New Connections Charging - A Water UK Consultation

1 About this document

This document is being published by Water UK, a trade association that represents substantially all UK water-only companies and water and sewerage companies. We refer to all of these companies as "water companies". In it we seek the views of interested parties on the work that Water UK has been doing to facilitate the introduction by its members whose areas are wholly or mainly in England of revised charges for new connections. We also provide a standardised means for water companies and others to compare the impact of proposed charging schemes on different types of development.

This consultation takes forward work undertaken by Defra and Ofwat to reform the existing regime for new connections charging. The existing rules have been widely criticised and the work of Defra and Ofwat offers a once in a generation opportunity to make substantial improvements to the current rules. The principle of reform has been widely welcomed by water companies and we are very pleased to make this contribution to implementing improvements to the current regime.

Water UK recognises the important role that the timely provision of water and sewerage infrastructure plays in allowing housing development to proceed. This current work is one of a range of activities that we are engaged in which are aimed at supporting our members in improving the service they offer to developer customers.

We look forward to receiving consultees' views on the questions raised by this consultation.

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3 The legal and regulatory background

The Water Act 2014 introduced powers for Ofwat to establish new rules governing the charges that water companies may levy for a range of activities which they carry out to facilitate new development. We refer to all of these as being charges for "new connections".

Under the legislation, the Minister issued guidance to Ofwat on these new rules. This guidance was published by Defra in December 2016¹.

The guidance was structured around four key objectives:

- Fairness and affordability
- Environmental protection
- Stability and predictability
- Transparency and customer-focused service

Following consultation, in December 2016, Ofwat issued new Charging Rules for New Connections and Charges Scheme Rules, having had regard to the Defra guidance². Note that capitalised terms used in this document are to be defined in accordance with those rules.

Under the existing charging schemes adopted by water companies pursuant to the Water Industry Act 1991 (WIA 1991), each company's charging scheme must follow the detailed rules laid down in the legislation. By contrast, under the new approach adopted by the Water Act 2014, Ofwat has laid down a series of broad principles leaving the method of implementation as a matter for individual companies.

In the consultations leading up to the adoption of the new charging rules, a number of parties highlighted that Ofwat's rules offered a broad range of implementation options to companies. This could result in very different approaches being adopted by individual companies.

As many Developers (a defined term in the new rules) carry on business on a national basis, the use of different terminology and the application of potentially widely differing charging schemes could create significant inefficiencies. The opportunity could also be lost to adopt a more consistent approach to some of the assumptions made in preparing quotations for this type of work.

During the period leading up to the implementation of the new rules, latterly confirmed as being April 2018, Water UK had offered to establish a project to explore the prospects for a more

http://www.ofwat.gov.uk/wp-content/uploads/2016/12/December-2016-charges-scheme-rules.pdf

 $^{^1 &}lt; https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575368/ofwat-charging-guidance-sewerage-connection-charges.pdf>$

² < http://www.ofwat.gov.uk/publication/charging-rules-new-connection-services/>

consistent approach to be taken to the implementation of the new rules. The decision document published by Ofwat at the same time as the new rules referred to this project at a number of points³.

Over the period from November 2016 to date, Water UK has therefore been working with a range of stakeholders to develop approaches to the implementation of the new rules. This document represents the outcome of that project.

Following the Ofwat guidance, this consultation only applies to new connections charging for developers and self-lay mains providers (SLPs). In considering how to implement new rules, companies will wish to consider how their approaches affect New Appointment and Variation companies (NAVs) who represent another route that developers may wish to consider in procuring infrastructure on a new development.

4 Responding to this consultation

A number of specific questions are set out in the various sections of the document and are also listed in section 15 but general comments are invited on any of the topics covered in this document. Such general comments should identify the wording of this consultation to which the comment relates and should ideally propose alternative wording where appropriate. We would particularly welcome comments on potential advantages and disadvantages of possible approaches to charging described in sections 7 and 9 of this consultation. We would expect evidence to be provided to support views advanced by consultees.

We also invite water companies to use the example methodologies set out in this document to test the impact of their proposed implementation of the new rules. While they may not wish to publish the specific outcomes of that exercise it would be very useful to have comments on the distributional effects of their proposed implementation methods. The example methodologies may also be used by companies when they come to consult on the implementation of their proposed charging schemes later this year.

We will be commissioning independent economics consultancy, Reckon, to compile a report summarising the responses received to this consultation. The report will also address the main considerations that water companies will need to take into account in implementing their own charging schemes. We anticipate publishing this report in June 2017.

Responses need to be provided to Water UK by no later than midnight on Monday 8 May and should be addressed to David Strang at Water UK (dstrang@water.org.uk) with a copy to David Heath, consultant to Water UK (davenheath52@gmail.com).

In commenting it would be helpful if you would confirm what type of organisation you are responding on behalf of, e.g. developer, NAV, SLP, trade body or other (please specify). If a developer, please advise what part of the country you operate within and your scale of operation,

 $^{^3 &}lt; \text{http://www.ofwat.gov.uk/wp-content/uploads/2016/12/Charging-rules-for-new-connections-\%E2\%80\%93-decision-document.pdf>$

i.e. large (building more than 50 homes per year), medium (building between 10 and 50 homes per year), or small (building less than 10 homes per year).

The Reckon report referred to above will summarise views received and may identify the nature of the responding consultee but will not highlight individual respondents. If you do not wish to be named or if there are particular elements of your response that you wish to keep confidential please indicate this clearly in your response.

While we believe that Water UK is not subject to the Environmental Information Regulations, it is possible that a third party may rely on those regulations to request access to consultees' responses. If any such request were found to be valid for the purposes of the regulations, this may result in responses having to be made public.

