

24 March 2016

Trust in water

New connections charging – emerging thinking for discussion

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About this document

The Water Act 2014 makes changes to the Water Industry Act 1991 that will allow the Water Services Regulation Authority (Ofwat) to set rules about charges for new connections – this is where an owner or occupier of a premises/building, to which the supply of water and/or wastewater services are provided, requires access to the existing public water supply or wastewater system by means of a service pipe or lateral drain, or a new water main or public sewer. Throughout this document, we use the term **‘developer’** to refer to any business or individual whose new buildings or premises require water or drainage services.

These rules will cover new connections to both household and non-household premises, but only where the connections are for ordinary domestic purposes (normally drinking, washing, cooking, central heating and sanitary purposes). The rules will not cover applications for a supply of water for non-domestic purposes (for example, for factory production purposes) or to discharge trade effluent to a public sewer. This reflects the legislative framework.

We will formally consult on charging rules for new connections in the summer, which will cover companies operating wholly or mainly in England. Before then, this document sets out a series of options for different charging approaches, and our emerging thinking on how we could help facilitate improvements in water companies’ approaches to charging through our rules.

In developing this document, we have taken account of the guidance issued to Ofwat by Defra on 29 January 2016 as set out in [‘Charging guidance to Ofwat’](#). In making our charging rules, we will have regard to the guidance issued by Defra and the Welsh Government, and the rules will be developed in line with our broader statutory duties.

Our emerging thinking is for rules that allow sufficient flexibility and tailoring of charges to meet customer needs. This includes allowing regional variation where the circumstances warrant it. In addition, we will have regard to any forthcoming guidance from the Welsh Government in developing charging rules for companies whose areas are wholly or mainly in Wales in due course.

We are seeking the views of all interested parties, and welcome feedback on our emerging thinking by **21 April 2016**.

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Responding to this discussion paper

We welcome your responses to this document by **21 April 2016**.

You can email your response to charging@ofwat.gsi.gov.uk. You can also submit your response by post to:

Charging
Ofwat
21 Bloomsbury Street
London WC1B 3HF.

Information provided in response to this discussion paper, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the Data Protection Act 1988 and the Environment Information Regulations 2004.

If you would like the information you have provided to be treated as confidential, please be aware that, under the FoIA, there is a statutory ‘Code of Practice’ with which public authorities must comply and which deals, among other things, with obligations of confidence.

In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system or a blanket request for confidentiality will not, in itself, be regarded as binding on Ofwat.

Executive Summary

This discussion paper sets out our emerging thinking on how charging rules for new connections could potentially meet the UK Government's charging objectives, and address the key issues of the existing framework.

Enabling a clear and customer-focused charging framework will be key to ensuring trust and confidence in the sector. Effective charges to developers will not only reduce administrative burden and delays (which will help support house building) but could also send beneficial price signals, which could lead to lower costs incurred overall and benefits to the environment. Improved transparency of charges would also help ensure a level playing field between incumbent water companies and other parties that may wish to provide the necessary infrastructure.

We are currently in the early stages of developing our thinking for charging rules, and welcome feedback from stakeholders on whether our emerging thinking would suitably meet the stated objectives, and whether we are missing any key practical considerations.

We recognise that the charging framework for new connections is complex, and it may take time to address fully all the associated issues. There will be the opportunity to refine our rules in future years, and to build on what we have learned from how our rules are interpreted.

For 2017-18, our emerging thinking is to avoid setting overly prescriptive rules to allow for some degree of flexibility and potential innovation in charging structures. However, in future years, if substantial issues with the charging framework were to remain, we may be minded to set more prescriptive rules that enforce a greater degree of standardisation across the sector, building on positive features of companies' charging practices that we were to observe.

In summary (and in line with our strategy, duties, and government guidance received to date), our emerging thinking so far is to:

- increase the **transparency** of charging publications, engagement between companies and stakeholders before publication, and clarity over which charges are expected to recover what costs;
- increase **predictability** through requiring water companies to set out a number of fixed charges (or clear methodologies for calculating charges) upfront;
- place the **ownership/accountability** with companies to develop charging approaches. This should enable greater flexibility for more straightforward

approaches and fewer arbitrary calculations. However, we will set a requirement for companies, in developing their approaches, to consider the role of charging structures that send environmentally beneficial price signals to developers (as well as promoting overall system resilience); and

- help **promote a level playing field**, for potential alternative providers that wish to compete with water companies to provide new connections by requiring equivalent charging for equivalent services.

To help facilitate an early and productive discussion ahead of a formal consultation later in the year, in appendix 1 we set out a draft view of what charging rules for new connections could potentially look like.

We welcome feedback from stakeholders on our emerging thinking by **21 April 2016**, and will consult formally on our charging rules for new connections in the summer.

1. Introduction

This discussion paper sets out our emerging thinking on how charging rules for new connections could potentially meet the UK Government's charging objectives, and address the key issues of the existing framework.

Is it structured as follows:

- Chapter 2 – provides an overview of the existing framework.
- Chapter 3 – details the legal and policy context within which charging rules will be set. It also examines the issues with the current charging framework and explains interactions with other work areas.
- Chapter 4 – reviews a number of different models for new connections charging.
- Chapter 5 – describes our emerging thinking for charging rules.
- Chapter 6 – sets out the next steps.

2. The existing framework

2.1 Overview of charges

The Water Industry Act 1991 (WIA91) allows water companies to charge developers to provide relevant infrastructure and connect new developments to the water and wastewater network for domestic purposes¹. These charges are intended to reflect the costs of the infrastructure that is needed to make such connections. There are different ways in which infrastructure can be provided – and there are also different charges that apply depending on how the relevant infrastructure is provided. The charges that are relevant to the new connections framework are as follows.

