2 June 2017

New Connection Services Charging

Responses to the Water UK Consultation

Index

1. Executive summary

This document sets out the results of the consultation initiated by Water UK on the implementation of the new Ofwat charging rules for "new connection services".

As we noted in our April consultation document, the introduction by Ofwat of new charging rules represents a once in a generation opportunity to make substantial improvements to the way in which water companies charge for "new connections".

In consultation with stakeholders and with the assistance of Reckon LLP, Water UK and its members have devoted considerable time and energy to understanding how the new rules can be implemented in order to simplify and improve the charging arrangements for works to enable new development.

As noted below, the initial comments reported in this document will shortly be supplemented by some further conclusions from Water UK on possible ways in which the new rules can be implemented. However, at this stage, we believe that a number of items have come into clearer focus.

First, there is a strong desire on the part of developers and other customers for simplicity and predictability in charging. These stakeholders also place a premium on the adoption by water companies of charging arrangements which are broadly aligned. Within the constraints of competition law, Water UK is endeavouring to respond to these preferences. We are therefore initiating further urgent work to establish a more detailed template for quotations and a model company charging scheme. Work is also to be initiated to develop a more comprehensive understanding of the extent of contestable work in new connections.

These approaches are balanced by the recognition by almost all parties that there will be circumstances in which fixed upfront charges can be undesirable. Ofwat has recently initiated a consultation on allowing for an exception to the general requirement of such fixed charges and on the assumption that this is supported by consultees, Water UK is going to work to develop a shared understanding of when this exception might apply, such as in cases where there is no data on which to base a fixed charge.

Secondly, on a number of the more technical elements of the charging arrangements covered by the consultation, there is a broad measure of agreement. Determination of the boundary between site-specific and other work is one example of this and others are set out in section 5 of the document.

Thirdly, most but not all parties favour the establishment of a single, regional infrastructure charge. It does however seem desirable for there to be the opportunity for this charge to vary depending on the circumstances of the development, such as the use of water-saving techniques or measures to reduce the volume of surface water entering the sewerage network. Further work is needed to identify common factors which might cause variation to a standard charge.

Finally, while the importance of the Ofwat rule on maintaining the present balance of charges between developers and other customers is recognised by all parties, it does seem that this rule can only operate as an overall check on the approach adopted by each water company rather than as a precise charging constraint. We hope to be able to give further guidance to this issue in our further conclusions document.

Water UK and its members look forward to working with stakeholders in the next stages of implementing these new rules.

This document was reissued on 23 June with a correction to paragraph 4 of section 5.2.2.

2. Introduction

2.1. This document represents the initial output from the consultation process that Water UK has conducted in relation to the implementation of the new Ofwat charging rules relating to new connection services.

2.2. It will be supplemented by further conclusions from Water UK on the topics under consideration and we are aiming to publish these on 9 June 2017.

2.3. Our consultation document dated 10 April 2017 invited views of stakeholders on a wide range of questions raised by the new rules and we received a total of sixteen substantive responses. Water UK would like to thank those who responded to the Consultation and who participated in the subsequent Working Group meeting at which the Consultation responses were considered. The Working Group comprised representatives from the water industry, the Home Builders Federation (HBF), the Home Builders Association (HBA), Fair Water Connections (FWC) and NAVs (new appointments and variations). Representatives from Defra, DCLG and CC Water attended as observers.

2.4. The list of those who responded to the Consultation appears in schedule 1. Eight are incumbent water companies, two are NAVs, three are trade associations, one a regulatory body, one an infrastructure consultant and the other an individual housing developer.

2.5. All except one of the Consultation responses (one respondent requested that its response be treated in confidence) are being published on the Water UK website at the following address < http://bit.ly/DSCR2017 > .

3. Background to this work

3.1. The consultation document expressed the purpose of the Consultation as follows: "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."

3.2. Water UK commissioned economics consultancy Reckon LLP to review the responses received to those consultation questions touching on companies' charging schemes. Sections 5.1 to 5.8 and section 6 of this document have therefore been drafted by Reckon. The remaining sections of this document have been prepared by Water UK. Reckon's brief was for a limited piece of initial work, and the focus at this stage has been on the synthesis of stakeholder responses and then providing some guidance to help companies work through some of the key charging issues these raised. The brief did not provide for a detailed review of all the issues arising or for a more comprehensive set of guidance

3.3. Based on the Consultation and the responses received, this document sets out initial guidance on how the new Ofwat rules might be implemented. As noted above, further guidance will be published shortly by Water UK. Following publication of that further guidance, individual companies will need to consider these conclusions and the extent to which in establishing their own charging schemes, they wish to adopt these conclusions.

3.4. Part of the consultation document offered test data for companies to use to demonstrate the effect of their proposed new approaches as against the outcome of applying their current approaches. It has become evident that companies are not yet in a position to use this methodology to compare the "before and after" charges for particular development types. A number of companies do however expect to use this approach once they have made further progress in specifying in detail how their new charging schemes will operate.

4. Next steps and further engagement

4.1. At this stage, Water UK envisages further work on the following issues:

4.1.1. Establishment of standard charging template and outline charging scheme

4.1.2. Definition of contestability

4.1.3. Defining situations falling outside the requirement for fixed upfront charges to be provided

4.1.4. Reaching a common approach to the transition to the new arrangements.

4.2. We will shortly give further details of the groups that we are establishing to consider these issues. We expect initial conclusions from these work streams to be available for discussion at the next meeting of the working group in mid-July.

4.3. Water UK will also be setting up an area on its website in which companies can publish their engagement plans and documentation

5. Summary of key issues and stakeholder views

This section provides a summary of the responses to the Consultation. Issues 1-8 have been reviewed by Reckon LLP and issues 9 to 16 by Water UK.

5.1. Issue 1: Dealing with cost variations and uncertainty in charges for requisitions

5.1.1. Background

Ofwat rules require water companies to offer the option of an upfront fixed charge for requisitions, connections and diversions.[1] Water companies may use alternative methods of applying charges if the method for calculating those charges is explained clearly in their Charging Arrangements.

The Consultation stated that while "many aspects of the provision of infrastructure to service new development can be predicted with a reasonable degree of accuracy" there may be occasions where exceptional and unpredictable costs may be incurred.

The Consultation put forward an approach to dealing with these exceptional costs, involving the use of clearly identified and transparent risk factors, and sought the views of stakeholders.

5.1.2. Summary of stakeholder responses

There were mixed views from stakeholders on this issue.

Responses from developers and most other non-water company respondents were strongly in favour of fixed upfront charges. They believed that companies are best placed to manage the risks associated with uncertain costs. One respondent suggested the use of a transparent contingency fee to manage uncertainty. Another suggested fixed prices for simple connections and bespoke quotations with transparent assumptions for complex connections.

CCWater suggested that the approach should be flexible to allow some uncertainty to be built in to upfront charges, as without this, there could be adverse price shocks for smaller developers.

Most water companies would like to see some flexibility in their approaches. Some suggested the use of the inclusion of specific risk factors and reconciliation against actual costs. One water company suggested giving developers the choice between a fixed upfront charge with some exclusions or a firm quote following detailed investigation.

5.1.3. Conclusions

It seems clear from the responses that developers and most other non-water company stakeholders are strongly in favour of charges that are fixed upfront and where the company bears the risk of cost variations. Responses from water companies and CCWater are in favour of some flexibility in setting charges to take account of exceptional circumstances.

