Yorkshire Water

Assessing the balance of Developer Charges and setting Infrastructure Charges

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1. Introduction to this document

The purpose of this document is to:

- assist stakeholders in the understanding of our charges related to new connection services, including the review and assessment we undertook in 2017-18 in preparation for the publication of our New Connection charges, and
- explain how we set our infrastructure charges in 2018-19, and maintained the balance of charges prior to the implementation of the new charging rules.

It is not necessary to read this document to determine the relevant charges we will apply to connect new premises to the water and sewerage network in the Yorkshire Water region. This document provides background to the changes Ofwat made to the rules around new connection and infrastructure charges and how we approached these changes to simplify our historic charging framework and to make charges more cost reflective.

Infrastructure charges are recovered when a new connection is provided to a premise which has not been served before. Infrastructure charges are now applied to recover the cost of reinforcing existing water and sewer networks to serve new developments. Infrastructure charges are additional to the costs of physical on-site and off-site water and sewerage connection work and allow the recovery of network reinforcement costs that will reasonably be incurred due to the provision or adoption of new water mains or public sewers and the connection of new premises. They are applied to new connections regardless of the method by which the new connection is procured or made.

Charges for new connection services are bound by the New Connection Rules as set out under sections 51CD, 105ZF and 144ZA of the Water Industry Act 1991. Charges for network reinforcement are bound by a section of the Charges Scheme rules as set out under sections 143(6A) and 143B of the Water Industry Act 1991. The New Connection Rules and the new charges scheme rules on infrastructure charges were originally consulted on in July 2016 and published by Ofwat in December 2016. The latest version of the rules was published in December 2018.

There have been concerns that the previous new connection charging arrangements were too complex, unpredictable and potentially unfair. The new charging rules are intended to set up a clear and customercentric charging framework that make it simpler for buyers and suppliers to make choices of how best to deliver wholesale services, and to enable and encourage efficiency.

The first charging year under the New Connection Rules and infrastructure charge rules was 2018-19 and this allowed us to make significant updates to our charging arrangements for developers. The 2018-19 water and sewerage new connection and infrastructure charges were developed following an investigation into the balance of previous income and expenditure between developers and the broad customer base.

Our investigations resulted in more cost reflective charges that align to the historic average cost of network reinforcement and network extension driven from new development. The new charges are simpler to apply and no longer include the application of 'income offsetting or asset payments'.

This summary document is intended to be a description of the work we completed to develop our 2018-19 developer related charges in accordance with Ofwat's new charging rules and to confirm that the charges for new connection services are fair for all our customers. The narrative also responds to Ofwat's Company Monitoring Framework (CMF) review in January 2019 to answer how:

- we have maintained the broad balance of charges that existed before the implementation of the new charging rules,
- we have maintained the balance in these circumstances without offering income offsetting or asset payments, and
- our charges are consistent with the rules and will be improved

2. The charging rules

In this section we cover how:

- the New Connection Charging Rules published by Ofwat in 2018 required statutory undertakers to publish a cost reflective developer charging framework,
- the framework is expected to maintain the financial balance in contributions through its charges between developers and the broad customer base, and
- the charging rules maintain the company specific cross-subsidy regime that existed prior to 1 April 2018.

In 2018 we were required to publish a new connection charging framework following the rules published in December 2018¹.

The rules are clear that when setting charges 'undertakers should take reasonable steps to ensure that the present balance of charges between Developers and other customers prior to implementation of these general rules is broadly maintained.' This balance includes contributions from the pre-April 2018 water and sewerage infrastructure charges.

There is a requirement for companies in their developer charges annual assurance statement, to satisfy the requirement that the balance of charges between developers and other customers continues to be maintained. This document explains the principles we have used to meet this rule for our charges applied from 2018-19.

We completed an investigation into the historic balance of charges between developer services customers and the broad customer base. We subsequently remodelled developer related charges (covering infrastructure charges, income offsetting and asset payments) ahead of 2018-19 to ensure they were simpler, more predictable and fair. The resultant infrastructure charges were set at £250 across all water and sewerage services, applied uniformly across the region for all 'developer' customers.

Yorkshire Water infrastructure charges have been held at the same value for the 2019-20 charging year but will be subject to change in accordance with the level of future network reinforcement expenditure.

¹ Charging Rules for New Connection Services (English Undertakers) issued by the Water Services Regulation Authority under sections 51CD, 105ZF and 144ZA of the Water Industry Act 1991, 20 December 2018.

