Water 2020: Regulatory framework for wholesale markets and the 2019 price review
Appendix 6 Our approach to assessing impacts and Ofwat's regulatory costs

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**About this document**

This appendix sets out our approach to assessing the impacts of our policy proposals and decisions and the associated regulatory costs to Ofwat. Rather than include the impact assessment (IA) as a separate appendix, we have integrated it within our decision document, with further detailed evidence and analysis in the appendices. The relevant sections of the main document and associated appendices should be referred to for the evidence, assumptions and calculations that we have used to inform our IA.
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1. **Our approach to assessing the impacts of our policy proposals and decisions**

In our December consultation, we included an initial impact assessment (the ‘initial IA’) which set out our initial views on the impacts of the different regulatory policy options that we were considering. The initial IA was largely qualitative in nature reflecting the early stage in the policy development process. In this document, we have sought where possible to quantify more of the costs and benefits associated with those different regulatory policy options. However, we recognise that some of the impacts are inherently difficult (or not always appropriate) to quantify and, in this case, we have described them qualitatively and taken them into consideration in our decision-making processes.

Rather than include the IA as a separate appendix, we have integrated it within our decision document, with further detailed evidence and analysis in the appendices, to ensure that our assessment of impacts and policy analysis are fully aligned.

In carrying out our IA, we have taken into account relevant published policy and guidance related to IAs, including:

- our own policy on IAs;
- HM Treasury’s ‘Green Book: appraisal and evaluation in central government’; and

In the December consultation, we asked four questions related to our initial IA:

- Do you agree with the benefit and cost impact categories we have identified?
- Are there any impact categories you think we have not included that are relevant, or any we have included that should be omitted?
- What are your views on the indicative scale of the impacts we have identified?
- Are you able to provide any evidence of the impacts in relation to our proposals?

We received few responses on our IA approach. These responses indicated:

1. There was general agreement with our approach to the benefit and cost categories.
2 Only two companies identified categories that were omitted that related to the alignment of the water resources management plan with the price control timetable and the additional complexity and disaggregation of our proposals.

3 Respondents found the relative scale of impact difficult to assess, although one company considered that this was appropriate for the stage of our assessment. Despite this some companies were able to provide comments on the level of costs in a number of areas. In general respondents were concerned that we had underestimated the cost in many areas of our proposals, including customer engagement, RPI/CPI and development of markets. One respondent noted that we should be mindful of the increase in costs with the retail market when we update our impact assessment. Whilst another respondent considered that it was important to continue to assess the costs and benefits of our proposals as further detail is developed.

4 Only two respondents provided additional evidence – where these were provided, they were considered in individual policy areas.

We took on board stakeholders’ comments in our updated IA. Where stakeholders responded with more evidence or information about the costs or benefits of our proposed policies or the categories we have used, we took them into account where appropriate in our updated assessment in the relevant policy areas. We also engaged with stakeholders through workshops, meetings and letters requesting further information to understand better the potential impacts of our policies.

1.1 Assessment of options

Each policy option has taken into account our Water 2020 objectives set out in our December consultation (see box below).

<table>
<thead>
<tr>
<th>Water 2020 Objectives</th>
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**How well does it achieve our objectives** – fulfilling our duties through our strategic vision to: “build and maintain trust and confidence”, which means moving to a new model of regulation that:

- is pro-market;
- is outcomes-focused;
- relationship-focused;
- uses a broad range of tools;
- is proportionate and targeted;
- has effective incentives;
• encourages ownership;
• encourages accountability and responsiveness; and
• delivers transparency and predictability.

**How well it addresses known problems** – current and future challenges including:
• environmental challenges (water quality and scarcity);
• maintaining resilience;
• affordability;
• rising environmental standards; and
• customer expectations.

**Ensuring our approach is practical and implementable** – taking into account legal, compliance, regulatory and other issues, considering:
• resources required to implement;
• the timescales required for implementation; and
• the costs of implementation.

For the Water 2020 objectives, each policy option is assessed against a ‘Do Nothing’ baseline that represents a continuation of the PR14 regulatory framework (except for those changes to which we are already committed, such as non-binding sub-caps for network plus parts of the value chain). In line with best practice, we have taken a proportionate approach to our analysis, focusing on those areas that are likely to have the largest impacts on stakeholders.