This issue was discussed further at the connections charging Working Group meeting held on 18 May 2017. The consensus view of the Working Group was that whilst it is possible to set fixed upfront charges for simple or standard connections (which constitute the majority of

[1] Ofwat rule 25 (requisitions), rule 32 (connections) and rule 42 (diversions)

new connections), there are some exceptional circumstances where it would not be reasonable to apply upfront fixed charges.

Ofwat has since proposed a variation to its charging rules that would provide an exemption from the requirement to published fixed charges in circumstances where it would be unreasonable to do so.

5.2. Issue 2: An approach to income offsets and asset payments

5.2.1. Background

Appendix 2 of the Consultation set out guiding principles proposed by three companies following preliminary work undertaken by them. These proposals included options for setting income offsets that would apply to charges for laying mains and sewers. Section 7.5 of the Consultation set out an alternative approach to income offsets, put forward by a member of the Working Group.

The Consultation sought stakeholders' views on whether the alternative proposal is preferable to any of the companies' approaches. Stakeholders were also asked for views on whether income offsets should be standardised as a per-property amount or as a percentage of costs.

5.2.2. Summary of stakeholder responses

The responses from the HBF and HBA said that the company proposals did not provide sufficient detail to allow for substantive comments to be made. One developer respondent preferred the alternative approach for its simplicity and transparency.

NAVs expressed the view that the arrangements for income offsets should contribute towards a level playing field between NAVs and water companies. In this regard, they expressed a clear preference for a per-property income offset.

One respondent was concerned that the Consultation did not adequately address the issue of asset payments. The same respondent expressed a preference for the alternative approach, and within this for the income offset and asset payments to be based on a published schedule based on site demand. The respondent also supported the use of income offsets against infrastructure charges, but only after all requisitions charges have been offset.

CCWater is concerned about the impact on customers of any proposal to apply income offsets to infrastructure charges. However, they believe their concerns would be addressed if there were no additional costs to customers, over and above a reasonable adjustment arising from moving to a different charging methodology.

One respondent said that charges should reflect costs and income offsets should reflect forecast income from the new development over a longer period (e.g. 25 years). This respondent was not in favour of an income offset applied as a fixed percentage of cost.

There were mixed views from water companies. Three respondents preferred the company proposals to the alternative in the Consultation. Of these, two suggested that a site-specific approach to charges and income offsets would be preferable, and that income offsets should be applied as a percentage of site-specific costs.

One water company preferred the alternative approach, and said that they would support setting income offsets either as a percentage of costs or as a per-property amount.

5.2.3. Conclusions

Whilst there seems to a consensus in favour of income offsets in general, stakeholders raised a number of issues relating to the calculation and application of income offsets and asset payments.

This issue was discussed further at the Working Group meeting. The group expressed support for the income offset and asset payment to be applied to all connections, not just for those involving a new main or sewer. The group also noted that a wider application of offsets would go against Ofwat's rule 34.

Section 6.2 of this document discusses this issue further and provides some guidance for companies.

5.3. Issue 3: Maintaining current balance between customers and developers

5.3.1. Background

Ofwat rule 19 requires that water companies take reasonable steps to ensure the present balance of charges between developers and other customers be maintained under the new arrangements.

The Consultation raised a number of points that Water UK had compiled following engagement with companies, and asked stakeholders if they had further points to make.

5.3.2. Summary of stakeholder responses

The HBF expressed concerns about a possible lack of consistency between companies on how the balance of charges will be maintained. The HBA suggested that the balance may need to change in the future to take account of new SuDS obligations that place a greater cost burden on developers, and potentially lead to lower costs for water companies.

One respondent suggested that, for a number of reasons, it would not be appropriate to use the historical balance of charges to set charges going forward. The respondent also suggested that the focus should be on the distributional impacts of any changes rather than on maintaining the balance at an aggregate level.

Another respondent said that the issue of maintaining the balance is closely linked to the price control framework. The approach to setting charges should be flexible enough to deal with changes to the price control framework.

5.3.3. Conclusions

Whilst the responses to the Consultation did not put forward suggestions for companies on how they might meet their obligations on maintaining the balance of charges, they did provide useful insight into the concerns that would need to be addressed.

For instance, concerns were raised about how companies would demonstrate compliance with the requirement in a transparent manner. Also, concerns were raised about locking into the historical balance when there may be reasonable grounds for deviations, for instance because the balance of costs may change in the future or because of unacceptable distributional impacts.

Section 6.3 of this document sets out some practical guidance for companies to consider when deciding how they might choose to comply with this requirement.

5.4. Issue 4: Approaches to setting infrastructure charges

5.4.1. Background

Ofwat rules require water companies to set infrastructure charges to cover the cost of network reinforcement associated with new connections. Infrastructure charges may be fixed per connection or calculated using a formula, and may vary within the appointed area.

The Consultation sought views on whether charges should be set at the level of the appointed area (single fixed charge) or vary within the appointed area (e.g. zonal charges).

5.4.2. Summary of stakeholder responses

The HBF and HBA expressed a strong preference for a single fixed charge, applied across the whole appointed area. The HBA said that zonal charges may be acceptable if these are known upfront.

One non-water company respondent said that the choice between a single charge and a zonal charge would depend on the specifics of the company. If there are significant differences in the supply/demand situation within the appointed area, that might suggest that a zonal approach is better.

Another non-water company respondent said that a single charge is better because it allows easier comparison to be made across companies. Another said that a single charge is preferable for its simplicity, and that a zonal charge would need to be supported with robust analysis.

One non-water company respondent supported the use of site-specific infrastructure charges that take account of the actual costs imposed by the connection on the water companies' networks.

Three water companies preferred a single charge, mainly for simplicity and ease of calculations. Two water companies expressed a preference for zonal charges because these can reflect cost differences between areas and send the right signals to developers.

5.4.3. Conclusions

Stakeholders expressed a wide range of views on this issue. Water companies have to balance competing, and sometimes mutually incompatible, objectives in deciding which approach to adopt.

The choice facing water companies is between the simplicity and transparency offered by a single infrastructure charge and the cost-reflectivity and scope for innovation in site design offered by a site-specific approach. A zonal charge falls somewhere between the two extremes.

Section 6.4 of this document offers a pragmatic “hybrid” approach to setting infrastructure charges that attempts to balance these competing demands.

5.5. Issue 5: Greater commonality across companies

5.5.1. Background

The Consultation sought stakeholders’ views on whether they would like to see greater commonality between companies on various aspects of the new charging arrangements. These include greater commonality in:

a) approaches to meeting Ofwat’s charging rules;

b) companies’ published charges schemes;

c) approaches to quotations; and

d) frameworks/templates for publishing variable charging elements (e.g. a price per metre for different types of pipes, surface types, depth etc)

5.5.2. Summary of stakeholder responses

Most non-water company respondents were strongly in favour of greater commonality in companies’ approaches to setting charges, contents of charges schemes, quotations and frameworks/templates for variable charging elements. There was no support for harmonised charges, and two respondents explicitly opposed any move towards harmonised charges.

Water companies broadly recognised the benefits to developers and other stakeholders of greater commonality across all companies. However, most water companies supported some flexibility to take account of regional variations. Some responses also suggested that commonality would hinder the development of innovative approaches.

