of new meters installed), cost (eg cost of maintaining leakage levels) or benefits (eg demand benefits from replacing basic meters with smart meters).

Activity	Scale	Costs	Benefits
Maintaining leakage	No	No (costs in aggregated base expenditure lines)	No ¹
Reducing leakage	No	No (costs in aggregated base or enhancement expenditure lines)	Yes (total benefits from annual performance reporting ¹)
New meter installation	Yes ²	Yes ²	No (benefits potentially included in aggregated supply-demand lines)
Replacement of meters	Yes ²	No (costs in aggregated base expenditure lines)	No (benefits potentially included in aggregated supply-demand lines)

- For maintaining leakage the outcome in terms of leakage level achieved (including reduction activity) is available at a company level but there is no view of the leakage level for a ‘do nothing’ scenario. For leakage reduction the benefits achieved at company level could be identified but no breakdown into sub-activities such as active leakage control, pressure management or mains replacement. Sector moved towards consistent reporting of benefits at company level during 2015–20.
- New meter installations and replacement meter installations not reported in terms of meter type, e.g. new basic or smart meters and replacement with basic or smart meter

Use of leakage and metering information at PR19

- For new meter installations we used a combination of historical and forecast costs and levels for the 2017-18 to 2024-25 period to create a benchmarking model for the cost of new meter installations.
- We considered replacement of basic meters to be included in the base cost allowance due to historical costs for this activity being captured within aggregated base expenditure lines.
- For replacement of basic meters with smart meters we queried companies for further information and assessed costs through an engineering deep dive approach. We were only able to make limited comparisons between companies.
- For leakage we had to review company plan narratives to identify a breakdown of forecast costs and benefits associated with leakage reduction which were included within the supply-demand balance enhancement lines.
- We had no historical information identifying separate specific leakage costs and associated benefits for reducing or maintaining leakage.
- For the majority of companies we considered that the base cost allowance provided costs for maintaining and reducing leakage.
- Where we and the CMA made enhancement cost allowances for leakage reduction or additional costs to maintain leakage, company forecasts were used with limited benchmarking comparisons possible.

Current regulatory reporting requirements

- Post PR19 we made the following amendments to the annual reporting requirements for 2020-21:
 - Leakage costs to be reported in terms of maintaining and reducing; and
 - Metering reporting to distinguish between basic and smart meters, costs and benefits of metering activities including replacement to be included.

Activity	Scale	Costs	Benefits
Maintaining leakage	No	Yes	No ¹
Reducing leakage	No	Yes	Yes (total benefits from annual performance reporting ¹)
New meter installation	Yes ²	Yes ²	Yes ²
Replacement of meters	Yes ²	Yes ²	Yes ²

1. For maintaining leakage the outcome in terms of leakage level achieved (including reduction activity) is available at a company level but there is no view the avoided leakage ie. leakage level in a 'do nothing' scenario. For leakage reduction the benefits achieved at company level could be identified but no breakdown into sub-activities such as active leakage control, pressure management or mains replacement. Sector consistent reporting of benefits in data set from 2017-18 onwards.
2. Meter reporting divided between basic and smart meters but no further sub-division into smart meter categories

Leakage information reporting proposals (May 2021 consultation)

- We are proposing that companies report cost, scale and benefits (leakage saved) of each activity they undertake to manage leakage.
- We propose activities should be grouped in common areas such as detection, repair and prevention – to facilitate high level comparisons of strategies.
- We expect companies to demonstrate how this activity breakdown reconciles with both:
 - the total costs reported in table 6D, line 16 for ‘Maintaining leakage’ and ‘Reducing leakage’; and
 - the leakage performance reported in table 3A, line 3, performance level for previous and current reporting years.
- We have proposed in table 6E a potential format for the capture of outturn cost and leakage saved data by activity on an annual basis.
- This is a bottom-up activity led approach, where any assumptions made to allocate benefits and costs would need to be clearly identified.
- In our [13 May consultation](#) **‘We welcome proposals from stakeholders on the most effective approach for collecting consistent and comparable leakage information’**.



Metering information reporting proposals (May 2021 consultation)

- We are proposing that the reporting of scale of metering activity, benefits and costs is further subdivided in table 6D in the following categories:
 - Basic meter;
 - AMR meter (remote read only);
 - AMR meter (AMI upgrade capable); and
 - AMI meter.



What do we need to understand

This workshop is an opportunity to discuss what information should be reported to best understand the efficient costs and benefits of leakage and metering activities. We consider that further information is necessary to address a number of questions, such as:

- Can costs and benefits of maintaining and reducing leakage be considered separately?
- What factors are influencing costs of leakage and metering across the sector?
- How does individual companies historical investment and approach to addressing leakage and metering impact the future incremental costs?
- What is required in order to achieve meaningful benchmarking of costs and benefits between companies?
- Should we consider a top-down or bottom-up approach to assessing leakage and metering costs?
- What historical data is available that can support understanding cost and benefits of these activities alongside any new information reporting?



Discussion questions

We have four questions to discuss:

Main group

1. What factors are influencing the costs of delivering leakage and metering activities and the level of demand reduction benefits they deliver?

Breakout groups

2. What information on leakage activities is required to understand costs and benefits and to be able to meaningfully benchmark company approaches? What are the issues involved?
3. What information on metering activities is required to understand costs and benefits and to be able to meaningfully benchmark company approaches? What are the issues involved?
4. What considerations will drive your proposed levels of leakage reduction and size of metering programme in WRMP24 and PR24 business plans? What options are there for developing the collection of additional metering and leakage information collaboratively between companies, regulators and other stakeholders?



What's next?

We request **formal feedback** on proposals for additional leakage and metering data collection through response to the [May 2021 regulatory reporting consultation](#), **closing date of 08 July**.

We have made proposals in our consultation in the form of tables 6D and 6E but as referenced previously we welcome proposals from stakeholders on the most effective approach for collecting consistent and comparable leakage and metering information building upon today's discussions.

Following review of the consultation responses we will establish the next steps in the reporting of additional leakage and metering information.

Outside of the formal consultation response you can contact us by emailing us at CostAssessment@ofwat.gov.uk.