Given that our policy proposals operate together as a bundle or package of measures, we have assessed them on that basis rather than each element separately. We have therefore assessed the impacts of packages of regulatory policy proposals in the following areas¹:

• customer engagement and outcomes;
• the indexation of future price controls;

¹ In Chapter 7 (Targeting regulation for networks), we explained that the water and wastewater network plus services are the respective wholesale water services less those parts defined as being within the scope of the proposed new price controls for water resources and sludge. The impact of these have been considered in the water resources and sludge policy areas.
• sludge treatment, transport and disposal;
• water resources; and
• direct procurement for customers.

We have tried wherever possible to quantify the benefits and costs of our packages of regulatory policy proposals\(^2\). However, as noted above, it is inherently difficult (or not always appropriate) to quantify all of the impacts. This is particularly the case for the impacts on resilience and the environment. In these cases we have sought to describe the impacts qualitatively so that we can still take them into account in our decision-making processes.

Wherever possible, we have assessed the benefits and costs separately for England and for Wales to reflect the different policy positions of the UK and Welsh governments. In so doing, our assessment reflects, where appropriate, the current legal framework and the allocation of executive powers between the UK and Welsh governments on the basis of company boundaries rather than the border between England and Wales\(^3\).

As well as the overall benefits, we have considered the distributional impacts of our policies and, in particular, whether any stakeholder group is likely to be adversely affected by the policy option. We have also considered the risks and uncertainties associated with the different policy options and assessed the impact of those options.

\(^2\) Quantification is based on the net present value (NPV) of the impact over 30 years using 2015-16 as the base year and using a discount rate of 3.5% (in line with the HMT Green Book).

\(^3\) We are aware of the recommendations of the Commission on Devolution in Wales (the Silk Commission) to align the executive powers of the UK and Welsh governments with the national borders and to devolve powers to the National Assembly for Wales to make primary legislation in relation to sewerage.
2. Regulatory costs

This section assesses the impacts of our proposals and decisions on regulatory costs. In December we carried out a qualitative assessment of the likely regulatory costs that we would incur in implementing the preferred package of options.

We received one response from the December consultation providing evidence from other sectors on the change in regulatory costs for Ofgem and Postcomm as a result of regulatory reforms. This highlighted that Ofgem’s costs increased during the period it implemented its new price control approach, RIIO-T1. Whereas, Postcomm’s costs reduced between 2010-11 and 2011-12 at a time when the number of price controls reduced from 8 to 2. It was acknowledged that this change in cost could be driven by other factors in addition to the regulatory reforms.

Since December, we have sought to understand further the change in regulatory costs associated with our proposals and decisions. We agree with the respondent to our December consultation that it is important to assess the regulatory costs of the reforms. It is not clear how much of the change in costs suggested by the respondent was due to regulatory reforms. It is likely in the case of Postcomm, which merged with Ofcom in October 2011 that much of the reduction in costs in that year was driven by the merger.

We have carried out a further assessment of our regulatory costs, which is presented in the following sections. These costs represent our current view given the existing level of uncertainty. We have assessed these costs collectively as a package rather than at an individual policy level. We understand that these costs could change as we continue to develop and implement our policy packages and we will keep them under review as policy develops.

2.1 Our budget between 2016-17 and 2020-21

Ofwat’s five-year business plan for the period 2016-17 to 2020-21 sets out the maximum revenue and capital budgets until 2019-20 with an indicative budget for 2020-21. This is set out in the Table below. Our budgets cover all of our activities including the work that falls under Water 2020 set out in our decision document and accompanying annexes. The budgets are governed by the Comprehensive Spending Review (CSR) settlement with limited flexibility. This will ensure that our proposals do not result in significant additional Ofwat costs to customers over this period.
Although the budget limits total spending across our activities, we still have the flexibility to reprioritise resources if required. This will enable us to deliver our policies alongside our other strategic objectives in a timescale that will provide the greatest benefits to customers.