CCWater said that any increase in commonality should be accompanied by a commitment to greater transparency.

5.5.3. Conclusions

There seems to be general agreement that greater commonality in approaches, quotations, charges schemes, and pricing templates between companies can bring transparency and ease of comparison to the new arrangements.

However, there are good arguments in favour of allowing some flexibility and discretion to companies. Such flexibility allows regional variations to be taken into account. Perhaps more importantly, it allows the emergence of innovative approaches that customers might eventually benefit from.

5.6. Issue 6: Views on companies' proposed principles

5.6.1. Background

The Consultation set out guiding principles proposed by three companies following preliminary work undertaken by them.

The Consultation sought views on these principles, and whether the proposals involve an appropriate blend of fixed, variable and capped charges to deal with high and low volume connections.

5.6.2. Summary of stakeholder responses

The HBF and HBA said that none of the approaches would provide sufficient information to allow them to comment on the merits of the different approaches. One developer said that there is little difference between the three approaches. All three respondents said that they would like a greater proportion of the charge to be fixed. The HBF raised a concern that none of the approaches included discounts for developers that take account of the reduced flow of surface water into the public sewer network.

One non-water company respondent agreed with developers that the approaches fail to provide sufficient information to developers.

Another non-water company respondent said that it preferred proposal 3 because it is simpler for service connections of less than 63mm and it does not apply a separate charge for connections to an existing main. The respondent expressed support for variable charges for main laying.

CCWater said that companies are best placed to decide on the approach, but expressed a concern that a rigid adherence to fixed charges could lead to some customers suffering significant price shocks.

Most water companies felt that all three proposals are similar and could provide sufficient information for developers. One water company expressed a preference for proposals 1 and 2 because these involve fixed charges for connections and main laying. One water company said that all three proposals fail to deliver an improvement to predictability and certainty.

5.6.3. Conclusions

Stakeholders provided a number of useful comments for water companies to consider in developing their approaches further.

5.7. Issue 7: The use of test data to compare approaches

5.7.1. Background

The Consultation included a set of template spreadsheets with illustrative test data that water companies could use to explain their proposed charging methodologies.

The Consultation sought views on whether this approach would allow meaningful comparisons between different approaches.

5.7.2. Summary of stakeholder views

Stakeholders had mixed views on this question.

Five respondents agreed that the use of test data would provide useful comparisons.

Both the HBF and HBA expressed concerns that it would be difficult to compare charges across companies if they were to adopt inconsistent approaches and criteria. Another respondent said that it is uncertain whether the use of test data can provide meaningful comparisons.

One water company said that it is up to each company to explain their proposed arrangements to their customers through stakeholder engagement and consultation. One water company supported a workshop for all companies to discuss and test their respective approaches.

5.7.3. Conclusions

There was widespread support in principle for the use of template spreadsheets with illustrative test data. However, for it to be helpful, companies would need to ensure that they are applied in a consistent manner allowing meaningful comparisons both between their current and proposed approaches, and also between approaches adopted by different companies.

5.8. Issue 8: Content of charges scheme

5.8.1. Background

The Consultation set out a candidate list of information that could be published within water companies' charges schemes, and sought stakeholders' views on what would be reasonable to include in the schemes.

5.8.2. Summary of stakeholder views

Most respondents expressed strong support for the charges schemes to be comprehensive and transparent.

There were not many responses on the details of the candidate list of information. One water company said that the list was reasonable.

The HBF suggested that companies should make a full disclosure of annual investment in water and sewerage infrastructure specific to new residential development.

One respondent said that charges schemes should contain an explanation of how charges would be determined and applied, and all assumptions should be disclosed. Another respondent suggested that companies include simple worked examples in their charges schemes.

One water company provided a list of items that might be included in charges schemes, namely information on the cost of mains (£/metre), design and checking fees, and details on how income offsets are calculated.

5.8.3. Conclusions

The common theme across all responses is that charges schemes should be comprehensive and transparent. Water companies could consider the candidate list of information from the Consultation and the additional suggestions.

5.9. Issue 9: Point of Connection

5.9.1. Background

Ofwat's rules 5(m) and 5(t) shown in Figure 1 set out the boundary between what they refer to as 'site specific' works and network reinforcement. The Consultation identified a shortcoming in the rules in that site-specific works as defined only includes works on a development site and *'in the immediate vicinity of ....the development'.* This implies that any pipework to connect a development to a water company's existing network beyond the immediate vicinity of a development is therefore network reinforcement. This would seem not to be the case if it is purely to link the development to the nearest part of a water company's network.

Figure 1- Ofwat rules 5(m) & 5(t)

Rule 5(m): "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.*

Rule 5(t): "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 Consultation therefore proposed a revision to Rule 5(t) shown in Figure 2 below which included connecting pipework within site-specific works to a point where it was of an internal diameter no greater than that of the water company's existing network. It was felt this would provide a good working rule for defining the point of connection and the boundaries of responsibilities for both developers and water companies.

Figure 2: Consultation proposal for revision of Rule 5(t)

Proposed revised Rule 5(t): "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 *to an existing network at a point where the connecting pipework is of an internal diameter no larger than that of the existing network* ~~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.

5.9.2. Summary of stakeholder responses

Most stakeholders agreed with the proposed revision. Additionally, FWC suggested an amendment to the revision to account for the slight differences in internal diameters of nominally equivalent PE and iron pipes. They suggested *'nominal bore'* be inserted before *'internal diameter ....'*.

FWC saw benefits in a pragmatic approach to setting the point of connection, with advantages for self-lay mains providers to undertake on and off-site works thereby improving the efficiency of infrastructure delivery. They were opposed to one water company's proposal to terminate site-specific works at the nearest main to a development site. They also suggested that the pipework required to serve the first development proceeding in an area should dictate the point of connection for that development.

Two non-water companies disagreed with the need for the revision without citing reasons why.

Severn Trent Water identified a potential conflict with the sewerage right of connection under s106 WIA 1991[2].

[2] Water Industry Act 1991

5.9.3. Conclusions

There appears to be overall support for the revised definition of site-specific. The proposed amendment to cover the small differences between the internal diameters of PE and iron pipe seems sensible.

Basing the point of connection for a development on the pipework required to serve the first development to progress a connection in an area provides a pragmatic approach where other development may follow at some stage.

The suggested amendment to the rules would ideally be implemented by Ofwat changing the rule in question but if stakeholders are in agreement with this approach, that may not be essential in the short term.

The potential conflict with the sewerage right of connection is recognised but in such circumstances statute would assume precedence over the rules.

There seems merit in the pipework required to serve the first development in an area being used to dictate the point of connection for that development.

5.10. Issue 10: Provision of additional capacity - apportioning costs

5.10.1. Background

The Consultation sought views on how costs should be apportioned where a developer, SLP (Self Lay Provider) or NAV, at a water company's request, provides extra capacity to accommodate future development elsewhere in the area.

The proposal was that such costs should be apportioned on a proportional flow basis, with the water company picking up the costs of any over-sizing. The water company's costs would be funded from the income derived from infrastructure charges arising from future development.

5.10.2. Summary of stakeholder responses

Most stakeholders supported the proposal.

FWC and IWNL suggested a need to stop 'free-riders' - subsequent developers who may benefit from the first developer providing infrastructure that may bring the point of connection nearer to their development than would have existed had they developed first. They also suggested a need to have a mechanism for recouping the costs of over-sizing the assets provided by the first developer from subsequent developers.