3. History of infrastructure charges

In this section we cover how:

- the infrastructure charge limit was fixed by Ofwat in 1994 to ensure a broad balance between future developer-sourced incomes and developer-driven network expenditures,
- the infrastructure charge limit was an income-expenditure balance mechanism and was capped in 1995 at £200 per service and then inflated by RPI each year thereafter.

The original infrastructure charge limit² was fixed by Ofwat in 1994 to ensure a broad balance between future developer-sourced incomes and future developer-driven expenditures across the industry. It was designed to be the key mechanism to maintain the balance of developer income and expenditure.

Ofwat determined that "such charges should be restricted to the costs of developing the local network and that they should be limited to £200 for each service in 1995-96" and would "only rise in line with inflation".

Ofwat stated "if customers in new properties are not to cross subsidise, or be cross subsidised by, existing customers, infrastructure charges should be set at a level that achieves a broad balance between the local system costs associated with connecting new properties and contributions from developers plus the appropriate element of annual charges."

In 1995, the infrastructure charge limit was capped at £200 per service and was inflated by RPI each year thereafter. By 2017-18 the combined infrastructure charges for water and sewerage services in the Yorkshire Water region had risen to £732 per property connected under this approach.

The work we completed in setting the charges for 2018-19 has resulted in a significant reduction in the value of our infrastructure charges.

² Future Charges for Water and Sewerage Services, The Outcome of the Periodic Review, July 1994.

4. Testing our balance of charges

In this section we cover how:

- we confirmed the broad balance of our charges that existed before the implementation of the new charging rules,
- we understood our balance of charges by comparing developer-sourced incomes with developer-driven expenditures from 2000-01 to 2016-17,
- our review found that developer-sourced income had almost exactly matched developer-driven expenditure and confirmed that our charges were in broad balance,
- we were able to remove income offsets and asset payments from our new connection charges for 2018-19, and
- reduce our combined infrastructure charges for 2018-19 by almost £500 per property,
 i.e. from £732 to £250 per property.

In setting our charges in 2018-19 we recognise that in addition to making the charges simpler, we need to be open and transparent about our methods of calculation. The following section describes how we tested our balance of charges before the implementation of the new charging rules, to develop our new charges from 1 April 2018.

To understand our balance of charges before April 2018, we examined our developer-sourced incomes with our developer-driven expenditures from 2000-01 to 2016-17 for combined water and sewerage services.

Over the period examined our overall developer-sourced income (£189m) almost exactly matched developer-driven expenditure (£190m) and confirmed that our charges were in 'broad balance'. This enabled us to introduce a simpler and fairer charging framework with fully cost-reflective developer charges where the balance can be maintained. More detail of our testing is set out in **Appendix 1**.

The table below provides a breakdown of the balance of expenditure and income across the time period and between services.

	2000-01 to 2009-10	2010-11 to 2016-17	2000-01 to 2016-17
Water	11.5%	0.3%	6.8%
Sewerage	(6.1%)	(7.7%)	(6.7%)
Combined	1.4%	(3.8%)	(0.6%)

Figure 4.1. The balance of expenditure and income between 2000 and 2017

Our resulting long-term income to expenditure balance at a combined service basis is significantly within the findings of the formal regulatory impact assessment across the sector. This is explained by an investigation that was completed by DEFRA³ in 2012, where a 13% income deficit was identified and subsequently determined to be in 'broad balance'. This is illustrated in **Appendix 2**.

³ IA: Defra 1383 "Charging for water and sewerage infrastructure within new development, 18/06/2012.

Our 'in balance' position has enabled us to realign our charges, and in 2018-19 we chose to move away from the legacy infrastructure charge to a lower charge that is reflective of the actual historic average cost of network reinforcement we have experienced. Our new infrastructure charges are set at a combined £250 per property (£50 for foul sewage, £125 for surface water drainage and £75 for water). This is significantly lower that the preceeding charge of £732.

In addition, our balanced position has allowed us to remove income offsetting and asset payments from our charging arrangements

In summary, our work concluded that neither developers nor the broad customer base had been cross subsidising the other over the long term and that the potential existed to remove income offsetting and asset payments and to simplify the new infrastructure charging arrangements.

5. Income offsetting and asset payments

In this section we cover how:

 we have been able to remove income offsets and asset payments from our charges from 2018/19.

Our analysis demonstrated the importance of legacy infrastructure charges in the context of our overall 'in balance' position. The receipts from infrastructure charges have accounted for over 75% of our developer-sourced income over the assessed period.

Our pre-April 2018 requisition charges included an income offsetting and asset payments regime.