### Table 1: Ofwat's maximum revenue and capital budget between 2016-17 and 2020-2021

<table>
<thead>
<tr>
<th>£ million</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
<th>2019-20</th>
<th>2020-21*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Departmental Expenditure Limit excluding depreciation</td>
<td>£25.4m</td>
<td>£23.6m</td>
<td>£28.9m</td>
<td>£29.6m</td>
<td>£24.2m</td>
</tr>
<tr>
<td>Capital Departmental Expenditure Limit</td>
<td>£0.36m</td>
<td>£0.37m</td>
<td>£0.17m</td>
<td>£0.22m</td>
<td>£0.15m</td>
</tr>
</tbody>
</table>

*Indicative figure only

Source: Ofwat’s five-year business plan 2016-17 to 2020-21

### 2.2 Regulatory costs: price controls

A number of our decisions and proposals will impact on our price control approach in a number of policy areas at PR19. This will include:

- modelling and embedding of CPI indexation within the financial model for the price control;
- assessment of the broader range of techniques applied by companies to understand customers’ preferences;
- reviewing companies’ legacy outcomes and assessing companies’ long-term outcome delivery incentives (ODIs);
- developing and implementing separate controls for sludge and water resources; and
- assessing companies’ approaches and proposals for direct procurement for customers.

At PR14 we spent approximately £27 million (2015-16 prices) over two financial years on internal and external resources in developing our price control approach and carrying-out our assessment of companies’ business plans. For PR19, we would expect to see an increase in our costs from incorporating our policy proposals and decisions within the PR19 assessment framework, including the separation of price
controls in sludge and water resources. Although the separation of price controls are likely to drive most of these costs, we would only expect it to lead to a small incremental cost as we already assess companies’ business plans in relation to sludge and water resources. We consider that the additional regulatory cost is likely to be around 10% of PR14 costs (£2.7 million).

Although the separation of the price controls in water resources and sludge is a driver behind these regulatory costs, these costs are small compared to the expected benefits that will be delivered in both England and Wales. We considered our approach to the form of price controls in Chapter 4 ‘Moving beyond waste’ and Chapter 5 ‘Tackling water scarcity’ of our decision document and whether bespoke price controls should be applied to companies operating wholly or mainly in Wales. This suggested that benefits would be delivered through supporting markets as well improved information and the potential for more targeted incentives. This means that although the bilateral market for water resources will not currently operate in Wales, we would still expect to see benefits from the water resource price control through better and comparative information as well as more targeted incentives. The benefits of sludge markets would also be experienced across England and Wales, as the same approach is applied in both England and Wales.

After PR19, there is a greater uncertainty over our regulatory costs of conducting price reviews. As we would have integrated our proposals and decisions within the price control assessment framework at PR19 costs of conducting each additional price review should be no greater than at PR19. Regulatory costs could even decrease below PR14 levels as we expect to move to a more light-touch approach as markets develop in sludge and water resources. Therefore we consider that it is reasonable to assume that the additional regulatory costs for PR24 and beyond could be between plus and minus 10% of the PR14 level.

Taking into account the expected changes in regulatory costs at PR19 and future price controls, we consider that the overall change in regulatory costs in NPV terms could be between -£6 million and +£11 million. These costs will be recovered from companies operating wholly or mainly in England and Wales and are small compared to the benefits that these changes will deliver.
2.3 Regulatory costs: market set-up and on-going costs

2.3.1 Market set-up costs

The main implementation costs for us will be in setting-up the market arrangements for sludge and water resources:

- for water resources: design and implementation costs for the market information platform and the bid assessment framework to support the bidding market model and the market architecture (access pricing framework and codes, for example) to support the bilateral market in England.
- for sludge: design and implementation costs associated with the information sharing platform.

These policies will be used to support the market in sludge (England and Wales) and the bidding market (England and Wales) and bilateral market (England only) in water resources. The regulation costs associated with the bilateral market will be recovered from companies wholly or mainly operating in England only. Though potential changes to the devolution settlement to align the boundary for legislative competence for water with the national border (a recommendation in the Part II report of the Commission on Devolution in Wales, also known as the Silk Commission) would mean that the Water Act 2014 reforms to enable bilateral markets for water resources could in future apply in areas within England that are served by companies operating mainly in Wales.

Both the Cave Review and the Impact Assessment published for the Water Act 2014 proposals on upstream competition (the Upstream Competition IA) assumed that one-off market set-up costs would be zero. This is because, at the time, it assumed that the combined supply licence and WSL regime was already in place and minimal legislative or regulatory changes were likely to be required to set-up the regime. However, our decisions will require implementation of a number of changes to ensure that the market works effectively and there is a level playing field for third parties. The Cave Review also referenced the set-up costs based on discussion from the South-East Queensland Water Grid Manager (a procurement entity) and evidence from the Irish electricity market (a bilateral market). This suggested that the start-up costs could be in the region of £10 million.