FWC subsequently put forward two options for how such development could be equitably funded amongst developers and a water company for provision of water supply infrastructure. One option would be for a developer (or asset provider) to set the access terms for any development located upstream of their development benefiting from the over-sized assets provided by them. The other option would involve a proportion of any offset attributed to subsequent developers being given to the developer (or asset provider) of the first development for the spare capacity they had provided.

FWC also suggested that a developer or SLP should be able to tender for network reinforcement arising out of the demand they would be adding to a water company's network. They suggested that that the tender should be accepted if this was below that for which the water company could expedite the work and they satisfied the required competencies.

IWNL suggested that apportionment should not result in charges greater than for a minimum scheme to serve a development.

5.10.3. Conclusions

The Consultation proposed a simple approach with the first developer providing connecting pipework to cater for their development only. It would be for the water company to then decide, with its knowledge of other development proposals in the area, whether to request the first developer to over-size its assets to cater for future development. The water company could make an economic decision as to whether to invest in this extra capacity on a proportional flow basis or risk future development taking place and connecting locally on the proposed size-for-size basis discussed in paragraph 5.9. Infrastructure charges income would provide the funding necessary for this over-sizing.

The FWC proposals would introduce greater complexity into the arrangements, providing greater uncertainty for developers and third party asset providers as to what their costs would be. At the working group meeting which stakeholders attended, while the merits of the FWC proposal were noted, it was not strongly supported. It was concluded that the Consultation proposal offers a combination of relative simplicity, predictability and fairness.

Extending the opportunity for a developer or SLP with the necessary competencies to tender for network reinforcement work in consequence of the development they would be connecting up may lead to more efficient delivery of development led infrastructure. It is therefore considered worthy of further consideration by water companies.

5.11. Issue 11: Funding of terminal pumping stations

5.11.1. Background

Views were sought as to how terminal pumping stations should be funded. This hinged on whether they fell under the umbrella of network reinforcement and hence should be funded from infrastructure charges income or whether they were classified as Resources and Treatment assets and hence should be funded from a water company's general customer base.

The Consultation suggested that funding should be based on location - if located within a sewage works site, it would be funded from the general customer base whereas outside of this it would fall to funding from infrastructure charges.

5.11.2. Summary of stakeholder responses

Most stakeholders were supportive of this proposal but the HBA suggested all stations outside of a development site should be a water company's responsibility.

FWC suggested the same proposal should apply to primary pumping stations at water sources and water treatment works.

One stakeholder disagreed and considered that Ofwat had been quite definitive in previous guidance that terminal pumping stations were a Resources and Treatment function and hence should be funded from the general customer base. This stakeholder's view was firmly that process rather than location should dictate the allocation of funding.

5.11.3. Conclusions

Whilst most stakeholders were supportive of the Consultation proposal, it may be inappropriate to move away from the well-established Ofwat view that terminal pumping stations are part of Resources and Treatment and hence should be funded from a water company's general customer base.

However, there may be merit in exploring whether there are any grey areas where the classification does require refinement, perhaps where upgrading of storage associated with a station is located off-site.

5.12. Issue 12: Publication of modelling parameters

5.12.1. Background

Stakeholders' views were sought on whether they would like to see publication of the water supply and sewerage modelling parameters that companies use to assess network capacity and network reinforcement requirements. Views were also sought as to whether other parameters were also required.

5.12.2. Summary of stakeholder responses

Most stakeholders agreed with the proposal.

HBA considered the list was the minimum they were seeking whilst the HBF considered the list was deficient but did not indicate what additional parameters should be included.

FWC advocated the publication of all parameters essential for contestable mains design work. They also suggested a standardised set of parameters be published by Water UK in a new water industry standard (WIS) including where water saving fittings are employed.

FWC also wished to see the industry publish flow criteria based on pressure to aid self-lay design work. Furthermore, they were keen to see criteria for establishing the domestic flow rates in non-household premises.

5.12.3. Conclusions

There is general support for water companies publishing their modelling parameters.

One implication of the new charging rules is that modelling parameters will be less significant in relation to individual sites given that requisitions will no longer attract network reinforcement costs. However, they will have a bearing on the setting of infrastructure charges and therefore are still likely to attract scrutiny.

The need for publication of parameters to aid self-lay design work is acknowledged and merits further consideration by Water UK.

5.13. Issue 13: Adoption of Planning Principles

5.13.1. Background

The Consultation set out a list of suggested Planning Principles that the water industry should adhere to when liaising with planning authorities.

5.13.2. Summary of stakeholder responses

Most stakeholders supported the proposal.

The HBF cited water companies' duties under s94 WIA 1991 and case law with regard to providing capacity for new development. They raised concerns over some water companies using 'Grampian' planning conditions to delay development in areas where network capacity was lacking and questioned whether companies were aware of the potential liabilities for constraints set out in the Planning and Compensation Act. They also suggested the Principles needed to reflect Government's recent planning reforms.

Another non-industry stakeholder also raised concerns about some water companies' reliance on the planning system to constrain development where network capacity was lacking.

Croudace wished to see a definition of 'reasonable timescale' where development is delayed to allow for a water company to upgrade its network to accommodate the extra demands.

United Utilities proposed a minor amendment to the introduction to the Principle as follows:

> ‘These duties need to be balanced but if all parties follow the principles outlined in this memorandum, this will help ensure that the right infrastructure, particularly sewerage infrastructure, is in place in advance of ***and alongside*** new developments being occupied.’

This was proposed to reflect the fact that infrastructure upgrades are often most appropriately taken whilst developments are being occupied and built out rather than wholly in advance of occupation of an entire development scheme.

They also proposed a deletion to part of Planning Principle 8 as follows:

> *‘As set out in the PPG, it is for developers to provide information about how the proposed development will be drained and wastewater dealt* ~~***with if there are concerns arising from a planning application about the capacity of wastewater***~~

~~infrastructure~~. They are therefore encouraged to work with water companies and local planning authorities to provide sufficient information with their planning submission. This could be in the form of a drainage strategy which, where appropriate, identifies the scope for phased implementation of drainage for new developments.

Their justification for this was that in order to properly assess the sustainability credentials of a drainage proposal and to manage flood risk and environmental impact, applicants should provide sufficient information on their drainage proposals regardless of whether there are concerns arising from a planning application about the capacity of wastewater infrastructure.

5.13.3. Conclusions

Whilst some of the development sector consider a small number of water companies place too much reliance on the planning system to manage development where network capacity is lacking, the planning system retains an essential role in ensuring development is properly serviced and that public health and the environment are suitably safeguarded.

The proposed planning Principles should help water companies to respond positively to meeting the Government's growth agenda in a timely and efficient manner. It is also envisaged that the new-style infrastructure charges will reduce the extent to which conditions will need to be imposed by local planning authorities as companies will have the security of knowing that network reinforcements triggered by individual developments will be fully funded.

The proposed amendments to the Principles suggested by United Utilities are considered sensible revisions but we believe that the introductory wording would be slightly clearer if instead of the proposal from that company, the text were as follows:

"*These duties need to be balanced but if all parties follow the principles outlined in this memorandum, this will help ensure that the right infrastructure, particularly sewerage infrastructure, is in place in advance of* **or as** *new developments are being occupied"*

Specifying what is a 'reasonable timescale' for a water company to address network capacity limitations presents difficulties given the wide range of development challenges that arise. Water UK is currently carrying out work to provide greater transparency on the ability to connect developments to companies' networks and this may help to address the timescale issue that has been raised.