- **Connection charges.** The developer pays these charges to the water company when the water company provides a physical connection for a premises to the water main or to a sewer. This charge is intended to cover the costs of the physical connection to the main or sewer. Water companies' are able to recover reasonably incurred expenses, including for the costs of ancillary work, necessary to facilitate the connection.
- **Infrastructure charges.** The developer pays these charges to the water company when premises are first connected to a water main or to a sewer. This charge contributes to water companies' investment in general improvements to the existing distribution network to meet increasing demand from new customers. Standard domestic dwellings are charged a single rate for each service whereas other types of premises (for example, those subject to common billing agreements, such as flats, or with larger than usual connection sizes) are charged a multiple of the single rate based on the number of water fittings in the premises.
- **Requisition charges.** When a developer requests the water company to provide new water main(s) or public sewer(s) and certain associated infrastructure, to serve a particularly locality, this is known as a 'requisition'. The water company then builds the infrastructure required to connect the new development to its network. Requisition charges are intended to recover the costs reasonably incurred in providing this infrastructure where those costs exceed income

¹ The meaning of "domestic purposes" is set out in section 218 of the WIA91 and "domestic sewerage purposes" is defined in section 117 of the WIA91. Both household and non-household premises can be connected for domestic purposes, which normally includes, for example, water for or from cooking, washing and lavatories.

received for the development over 12 years – this charge can be paid annually for 12 years (the Relevant Deficit approach) or as a lump sum; the Discounted Aggregate Deficit (DAD) approach. This leads to the effect of the costs of the infrastructure being recovered partially from developers and partially from bill payers. Many developments and connections to individual premises will not require a requisition, and in those cases will be subject only to connection and infrastructure charges (see above).

- **Self-lay charges.** The self-lay option requires the developer to either build the necessary infrastructure itself; or contract with a third party – such as a self-lay organisation (SLO) – to build it. The developer pays the SLO the costs of building these self-lay assets. Either the developer or the SLO pay the water company for any additional infrastructure required (some of which only the water company may be able to build). The water company then ‘adopts’ these assets, and, where appropriate, pays the developer an asset payment when it takes ownership (see below).
- **Asset payments.** The water company makes these payments to a developer/SLO once it has adopted the assets owned by the developer (for example, those put in place by an SLO as discussed under ‘self-lay charges’ above). This currently only applies to water mains (the new legislation makes provision for potential asset payments for wastewater in the future).

Table 1 below summarises the different arrangements that exist.

Table 1: Charges by infrastructure provision

Ways in which infrastructure can be provided	Relevant charges
Requisitions for water mains, public sewers, and lateral drains	Requisition charge Infrastructure charge
Self-lay of water mains	Self-lay charge Infrastructure charge Asset payment
Self-lay of public sewers	Infrastructure charge
Service connections	Connection charge Infrastructure charge

2.2 Companies’ current charges

During December 2015, we asked all water companies to complete a standardised template providing specific information on their new connection charging. For water

connections, this was based on an activity under section 45 of the WIA91. For sewer connections, the template assumed the developer had laid the new sewer itself and exercised the “right to communicate” with the water company’s existing public sewers under sections 106–108 of the WIA91. We asked companies to provide us with the range of services and activities that formed the basis of their charges for these connections, what factors influenced these costs and why.

The information revealed that many factors can influence the costs of new connections, and that companies adopt different approaches to the way in which they build up their charges. For example, for sewer connections, some companies apply standard assessment and administration charges based on ‘average time’ calculations, while others charge based on the actual time spent on certain activities.

Although water companies update and publish their charging schemes each year, the information they provide varies both in detail, language and presentation. For developers, not only does this make comparisons between companies difficult, but it reduces the predictability of these charges.

However, there is a fair amount of commonality in the types of services and activities that are included in companies’ charges – and the factors that influence these. The table below summarises a number of key areas in relation to water and sewer connection charges where we found this was the case.

Table 3: Areas of commonality in water and sewer connection charging

Cost category	Cost driver
Water connections	
Materials	Standard-sized connections 25mm to 32mm based on fixed charges from competitively tendered framework rates. Larger bespoke connections of >32mm tend to be charged at cost because of their differing characteristics.
Site-specific characteristics	Whether the surface is made or unmade (grass verge, pathway, road). Whether the site is a greenfield or a brownfield site, or on contaminated land.
Labour	Excavation costs. Reinstatement costs particularly if outside working hours.
Other	Traffic management – can be significant and can vary within companies’ operating regions because of differing charges levied by different Local Authorities.
Sewer connections	
Site visits	Most water companies charge for an initial site visit and for subsequent visits (these increase out of hours).

Cost category	Cost driver
	Abortive visit charges for re-inspections when workmanship is poor or if customers say they are ready when they are not.
Technical assessment/administration	Vetting of applications for quality of information and completeness.

There was also notable commonality from companies on certain key aspects of their charging approach. For example, most companies charge an application fee and, rather than request a security deposit towards the cost of the new connection work, require full payment based on their quoted amounts in advance of the works starting. In addition, most companies do not recover the exact costs of the work to provide new water connections under section 45 of the WIA91.

Since water companies are generally charging for the same items and there are a common set of factors that influence these, it is our view that there may be scope to increase the level of standardisation into new connection charging. This could include companies publishing their charges in a consistent way, so that developers can see clearly those cost elements of new connection charges that are fixed and those that are variable. We discuss our proposals in more detail in chapter 5.

2.3 Trust and confidence in new connections

Last year, we [consulted](#) on how to drive trust and confidence in the new connections market. Trust and confidence is not just about what the sector delivers, but also about how it does this. There are two vital strands to this.

- The first is that the **quality of the relationships** that exist in the sector matters immensely. Absolutely key to this is the relationship between water companies (as service providers) and their customers, which needs to be fair, open, honest and transparent.
- The second is about the **legitimacy** water companies can achieve by engaging actively with their customers to understand and reliably deliver services that meet those customers' needs. Critically, this includes water companies understanding how their delivery of services impacts on the outcome a customer is seeking – in particular, the impact they can have if their delivery is poor.

We asked all water companies to review the information they provide and how developers and SLOs may access the information services they need.

In addition, we have been closely involved in the sector entering into a self-reporting framework for developer services (through Water UK), where companies report their service delivery performance on a quarterly basis across a broad range of measures. In light of this reporting, we have held targeted discussions with the poorer performing companies and gained commitments from them to address some of the issues observed.