5 Background and approach

The move from a tightly constrained set of rules to broader principles-based regulation allows significant scope for innovation in individual companies' approaches to charging for new connections, reflecting the different circumstances that each company faces. Different companies may wish to choose alternative means of achieving the goals sought through Defra's guidance and Ofwat's rules.

Companies in high growth areas or in areas with constrained supplies, for example, may well wish to adopt differing approaches to charging for new connections reflecting their specific challenges and setting charges which send appropriate pricing signals such as those associated with water efficiency.

Water UK believes that it can perform a useful role in exploring the extent to which, while allowing scope for variation, companies can reduce unnecessary differences between their approaches to implementation.

With this aim in mind, Water UK convened a Working Group comprising the following participants:

Water UK	Brookfield Utilities/IWNL	
Wessex Water	House Builders Association	
Albion Water	Home Builders Federation	
Thames Water	Fair Water Connections	
South East Water	DCLG	
Severn Trent Water	Defra	
United Utilities	CCWater	
Anglian Water		

Water UK initially identified six areas of study:

- A comparison of the distributional effects of different potential approaches to the implementation of the charging rules;
- 2 How to approach the requirement of the rules that the balance of contributions to infrastructure from Developers and customers remains broadly as it was under the old regime;

- Analysing parameters used for modelling the impact of new development on water and sewerage networks with a view to providing greater transparency;
- 4 Guidance on the application of the new rules focussing on agreeing terminology, the scope of works covered by the new rules and the interpretation of certain of the new rules;
- 5 A model quotation form;
- The development of principles regarding the interaction between water companies and the planning system.

This consultation is concerned with work carried out in relation to water and sewerage services provided for domestic purposes as defined in the Water Industry Act 1991 (WIA 1991). As is the case today, companies will continue to ensure that costs charged for such work do not provide any element of subsidy to non-domestic customers.

Each of these topics has been discussed with the members of the working group. As a result of those discussions some changes were made to the initial plans and the following section sets out how each topic has been addressed.

On further analysis, Water UK did not consider it appropriate for it to be the forum for companies to exchange detailed information about the implementation of their proposed approaches but we have been pleased that three companies, United Utilities, Anglian Water and Thames Water have been prepared to outline their proposed approaches and identify some of the key issues relating to implementation of the new rules. Their outline proposals (in anonymised form) are set out in section 9 and Appendices 2 & 3.

Item 3, work on modelling parameters, continues to be discussed by the joint Water UK/HBF group, the National Joint Infrastructure Development Group. The approach that water companies are proposing on this topic is discussed in section 13.

Item 4 is primarily dealt with in section 6 whilst item 5 is covered in section 12.2.

Item 6 is dealt with in section 14.

The approach in this document is necessarily, therefore, one of principle; considering which approaches are more likely to meet the expectations of stakeholders and the requirements of the rules.

It is anticipated that once individual companies have seen the outcome of this exercise they will then be much better placed to develop the detail of their own approaches to implementation. We hope that at that point, companies will be able to provide costed examples of the consequences of their own approaches based on the methodologies set out in this consultation.

We have not in this consultation addressed how the transition to the new regime will work. We are requesting stakeholders' views on transitional arrangements in section 15 and will look to find a common approach to this topic in the coming months.

Q1: Are there any other areas of study that the Working Group could look at in a subsequent phase in relation to new connections charging? If so, please specify these.

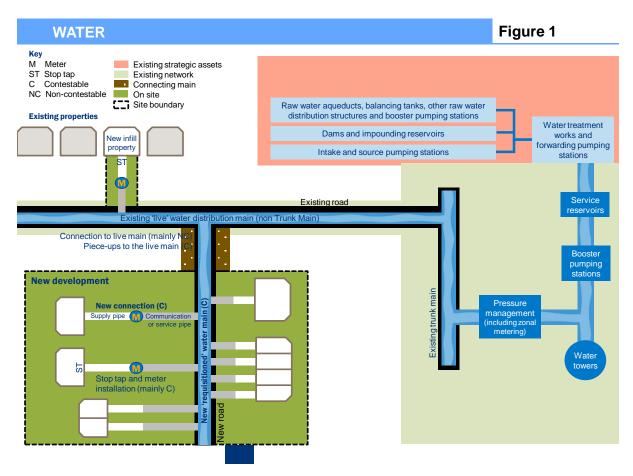
6 Guidance on the New Rules

6.1 Rules framework

This section of the document deals with issues of interpretation. Water UK is not able to recommend or require companies to adopt the approaches outlined in this section, or elsewhere in this document, but individual water companies may wish to follow the guidance that is ultimately published following this consultation exercise.

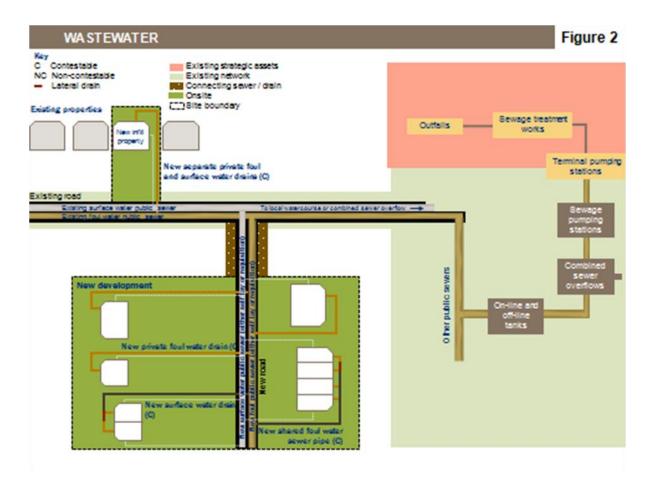
The working group has studied the new Ofwat rules and the accompanying decision document⁴ and has identified areas where further clarity on terminology and on the practical application of the new rules could be useful to companies as they implement the new charging regime. We believe this would be to the benefit of the wider industry and to Developers.