Water UK remains open to considering changes to the Principles where these are required as a result of changes to planning law or policy. Water companies are also advised to have regard to liabilities under the Planning and Compensation Act 1991 when liaising with planning authorities.

5.14. Issue 14: Transition arrangements

5.14.1. Background

Stakeholders were invited to offer their views on how a smooth transition to the new charging regime could be effected.

5.14.2. Summary of stakeholder responses

All stakeholders recognised the importance of a smooth transition to the new charging regime and the avoidance of 'price shocks'. The need for clear guidance was also expressed.

One non-industry stakeholder believed that the timescales were unrealistic and suggested the creation and testing of the charges by April 2018 and issue to the wider market between then and April 2019 to allow for businesses to plan, understand and train staff.

FWC suggested companies should produce detailed draft charging formats by no later than September 2017 and then review these for compliance against Ofwat's rules, test for consistency of approaches across the industry and refine accordingly and test incidence effects and transition impact on previous terms issued. This to be followed by transition proposals by the end of October and final transition plans by the end of November 2017.

IWNL suggested three potential windows:

- quotes issued/accepted between April 2017 and date charges come into effect - give right to request quote based on new charges;
- for new quotes given from January 2018 to date charges come into effect - give option of charges being made under new or old arrangements;
- from April 2018 - all under new arrangements.

South Staffs Water supported Ofwat's suggestion in its July 2016 consultation[3] which promoted a transitional period ending April 2022 for negotiations which were underway before the new charging scheme came into effect. Existing agreements entered into before the new scheme came into effect would also stand.

5.14.3. Conclusions

There is a clear need for workable and fair transition arrangements as companies move to the new charging arrangements. It is also vital that the transition arrangements are clear and well publicised.

The Water UK working group was of the view that it would be desirable if transition arrangements were common across the industry.

The group has agreed to look at various options to help develop a common approach to transition which could be adopted by the industry.

[3] http://www.ofwat.gov.uk/consultation/new-connections-charging-consultation/

5.15. Issue 15: Scope of Non-contestable items

5.15.1. Background

Stakeholders were asked for their views on the proposed list of non-contestable items in Appendix 1 of the Consultation.

5.15.2. Summary of stakeholder responses

Most non-water industry stakeholders disagreed with the extent of non-contestable activities. One suggested it was not appropriate for Water UK to specify the list and that Ofwat had previously published guidance on the subject.

IWNL were critical that NAVs had not been properly considered and this had led to confusion in the list of activities which were non-contestable. They also sought justification for why high-risk items should be non-contestable, arguing that water companies may use the same contractors who may also provide third party connections so therefore there was no valid reason for these not being able to execute high-risk work. They suggested that incumbents should put in place processes, procedures and systems that remove (as far as practicable) the incumbent from the connections process. Parallels already existed within the electricity and gas new connections market which the water industry should have regard to.

FWC suggested that design of all site-specific works should be contestable and that only design of network reinforcement work should be non-contestable. Furthermore, they advocated that under pressure source of water connections should be contestable regardless of pipe size.

One non-industry stakeholder suggested that Appendix 1 was inconsistent with figures 1 and 2 in the Consultation.

5.15.3. Conclusions

The non-water industry stakeholders have identified a number of issues which require further consideration to ensure a fair and competitive market for infrastructure provision.

A Water UK sub-group to explore the issues and propose revisions to the list of non-contestable items would be a way forward to address the concerns of stakeholders. This could have regard to any published Ofwat guidance.

5.16. Issue 16: Further areas of study for the Working Group to consider

5.16.1. Background

Stakeholders were invited to suggest any other areas that the Water UK Working Group could look at in a subsequent phase in relation to connections charging.

5.16.2. Summary of stakeholder responses

The HBA suggested the Working Group looked at how 'windfall' sites would be dealt with under the new charging arrangements and also encouraged the use of digital network capacity mapping.

The HBF were keen to see a network protocol developed and KPIs for water companies undertaking capacity assessments. They also wished to know how companies were addressing their obligations to keep accurate asset records of mains and sewers. They also commented on developer services performance reporting, suggesting that developers should judge such performance rather than water companies self-reporting.

FWC suggested that Water UK should hold regionally based sessions where several water companies would set out their charging proposals for discussion. They believed this would help stakeholders to economise on their time compared with attending 18 separate company sessions over a short space of time.

IWNL and Albion Water sought the creation of a level playing field in the charging arrangements to enable NAVs to compete on an equal footing to developers and SLPs.

Croudace wanted timescales defined for water companies to address network capacity constraints. They also wished to see requirements for water companies to maintain up-to-date sewerage models.

5.16.3. Conclusions

It is envisaged that windfall sites would be treated in the same manner as other developments although it is possible that in relation to such sites there is a greater likelihood of water companies seeking planning conditions to control the timing of development where network capacity is lacking and time is required to undertake network reinforcement.

Water UK is already in discussion with HBF about sewer modelling and it is expected this dialogue will continue.

Water UK recently set up a group to look at the potential for developers, SLPs and NAVs to 'self-serve' their connections to service new development. Digital capacity maps would be an integral element of this offering. However, the speed at which this can progress will be limited by the extent to which individual water companies have information and systems which can meet the expectations of developers.

Water companies already have KPIs for responding to developer enquiries and these have been the subject of a recent independent audit, the results of which will be published in late July along with the quarterly developer services performance results.

The desire for developers to judge the performance of water companies' developer services' performance is acknowledged. The industry responded quickly to requests in 2014 for performance reporting and is now self-reporting performance on a quarterly basis against 38 metrics. Whilst some water companies already invite developers to judge their performance by customer feedback surveys, the industry has been looking into the possibility of a common framework for such reporting. It is recognised that both qualitative and quantitative monitoring of performance is of value. We understand that Ofwat is likely to propose a means of assessing developer satisfaction with water company performance as part of their PR19 outcomes work.

Water companies are expected to maintain accurate maps of their networks and do make considerable efforts to update their records as information becomes available. The Water UK Infrastructure Policy Group is currently considering this topic further with a view to improving water companies' performance in this area.

The proposal for Water UK to host water companies' charging scheme consultations on a regional basis was discussed with the working group. They concluded that companies holding their own sessions was preferable and manageable. Water UK will however be hosting a section on their website relating to individual companies' consultation plans.

The need for charging schemes to ensure that NAVs may compete on a level playing field is acknowledged and is discussed further in section 6 of this document.

6. Guidance for water companies

This section (which has been drafted by Reckon LLP) provides guidance for water companies setting possible approaches to addressing the key issues identified following the consultation. Our guidance takes account of the views expressed by stakeholders in their responses.

This section considers several key charging issues for which Water UK considered it useful to make available some guidance to water companies, in the light of the issues raised in the consultation responses and the Working Group meeting of 18 May. It is not intended to be comprehensive, nor to limit the approaches that companies may consider as they develop their new charging methodologies.

6.1. Dealing with cost variations and uncertainty in charges for requisitions

6.1.1. Background

This section provides guidance for water companies on possible approaches to dealing with cost uncertainty and the balance of risks when setting charges for requisitioned mains and sewers.