The total charges applicable to servicing a new site are constructed to recover the costs of extending the network and the costs of reinforcing the network. These costs were recovered through a variable requisition charge component (including the embedded income offsetting or asset payments), and the relatively fixed infrastructure charge component (set at a national level inflated annually).

The previous net requisition charge approach (including income offsetting or asset payments) combined with the legacy infrastructure charge has been effectively replaced by our cost reflective requisition charges and Yorkshire Water specific infrastructure charges (which reflect company network reinforcement costs distributed appropriately across the three services).

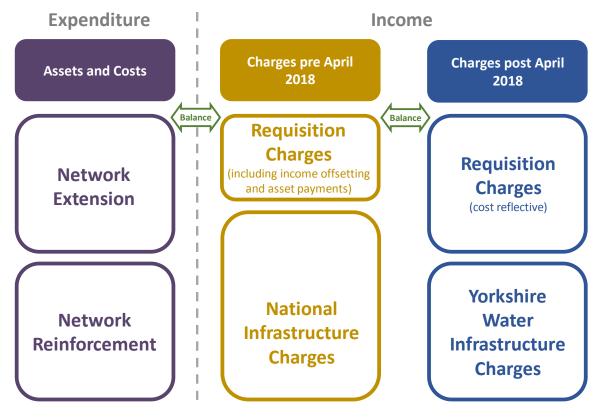


Figure 5.1. Removing the need for income offsetting and asset payments

The result of this change is that there is no requirement to continue to maintain the old income offsetting and asset payment regime that previously existed, and our total income and expenditures has remained in balance.

In practice in our region the income offsetting or asset payment was indirectly funded by income from the legacy infrastructure charge. The offsetting was therefore wholly financed from within the development community operating in our region and as we have already explained there was no material cross subsidy between developers and the broad customer base.

On this basis this financial transfer mechanism, and the associated asset payment, have been removed from our developer charging framework ensuring a fair and transparent model for infrastructure charges i.e. all developers, large or small, pay uniform infrastructure charges⁴ without income offsetting or asset payments.

⁴ Yorkshire Water infrastructure charges for 2018-19 and 2019-20 are fixed. 'Environmental' incentives can reduce the level of these charges where developers can evidence they are building low water usage properties and/or not connecting to the sewerage network for surface water.

6. Consistency of charges and future improvement

In this section we cover how:

 our charges remain consistent with the charging rules and will be improved in the future.

Our developer related charges will be published on an annual basis in accordance with the latest Ofwat new connection and charges scheme charging rules. Our charges are subject to assurance before publication as described in our Final Assurance Plan which is published on our website:

https://www.yorkshirewater.com/sites/default/files/Final%20Assurance%20Plan%202018-19.pdf

We will monitor our actual developer driven network reinforcement expenditures and infrastructure charge incomes on a rolling 5-year basis to ensure that the infrastructure charges remain aligned to the costs we incur, remain fair and predictable, and meet rule 28 of the Charges Scheme Rules⁵. The expenditure and income will be reported in our Annual Performance Report published in July each year.

We will continue to consult effectively with developer customers and stakeholders on changes to our new connection and developer related charges ahead of their publication and implementation.

In summary, we will continue to model the long-term relationship between expenditure and charges including forecast levels of activity, so that we can maintain the infrastructure charges at a level which ensures the balance of charges is maintained and that charges remain cost reflective.

⁵ 28.Infrastructure Charges must be determined in accordance with the principle that the amount of such charges will over each period of five consecutive Charging Years ending on 31 March 2023 and, thereafter, on 31 March in each subsequent year cover the costs of Network Reinforcement that the relevant undertaker reasonably incurs, less any other amounts that the relevant undertaker receives for Network Reinforcement.

7. Summary

In summary:

- we have outlined the work we have completed to demonstrate that a broad balance of charges already existed under the previous developer charging regime,
- we have described how we have used income and expenditure data to develop our new connection charges and new infrastructure charges that applied from 1 April 2018,
- there is demonstrable evidence that our prices for requisition and infrastructure charges are compliant with charging rules and have been subject to an appropriate level of assurance,
- the balance of charges which already existed up to 1 April 2018 allowed us to apply a
 framework that was fully cost reflective and to remove income offsetting and asset
 payments, and
- the total infrastructure charges were set at £250 per property (for all services) for 2018 19.

8. Appendix 1 – Income and expenditure balancing test

To test the balance of our charges we completed a detailed review. It was conducted to understand whether:

- a 'broad balance' of charges had existed over an extended period, and
- whether we were (a)typical of the overall industry position.