Figures 1 & 2 have been produced by Ofwat with suggestions from a range of parties to assist in the understanding of the terminology used for water and sewerage networks respectively. They also help in assessing who is responsible for providing the various assets required to service new connections and how the associated costs are to be recovered. This allocation of responsibilities is reflected in the remainder of this document.



⁴ See footnotes 2 and 3

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The models in figures 1 and 2 assume that the new development is connected to a water company's network and is served by its resources and treatment infrastructure. In Figure 2 surface water sewerage has been omitted for clarity but developers may continue to requisition such infrastructure. In these cases, discharge would be to a suitable outfall.

Contestable items are those elements of infrastructure which may be provided by a water company with costs recovered from the Developer or which the Developer, SLP or contractor may provide for subsequent adoption by the company.

Non-contestable items are those elements of work which may be carried out only by the water company. This normally comprises work on its existing network or where the risks to existing customers, water quality, structural integrity of the network or environment are considered high.

Appendix 1 details contestable and non-contestable activities for the provision of water services infrastructure for new development.

Q2: Do you agree with the scope of activities described as being contestable in Appendix 1? Do you think:

- the descriptions of the activities are sufficient?
- there are any activities which are missing from either category?

6.2 Types of infrastructure

A key part of Ofwat's new rules is the distinction between "Site Specific" and "Network Reinforcement" works.

Site Specific works are those undertaken within the green shaded areas and brown with white dots areas in Figures 1 & 2. A proportion of the costs of these works are recovered from Developers (with possible offsets for water and/or sewerage income subsequently generated from the development).

Network reinforcement works are those on the existing network within the light blue areas in Figures 1 & 2. The costs of these works are to be recovered by means of Infrastructure Charges payable by Developers where appropriate. Unlike the current infrastructure charges, the new ones will be company-specific, reflecting expenditure on Network Reinforcement by individual companies.

The other category of work is that carried out by water company on providing resources and treatment. These are described in the pink areas in Figures 1 & 2. Consistent with the current charging regime any expenditure in this area is to be funded by existing and future bill payers.

6.3 Definitions

6.3.1 Site Specific

6.3.1.1 **General**

'Site Specific' is defined in Ofwat's rules under 5(t) as:

""Site Specific" refers to work on, or the provision of, water or sewerage structures or facilities located on a Development as well as work to provide and connect a requested Water Main, Sewer, Communication Pipe or Lateral Drain on, to or in the immediate vicinity of, the Development and "Site Specific Work" shall be construed accordingly. It does not refer to costs or work required as part of Network Reinforcement as defined above".

The working group considered that it would be helpful to provide further clarification of the phrase 'on or in the immediate vicinity' [of the development] when referring to pipework connecting the development to the existing network. Costs for such pipework are to be regarded as being recoverable from the Developer on the basis that they are "Site Specific".

The working group considered that the phrase used may not take account of the fact that a company's existing network may be some distance away from a development site. In such cases, even if relatively remote from the development site, the connecting pipework would not constitute reinforcement of a company's network if it was purely to connect the development's on-site infrastructure to the network.

It is therefore proposed that 'Site Specific' should also be interpreted as including:

any pipework required to connect the development to an existing network at a point where the connecting pipework is of an internal diameter no larger than the that of the existing network.

Q3: Do you agree with this suggested approach to the interpretation of 'Site Specific'? If not, why not?

6.3.1.2 Additional capacity at water company's request

Water UK considers that it would be helpful to provide further guidance on how water company requests for additional capacity are to be dealt with.

If the water company exercised its rights under the WIA 1991 to require a Developer or SLP (or NAV) to increase the capacity of its Site Specific infrastructure to overcome an existing capacity constraint on its network or provide capacity for other expected development, this would be classified as Network Reinforcement under 5(m) of Ofwat's rules and be funded by the water company from its Infrastructure Charges income.

Similarly, there may be occasions when the most cost-effective means of servicing a new development is for the water company to reach agreement with the Developer or SLP (or NAV) to extend its connecting pipework beyond the size-for-size connection point. In these circumstances, the additional costs of going beyond this point would again be classed as Network Reinforcement and would not be recoverable as part of the Site Specific charges.

Additional capacity costs should be apportioned between a water company and a Developer or SLP (or NAV) on an equitable, i.e. proportional flow, basis. This basis of calculation is used in Ofwat's rules (Rule 28) with reference to requisitioning but it is proposed this approach to apportionment should equally apply to infrastructure provided through the adoption route.

Q4: Do you agree with the proposed means of apportioning the costs where a Developer, SLP or NAV provides additional capacity to that required to serve their own development? If not, why not?

6.3.1.3 **Network Reinforcement**

For completeness, we are including here the definition that Ofwat has provided of the term "Network Reinforcement".

This is defined in 5(m) of Ofwat's rules and should be read in conjunction with the definition of 'Site Specific' above. The definition reads:

"Network Reinforcement refers to work other than Site Specific Work, as defined below to provide or modify such other:

- i. Water mains and such tanks, service reservoirs and pumping stations, or
- ii. Sewers and such pumping stations

as is necessary in consequence of the Site Specific installation or connection of Water Mains, Service Pipes, Public Sewers and Lateral Drains pursuant to a duty imposed on the undertaker by the Water Industry Act 1991, whether by requisition (under sections 41(1), 98(1) or 98(1A), under an agreement for adoption (under sections 51A or 104), pursuant to section 45(1) (Duty to make connections with main) or in accordance with another duty imposed by the Act, or inconsequence of the exercise of

rights under section 106(1) (Right to communicate with public sewers). It also includes the additional capacity in any earlier water main or sewer that falls to be used in consequence of the provision or connection of a new main or sewer.