Ofwat rule 25 requires water companies to provide the option of upfront fixed charges for requisitions. Water companies may also provide alternative methods of setting charges, provided these methods are explained clearly upfront. Ofwat rule 14 requires water companies to publish sufficient information in their charges schemes such that developers can "confidently work out a reasonable estimate of the charges payable".

Stakeholders would like the charges to be simple and known upfront as far as possible. They also expressed the view that water companies are best placed to bear the risks associated with upfront charges.

6.1.2. Approaches to setting charges

Within the constraints of Ofwat's rules and the views expressed by stakeholders, we see three broad approaches to setting charges for requisitioned mains and sewers.

a) A single charge covering all services and connection types that is fixed (in £ per connection) and published upfront;

b) Charges for different elements of requisitioned mains and sewers which are published upfront and can be used to calculate the total charge for the requisition once the design for the requisition is known (e.g. charges expressed in £ per metre for mains of different diameter in different types of ground);

c) A charging methodology that involves (i) bespoke quotations produced in response to a request from the developer, and (ii) the publication of indicative information on costs for the various elements feeding into such quotations (e.g. indicative range of costs for mains of different diameter in different types of ground). These quotations would be firm or fixed once accepted.

We note that Ofwat recently wrote to stakeholders to propose a change to provide a potential exemption from the fixed charges requirement in certain circumstances. Such a change could allow for a modified version of approach (c) above where, in some circumstances, the quote is not fixed and depends on the level of outturn costs.

Approach (a) above would provide the most upfront certainty for developers, but there are some significant drawbacks to this approach. Setting fixed upfront charges for connections may mean that charges are set to reflect the costs associated with the average connection, and this may create the perception of winners and losers. Developers requiring low cost connections may consider their charges to be excessive in relation to cost, while those requiring relatively high cost connections may benefit from this approach. Moreover, setting fixed charges gives developers limited incentives to keep the cost of laying new mains or sewers to a minimum, thereby discouraging innovative and environmentally friendly designs. Furthermore, there may be competition concerns if the pricing for contestable services is based on potentially crude averages across a heterogeneous range of requisition scenarios.

Approaches (b) and (c) help to address those concerns, at the cost of somewhat lower predictability and increased complexity.

Approach (b) may seem more to offer greater transparency. However, before the designs for the site have been confirmed it may not be possible to use the published information to estimate the costs. Furthermore, there may be practical difficulties in developing an explicit charging tool of this nature that works reasonably well in all circumstances. There may also be competition concerns about publishing detailed fixed charges for different elements of work.

Approach (c) provides a basis for requisition charges (before income offset) to align more closely with the costs of the new water mains and sewers needed to serve each development. However, quotations would be produced on a site-specific basis, and this means that charges would only be known several weeks or months after a formal request for a quotation is made. This may not be proportionate in some cases.

We see merit in a hybrid approach which would involve a published fixed charge (in £ per connection) for certain relatively simple or standard connections, and then either approach (b) or (c) above for other cases. Approach (c) seems more practical and more compatible with competition between self-lay and requisition models. However, water companies may be concerned about compliance with rule 14 if some quotations are significantly out of line with the indicative information included in the charging methodology.

Under this hybrid, companies could publish transparent criteria to determine whether a connection would be considered standard, and therefore be liable for the simple upfront charge per connection. Water UK could work with water companies and stakeholders to facilitate the development of a common set of criteria that can be adopted by water companies if they choose to do so.

Whilst there are benefits to a common set of criteria for drawing the boundary between fixed and site-specific charges, water companies may choose to develop criteria that are more individually tailored to their areas and circumstances.

6.1.3. Suggested approach to developing criteria

In developing criteria to determine the scope of any simple fixed charge per connection, there is a range of analysis of past connection projects that may be useful. In particular:

a) Analysis of data on the historical variation, across different connections and developments, in the cost of laying new mains or sewers (expressed on a cost per property basis);

b) Where significant variations in costs are observed, analysis of the drivers of these variations. This could be geographical drivers (e.g. according to surface type and ground conditions) or other site characteristics (e.g. distance from the nearest main or sewer on the public network or anticipated peak flows);

c) Consideration of the potential limitations of self-lay as a practical alternative to a water mains requisition. For instance, if there is an indication from past experience that work below a certain scale is less open to competition then this may indicate an area where the extra protection from a published upfront charge is more important and the deviations from cost-reflectivity less of a concern.

6.2. An approach to income offsets and asset payments

One of the main conclusions we drew from the consultation and Working Group is that there is a range of views on the income offset and the principles behind it. We propose potential interpretations of the principle of the income offsets and we then draw implications for setting them.

6.2.1. Background and purpose of income offsets/asset payments

The current arrangements include the provision for income offsets to be applied against requisition charges payable by a developer. Analogous arrangements exist for making asset payments to developers when new mains are laid by an SLP.

Income offsets are currently calculated using the Relevant Deficit method (over 12 years) or the Discounted Aggregated Deficit (DAD) approach. This applies to both water mains and public sewers.

The current arrangements allow the income offset to apply when the developer requisitions a main or sewer and the asset payment to apply when the developer lays a new water main (using an SLP). However, under current rules, income offsets do not apply to connections that do not involve a new water main or public sewer that is requisitioned from the water company or adopted by the water company. This means that developers requiring connections that do not involve a new water main or public sewer do not benefit from the income offset or asset payment.

One possible view on the purpose of the income offset is that it allows the developer to receive, as an offset against the cost of a new requisitioned main, some of the benefit that new customers (and assets in the case of self-lay) can bring to the water company (or possibly to all other customers) through the additional revenue generated from water and sewerage charges. This view has been expressed by developers and SLPs.

An alternative view starts from the premise that annual tariffs imposed on customers for water and wastewater services is the primary source of funding for the establishment and maintenance of water mains and sewers. The practice of requiring financial contributions from a developer *in some circumstances* can then be explained as an upfront “top-up” payment from the developer in cases where the costs associated with the new mains or sewers are high relative to the income that will be generated through the annual tariffs imposed on the newly-connected customers.

This second perspective suggests a principle that upfront charges to developers for requisitions are treated as a top-up in the case of relatively high-cost requisitions. Under this principle, the calculation of the income offset by reference to the estimated tariff income from customers at a newly-connected development performs a practical role: it is the threshold beyond which the costs associated with new mains and sewers are treated as sufficiently high to warrant funding through an upfront top up payment from the developer. This “top-up principle” provides a cogent explanation of the current and historical practice of income offsets within the requisition and self-laid water main adoption arrangements in England and Wales.

The new rules give water companies some leeway in how income offsets or asset payments for mains may be calculated and applied. This principle can help guide the development of an approach to income offsets under the new connection charging arrangements.

One immediate implication of the principle is that it would suggest income offsets are to be calculated by reference to some measure of wholesale tariff income from the development, rather than being applied as a percentage deduction against requisition costs. We draw some further implications below.

6.2.2. Simplification of the income offset calculation

There seems considerable opportunity to simplify the way that the income offset arrangements work, and to remove the need for calculations that involve discounting anticipated revenues over a 12-year time horizon.

In particular, each water company could calculate and publish a standard "maximum income offset" for a typical household connection, expressed in pounds per property. The company would specify the demand assumptions it has made for the typical property (e.g. annual water consumption).

