

May 2022

Network reinforcement data request – supporting guidance

About this document

This document accompanies an information request that will collect additional network reinforcement data from incumbent water and wastewater companies, for the 2017-18 to 2021-22 period.

We highlighted the data request in [IN 22/01 Expectations for monopoly company annual performance reporting 2021-22](#) published in March 2022, and in [IN 22/02 Cost assessment data requests](#) published in April 2022.

The data request reflects a direct ask from water companies to consider additional data collection in our approach to growth expenditure and cost drivers, to inform cost assessment of this expenditure at PR24. The data request was discussed extensively with companies at the Cost Assessment Working Group (CAWG) on 7 April 2022, and through additional feedback collected from companies following the CAWG.

This request complements the request for data on growth expenditure published in April 2022 as part of the [IN 22/02 Cost assessment data requests](#).

This document provides guidance for companies on how to complete the information request.

The information provided will help to understand efficient costs of network reinforcement activities, to support our assessment of this expenditure at PR24. We are not intending to use the information for the purpose of setting reconciliation adjustments, due to endogeneity issues.

Deadline for completing the network reinforcement data request

Completed network reinforcement information requests and accompanying commentary should be submitted by **Monday 29 August 2022**.

We ask companies to provide accompanying commentary alongside the completed data request, to set out:

- the approach/methodology taken to complete each table and any assumptions that have been applied; and
- an indication of the level of confidence behind the data provided in each table (eg RAG ratings).

Please provide accurate and complete data, ensuring that you have undertaken appropriate assurance of the data so that it can be used alongside other data in the APR. Please state in your response the assurance process you have followed for the submitted data.

Please email the completed data request and any accompanying commentary to CostAssessment@ofwat.gov.uk.

If you have any issues with completing the data request by this date or wish to discuss any aspect of the data request, please contact us using the same email address.

Contents

1. Background	4
2. Guidance for completing the data request.....	6
Annex 1: List of growth data items considered for the data request	8

1. Background

This document accompanies an information request that will collect additional network reinforcement data from incumbent water and wastewater companies, for the 2017-18 to 2021-22 period.

At PR19, we included costs driven by population growth (ie growth expenditure), including expenditure for network reinforcement, in our wholesale base cost models. We used this approach because growth activities and base costs share similar characteristics, notably companies experience these costs on a year-on-year basis. The integrated approach also mitigated for known reporting differences between operating, capital maintenance and growth-related expenditure, which may have made standalone growth and base models misleading. In its PR19 redetermination, the Competition and Markets Authority (CMA) agreed with our assessment and assessed growth expenditure as part of our base cost models.¹

Some companies have suggested we should explore the assessment of growth expenditure separately from base costs at PR24. We are open to considering this.

To this extent, in January 2022 we commissioned the consultancy Arup to analyse whether growth-related expenditure, including network reinforcement, could be robustly assessed separately from base costs at PR24, based on available data.

Arup found that separate econometric models based on historical data for network reinforcement were insufficiently robust. This was due to:

- reporting inconsistencies and differences in allocation practices between base and reinforcement expenditure across companies;
- synergies with asset replacement costs (which are part of base costs);
- the localised nature of the drivers of network reinforcement; and
- differences in available headroom across companies.

One of Arup's recommendations was to continue to explore comparative benchmarking of network reinforcement expenditure using information that better reflects localised features of growth and mitigates changes in reporting / allocation practices.

The data request reflects a direct ask from water companies to consider additional data collection on growth expenditure and cost drivers, to inform cost assessment of this area at PR24. We extensively discussed the type of additional data that we could collect to help inform our assessment of growth expenditure at the Cost Assessment Working Group (CAWG)

¹ Competition and Markets Authority, ['Ofwat Price Determinations'](#), March 2021, pp. 298-299.

on 7 April 2022, and through additional feedback collected from companies following the CAWG.

Following our assessment of feedback received, we:

- issued a data request in April 2022,² to collect historical outturn developer services expenditure, to enable growth costs to be robustly separated from base costs at PR24; and
- are issuing this additional data request, to collect information on network reinforcement activities, such as the laying of new mains in consequence of new developments.

This data request complements the April 2022 data request, to inform and support the development of growth cost assessment at PR24.

Annex 1 sets out the full list of data items we considered for collection in growth, the items we selected and a summary of the rationale for selection. As part of this process, we considered whether data items have good company support and assessed them across a set of criteria aligned to our cost assessment principles:

- exogeneity;
- clear engineering and economic rationale;
- materiality;
- data availability; and
- data quality.

We consider that the items selected as part of this data request will support the assessment of efficient costs of network reinforcement activities, alongside information collected in the April 2022 data request. This will support the assessment of companies' business plans at PR24. The data may also help to inform differences in levels of network reinforcement expenditure across companies.

We do not intend to use this data for the purpose of setting a reconciliation mechanism for growth expenditure at PR24, due to its highly endogenous nature (ie the data is under companies' management control). The use of this data in a reconciliation mechanism may distort companies' efficient investment decisions, creating a perverse incentive to invest in and charge developers for inefficient work or work that is not needed.