Also, we have, and will continue to, engage with companies on improving their performance more generally – for example, with regard to how to identify developers' needs early ahead of receiving an application, and ensuring a level playing field for SLOs and new appointees and variations (NAVs).

These conversations will take place regardless of the charging framework, but clearly the charging framework can have a major effect in terms of relationships in the sector, and the perceived legitimacy of water companies when delivering these services.

3. Charging rules context

3.1 Government guidance

On 29 January 2016, Defra issued charging guidance to Ofwat. The guidance is structured around four key objectives.

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

The guidance included direction on the UK Government's expectations about charges for new connections. And Defra will shortly consult on some more detailed guidance about new connections charging. In making rules, we will have regard to the guidance issued by the Secretary of State and Welsh Ministers.

Ahead of issuing the draft guidance consultation, Defra held a number of Task and Finish groups with active engagement from developers, water companies, ourselves, and others. WaterUK also hosted an event to consider charging issues. These groups identified a number of issues with the current framework (see section 3.4), and have helped inform some of our emerging thinking to date (see chapter 5).

In October 2015, the Welsh Government consulted on general [charging guidance](#) to Ofwat. Welsh Ministers will issue the final guidance covering the companies that are wholly or mainly in Wales in due course, and will be investigating options for more detailed guidance relating specifically to new connections over the next few months.

We expect to implement rules for the companies operating wholly or mainly in Wales at a later time than for the companies operating wholly or mainly in England (most likely for 2018-19). These rules will need to reflect the specific considerations set out in any guidance for Wales. In the meantime, the existing framework will remain for companies operating wholly or mainly in Wales.

Furthermore, there are [specific standards](#) set by Welsh Ministers for new gravity foul sewers and lateral drains. Any charging rules we set for companies operating wholly or mainly in Wales will have regard to these standards, as well as guidance issued by the Welsh Ministers.

3.2 Legal framework

Section 144Z of the Water Act 2014 (WA14) sets out the main legal basis of the new rule-based framework for new connection services. It allows Ofwat to set rules imposed by a relevant water company for:

- the provision of new water mains;
- connections with water mains;
- ancillary work for connections;
- the provision of public sewers or lateral drains;
- communications with public sewers; and
- the moving of pipes.

As defined in the relevant parts of the WIA91.

Sections 51CD and 105ZF of the WIA91² set out the legal basis for Ofwat to set rules about the self-lay charges and asset payments for the adoption of water and wastewater infrastructure respectively.

Infrastructure charges are included in water companies' statutory end-user charges schemes made under section 143 of the WIA91. Section 143B of the WIA91³ sets out the legal basis for Ofwat to set rules about those charges schemes. Currently, the value of infrastructure charges is set out in companies' licences.

As per the WA14 ethe charging rules in particular may:

- make provision about the types of charges that may be imposed;
- make provision about the amount or maximum amount, or the methods for determining the amount or maximum amount, of any type of charge;
- make provision about the principles for determining what types of charges may or may not be imposed;
- make provision about the principles for determining the amount of any charge that may be imposed;
- provide for charges to be payable over a period; and
- make provision about publication of the charges that may be imposed.

² Sections 51CD and 105ZF were inserted into the WIA91 with effect from 18 December 2015 by sections 10 and 11 of the WA14 respectively.

³ Section 143B was inserted into the WIA91 with effect from 1 November 2015 by section 16 of the WA14.

Once the rules are in place, if Ofwat considers that a water company is not acting as required by rules, we may give the company a direction to do, or not to do, a thing specified in the direction. Such directions will be enforceable as if they were licence conditions.

In developing our charging rules, we are required to have regard to relevant government guidance. Where appropriate, we will update our rules (subject to appropriate consultation) after they have been issued. This enables a more flexible framework than the basis of charging currently being set out in primary legislation.

3.3 Ofwat strategy

As the economic regulator of the water sector in England and Wales, Ofwat's strategy is to help the sector build trust and confidence with customers and wider society. It is clear (because of the issues set out in section 3.4), that the current framework is not providing this.

Through setting charging rules, we have the opportunity to address these key issues, and to help enable a clearer and more customer-focused charging framework. Effective charges to developers will not only reduce administrative burden and delays (which will help support house building) but could also send price signals, which could lead to lower costs incurred overall and benefits to the environment. Improved transparency of charges would also help ensure a level playing field between incumbent water companies, and other parties that may wish to provide the necessary infrastructure.

In assessing an appropriate way forward, we have gone back to first principles to consider the key issues that any charging framework will need to address. These are set out below.

3.3.1 Why have charges for new connections?

Under the WIA91, water and wastewater companies have statutory duties to provide water and wastewater services. This has led some stakeholders to question why developers should make any contribution at all towards the funding of new connections and the associated network reinforcement.

However, the WIA91 does not state that existing bill payers should fund fulfilment of those duties (indeed, in some places it is explicit that developers should provide the funding required). It also places a number of general requirements on Ofwat when

we are carrying out work such as preparing charging rules. In particular, section 2 of the WIA91 requires us to issue charging rules that we consider are best calculated to, in summary:

- further the consumer objective (to protect the interests of consumers, wherever appropriate by promoting effective competition);
- secure that the functions of water companies are properly carried out;
- secure that water companies can finance those functions; and
- further the resilience objective (to secure the long-term resilience of water companies water supply and wastewater systems and to secure they take steps to enable them, in the long term, to meet the need for water supplies and wastewater services).

Subject to the main objectives, we also required to issue charging rules that we consider are best calculated to (among other things):

- promote economy and efficiency;
- secure that no undue preference is shown, and that there is no undue discrimination, in the fixing of water and drainage charges; and
- contribute to the achievement of sustainable development.

If charges to developers were to be zero, the above objectives would not be met as either the costs of connection would be recovered solely through consumers, or water companies would receive insufficient funding to meet their obligations. In addition, developers would not be sent any price signals associated with the costs they impose on the system, and therefore would have no incentive to manage the impact they have.