When it comes to the calculation of the maximum income offset for a new development, the company would apply a multiplier approach as follows:

i. The offset multiplier would be calculated as the estimated aggregate annual wholesale charges (in the current year) for all properties to be connected as part of the development relative to the annual wholesale charge for the assumed typical connection. For example, if a new development comprises 20 properties that are identical to the assumed typical household property, then the offset multiplier would be 20; it would be 30 if the properties on the development each had an estimated annual bill of 50% more than the assumed typical household property.

ii. The maximum income offset for the development would be calculated as the figure from (i) above, multiplied by a standard "maximum income offset" for a typical household connection.

This approach represents a simplification of the existing calculation, which retains the principle that the income to be offset against water and wastewater infrastructure costs is linked to the tariff revenue expected to be generated from supplies to properties on the new development. Since we would expect estimates of annual water consumption from the properties to be connected to be needed as part of the design of new infrastructure under a requisition or adoption, the information to make these calculations should be readily available for each development.

There are different ways that companies could seek to calculate the figure for the maximum amount for the typical household. One approach would be to work out a figure that would give an equivalent amount as would apply under the current DAD method based on the same assumptions about consumption. An alternative would be to develop a method that calculates the standard maximum offset by starting with a pre-determined "pot" of money and then spreads this out across a forecast number of standardised new connections (using a multiplier approach to standardise across connections). In either case, the level of the standard maximum offset could be increased or decreased if considered appropriate to comply with Ofwat's rule 19 on the balance of charges (discussed further below).

6.2.3. Implications of the income offsets for NAVs

The income offset represents a contribution from wholesale water and wastewater charges to the costs of new infrastructure that is requisitioned or adopted. There is a related question of whether there should be some form of income offset from wholesale water and wastewater service charges to contribute to new infrastructure that is installed on a self-lay basis and then adopted by a NAV. This seems outside the direct scope of the connection charging rules, but we briefly comment below.

There seems nothing wrong in principle with a water company deciding, as part of its arrangements for bulk supplies to a NAV, to offer an income offset to the NAV to enable a contribution to the new site-specific water or wastewater infrastructure required for the development, even though the water company does not adopt that infrastructure. This contribution could be interpreted as coming from the applicable wholesale charges, which in this case would be the bulk supply or bulk discharge charges imposed by the water company on the NAV.

Indeed, to do otherwise could place a NAV at a competitive disadvantage because the NAV may then be unable to offer the developer any income or contribution to set against the costs of new water mains at the development (though this would depend on other factors, such as the ongoing bulk supply terms faced by the NAV and any upfront contribution it is required to make to network reinforcement).

The income offset could be calculated by considering what income offset would be available in the alternative scenario in which the water company were to adopt the infrastructure. Alternatively, it may be possible to calculate an income offset by using the bulk supply charges within an offset multiplier methodology. In either case, further consideration would be needed, particularly given competition law risks in this area.

6.2.4. Widening the scope of income offsets/asset payments to include all connections

Providing income offsets/asset payments for service pipes or lateral drains is prohibited by Ofwat rules 34 and 41.

The income offset represents a contribution from wholesale water and wastewater charges to the costs of new infrastructure needed to serve a site. There does seem an argument, in principle, for the application of the offset to a wider category of costs (e.g. the cost of service pipes and drains and the cost of network reinforcement to be covered by the infrastructure charge). The possibility of widening the scope of income offsets/asset payments was discussed at the Working Group meeting on 18 May.

Concerns have been raised previously that extending the scope of the income offset/asset payment to a wider set of costs, particularly infrastructure charges, could lead to increased charges for all customers under the current price control arrangements. Ofwat has referred to these concerns in recent published documents.

Whilst a detailed discussion of the price control framework is outside the scope of this report, it may be possible to develop an approach that does not lead to increased charges to customers. For instance, it may be possible to widen the scope of income offsets/asset payments while limiting the aggregate level of income offsets/asset payments such that the overall balance of charges between developers and other customers remains broadly the same as now.

6.3. Approaches to setting infrastructure charges

The current arrangements in the water industry involve two types of charges in relation to network reinforcement:

i. The charges specified as "infrastructure charges" in companies' charges schemes which are imposed where properties are connected for the first time to water supply or the public sewerage system. These charges do not involve any site- or development-specific calculation of costs, and depend on the number and nature of properties connected.

ii. The financial arrangements for requisition and adoption of water and wastewater infrastructure may involve a charge relating to certain network reinforcement expenditure that is necessary to provide in consequence of the provision of a new main or sewer.

The new Ofwat charging arrangements would involve a single type of charge for network reinforcement, to be termed an infrastructure charge.

The key issue we identify for infrastructure charges is the form these should take. For instance, at one extreme these might take the form of a flat fee per property across the area of appointment. At the other extreme, the charge might be calculated on a site-specific basis taking account of the network reinforcement requirements attributed to a particular development.

It will be for water and wastewater water companies to decide on how to balance different objectives and risks. We make some suggestions below.

It may be difficult to justify a flat charge per property for all types of connection. While this would score well in terms of simplicity, predictability and transparency it could leave developers financially indifferent to the impact of their developments on network reinforcement costs, and provide no direct financial incentive for developers to tailor the design of developments to achieve "win-win" innovation, efficiency and environmental benefits relating to water and wastewater infrastructure. These costs could be financially significant to water companies, and bill payers, in the case of larger-scale developments.

The possibility of a zonal infrastructure charge is a relatively simple way to vary infrastructure charges. However, it may not offer an attractive balance of benefits to drawbacks. It would bring some complexity compared to a flat charge per property, through the need to create different charging zones and then to calculate and explain different charges for network reinforcement in each zone. Yet the infrastructure charge differentials may not have much influence on developers' decision-making. Without evidence, we would question whether the choice of where to develop would be significantly influenced by charges for network reinforcement. There is an argument that a zonal charge could focus unduly on one way that network reinforcement costs vary between connections to the exclusion of others.

There seems considerable merit in an approach that combines some form of standard or "reference" infrastructure charge per connection, with an adjustment element that reflects the extent to which the network reinforcement costs associated with the development are greater or less than for a reference connection.

There could be a provision that all developments below a certain size qualify for the standard charge, so that the greater complexity and lower predictability is limited to cases where a more bespoke charge adds the most value.

In considering how an adjustment could work, we can draw a distinction between:

i. **Site-specific identification of reinforcement costs**. Under this approach there would be a site-specific assessment by the water company of the network reinforcement costs reasonably attributable to the development. This would be used to calculate an adjustment relative to a published figure for the typical network reinforcement costs associated with the standard or reference charge.

ii. **Adjustments derived from modelling**. Under this approach, there would be a published formula or methodology for calculating adjustments to reference infrastructure charge, taking account of characteristics of the development that are likely to affect the network reinforcement costs associated with the development. There would not be a site-level costing exercise.

The first approach is more similar to the existing arrangements for the network reinforcement cost element (if any) of requisition and adoption agreements. However, it may be difficult to adopt the first approach within the Ofwat charges scheme rules on infrastructure charges, particularly rule 31 which says that infrastructure charges "may be set as a fixed charge per connection or calculated in accordance with a formula".

The second approach is more closely aligned with rule 31 of the charges scheme rules, but may be more difficult to implement. It may take time for water companies to develop suitable models or methodologies to allow for cost-based variations in the network reinforcement costs attributed to a development without requiring a bespoke site-level costing.