6.3.2 Resources and Treatment

As noted above, water companies' costs in providing resources and treatment assets will continue to be funded by existing and future bill payers.

A particular question relates to terminal pumping stations as these may sometimes lie outside a water company's sewage treatment works (STW) boundary.

It is therefore proposed that if they are sited within such a boundary they will be classed as resources and treatment and be funded by existing and future bill payers. If an existing sewage pumping station falls outside a sewage treatment work's boundary, it will fall within the area covered by Network Reinforcement and any required capacity upgrading will be funded from Infrastructure Charges.

Q5: Do you agree with the proposal for how terminal pumping stations should be funded? If not, what funding methodology would you suggest?

6.4 Treatment of uncertainty

Rule 9 of the Charging Rules requires that the maximum amount of any charge is either set out in or calculated in accordance with the company's published Charging Arrangements.

The cost of many aspects of the provision of infrastructure to service new development can be predicted with a reasonable degree of accuracy.

However, there are occasions where exceptional costs may be incurred. Examples could include rail, river and canal crossings and working in environments where there may be buildings, foundations or tunnels requiring alternative routes for pipework or special working measures and protection. Dewatering and other unforeseen issues may also have a significant impact on the cost of works.

Where provision of a simple and accurate maximum charge is problematic, companies may wish to consider applying risk factors to jobs where there is good reason to suspect that exceptional costs may arise. The risks would need to be separately identified in water companies' quotations. The particular charges would not be applied if the particular risk did not materialise. It is expected that such rates and the triggers for their application would need to be made explicit in companies' charging schemes and quotations.

Q6: Do you have any views on how uncertainty should be treated in quotations where exceptional costs could materialise? For example, should terms in the connection offer exclude "exceptional" / "unforeseeable" costs?

7 Changes to the existing regime

7.1 General

This section provides a general introduction to some of the potential implications of the new Ofwat rules. These comments may be helpful to companies considering their own approaches to the implementation of new charging schemes.

7.2 Ofwat's rules on upfront costing

Ofwat's new rules provide a clear framework for how the costs of providing infrastructure to serve new developments may be recovered from Developers. However, the rules do offer scope for different approaches to charging within this overall framework. These are discussed under the various categories below.

A key requirement of the rules is that for 'Site Specific' works (comprising connections and requisitions) water companies must offer an upfront Fixed Charge for work they are requested to undertake. Under the definitions in the rules, a Fixed Charge is either fixed in amount or calculated by reference to a [published] pre-determined methodology.

Companies may also offer alternative methods for calculating their charges provided these are fully explained to the customer.⁵ The latter could include estimates which are subsequently adjusted to reflect actual costs incurred on completion of the works.

Note however that Rule 14 requires charges to be published in such a way that customers can "confidently work out a reasonable estimate of the charges payable". (The reasonableness of the charges themselves is on the other hand a decision for the water companies themselves)

For diversions of water companies' mains and sewers, the rules state water companies may provide an upfront Fixed Charge for these works but they are not obliged to do so. Alternative forms of charging are permissible. However, companies are only entitled to recover the cost reasonably incurred in complying with s185(5) of the WIA 1991.

In response to these requirements, the companies' proposals referred to in section 9 of this document propose that certain charges will be provided on a fixed or capped basis. In doing so, companies are conscious of potential incidental effects. Charges set at too high a level could raise the cost of competitive offers by alternative infrastructure providers and charges which underrecover the true cost of the work could reduce the opportunities for such competitive service provision.

Companies are also mindful that jobs which are infrequently quoted for or which are novel could present particular difficulties in relation to complying with Rule 14. There may be insufficient evidence on which to base a Fixed Charge.

Specific questions on this topic are set out in section 9 below.

⁵ Rules 25 and 32

7.3 Connection charges

These are the physical costs of connection to a water company's network and comprise service pipe connections and associated metering and connections to public sewerage along with other miscellaneous charges.

Many companies already offer "standard" charges for simple connections (25/32mm water) with modifiers for nearside/farside, surface type, poor ground conditions, and extra meterage. Most companies complete thousands of simple connections each year, and have extensive historic data that can be used to determine fixed charges that are broadly cost reflective in a wide range of scenarios. In future, company's standard charges could possibly also include basic traffic management (for example two way lights and signage) or a separate schedule of traffic management and street works charges could be published each year.

Companies could choose to meet the requirement for fixed charges by expanding this methodology into larger connection works. However, larger connections are less common across the industry than smaller ones, and as a result there are fewer examples available to inform the setting of fixed (cost-reflective) charges across the likely range of engineering scenarios.

In summary, therefore, companies may be able to fully fix or cap simple connection charges, whilst complex connections could be fixed, or offered on a quotation basis, perhaps with risk elements that would only be charged if the risks materialised.

Companies could also opt to make all connections work contestable, so that published charges provide a benchmark for self-lay organisations to price against.

It is expected that connection charges will broadly remain cost reflective.

7.4 Requisition charges

Developers will retain the right to requisition water mains and sewers to service their developments. However, water companies will no longer be required to calculate the amount funded by Developers using the relevant deficit and discounted aggregate deficit (DADs) rules set out in s41 and s98 of the WIA 1991. They may choose to apply income offsets but are not obliged to do so. However, in relation to self-laid water mains companies will be bound to ensure that the payments they make to SLPs or Developers will be consistent with their approach to requisition charging to ensure fair competition.