Conversely, there may be reasons why it would not be beneficial for developers to pay all the costs associated with connection. If developers were to bear all the associated costs, this would not take into account that water companies may receive a benefit from having more water bill payers.

While the ongoing costs of providing water and/or wastewater services are likely to vary on a customer-by-customer basis, historically, a number of studies have found there to be economies of scale in the water sector⁴. Therefore, it arguably could be

⁴ See Pollitt, M.G., and Steer, S.J. (2011) 'Economies of Scale and Scope in Network Industries: Lessons for the UK water and sewerage sectors'.

expected that serving additional customers would reduce average costs, which would ultimately create a net benefit from water companies having a larger customer base. If developers were exposed to all of the associated costs of connection, such a benefit would not be recognised, which could lead to a sub-optimal level of housing development⁵.

Therefore, a charging framework that complies with Ofwat's duties would need to enable a balance between the two extremes of developers not paying for anything, and paying for everything.

Defra's January guidance was clear in stating that:

“It is right that developers should bear the costs associated with connections to, or adoption of, water and sewerage systems. Charges should ensure that the distribution of costs for new infrastructure between developers and current customers of water and sewerage companies is fair. Cross subsidy between developers and water customers should be limited.”

Similarly, the Welsh Government's draft guidance stated:

“...we expect Ofwat to continue to facilitate a simple, fair and transparent charging structure for the relevant undertakers to abide by.”

So achieving an appropriate balance in how costs are recovered between customers and developers needs to be a key concern in the development of charging rules.

3.3.2 Why have cost-reflective charging?

Having established that it is likely (in most cases) for it to be beneficial for there to be some level of charge to developers, there is a choice to be made about the extent

⁵ Although it is recognised that water and wastewater connection costs are only one of many costs experienced by developers in housing construction.

that such charges reflect the costs associated with serving the development in question.

Having charges that link directly to the costs that a specific site imposes on the system may seem preferable in terms of sending an effective price signal to developers about the costs they impose on the system (and therefore they may take steps to minimise those costs). But if these costs are revealed late in the process, there may be limited action a developer could take to minimise the costs that it imposes. In addition, basing charges on outturn costs reduces the predictability of charges (something that a number of stakeholders have identified as being highly beneficial to developers).

Conversely, having charges that are based on a simple ‘one-size-fits-all’ single rate (while good for predictability) may not send particularly effective price signals for the costs that any given developer imposes on the system.

Therefore, an optimal charging framework would need to enable a trade-off between the two extremes of a one-size-fits-all approach, and case-specific considerations. A framework that reflects the incremental costs of different actions that are within developers’ control, could help send price signals that reduce costs and deliver environmental benefits.

Defra’s January guidance stated that:

“Charges that are clearly reflective of the work involved will build confidence within the developer community.’ And ‘Charges should adequately reflect relevant costs in order to provide incentives for efficient resource use and innovative solutions that are sustainable over the longer term.”

Therefore, achieving a suitable degree of cost-reflectivity needs to be a key concern in the development of charging rules. It should also be noted that developers interact with utilities other than the water sector. Other sectors have their own charging approaches (see chapter 4). Therefore, in terms of simplicity, there may be benefits from adopting some degree of commonality across sectors.

3.3.3 Who should set the charges?

Currently, the value of infrastructure charges is specified (by Ofwat) in water companies’ licences. Water companies establish the remaining charges, although (most) may be referred to Ofwat for determination in the event of a dispute.

Ofwat setting specified charges would provide a strong degree of predictability for developers, and would enable comprehensive standardisation across the sector (something that may aid transparency). However, water companies are better placed to know the specific costs associated with making new connections, and so Ofwat setting charges could reduce cost reflectivity. It also would risk being seen to reduce company ownership of their charges and their relationship with their customers. A regulator-driven approach to charging may not provide for flexibility, innovation, and customer focus from the water companies. (A recommendation within the Gray review was for Ofwat to give companies greater ownership of their operations.)

The WA14 provides for Ofwat to set a rule-based framework, and for water companies to set the final charges (in a manner that complies with the rules and their other legal obligations).

Therefore, we consider it appropriate for water companies to set charges for new connections, but for the charges to comply with our charging rules, and that will sit within the overall policy context (as set out in the UK Government's charging guidance).

However, we recognise that there is currently widespread dissatisfaction with the charges that companies currently set. This may be, in part, because the existing charging framework is ambiguous, and lacking in flexibility as a result of being set out in primary legislation. It may also be because of water companies not sufficiently engaging with developers, and not providing charges with clear and transparent explanation of how they were calculated.

So, we consider that our charging framework should further encourage transparency from water companies in the setting of their charges for new connections.

We also recognise that some degree of standardisation across the sector may be desirable in terms of providing developers with a broadly consistent experience across the country.

For the reasons stated above, our preference would be for the development of standardised approaches to be a sector-led activity to maintain clear company ownership. But if substantial issues with the charging framework were to remain, in future years we may choose to set more prescriptive rules that enforce more of a one-size-fits-all framework across the sector, building on positive features of companies' charging practices that we were to observe.

Regardless of which party sets the charges, key to our strategy is the transparency of information, as this can help build trust and confidence in the sector. We therefore hope to see significant improvements in this area.

3.4 Issues with the current framework

Both the [independent review of competition and innovation in water markets](#) (the ‘Cave review’) and the [review of Ofwat and consumer representation in the water sector](#) (the ‘Gray review’) identified issues with the current charging framework for new connections. We have also had a number of concerns raised to us by various stakeholders (for example, developer representative groups and water companies). We also receive a substantial amount of disputes for our determination, which often reflect shortcomings in the existing framework.

We summarise the various issues below.

