

December 2019

PR19 final determinations

**Our methodology for the classification
of bioresources costs and revenues**

PR19 final determinations: Our methodology for the classification of bioresources costs and revenues

1. Introduction

This appendix sets out the methodology we use to classify companies' bioresources costs and revenues as either fixed or variable. The classification of revenues is important as it affects how Water and Sewerage Companies' (WaSCs') allowed revenue varies with their sludge production.

We summarise our implementation of this methodology for each company in their final determination, which can be found on the [final determination webpage](#). We are also publishing the detailed calculations in the spreadsheets 'Bioresources revenue to remunerate fixed costs'.

Our decisions take into account the representations made on all our draft determinations, responses from companies to our queries and additional information provided following further engagement with companies and other stakeholders as part of the final determination process. In the interest of brevity, where no representations have been made on our draft determination proposals, we do not repeat our reasoning in all cases. Please see the [PR19 draft determinations](#) for further details.

Our methodology takes account of the responses to:

- the initial assessment of business plans;
- companies' revised business plans submitted by 1 April 2019, which were reflected in the draft determinations published in the July 2019 draft determinations for slow track and significant scrutiny companies; and
- representations made in respect of these determinations.

2. Background

In our PR19 [final methodology](#), we set out how we would establish a separate price control for bioresources. A key objective in setting our price control is to ensure that customers are sufficiently protected for the services they receive while encouraging the development of the bioresources market. Treatment and disposal of sewage sludge is an area where we expect significant efficiency and environmental benefits to be delivered from trading. We adopt an average revenue price control to align the form of control with the way bioresources and organic waste processing services are contracted. Our approach balances the development of new market opportunities with customer protections by aligning incremental costs and revenues.

We recognise that a proportion of bioresources revenues are fixed, so it would be inappropriate to set an average revenue control which did not account for this. Therefore, the form of the control we set is a 'modified average revenue' control, which differs from our approach to other wholesale price controls.

The revenue control should ensure that where sludge production varies the incremental change in revenues that arises is aligned to incremental costs. Getting the alignment between incremental revenues and incremental costs right is key to ensuring that the company is correctly remunerated, if there is a difference between the sludge companies actually produce and what they had forecast and to better align the form of control with the development of bioresources market.

[Appendix 6](#) of our PR19 final methodology published in December 2017 sets out in detail how a modified average revenue control will operate to set companies' bioresources revenue allowance.

In order to implement the modified average revenue control, we asked companies, in their business plans in September 2018, to classify their bioresources revenues as either fixed or variable. We also expected companies to justify their classification.

3. What we said in our draft determination

Our initial assessment of business plans revealed that companies had taken inconsistent, and sometimes incorrect, approaches to classifying their bioresources revenues. We found that the proportion of revenue that companies proposed to remunerate fixed costs varied between 0% and 97%.

In order to better understand companies' approaches, we issued a query to all WaSCs in October 2018 asking them to provide more evidence and justification for their classification of cost. As part of their response, some companies made large changes to their cost classification. However, company approaches remained widely inconsistent.

Although there is a separate incentive to encourage companies to forecast their sludge production accurately, we consider that this may not be sufficient to offset the customer detriment from the significant misalignment of costs and revenues or distortions to trade. In our initial assessment of plans we concluded that there is a significant risk that we would not achieve the objectives of a separate bioresources control without further intervention. Therefore, to protect the interest of customers we established a common methodology for classifying WaSC's revenues as either fixed or variable and signalled that we would set out our view in companies' draft determinations.

In preparation for submission in April 2019, some non-fast track companies queried us to get more information on the requirements. We issued an industry query response in March 2019 setting out further details about our forthcoming approach.

We applied the common methodology to the fast track companies' [draft determinations](#). The fixed / variable split in our methodology took account of our standard building block approach to calculating price controls and the evidence in response to the October 2018 query, when we asked companies to provide more information on the split between fixed and variable revenue. In particular, we asked for a description and a high level breakdown of bioresource costs, split by fixed costs and variable costs.

In their April 2019 submissions, some companies provided further detail about the split between their fixed and variable costs. We reviewed this new evidence. Following the publication of the draft determination for fast track companies, we did not receive representations in relation to our proposed methodology for the

classification of bioresources costs. Therefore, we maintained the same methodology in the draft determinations for slow track and significant scrutiny companies.

4. Stakeholders' representations

Companies' views

In response to our July 2019 draft determinations for slow track and significant scrutiny companies, we received one representation, which was from Yorkshire Water. The company argues that our proposed methodology is inappropriate for its own circumstances. It argues that contractual arrangements, insourcing or outsourcing decisions and type of assets could differ materially from other companies resulting in differing fixed and variable cost bases.