At present, requisition charges are calculated by companies based on their own schedule of mainlaying rates. The new rules do not require companies to change their approach. However, there may be potential for a framework of charges to be developed based on a price per metre which varies according to pipe size, surface type, depth, etc. Companies may prefer to limit these charges to the most straightforward requisition work and apply charge modifiers for work in difficult locations or for different types of sewer. Companies might be able to apply these charges as a capped or fixed charge. However, in the context of asset payments for self-laid mains, the implications under competition law of applying a cap may need to be considered.

Income offsets may continue to be calculated as currently or calculated on a different basis. Since Ofwat's rules require water companies to take reasonable steps to ensure that the present balance

of charges between Developers and other customers prior to the new charging rules is broadly maintained, requisition offsets offer a means of achieving this. Water companies may therefore wish to review recent past requisition and self-lay schemes to understand the ratio between offsets and value of the infrastructure provided so that these ratios could be applied to schemes under the new charging rules. In reviewing past schemes, any Network Reinforcement costs would need to be stripped out so that only the 'Site Specific' element is taken in to account. This is addressed further in the next section of this document.

7.5 Alternative approach to income offsets

Another proposed approached to site-specific charging for provision of new water mains has been advanced by a member of the Working Group and focuses on 'income offset' rather than costs.

This approach is based on the fact that today and in the future, the cost of new mains provision is subsidised because water companies take into account (offset) against their costs an allowance to take account of income from newly connected customers.

Given the time taken to calculate the whole construction cost, before then applying an 'income offset', if the new arrangements were to focus more on the offset than on construction pricing, companies could do less administrative work and response times might, accordingly, be faster.

This would however involve reconciling costs, and allowances, over multiple projects than focusing on site specifics.

Some companies are indicating that the contribution they currently seek from developers is around 15% (ie, costs less 'income allowance'). Using that figure for illustrative purposes could create a situation whereby:

- Say 100 houses were to be connected
- The Site Specific works to supply these houses were to cost £80,000
- The resultant income allowance is (at 85%) £68,000
- A developer payment of £12,000 would be required.

But rather than cost the whole works to derive this figure, the proposal is to: -

- a) Calculate the non-contestable costs (i.e. to connect the site, this being works that need to be paid for, however the site works are constructed); and,
- b) (If needed) apply a top-up mechanism to raise the amount recovered back to the required level (i.e., to maintain the balance between developer and bill-payers' contributions).

For most sites this could draw on a published schedule of connection types and sizes. If, in the example, the non-contestable cost was £4,000 it would mean that each connection would need to contribute some £80. This 'up-front' approach would mean that extras, such as works associated with commissioning each phase, would need to be separately charged. The benefit of this being that it would encourage developers to consider cost implications when they decide how to call-off sections of work.

Although this example has focused on site specifics the charges could be set and published for all sites done across a year (with, if merited, different charges being set against various property types).

The advantages from this approach apply whether the work is done in-house or by an SLP. For a developer who chooses to requisition they would be able (assuming their work falls within the categories covered in published schedules) to readily pre-determine:-

- Infrastructure Charges due; and,
- Site Specific costs (connection plus per connection amount); and,
- Any extras that could apply (depending how they ask for the work to be done). This calculation would be independent of construction costs which would be managed in the background.

Similarly with self-lay the SLP can readily determine:-

- Infrastructure Charges due; and,
- Site Specific costs (non-contestable works plus per connection amount).

It will then be for them to tender an offer to the developer and include whatever mechanism they feel was appropriate to recover any extras which arise (depending on how the work was done). Again there would be no need to determine all the construction costs before terms can be issued.

Q7: Do you consider this approach is preferable to any of the company proposals referred to in section 9? If so, please give reasons.

7.6 Infrastructure charges

Under the new rules, these charges will be payable by Developers purely to fund the cost of reinforcing water companies' networks other than resources and treatment costs. These costs will continue to be funded by existing and future bill payers.

Ofwat's rules require that infrastructure charges only contribute to funding the provision of new or uprated infrastructure to cater for expected new development. They are not intended for resolving existing capacity problems. These must be funded separately by the water company.

The rules give flexibility in how the charges could be applied. A single charge per service could apply across a water company's region or zonal charges could be introduced to address areas where there are shortfalls in network capacity to service new development. The zones could apply to water supply resource zones and/or sewerage catchments.

Discounts to the charges could be applied where water efficiency measures are installed in new homes or where measures are taken to reduce discharges to the public sewer network. The rules do not prevent water companies from offering discounts exceeding 100% but companies would need to ensure these would not have perverse consequences.

As currently, credits would be expected to apply where there has been a previous demand on a development site within the five years preceding the new development.

Ofwat's Charges Scheme Rules provide that Infrastructure Charges should be set at a level that recovers the costs incurred by the water company in reinforcing its network over a rolling five-year period to service new development. These may therefore include the associated costs of network modelling, administration and assurance.

8 Maintaining the balance

One of the key requirements of Ofwat's new charging rules (see Rule 19) is that "the present balance of charges between Developers and other customers prior to the implementation of these rules is broadly maintained".

Fulfilment of this requirement is a matter for individual companies but a number of companies have shared their approaches with Water UK. This has highlighted the following points:

- the need for a detailed analysis of past requisition and self-lay schemes to separate out the investment in 'Site Specific' infrastructure from Network Reinforcement expenditure;
- the translation of this investment into what Developers and SLPs would have contributed towards the costs of the 'Site Specific' infrastructure compared with that which would have been funded by water companies under the new charging rules;
- such analyses are time consuming and require experienced engineering assessment.
 Depending on the number of schemes undertaken, companies may either choose to analyse all schemes over a reasonable time period or select a statistically representative sample of schemes for analysis. A reasonable time period is considered to be up to 2 years.
- the historic ratio of Developer/SLP to water company funded investment may then be applied to future investment to demonstrate whether the present balance of charges is broadly maintained;
- in developing charging schemes, there will be a trade-off between cost reflectivity and simplicity. With a desire for simple and predictable charges, averaging of charges will inevitably lead to charges being less cost reflective for individual developments. Individual developments may therefore pay more or less than under existing arrangements whilst the overall broad balance of charges is maintained;
- as the physical costs of connections are likely to continue to be generally cost reflective, and
 Ofwat will expect infrastructure charges income over a 5-year period to broadly match
 investment in Network Reinforcement, the charges for requisitions and the payments made
 to SLPs for the assets they provide and which are adopted are likely to provide the main
 means by which the overall broad balance of charging is maintained;
- while companies might wish to simplify charging further by providing a per-property discount to reflect the income expected to be received from the newly connected properties (offset), this approach has so far not been accepted by Ofwat-see paragraph 3.4 of its December decision document⁶.