Our review considered our developer income-expenditure balance position over two distinct time periods:

- "Early" the ten years between 2000-10, when audited June Return data was published annually (see lines 12, 20 and 21 in table 35 and lines 12, 18, 19 in table 36).
- "Recent" the seven years between 2011-17, using developer-driven expenditure and developer-sourced income information from our internal management systems.

Our Early Income-Expenditure Balance History: 2000-01 to 2009-10

To complete our review, we compared our developer-sourced incomes with our developer-driven expenditures from 2000-01 to 2009-10.

The income surplus for the combined service was around plus 1.4%. This is well below the income deficit of minus 13% - identified by DEFRA to be in "broad balance".

Over the early 10-year period, we consider developer-sourced income broadly matched developer-driven expenditure.

The infrastructure charge income as a key financial balancing mechanism is clear – it accounted for over 75% of our developer-sourced income over an extended period.

A summary of our historic developer-sourced income and developer-driven expenditure for each service is profiled below.

Sewerage Service

Over the 10 years analysed, the sewerage service variance, scaled as developer-sourced income minus developer-driven expenditure, was small and *negative*, with an income deficit of just under £4.1m equating to £25 per property.

Although it is evident from the graph that the income-expenditure variance for the sewerage service can vary substantially from year to year, for example, the balance reversal in 2004-05 compared to 2009-10 this is as expected, and the overall position is reasonable.

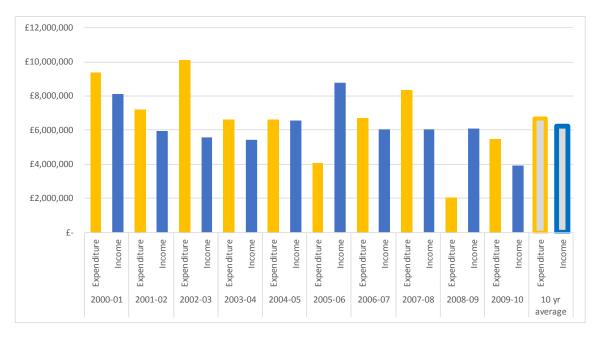


Figure 8.1. Sewerage: Developer Income vs Developer Expenditure (£m) – Yorkshire Water

Water Service

In contrast to sewerage, there was a small *positive* income surplus on the water supply service, over the same period, of just over £5.7m equating to £35 per property. The direction of this small income surplus on the water service was slightly more consistent (than on sewerage) across the 10-year time-period analysed.

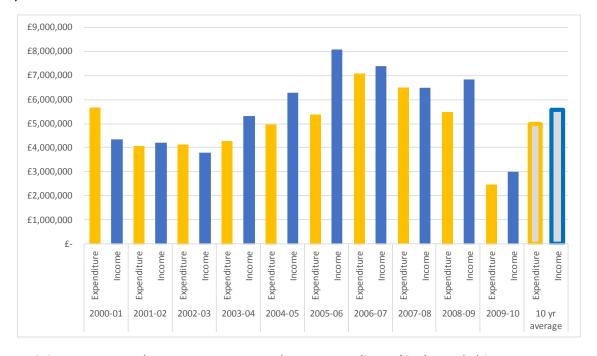


Figure 8.2. Water: Developer Income vs Developer Expenditure (£m) - Yorkshire Water

Combined Services

Over this "early" period the combined income-expenditure variance was small and positive – i.e. an income surplus of around plus 1.4% of the associated expenditure.

This can be compared to the DEFRA combined service income deficit estimate for the industry of around minus 13%. Our variance was therefore much smaller than (and in the opposite direction) the industry income deficit estimate provided by DEFRA in 2012.

Our Recent Income-Expenditure Balance History: 2010-11 to 2016-17

For our investigation we also compared our developer-sourced incomes with our developer-driven expenditures from 2010-11 to 2016-17. For the combined service the income deficit was around minus 3.8%. This is well below the income deficit of minus 13% identified by DEFRA as being deemed to be in "broad balance".

On this basis, and over this 7-year period, we conclude developer-sourced income broadly matched developer-driven expenditure. We can also compare developer-driven expenditures with developer-sourced incomes in more recent times.

Sewerage Service

The recent seven-year average indicates the sewerage service remains broadly in balance. This is in part because of a single outlier project spike in developer-driven expenditure at Bransholme in Hull, between 2013-16. The net result was a small *negative* income deficit of just over £2.9m, equating to £35 per property.