Experience from the business retail market indicates that the market implementation costs are not insignificant. In November 2015, Open Water Marked Limited
estimated that these costs could be in the region of £36.2 million\(^4\) (excluding contingency). The large centralised IT costs make up a significant proportion of this budget and are currently forecast to cost £12.6 million\(^5\). The market operator business costs are also estimated to be in the region of £3.2 million\(^5\).

### Business retail market implementation costs

The latest estimate of the costs provided in 2015 associated with the market arrangements in the business retail market is £36.2 million (excluding 10% contingency). This includes:

- £24.0 million for Market Operator Services Ltd (MOSL) who will operate the new market. This includes the costs of building, testing and implementing central IT systems.
- £6.9 million for Open Water Markets Limited who are responsible for designing the necessary market arrangements, including development of codes, licences, contracts and other market architecture.
- £5.3 million Ofwat costs associated with the design of the market arrangements.

We consider that the **costs associated with the market opening for sludge and water resources will be significantly lower** than those associated with retail business market opening as we are not proposing a large centralised IT system that will allow mass scale customer switching and we have not yet decided whether to have a separate entity. Our decisions and proposals are also based on less complex market arrangements that capture the market characteristics of water resources and sludge. We therefore consider that it is reasonable to assume implementation costs of our regulatory approach of between 25% and 50% of the Business Retail Market implementation costs. This would result in a set-up cost of between £9 million and £18 million and is similar or higher than the evidence in the Cave Review of other sectors mentioned above.

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A high proportion of these costs are driven by those needed to set-up the bilateral market in England and will therefore be recovered from companies that are wholly or mainly operating in England. Whilst these costs are not insignificant they are small in comparison with the expected benefits delivered through the bilateral market. Other market costs (sludge market and water resource bidding market) will be recovered from companies wholly or mainly operating in England or Wales and should be small.

2.3.2 On-going costs of our markets in sludge and water resources

The on-going regulatory costs will reflect the on-going governance of the sludge and water resources markets. For the business retail market, Open Water Market Limited provided a top-down estimate of the annual on-going cost of the retail market of £5.6 million (2014 prices)\(^6\). As discussed in the section above, we consider that the market arrangements of our regulatory approach will be significantly less complex than the business retail market as we will be designing and implementing much simpler market architecture in line with the market characteristics.

The Cave Review and the Upstream Competition IA identified an on-going cost to Ofwat of £2 million per annum (£2.4 million in 2015-16 prices). The Cave Review considered that it had used “cautiously high” cost estimates both for the start-up and on-going costs. These were also provided on the basis of the introduction of both upstream water and sewerage licences. Although the Water Act 2014 makes provisions for sewerage licences, our market proposals in sludge focus primarily on information remedies, with the information being held on company websites, and should only result in a small regulatory cost. Therefore, we consider it appropriate to assume that the on-going cost to Ofwat of running the market would be around 50% of the Cave Review and the Upstream Competition IA estimate. This would result in an annual cost of £1.2 million.

The Cave Review and the Upstream Competition IA identified an additional regulatory cost to the Drinking Water Inspectorate (DWI) and the Environment Agency (EA). This resulted in an additional cost of £0.35 million per annum (£0.42 million per annum in 2015-16 prices) for each organisation. Although the EA costs

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related to services are provided for in the sewerage licences, it is likely that the EA costs will still increase as a result of new entrants in sludge treatment, disposal and recycling. We have therefore assumed the same costs as the Cave Review and the Upstream Competition IA but adjusted for inflation.

This would result in an annual regulatory cost for Ofwat, EA and DWI of £2.1 million per annum and an NPV of around £39 million over thirty years. As with the market set-up costs, we would expect the main costs to be driven by the bilateral market in England and will therefore be recovered from companies that are wholly or mainly operating in England. Other market costs (sludge market and water resource bidding market) will be recovered from companies wholly or mainly operating in England or Wales.