Q8: Are there any further points relating to maintaining the balance of costs which should be considered?

Q9: Do you agree with an approach where the income offset continues to be applied to Site-Specific requisitions and SLP schemes in order to maintain the balance? Would it be preferable for this calculation to be standardised as a percentage or per-property offset in order to provide more certainty over costs?

 $^{^6 &}lt; http://www.ofwat.gov.uk/wp-content/uploads/2016/12/Charging-rules-for-new-connections-\%E2\%80\%93-decision-document.pdf>$

9 Potential new approaches

While all companies will need to undertake further detailed work to prepare schemes meeting the requirements of the new Ofwat rules, at this stage Water UK considered that it would be helpful for consultees to be able to comment on the principles that might inform companies' approaches to the implementation of the new rules.

Appendices 2 and 3 set out the guiding principles proposed by three different companies, all of which have undertaken significant preliminary work in assessing the implications of the new rules.

Q10: Would you favour greater commonality to charging for new connections across England or do you see benefits in individual water companies having different approaches?

Q11: Do you share the concerns expressed about the implications of complying with the requirement for upfront costing referred to in section 7.1 (reflecting Ofwat's Rule 14) and if so, how would you suggest these be addressed?

Q 12: Do you think any of the three proposed approaches are better at complying with Ofwat's Rules? If so, which? Please give your reasons.

Q13: Have companies proposed an appropriate blend of fixed, capped and variable charges to deal with high and low volume connection activities. If not, what would you suggest and why?

Q14: Do you favour a single standard infrastructure charge in a company area or a range of subregional (zonal) specific charges? Please give reasons.

10 Testing the Models

10.1 Purpose

In considering water companies' proposed charging schemes, we have anticipated that stakeholders will want to understand how different types and scales of development would be charged under the new charging arrangements compared with existing arrangements.

Water UK has therefore developed a series of templates for water companies to undertake these comparisons using a variety of typical scenarios and common inputs. They are spreadsheet based The scenarios are set out in Appendices 4 and 5 and the spreadsheets are in Appendix 8.

The use of common inputs as far as possible will allow "before and after" comparisons to focus on the differences between different companies' proposed means of implementing the new rules.

We appreciate that companies may be reluctant to publish the data resulting from the use of these models but we hope that they will allow companies to publish details of how particular types and sizes of development would fare under their proposed approaches.

10.2 Scenarios

The scenarios cover the main areas of infrastructure delivery for new development as follows:

Water supply

- water connections without requisitioning
- requisitioning
- self-lay

Sewerage

- sewerage connections without requisitioning
- foul sewerage requisitioning

Companies undertake few combined and surface water sewerage requisitions so data is scant on these for reliable comparisons.

The scenarios which are set out should provide stakeholders with a reasonably comprehensive appreciation of how water companies' proposed schemes will apply compared with existing arrangements. They will also permit comparisons between different companies' approaches. The templates are not intended to provide any guide to actual charges and approaches that may ultimately be adopted by companies.

10.3 The templates

Each infrastructure delivery approach, e.g. water requisition, has its own template comprising a base input spreadsheet and tabbed sheets feeding off this covering the various scenarios. Each file also has an 'Overview and Assumptions' sheet which provides information on how to input the data and assumptions used.

For the base data, common assumptions have been made as follows:

- Current interest rate for requisitions 2.25%
- The Retail Price Index (RPI) for the next 12 years 2.5%
- The water Infrastructure Charge is £361/per dwelling and similar for sewerage.

The base data will then include a water company's estimate of water charges income per new household for the following 12 years as an input for the requisition scenarios. Income should be given at outturn prices.

Similarly, sewerage income data should be input for those companies who provide sewerage services.

The requisition spreadsheets are simplified to enable stakeholders to follow easily the mechanics of current requisitioning and derivation of the figures. For example, there is no algorithm for calculating the annual income offset to take account of between-year phasing of development. It is assumed that in any year any properties built will contribute a full year of charges income.

No allowance is made for a proportion of void properties, i.e., those where no income is received due to zero occupancy.

The requisition and self-lay spreadsheets only apply to current requisitioning and self-lay respectively. Companies will need to decide how these forms of infrastructure delivery will apply under their new charging arrangements.

For self-lay under existing charging arrangements, it has been assumed that all activities relating to the provision of infrastructure to serve new development are contestable and feature in the calculation of the Asset Value Payment made by a company to a Developer or SLP. This includes Network Reinforcement which would form part of a water supply requisition calculation in terms of assessing income offsets.

For each scenario, typical water company costs of providing Site Specific and Network Reinforcement costs have been provided to enable sensible comparisons to be made of companies' charges under current and new charging proposals. For the companies' costs, expenditure has been split into on-site, off-site and Network Reinforcement with the off-site element comprising pipework purely to connect the development to a company's existing network on a size-for-size basis or below. Any over-sizing to cater for other development would fall within the Network Reinforcement category.