Table 2: Potential issues of the existing framework

Issue	Description
1) Administrative burden	<p>For larger developments, the water companies often carry out complex calculations to estimate the costs of providing the requisitioned main. Significant variation between companies exists in how they apply the charging framework. As a result, this creates a lot of work for all parties, as well as for Ofwat as we are frequently asked to determine disputes over these calculations.</p> <p>There is also a requirement for the calculations to be redone once the actual costs of providing the requisitioned main/sewer or connection are known, creating additional administrative burden on both parties. This process causes concerns for developers as the actual costs may be significantly different from the estimated costs. And it provides little incentive for the water and/or wastewater company to provide accurate estimates as they are able to recover the actual costs regardless of the accuracy of their estimate.</p>
2) Risk of double-charging	<p>Through requisition charges, water companies can recover the costs that are reasonably incurred in providing a new water main, public sewer or lateral drain, including costs associated with certain off-site network reinforcement. They can also collect infrastructure charges from each premises connected to the network for the first time, which are designed to contribute to the costs of existing network reinforcement. Developers are therefore concerned that this may result in water companies double-charging for network reinforcement costs.</p>
3) Unclear incentives to self-lay and potential barriers to competition	<p>If a developer chooses to self-lay a water main, (in most cases) they must pay a self-lay charge to the water company. This is supposed to cover the costs associated with incorporating the new pipework to the company's assets. However, it appears that there are differences between water companies over what costs are recovered through self-lay charges. Self-lay organisations are concerned that this puts them at a competitive disadvantage compared with the incumbent doing the work themselves.</p>

	In addition, the water company will make an asset payment to the self-lay organisation to compensate them for the costs of the asset, which the water company will then adopt. This is only available for water mains and not sewers, which creates concerns over the existence of a level playing field.
4) A 'first mover' disadvantage	In areas of new development, the first developer will often pay the costs associated with connecting the new area to the existing public mains/sewers. Subsequent developments in the new area can connect into these new mains/sewers and therefore may avoid the costs associated with connecting the area to the public mains/sewer. Also, when works are provided that serve more than one development, there are differences between water and/or wastewater providers in the approach taken to share the costs between customers.
5) Arbitrary calculations	When requisitioning a new main/sewer, the charge to the developer is based on a complex calculation of a 12-year loan to cover the costs of providing the main/sewer, which is offset by the income generated by the premises connected to the main/sewer. This results in the costs being heavily dependent on the rate at which the new premises are built and connected. Similarly, asset payments are only made for self-laid water mains but not for self-laid sewers, with little clear economic rationale why this is the case.
6) Weak price signals	Infrastructure charges are fixed for the entire company area are essentially fixed at the same level across England and Wales. Therefore, they provide weak price signals to encourage developers to build in areas where there is existing network capacity.
7) Lack of transparency	It is not clear to most developers what exactly they are paying for in the charges they are asked to pay. This is especially true of infrastructure charges, which are the same across the entire sector and not directly attributable to specific works arising from an individual development. In addition to this, water companies interpret the existing legislation differently, leading to companies having different approaches to what costs they will or will not include in the charges they require of developers. This has resulted in a lack of confidence in these charges, especially where they appear to be significantly different to the levels of charges made to connect other utilities.
8) Interactions with planning framework	<p>Developers have raised concerns that some water companies are using the statutory planning framework as a way to make developers fund works to reinforce the existing network. Water companies are often asked by a local planning authority (LPA) to review the potential impacts of a new development on existing customers, in particular to help understand and mitigate any potential flood risk.</p> <p>Where there are concerns that a development would adversely impact existing customers, these companies may be able to suggest that the LPA place a condition on the developer's planning consent to address any particular concerns (or pay the company to do this work) before planning permission is granted. This is not an activity that Ofwat regulates through the WIA91. But the fact that some water companies are pursuing this route to recover costs associated with new connection may indicate a failure of the current framework.</p>
9) Investment ahead of need	Water companies have raised concerns about how effective the existing framework is in allowing them to invest in reinforcement works ahead of expected future developments. In many cases, a forward-looking plan of investments can be more efficient than a piecemeal approach that is reactive to each individual development as it occurs. While the existing framework does not explicitly prevent water companies from doing this,

	there is still some reluctance in the sector to pursue this option. This may be because of distributional concerns about whether the costs for this work are recovered from developers or from bill payers.
10) Predictability of charges	A number of stakeholders have identified the predictability of charges as being highly beneficial to developers, as it enables them to take account of the costs more effectively when purchasing available land, and constructing the developments.

As can be seen from the above, the issues with the current framework are extensive. We therefore have a significant opportunity with the introduction of charging rules to facilitate a framework that works more effectively for all parties.

3.5 Interactions with other areas

Interactions with different policy areas and Ofwat workstreams are set out below.

3.5.1 Price controls

At the most recent price review (PR14), we set separate revenue controls for water and wastewater wholesale services. These were aggregate controls that covered both the revenue associated with water and wastewater companies providing water and wastewater services to customers, and the revenues received from connection and infrastructure charges to developers.

This ‘single-till’ approach, limits the incentive for water companies to levy excessive charges onto developers, as the more revenue water companies recover from developers (in relation to their regulated activities), the less they are allowed to recover from water customers (and vice versa).

A consequence of this framework is that changes in the expected level of revenue to be recovered from developers cannot be made in isolation of customer bills. Therefore, we will need to align the implementation of any charging rules for new connections with the development of water companies’ wholesale charges.

3.5.2 Company monitoring framework

In June 2015, we set out our [company monitoring framework](#) for the 2015-20 period. The company monitoring framework is a tool we use to oversee that stakeholders can have confidence in the information that water companies provide. Within the framework, we make a distinction between data assurance activities that water companies put in place to provide accurate data and the wider assurance that they

provide to demonstrate that they are listening to customers and delivering services they want and can afford.

In relation to new connections charging, there may be a range of information that it would be beneficial for companies to provide to their stakeholders. We expect that the provision of this information will be covered by the monitoring framework. This will help ensure that such information is provided in a suitably robust and customer-focused manner.

3.5.3 Casework

Under the current framework, if a customer and a water company end up in dispute over the costs associated with a new connection, they can refer their dispute to Ofwat to make a determination. Determining a dispute requires time and resources – both from us to make the determination, and from the parties involved in the dispute as they will be required to provide the information and supporting evidence that are needed for us to make the determination. As a result, there is a clear benefit to all parties in having a framework for charging for new connections that is seen as being fair and transparent as this should lead to fewer disputes.