In either case, there seem opportunities for water companies to provide information to stakeholders to further improve the predictability and transparency of charges. For instance, companies could provide worked examples to stakeholders of circumstances in which the applicable infrastructure charge could be higher or lower than the reference charge, and explain both the calculation of applicable charges and the rationale for these.

6.4. Maintaining current balance between customers and developers

Ofwat rule 19 requires water companies to "take reasonable steps to ensure that the present balance of charges between developers and other customers prior to the implementation of these rules is broadly maintained".

The Ofwat rules do not require that water companies take all steps necessary to preserve the balance of charges between developers and other customers. For this reason, rule 19 does not need to be a driving force for the determination of the applicable charges and could instead be taken as a cross check before these charges are finalised.

The new charging rules do not offer much flexibility in setting connection charges, site-specific charges for requisitions or average infrastructure charges. In one way or the other, these charges must reflect the cost of providing these services (either on a site-specific or aggregate basis).

If there is a concern about the broad balance of charges not being maintained, variation in the income offset provides a tool to vary the balance. However, variation in the income offset affects different developers (or developments) in different ways, especially if the income offset is not applied against certain charges (e.g. charges for communication pipes and lateral drain or infrastructure charges for network reinforcement).

There are a number of factors that make it difficult to preserve the balance of charges between developers and other customers on a like-for-like basis:

i. Charges to developers are upfront capital charges linked to network infrastructure, and the charges to other customers are ongoing charges for the provision of services, which includes revenues that allow for the recovery of operating expenditure and capital expenditure.

ii. If there are changes to the mix of self-lay versus requisitions, this would be expected to affect the net developer contributions paid by developers to water companies. This could affect some measures of the balance of charges even if the charging methodology remained the same.

iii. Variations in the number and mix of new developments could affect the net developer contributions paid by developers to water companies. This could affect some measures of the balance of charges even if the charging methodology remained the same.

iv. If developers find ways of reducing the water and wastewater infrastructure costs associated with their developments (either onsite costs or network reinforcement) this would be expected to reduce the level of developer contributions under an unchanged charging methodology and may change measures of the balance between developers and customers. In these circumstances it is questionable whether it would be appropriate to make changes to the charging methodology to increase net charges to developers to redress the balance.

v. The major changes to the arrangements for connection charges introduced by the Water Act 2014 were prompted by a number of concerns about the prevailing charging arrangements. In this context, there may be a danger of locking in too precisely to a structure of charges that prevailed in the past.

In this context, we do not think that there is a single method, measure or test that can be relied on for the purposes of rule 19.

Instead, we suggest that water companies consider a range of measures that provide difference perspectives on the broad balance. Where a particular measure indicates a potential deviation from the past, companies could try to understand the underlying causes of this deviation, consider what steps could be taken to address and assess whether such steps would be reasonable given the underlying causes.

We outline three types of measure below:

a) Net developer contribution per property compared against average bill.

b) Net developer contribution as a proportion of costs attributed to newly-connected properties.

c) Net contribution for hypothetical new development scenarios

(a) Net developer contribution per property compared against average bill

We can define net developer contributions as the total income to the water company from a defined set of charges to developers (e.g. including connection charges, requisition charges (which may include an element of income offset) and infrastructure charges) minus the value of asset payments made to developers.

It would be possible to calculate the average annual wholesale water and wastewater bill per property, and compare these to the average net developer contribution per newly connected property for each of water and wastewater.

This measure provides a very high-level comparison of the revenue to water companies from developers compared to wholesale charges. It has the benefit of being relatively simple to calculate and not reliant on the attribution of costs between different activities.

(b) Net developer contribution as a proportion of costs attributed to newly-connected properties

An alternative perspective involves determining the balance between developers and other customers of the source of funding for capital expenditure associated with the provision of new network infrastructure. This approach would involve the following steps:

- Determine the time horizon over which the relevant balance is to be calculated. This horizon should be determined by each company taking account of the availability of historical data and the extent of year-on-year variation that might skew the results if too short a time horizon is selected.

- Collect historical data on investment in new network infrastructure (excluding like-for-like replacement expenditure) that is attributable to new connections over the relevant time horizon. This can be done separately for water and sewerage infrastructure.

- Collect historical data on the income received from developers through charges, net of asset payments.

- Determine the ratio between the two sets of figures. This ratio is the proportion of the cost of new network infrastructure that was funded by developers (the “developer share”). The remainder is the amount that funded by other customers through charges under the price control.

This method may need to be refined to take account of self-lay activity in water companies' areas. If the data available allow for separate identification, in the case of adoption agreements, between the estimated costs/value of the adopted asset itself and other financial aspects of the adoption agreement (e.g. income offset and any charges for network reinforcement), then the estimated aggregate costs of adopted assets could be added to both the figure for network infrastructure attributed to new connections and the figure for the income received from developers, before calculation of the ratio. This adjustment would make the ratio less sensitive to variations, over time, in the mix between requisition and self-lay.

In applying this ratio, the water company must determine the time horizon in the future over which the appropriate balance would be targeted. This time horizon should be set long enough that normal year-on-year variations in new connections or investment do not cause large swings in charges.

Apart from the data requirements and relative complexity of the measure above, it suffers from some vulnerabilities in terms of the accuracy of cost allocation between costs attributed to new connections and other costs. Furthermore, it may indicate a change in the balance which is driven by changes in the mix of developments or the mix of self-lay versus requisition, rather than changes to developer charges on a like-for-like basis.

(c) Net contribution for hypothetical new development scenarios

An alternative perspective would come from looking at the potential changes in charges, from the introduction of new charging methodologies, at the level of specific developments.

We have identified a number of scenarios for which the net developer contribution could be calculated under the present charging arrangements and under proposed new charging arrangements:

a) A simple domestic water connection, which is not subject to infrastructure charges under the present charging arrangements (e.g. because it is not being connected for the first time) and which does not involve any requisition or self-lay of new mains or sewers.

b) A simple domestic water connection, which is subject to infrastructure charges (e.g. £365.40 per connection for 2017/18) but which does not involve any requisition or self-lay of new mains.

c) A development involving new water mains for which, under the present charging arrangements, the costs of the new mains are at the maximum level before which a requisition payment is required from the developer (i.e. the point at which the income offset cancels out the identified costs) and without any charges for network reinforcement costs. This provides a measure of the maximum onsite water infrastructure cost that is, at present, to be covered by future revenues from the new development (leaving aside infrastructure charges).

d) A development involving new water mains which involve a substantial requisition payment from the developer, reflecting a combination of the costs of new mains and charges for network reinforcement costs.

e) Corresponding versions of (a) to (d) applied to the connection of wastewater services and requisition of sewers rather than water services and water mains.

This perspective on the broad balance is perhaps less intuitive than something that deals with checks at an aggregate percentage level. But it has benefits in helping to track down the source of any differentials, exposing areas where the balance may shift dramatically for some types of connection (which might be missed in aggregate measures) and making allowances for situations where costs change over time as new innovative and efficient local site designs are developed.

Schedule 1-List of respondents to the consultation

Albion Water

Anglian Water

CC Water

Croudace Homes

Fair Water Connections

HBA

HBF

Independent Water Networks

MA Infrastructure

SES Water

Severn Trent Water

South East Water

South Staffs Water

South West Water

United Utilities

Wessex Water