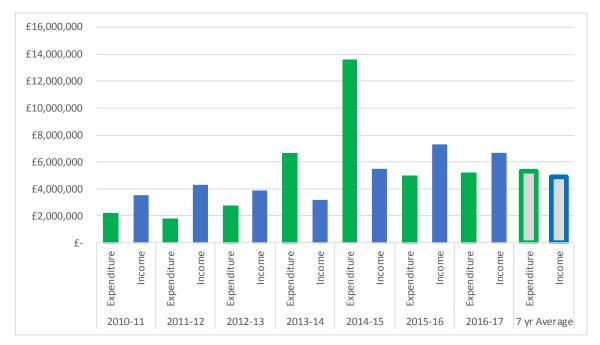


Figure 8.3. Sewerage: Developer Income vs Developer Expenditure (£m) - Yorkshire Water

Water Supply

The recent seven-year average indicates the water supply service is in almost exact balance. This is explained by the spike in developer-driven network reinforcement expenditure around Thirsk in 2012-13 the small positive income surplus identified between 2001 and 2011 of plus £35 per property which has been almost been eliminated.

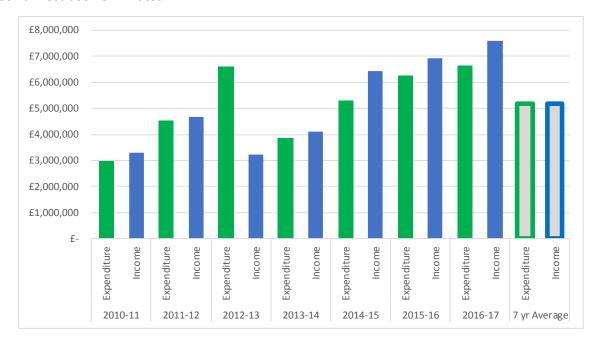


Figure 8.4. Water Supply: Developer Income vs Developer Expenditure (£m) - Yorkshire Water

Combined Services

Combining service variances over the 7 years from 2010-11 to 2016-17 we had a small negative income deficit of around minus 3.8%. This small combined service income deficit was solely driven by the recent imbalance position on the sewerage service.

9. Appendix 2 - DEFRA and Ofwat industry income and expenditure balance assessment

DEFRA assessed the "fair balance" issue in their 2012 impact assessment⁶ (IA) on developer charging. The results of the Government's industry income-expenditure balance assessment are summarised below. DEFRA concluded that, at an industry level, "there is a broad balance between the capital cost of new connections (in relation to the provision of local infrastructure which excludes water resource and treatment infrastructure) and the revenue that WaSCs receive from developer contributions. The table indicates that in the last three years there has been a small deficit between revenue and cost of around 13%.

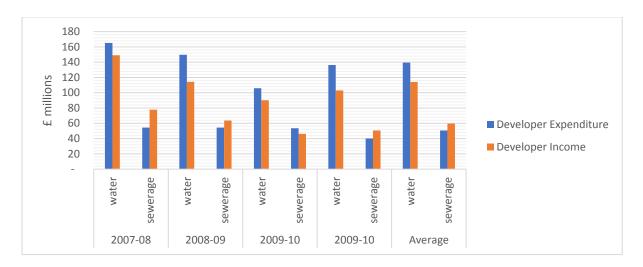


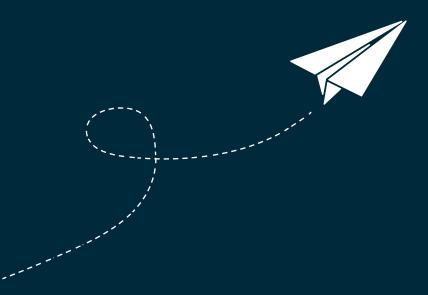
Figure 9.1. Developer Income vs Developer Expenditure for Water Industry (£ millions), DEFRA, 2012

Ofwat also identified a similar small income deficit for the industry of around **15%** for the 2014-20 period in their final impact assessment⁷ (IA) for new connection charging rules in December 2016. For the preceding period, 2004-11, Ofwat also noted that developer-driven capital expenditures and developer-sourced contributions were "comparable".

Both the DEFRA and Ofwat analysis demonstrated measurably different variances between developer-driven expenditure and developer-driven revenue compared with that of our Yorkshire Water regional analysis.

⁶ IA: Defra 1383 "Charging for water and sewerage infrastructure within new development, 18/06/2012.

⁷ IA: Ofwat, "Appendix 6: Final Impact Assessment for New Connections charging rules" 8 December 2016.



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