To reduce the number of disputes we receive over the costs associated with new connections, we publish all of our final determinations on these cases on our [website](#). This allows the sector to learn from these determinations and, where we discover a concern with the methodology that a company has used to set its charges, allows other companies to take proactive steps to avoid similar issues.

An example of a dispute relating to charges for new connections is the ‘Wing’ case between a number of developers and Anglian Water⁶. The dispute centred on whether a water undertaker could include contributions towards a large off-site main in the costs reasonably incurred by a number of developments, each of which used part of the capacity of the off-site main, and how this contribution should be calculated. This case took more than five years and a large amount of time and resources from all of the parties to resolve.

⁶ ‘Dispute referred under sections 30A, 42(6) and 51C(11) of the Water Industry Act 1991 on inclusion of costs associated with ‘the Wing Main’ in requisition charges for water supply infrastructure from Anglian Water Services Limited – Final determination’.

A framework that is seen as being both transparent and fair should help reduce the number of disputes between developers and water companies. A rule-based framework should also provide Ofwat with greater flexibility in addressing any issues with companies' charges, as we will be assessing compliance with our rules, rather than determining whether charges comply with primary legislation. We will also be able to update our rules to reflect lessons learned from behaviours and practices we observe across the sector.

4. Different models for new connections charging

In the sections below, we set out a number of alternative models for new connections charging, which could inform how a new charging framework could operate going forward.

4.1 Scottish Water

Scottish Water categorises the work associated with new connections into four elements.

1. The connection from the individual premises to the water main or sewer.
2. The water mains and sewers that connect developments – for example, a street of houses to trunk mains and trunk sewers, and some sustainable urban drainage systems (SUDS).
3. The local bulk infrastructure, such as trunk mains and trunk sewers, water service reservoirs, wastewater pumping systems, and some SUDS.
4. The strategic assets such as raw water intakes, water impounding reservoirs, raw water pumping stations and aqueducts, and water and wastewater treatment works.

Scottish Water then provides clear information as to which party is responsible for which element, and how each element is paid for.

- The developer solely funds Part 1.
- Parts 2 and 3 receive a financial contribution from Scottish Water.
- Scottish Water solely funds Part 4 (through revenues received from bill payers).

Scottish Water has a number of ‘standard’ connection charges – for example, ‘Connection to Live Water Main 32mm or less outside diameter’. Non-standard work is charged at cost.

Potential lesson: charging schemes can be produced that include fixed costs for some types of work, and set out clear approaches on how different types of work are charged for.

4.2 Electricity

The Electricity Act 1989 requires District Network Operators (DNOs) to offer terms for connection to any customer. Costs are shared between connecting customers and wider customer base (funded through price control allowances – recovered through energy bills).

The connection offer includes the cost of the work that is triggered by the connection. The customer needs to accept the terms of the connection quotation before any work begins.

DNOs provide customers with a full quote of the work, which splits the cost between the non-contestable and contestable works. Non-contestable work can be only be undertaken by the DNO. Contestable work can be undertaken by the DNO or alternative connection providers - i.e. the Independent Connection Providers (ICPs), and the Independent Distribution Network Operators.

As well as the on-site costs, developers may be required to contribute towards any wider network reinforcement that is needed to connect the customer to the network (up to one voltage level above their point of connection). This reinforcement may result in a significant one-off cost (see the ‘first mover’ issue described in section 3.4). This has been addressed, to some degree, by a rule that if a second developer makes a connection within five years⁷, the ‘second mover’ needs to make a payment to the first mover so that the reinforcement costs are shared.

To protect the wider customer base from paying for assets that may not get used, DNOs will generally wait until a connection customer has asked (and paid) for a connection before carrying out the necessary wider network reinforcement work.

Ofgem is currently consulting on new approaches, and has invited some trials to be carried out. The trials include socialising the reinforcement costs in cases where upfront investment (without a developer directly triggering a requirement for reinforcement) leads to significant savings both to the developer and the wider generality of customers (who would have been required to contribute towards reinforcement costs in any event).

DNOs must meet a set of service levels, called Guaranteed Standards, when providing connections. Failure to meet these standards for any individual connection

⁷ DECC is currently considering whether this time period should be extended.

can result in the connecting customer being eligible for a payment for inconvenience caused.

Ofgem does not approve the specific prices that DNOs and IDNOs charge for connections. But it does approve the methodology that they use to calculate these charges – and they must publish this methodology on their website.

Potential lesson: there is precedent for quotes to be split between contestable and non-contestable work⁸. Other charging frameworks have sought to share incremental costs across developers to address the first-mover issue.

4.3 Gas

The Gas Act 1986 requires Gas Distribution Networks (GDNs) to offer terms for connection to any customer. The GDN is exempt from this requirement if the GDN determines that providing the connection would contradict its obligation to develop and maintain an efficient and economical gas pipeline system.

The costs of connection are shared between connecting customers and the wider customer base. For example, if a domestic customer within 23 metres of an existing GDN pipelines requests a new connection, then the first 10 metres of pipeline is paid for by the wider customer base and the rest would be paid by the connecting customer.

There is substantial competition for the provision of new and modified connections to the gas networks. Utility Infrastructure Providers (UIPs) and licensed Independent Gas Transporters (IGTs) can compete with Gas Distribution Networks (GDNs) to complete some connection activities.

GDNs and IGTs must meet a set of service levels, called Guaranteed Standards, when providing connections. Failure to meet these standards for any individual connection can result in the connecting customer being eligible for a payment for inconvenience caused.

Companies also operate a quotation accuracy scheme, whereby, if a developer challenges a quotation and it is found to be inaccurate, the company in question is

⁸ Indeed, Water UK developed a good practice template that does this. However, it is not consistently applied across the sector.

required to make a payment to the developer. This is enabled through the companies' licences.

Ofgem does not approve the specific prices that GDNs and IGTs charge for connections. But it does approve the methodology that they use to calculate these charges – and they must publish this methodology on their website.