The company provides a summary of its bioresources costs categories and a high level evaluation of the proportion of costs that are likely to be fixed or variable with volumes. The company's analysis does not include information on the time period over which costs are considered and that the volume increment is consistent with the approach set out in our PR19 methodology. The high level narrative set out that staff costs are proposed to be 100% fixed based on an assessment of short run marginal costs. We subsequently sought further clarification from the company. Following on from that, the company provides revised analysis which considers longer-term variances in the volume of sludge over a five-year period. The revised analysis results in some changes to the fixed / variable split.

Our view

We have considered the approach Yorkshire Water has outlined in its representation to the July 2019 draft determinations for slow track and significant scrutiny companies and its further representations in response to our queries.

In relation to the substance of its further representations, we have a number of concerns. Appendix 6 of our PR19 final methodology sets out that companies should consider a 10% sludge volume increment when determining the split between fixed and variable costs. Yorkshire Water's initial assessment of costs does not appear consistent with those volume changes. In addition, the company bases its analysis on a short time horizon, rather than the whole of the control period.

We queried the analysis and the company submitted a revised approach, more consistent with the framework of our PR19 methodology. The company provides qualitative analysis of costs for its sludge transport, treatment and disposal activities, in a manner that brings the company's view closer to our view of incremental costs.

Despite this, we cannot fully reconcile the company's approach and analysis. We find Yorkshire Water to be a significant outlier in its approach to some elements of costs when compared with other companies. It is our view that these differences cannot be explained by differences in business structure or operating model. Therefore, we do not consider that the arguments put forward are sufficiently compelling to change our approach.

5. Our final determination decision

As noted above, we have concerns about the different approaches put forward by companies which create the potential for unequal treatment of some companies and the risk of gaming the control. This could be detrimental to customers. We are therefore implementing a common methodology for the classification of bioresources costs to address these concerns.

We have considered the representation from Yorkshire Water. Our consideration of the representation does not lead us to change our view that a common methodology for the classification of bioresources costs is necessary and appropriate. We consider we should implement a consistent approach to avoid relying on companies' methodologies for this classification which were widely inconsistent and sometimes incorrect. The main benefits of this approach are to ensure consistency of treatment across all companies, to achieve the objectives of a separate bioresources control and to protect customers. Therefore, we are retaining the common methodology as set out in the draft determination for the final determination. The common methodology is set out below.

Our PR19 final methodology set out the 'building blocks' of our revenue control. These building blocks can be categorised as:

- costs related to pre- and post-2020 Regulated Capital Value (RCV), i.e. RCV run-off and return on RCV;
- Pay-as-you-go (PAYG) expenditure; and
- other costs.

We discuss below how we have classified these categories of costs.

Funding of the RCV The bioresources revenue control remunerates the RCV run-off and return on investment. The revenues required to fund these costs do not vary with volumes. However, some companies discounted this key element of fixed revenues in deriving their proposed allocation between fixed and variable revenues. We are classifying the revenues associated with the RCV run-off and return as fixed.

PAYG and other costs We recognise that the appropriate proportion of PAYG and other costs classed as fixed costs will differ across companies depending on factors such as:

- the technological processes involved to process sludge;
- the efficiency of operations; and
- the nature of contractual relationships with third parties.

However, differences between companies are not only due to differences in the companies' characteristics, but due to how they choose to classify their costs.

Table 1 shows how we are intervening to determine the classification of various types of cost.

Table 1: Proportion of PAYG and other costs classed as fixed

Cost line	Fixed proportion
Local authority and Cumulo rates for both treatment and disposal (items 3 and 11 in Bio3)	100%
Other direct costs of treatment (item 4 in Bio3)	25%
Other direct costs of disposal (item 12 in Bio3)	0%
Other indirect costs of treatment (item 5 in Bio3)	35%
Other indirect costs of disposal (item 13 in Bio3)	35%
Pension deficit repair contributions (item 2 in Bio4)	100%
Current tax ~ wholesale wastewater bioresources (item 9 in Bio4)	0%

Our reasoning is as follows:

- Local authority rates are taxes set periodically, based on the valuation of a company's assets. These do not change with incremental changes in treated volumes of sludge and are therefore considered fully fixed.
- Pension deficit repair contributions also do not change with treated volumes of sludge and are considered fully fixed.
- Tax on operations is linked directly to profits, which in turn vary with volumes. We are therefore treating tax receipts as incremental.
- We have set the direct and indirect cost of treatment and disposal based on our analysis of the evidence from companies' submissions to us.

Transport costs are considered fully variable. In some cases, we apply these proportions to the efficient level of costs that we have determined, rather than the costs companies have proposed.

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December 2019

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