For foul sewer connections and foul sewer requisitions, it has been assumed that all water company works are off-site and only relate to off-site connecting pipework and Network Reinforcement. Sewer adoption costs are excluded and are not expected to change.

For each scenario most calculations are automatic and carry through to the summary sheets. Some require company inputs and are clearly defined by blue boxes. The sheets are password protected to avoid inadvertent corruption of calculation logic. However, it is recognised that companies' charging models may not necessarily align with the templates and a password is provided to enable companies to amend the sheets to meet their particular needs if they so require.

Under each scenario, the cost to the Developer and to the water company under current arrangements is summarised in the top right hand corner of each spreadsheet. Below this the respective costs under the new charging proposals are given for comparison.

Q15: Do you consider that the use of the test data will provide meaningful comparisons between different companies' approaches and if not, do you have any alternative suggestions?

11 Independent review of our approach

One of the aims of this consultation is to provide a means for stakeholders to compare the implications of different companies' proposed approaches to the implementation of the new charging rules. We asked economics consultancy Reckon to assess the appropriateness of our approach and they have commented as follows:

"The overall approach of using a set of hypothetical new connections projects to illustrate the impact of moving from the current methodology to new company-specific methodologies seems reasonable. The set of hypothetical projects listed in [the appendix] provides a good range of possible

connections, covering both small and large domestic and commercial developments. The use of standardized on-site and off-site costs allows comparisons between companies' methodologies on a common footing."

12 A common approach to published charges and quotations and published charges

12.1 Published charges format

The current consultation also seeks to address whether stakeholders would value more commonality in companies' published charges documents. Currently companies have their own charging schedules but there may be merit in these following a single framework when the new charging arrangements are introduced from April 2018.

As part of their approach to the new rules companies expect to publish new information about their charging schemes. These are envisaged to include:

- Tables of fixed charges
- Methodology statements
- Capped risk items
- Offset and asset payments
- Administrative charges where applicable
- Fees and bonds
- Building water charges

Q16; Do you think companies should move towards a common framework for publishing their charging information each year?

Q17: What do you consider is reasonable for companies to provide in their published charges?

12.2 Common quotations format

Comments are also sought on whether there would be merit in companies providing commonality in their quotations.

A common form exists already and is used to varying degrees by companies⁷ A number provide the information required by the current form but do so in a different format.

A template is given in Appendix 6 as a suggested framework for a common quotation form. It aligns with the terminology set out in section 6.3.

We also invite comments on how companies should provide convertible quotations⁸ so that SLPs can decide which contestable elements of work they may wish to undertake. It is recognised that the

https://dl.dropboxusercontent.com/u/299993612/Publications/Guidance/Building%20protocols/Guidelines%20for%20the%20Production%20of%20Quotations.pdf

⁸ A quotation where various elements of work can be selected and the price for the selected elements do not change if all the works included in the quotation are not undertaken by the water company

selection of only some elements may impact on a water company's overall costs of delivery due to loss of economies of scale.

Q18: Do you consider that the adoption by companies of greater commonality in their approach to quotations would be helpful? If so, what information would you like to see?

Q19: What do you think are the benefits or dis-benefits of developing a common framework/template for charges; e.g. based on a price per metre which varies according to pipe size, surface type, depth, etc?

- Would such arrangements be more cost reflective?
- Would it improve quotation process times?

13 Transparency of water and sewerage modelling assumptions

Each company adopts its own approach to water and sewerage capacity modelling reflecting the particular company's circumstances. The current Water UK work has provided an opportunity for comparisons to be made between the approaches adopted by each company.

For example, on the sewerage side, there has been extensive discussion with the Home Builders Federation (HBF) which has challenged water companies' approaches to modelling and the differing parameters each uses. A significant issue for the HBF has been the allowances water companies make for infiltration and illicit connections in relation to sewerage. The water companies consider that applications for new connections must take account of the actual state of networks and note that any change to current practice would transfer the costs occasioned by development from Developers to the general customer base. This would appear to be incompatible with the requirement to maintain the balance, as described in section 8 above.

The new rules⁹ make it clear that Developers cannot be required to contribute to the cost of remedying existing deficiencies or of other works unrelated to the requisition.

Companies do however consider that there would be merit in providing greater transparency on their modelling assumptions, and have already shared a comparison table of companies' parameters with the HBF. To further increase this transparency, it is proposed that modelling assumptions for both water and sewerage will in future be published by all companies. These are set out in the table below:

Water supply	Sewerage
Per capita consumption	Per capita consumption
Average household size	Average household size
Leakage	Infiltration rate for sewers on development site
Average design flow rate over peak 15 minutes	Infiltration rate for existing sewers
for a new standard domestic connection	
(Average day peak week)	
Non-standard domestic design flow rate	Allowance for illicit surface water connections
Minimum design pressure in the mains used in	
assessment of reinforcement	

⁹ Rule28 of the Charging Rules

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Design maximum peak velocity	
Relaxation on standards for fire flows (if	
applicable)	

Q20: Do you consider that publication of the parameters set out in section 13 would be helpful and what other parameters would you wish to see published?

14 Proposed Principles for Interaction with the Planning System

14.1 Background

While there is no direct linkage between the new Ofwat charging rules and the planning system, during discussions on the new rules, concerns have been raised that on occasion, new development may have to be delayed to await the delivery of off-site infrastructure by the water company.

This is largely related to sewerage infrastructure and sometimes arises out of the ability of Developers, once a development has planning approval, to connect it to the sewerage system, merely by giving notice to the relevant water company.

In order to help ensure that sewer flooding can be prevented and that sewerage can be treated properly, local planning authorities may on occasion consult water companies and other parties such as the Environment Agency to understand the extent of these risks. This may in turn lead to conditions being imposed so that a particular development may not proceed until upgrades to off-site infrastructure have taken place.