Potential lesson: charging schemes can include compensation payments, and regulated companies have been required to publish their charging methodologies for new connections.

4.4 Telecoms

The regulatory framework for telecoms new connections is more 'light touch' than for water, electricity, and gas. This may be, in part, because property developers do not require telecommunications connections for building sign off under national planning rules and there is no monopoly in the provision of such connections (though BT is frequently the dominant network operator). In general, the framework is one of commercial negotiation between parties.

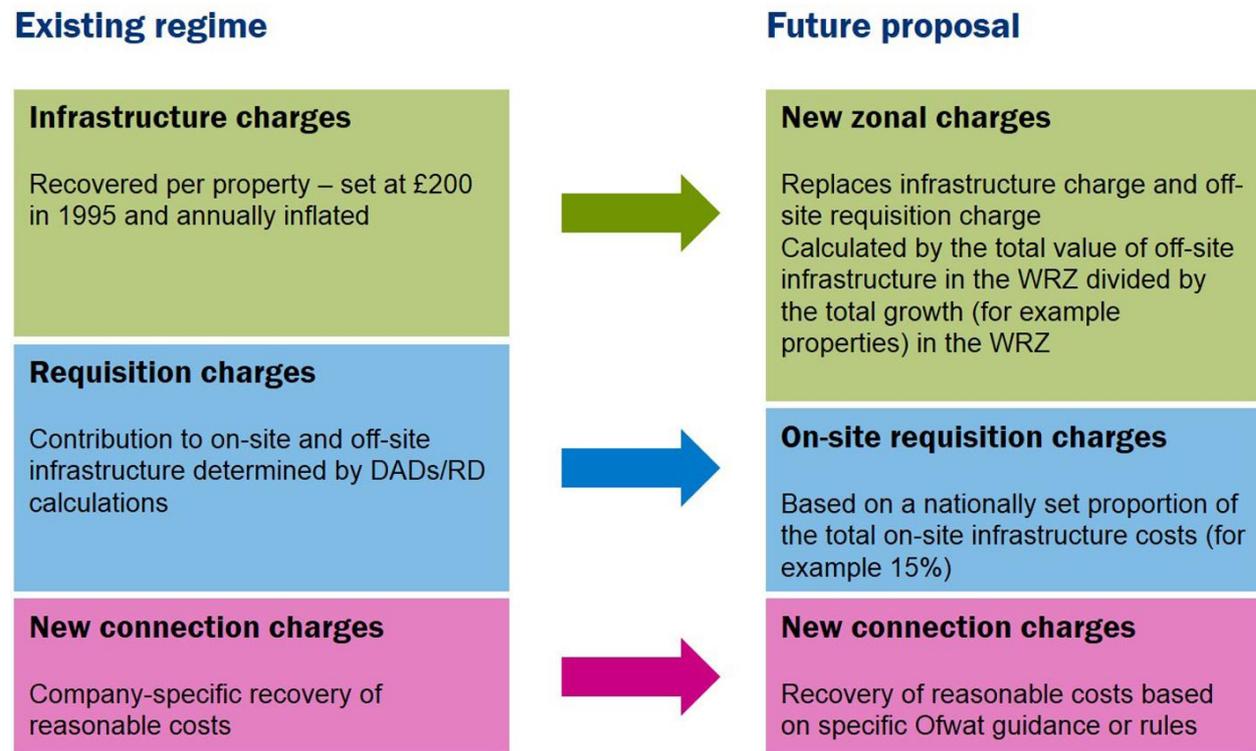
It is up to developers to inform network operators of new proposed sites and to negotiate terms for connections. The specifics of such agreements can vary widely between all costs being borne by the network operator, through to a sharing of costs though with the network operator taking on possession of the assets, through to a model where the developer builds and operates the telecommunications infrastructure directly. The basis for any arrangement will depend on the relative attractiveness of the development to potential network operators.

Potential lesson: (albeit in a different context) there is precedence of charging frameworks that are predominantly based on commercial negotiation.

4.5 The zonal charging model

Building on an initial suggestion proposed in discussions in the Defra-led Task and Finish Groups, Anglian Water has developed a set of proposals referred to as 'zonal charging'. We have summarised the model in the diagram below.

Figure 1: zonal charging approach



The model replaces infrastructure charges and other charges associated with off-site reinforcement with a single zonal charge. The zonal charge is calculated to reflect the total forecast value of infrastructure required within a given area (for example, a water resource zone) to meet the need of developers over a given period of time.

This means that each zonal charge will not directly reflect the cost that any single given development on the system, but instead reflects an average (within a given area and period of time). While this may, to some extent, reduce the cost reflectivity of the charge at a specific site level, it would provide developers with clear upfront certainty of the charges that they will be exposed to. It would also address the first mover issue (see section 3.4), as all developers will be subject to the same average costs of all subsequent developers within a given area.

However, this model is not without its challenges. It will require water companies to develop suitable forecasts of the expected level of costs to be incurred in relation to new developments. While this is already carried out as part of the price review process (see section 3.5.1), it is currently carried out at an aggregate company-wide basis.

In addition to the zonal charge, Anglian Water suggested simplifying the 12-year DAD approach, through having a charge to reflect a proportion of the total on-site

infrastructure cost. The company estimated that using a figure of around 15% would keep the current balance of costs recovered through customers and developers broadly equivalent to how the DAD approach has been applied in the past across its customer base.

Finally, Anglian Water suggests further work on ensuring consistency of charging approaches across companies in relation to new connection charges. This could increase the consistency and transparency of these charges to developers.

Potential lesson: a fixed-fee approach may have a number of benefits, and more straightforward approaches than the DAD can be developed that maintain the overall balance of charges.

4.6 Alternative models

As well as the approaches outlined above, we recognise that there may be many others that could deliver positive outcomes. As, to date, companies have had to comply with a charging framework set out in primary legislation, there has arguably been limited reason for alternative and innovative charging models to be considered.