² Ofwat, [IN 22/02 Cost assessment data requests](#), April 2022.

2. Guidance for completing the data request

The information request will collect data on the following activities:

- length of new and upsized potable mains;
- length of new and upsized sewers;
- number of new and upsized pumping stations; and
- additional pumping capacity installed.

We ask for the data to be split by driver of the investment:

- network reinforcement;
- requisition mains / sewers;
- resilience;
- maintenance; and
- water quality.

Additional guidance on each investment area is set out in the accompanying data template. For the avoidance of the doubt, **for each data line the company should report the total value of activities completed in the year, not only where projects have an overlap with network reinforcement.** Eg all new potable mains laid in the year should be included and reported against the relevant driver of the investment.

We recognise that requesting data to be split by investment driver may be time consuming to complete for some companies. But this information is important to help to inform differences in allocation practices across companies between growth expenditure and other areas of expenditure.

Where an activity has more than one investment driver (eg reinforcement, resilience, maintenance), it should be allocated according to two different allocation methods:

- in worksheet 1), companies should allocate the asset proportionally across investment areas following the same method used to allocate the relevant expenditure. For example, assuming the relevant expenditure was allocated 60:40 between network reinforcement and maintenance, the activity should also be allocated 60:40 between network reinforcement and maintenance; and
- in worksheet 2), companies should allocate the asset in full to each of the areas that drive the expenditure. For example, assuming the relevant expenditure was allocated 60:40 between network reinforcement and maintenance, the activity should be allocated in full to both network reinforcement and maintenance.

The comparison of information between worksheet 1 and worksheet 2 will help to inform differences in allocation practices across companies between growth and other areas of expenditure. In particular, it will help to inform what proportion of activities was allocated to network reinforcement, out of all activities that had some overlap with network reinforcement in the year.

We provide an example of the two allocation methods as part of the data request.

Commentary requested to support the data tables

Accompanying commentary is essential for us to understand the data provided.

We welcome any commentary companies consider may be needed to support the information provided in data tables.

In particular, we request companies to provide accompanying commentary to set out:

- the approach/methodology taken to complete each table and any assumptions that have been applied; and
- an indication of the level of confidence behind the data provided in each table (eg RAG ratings).

Additionally, we request companies to provide commentary to explain discrepancies between the data provided in the information request and historical outturn data provided as part of Annual Performance Reports (APRs). The data definitions included in the information request indicate where data is expected to match to outturn APR data.

Annex 1: List of growth data items considered for the data request

No	Item	Collected	Rationale
Network reinforcement			
1	Length of water main laid	Yes	Good company support; directly relates to network reinforcement activities; however highly endogenous and therefore we do not intend to use this data to set reconciliation mechanisms, to avoid perverse incentives.
2	Length of sewer main laid	Yes	Good company support; directly relates to network reinforcement activities; however highly endogenous and therefore we do not intend to use this data to set reconciliation mechanisms, to avoid perverse incentives.
3	Pumping stations built or upgraded	Yes	Good company support; directly relates to network reinforcement activities; however highly endogenous and therefore we do not intend to use this data to set reconciliation mechanisms, to avoid perverse incentives.
4	Total capacity of pumping stations built or upgraded	Yes	Good company support; directly relates to network reinforcement activities; however highly endogenous and therefore we do not intend to use this data to set reconciliation mechanisms, to avoid perverse incentives.
5	More granular reporting of expenditure	No	Limited company support; data quality and availability concerns.
6	Distance gained in network reinforcement	No	Limited company support; consider items 1 and 2 included for collection offer a more effective alternative to this item.
7	Elevation gained in network reinforcement	No	Limited company support; data quality and availability concerns; consider items 3 and 4 included for collection offer a more effective alternative to this item.
8 – 12	Headroom: <ul style="list-style-type: none"> • Property capacity created by investment in pumping stations and pipes; • Available capacity in treated network; • Available headroom under normal conditions • Available headroom under peak conditions • Additional network property capacity provided 	No	Limited company support; data quality and availability concerns.
Growth at sewage treatment works			
13	Number or scale of sewage treatment works (STWs) where permit compliance is 'beyond available technology'	No	Limited company support; does not appear to be a material driver of expenditure for most companies on a historical basis.
14	Additional treatment capacity (PE) provided through expansion of STWs	No	Limited company support; potentially covered by existing information collected in APR such as 7D.21 'PE treatment capacity enhancement'.
15	Total growth-related expenditure by site	No	Limited company support; data quality and availability concerns.

No	Item	Collected	Rationale
16	Total expenditure by site (not just growth), split by driver	No	Limited company support; data quality and availability concerns.
Site-specific developer services data			
17	Site-specific developer services expenditure and cost driver data (APR tables 4N, 4O and 4Q)	Yes (part of April 2022 data request, except 4Q)	Good company support; clear use. Data on table 4Q has not been collected yet and may be part of a future data request.
18	<ul style="list-style-type: none"> • Number of single property developments (eg infill) • Breakdown of new properties by development size • Household versus non-household connections / properties for SLP connections 	No	Alongside table 4Q, data has not been collected yet and may be part of a future data request.

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