It has been suggested that such interventions may lead to Developers contributing to the cost of the infrastructure in circumstances where they could not be required under water legislation to make any such contributions. It has also been suggested that all such works should be carried out by water companies pursuant to their general duties to provide water and sewerage infrastructure. In such a case, costs would fall on existing and future bill payers.

The leading case on this topic, Barrett Homes v Dŵr Cymru ¹⁰ noted the ability of the planning system to deal with such cases and there continue to be individual decisions of the Planning Inspectorate upholding the imposition of conditions by planning authorities in such cases.

We also observe that the overall "balance" requirement would seem to remove any incentive for water companies to use the planning system as a means of shifting costs onto Developers which they should properly bear.

14.2 Proposed planning principles

Water companies support the government's aspirations to increase the rate of home building. At a local level, water companies work hard to understand when and where new development will come forward so that the necessary infrastructure can be provided in time for such developments to proceed without delay.

¹⁰ https://www.supremecourt.uk/cases/docs/uksc-2009-0038-judgment.pdf

Despite such efforts, accurately predicting new development is not an exact science. Developments foreseen in local plans may not proceed, either at all or as originally envisaged and there continue to be development applications submitted for sites not covered by the local plan. Water companies are loath to provide infrastructure unless they are certain that the development will proceed, partly because any such investments may be disallowed by the regulatory price control system if the development does not proceed and partly because operationally, it is undesirable to have unused lengths of pipework.

Water UK is therefore proposing that the use of the planning system be addressed by a set of principles which all water companies would agree to adhere to. These are attached as Appendix 7.

These have been considered by the Working Group and the one outstanding comment relates to the reliance that can be placed on local plans. For the reasons noted above, while local plans are an important element in water companies plans for new infrastructure, it is not possible to place absolute reliance on them. We invite comments on our proposed approach.

Q21: Do you agree with the proposed planning principles? If not, please suggest any changes by reference to a numbered principle and by proposing alternative wording for the current text.

15 Consultation questions

Comments are invited on any aspects of the consultation but it would be helpful if responses to the following questions raised in the document could be given:

- Q1: Are there any other areas of study that the Working Group could look at in a subsequent phase in relation to new connections charging? If so, please specify these.
- Q2: Do you agree with the scope of activities described as being contestable in Appendix 1? Do you think:
 - the descriptions of the activities are sufficient?
 - there are any activities which are missing from either category?

Q3: Do you agree with this suggested approach to the interpretation of 'Site Specific'? If not, why not?

Q4: Do you agree with the proposed means of apportioning the costs where a Developer, SLP or NAV provides additional capacity to that required to serve their own development? If not, why not?

- Q5: Do you agree with the proposal for how terminal pumping stations should be funded? If not, what funding methodology would you suggest?
- Q6: Do you have any views on how uncertainty should be treated in quotations where exceptional costs could materialise? For example, should terms in the connection offer exclude "exceptional"/ "unforeseeable" costs?
- Q7: Do you consider this approach is preferable to any of the company proposals referred to in section 9? If so, please give reasons.

- Q8: Are there any further points relating to maintaining the balance of costs which should be considered?
- Q9: Do you agree with an approach where the income offset continues to be applied to Site Specific requisitions and SLP schemes in order to maintain the balance? Would it be preferable for this calculation to be standardised as a percentage or per-property offset in order to provide more certainty over costs?
- Q10: Would you favour greater commonality to charging for new connections across England or do you see benefits in individual water companies having different approaches?
- Q11: Do you share the concerns expressed about the implications of complying with the requirement for upfront costing referred to in section 7.1 (reflecting Ofwat's Rule 14) and if so, how would you suggest these be addressed?
- Q 12: Do you think any of the three proposed approaches set out in Appendices 2 and 3 are better at complying with Ofwat's Rule 14? If so, which? Please give your reasons.
- Q13: Have companies proposed an appropriate blend of fixed, capped and variable charges to deal with high and low volume connection activities. If not, what would you suggest and why?
- Q14: Do you favour a single standard infrastructure charge in a company area or a range of subregional (zonal) specific charges? Please give reasons.
- Q15: Do you consider that the use of the test data referred to in section 10 will provide meaningful comparisons between different companies' approaches and if not, do you have any alternative suggestions?
- Q16: Do you think companies should move towards a common framework for publishing their charging information each year?
- Q17: What do you consider is reasonable for companies to provide in their published charges?
- Q18: Do you consider that the adoption by companies of greater commonality in their approach to quotations would be helpful? If so, what information would you like to see?
- Q19: What do you think are the benefits or dis-benefits of developing a common framework/template for charges; e.g. based on a price per metre which varies according to pipe size, surface type, depth, etc?
 - Would such arrangements be more cost-reflective?
 - Would it improve quotation process times?
- Q20: Do you consider that publication of the parameters set out in section 13 would be helpful and what other parameters would you wish to see published?
- Q21: Do you agree with the proposed planning principles in section 14? If not, please suggest any changes by reference to a numbered principle and by proposing alternative wording for the current text.

Q21: Consultees' views are requested on defining what they would see as desirable in order to provide a smooth transition to the new regime.

16 Next steps

As noted in section 4, we will publish an independent review of responses to this consultation. The review will also be published on the Water UK website <www.water.org.uk>.

The responses may also enable us to publish guidance in relation to the new rules during summer 2017.

We are aiming to publish the responses and the review in June 2017 and expect that companies will then wish to consult their customers on their proposed approaches.

If it were considered to be helpful, Water UK could arrange further workshops at which companies could test their proposed approaches.

Water UK will also look to facilitate that consultation process, for example, by providing a central list of consultees which companies can use in addition to their own regional and local stakeholders and by hosting a central consultation timetable for individual companies' consultation programmes.