### 2.4 Conclusion

Taking into account both one-off and on-going costs, we estimate that the total increase in our regulatory costs as a result of our policy packages would be between £42 million and £68 million in NPV terms over a thirty-year period. These overall regulatory costs are low compared to the overall benefits that we expect from our package of measures. The benefits of our package of measures are described in the specific policy areas of our decision document and accompanying appendices. These indicate that we expect individual policy areas will deliver net benefits to both England and Wales.

**Table 2: Summary of regulatory costs over a thirty year period (NPV) in 2015-16 prices**

<table>
<thead>
<tr>
<th>£ million</th>
<th>Total costs (£m)</th>
<th>England costs (£m)</th>
<th>Wales costs (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price control</td>
<td>-£6m to +£11m</td>
<td>-£5.1m to +£10m</td>
<td>-£0.6m to +£1.2m</td>
</tr>
<tr>
<td>Market set-up costs</td>
<td>+£9m to +£18m</td>
<td>+£8.8m to +£17.5m</td>
<td>+£0.3m to +£0.6m</td>
</tr>
<tr>
<td>Market on-going costs</td>
<td>+£39m</td>
<td>+£37.8m</td>
<td>+£1.3m</td>
</tr>
<tr>
<td>Total</td>
<td>+£42m and +£68m</td>
<td>+£41.5m to +£65.3m</td>
<td>+£1.0 to +£3.1m</td>
</tr>
</tbody>
</table>

Table 2 also shows the costs allocated between England and Wales. In estimating the price control costs we have split the costs equally between the sludge and water resources price control. This takes into account that the separation of the price controls and future market development in water resources and sludge is the main driver of these costs. We also made the assumption that these costs were split equally by the number of companies operating wholly or mainly in Wales or England.
The market costs take into account the bilateral market for water resources (England only), the sludge market (England and Wales) and the bidding market in water resources (England and Wales). As a large proportion of these market costs are driven by the bilateral market, we have assumed that 70% of the total market set-up and on-going costs (£34 million to £40 million) are driven by the bilateral market. We would expect to recover the bilateral market regulatory costs only from companies whose areas are wholly or mainly in England.

The remaining 30% of the market set-up and on-going costs (£14 million to £17 million) have been allocated evenly between the sludge market and the bidding market in water resources. These costs would affect companies whose areas are wholly or mainly in England or Wales and therefore have been split in proportion to the number of companies in these areas. These markets are expected to deliver significant benefits in both England and Wales through increased trading and the wider efficiency gains.
3. **Other impacts**

In carrying out our impact assessment, we also considered the impact that our proposals may have on equality and whether they are qualifying regulatory provisions under the Business Impact Target (BIT).

### 3.1 Equality Impact Assessment

An Equality Impact Assessment (EIA) may be needed for proposals that have an impact on persons with relevant protected characteristics (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex or sexual orientation). We believe that our policies are likely to have a similar impact across customer groups insofar as they will not directly or indirectly impact persons who share a relevant protected characteristic as compared with persons who do not share it.

Our proposals on customer engagement recognise the importance of companies ensuring that they engage with all customer groups, including those whose circumstances may make them more difficult to reach, such as people with a disability. In this context, we have stressed the importance of customer surveys being representative and we have encouraged companies to think creatively and to learn from each other about how to engage with harder-to-reach customers. We are also expecting Customer Challenge Groups (CCGs) to consider the effectiveness of companies engaging with different types of customers in their reports to Ofwat.

### 3.2 Business Impact Target

The Enterprise Act 2016\(^7\) will extend the scope of the Government’s deregulation target – the Business Impact Target (BIT) – under the Small Business, Enterprise and Employment Act 2015 to include economic regulators such as Ofwat.

The Government has said that activities related to the economic regulation of natural monopolies, such as price control of natural monopolies and network access, will be

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\(^7\) The Enterprise Bill was enacted as the Enterprise Act 2016 on 4 May 2016 and will come into force on 6 July 2016.
out of scope of the BIT when it determines qualifying regulatory provisions for the target. Based on the draft guidance issued by BIS\textsuperscript{8}, our view is that the Water 2020 proposals will be out of scope\textsuperscript{9} and therefore do not need to be included in the BIT process of verification by the Regulatory Policy Committee.

\textsuperscript{8} BIS (2016) The Business Impact Target, growth duty and small business appeals champion: Consultation on Scope and Guidance, paragraph 64

\textsuperscript{9} We consider they would be covered by the exemptions in Section B (economic regulation) and/or Section C (price controls).