Therefore, we may wish to take an evolutionary approach to charging rules, allowing companies some degree of flexibility in developing their charges. Such flexibility could enable companies to pilot particular charging approaches in their areas.

5. Emerging thinking of potential rules

To help facilitate an early and productive discussion ahead of a formal consultation later in the year, in appendix 1 we have set out a draft view of what charging rules for new connections could potentially look like.

This chapter provides a discussion of what rules we could set that could help facilitate water companies adopting improved charging models. We have structured this chapter around the four overarching objectives set out in Defra's guidance. This will help provide stakeholders with a clear understanding of how we intend to have regard to the UK Government's guidance.

5.1 Fairness and affordability

The balance of how costs for new connections are recovered between customers and developers is clearly a sensitive and complicated issue. The matter is not helped by the fact that the current framework lacks transparency.

A principle that has been discussed at Defra's Task and Finish groups is that the current balance of contributions to costs by developers and bill payers should be broadly maintained.

The current approach of calculating income deficits over a 12-year period provides a way of sharing costs between bill payers and developers. However, other ways may carry equal (if not more) legitimacy. For example, Anglian Water's proposal of charging developers 15% of total on-site infrastructure costs is considerably more straightforward, while (at an aggregate level) maintaining the current balance between the costs that customers and developers bear.

Therefore, our emerging thinking is to not set a rule that requires the 12-year income deficit approach. Instead, we could set a rule requiring water companies to publish their proposed approach of balancing costs between developers and customers. These proposals will need to be informed by engagement between companies and their key stakeholders. Any substantial changes from the current balance will need to be accompanied by strong objective justification to be seen as legitimate by stakeholders.

Our emerging thinking is for us to set a rule that developers should not be required to bear the costs of reinforcing, upgrading or otherwise changing existing network

infrastructure to address pre-existing shortfalls in capacity or capability. This could help ensure a fair allocation of cost recover between developers and bill payers.

As identified in section 3.4, some stakeholders have expressed concern that some water companies are using the statutory planning framework as a way to make developers fund network reinforcement works. The core operation of the statutory planning system is outside our vires (although we do have a role to play in enabling a water sector that treats developers as valued customers – see section 2.3 – and promoting efficient investment).

We recognise that in some instances water companies have requested a local planning authority to put conditions on a planning consent that have led to significant costs. The appropriateness of these requirements and the decision to include any such conditions on planning consents is ultimately a question for local planning authorities. However, the extent that we can encourage companies to invest ahead of need where it is efficient to do so (see section 3.4), should help reduce the scale/frequency of large cost requirements arising at short notice.

As described in section 3.5.1, our price controls are currently ‘single-till’, which means that water companies receive pre-determined revenue allowances (at the aggregate level) regardless of when they charge developers for specific developments. If investing ahead of need is efficient, this should help companies reduce their total expenditure requirement, and therefore receive financial outperformance (a proportion of which is then shared with customers through the total expenditure – or totex – menus). Therefore, companies currently have a financial incentive to invest ahead of need where it is efficient to do so.

However, there is a distributional effect from companies doing so. Currently, it is bill payers rather than developers who bear the cost and risks (including of stranded or under-utilised assets) of investments ahead of need. Whereas, if equivalent investments are made at the point of need, the costs can be recovered from developers (see section 3.2), albeit with some degree of cost sharing through the DAD calculations. This leads to an unclear balance of the costs between customers and developers. We discuss this further in section 5.4.

5.2 Environmental protection

One way that water companies could send price signals to developers that encourage efficient resource use, is through the structure of charges. For example, companies could charge their off-site reinforcement costs on an expected litre-per-second demand of the development in question. So, developers would be able to

reduce the charges to which they were subject, through installing more water efficient fittings.

This could be adapted for wastewater, by using a charging denominator relating to the volume of expected water returned to the sewer (both foul and surface).

Using such denominators in the structure of charges will require water companies to engage with developers to understand the nature of their development, and could encourage more collaboration between developers and neighbouring landowners to adopt sustainable solutions.

As this could represent a significant change, our emerging thinking is to not set this as an explicit requirement for April 2017. But we could set a general requirement for companies to consider the role of charging structures that send environmentally beneficial price signals when developing their charges (as well as promoting overall system resilience), and seek to strengthen this requirement in future years. We would also welcome views from stakeholders on the practicality of adopting such charging structures.

5.3 Stability and predictability

As per some of the alternative models discussed in chapter 4, water companies providing fixed fees (which are published in advance) could give developers a high degree of cost certainty. However, there is a trade-off with cost reflectivity.

One approach could be for water companies to offer a series of standard fixed charges for different types of common connections (both in terms of on-site and off-site work). By having different charges by type of connection there would be some level of cost reflectivity, while providing developers with a high degree of upfront cost certainty. For highly bespoke connections, it may be appropriate for a more flexible charging approach to apply.

The implication of having such fixed charges is that water companies would bear the risk in the event that the costs associated with the specific connection were higher than the fixed charge, which would be based on an average of new connections (for that given type). Equally, developers would bear the risk if the cost of works were to come in under the average charge levied.

To help provide for innovative charging practices to be adopted that could be in all parties' interests, our emerging thinking is not to limit companies' charges to only being fixed fees. Water companies could be able to offer alternative forms of

charging (such as having post-delivery true-ups) where such approaches were beneficial to both customers and developers.

Over the longer term, we see there could be a benefit of further sector-wide standardisation. Our current preference is for this to be sector-led (within the parameters of their obligations under competition law). But if we do not see substantial progress in this area, we may choose to set more prescriptive rules that enforce more of a 'one-size-fits-all' framework across the sector. This could take the form of Ofwat specifying a set of minimum requirements regarding how charges are calculated and presented.

5.4 Transparency and customer-focused service

We consider that there is significant scope to improve transparency and the customer-focus of charges for new connections.

Our emerging thinking is to set a rule requiring water companies to set out their new connections charges in a single document. The document would need to explain how companies had derived each charge, and be easy to access and understand. How water companies perform in this area could also feed into the overall company monitoring framework (see section 3.5.2), and targeted discussions we have with companies regarding how they improve their performance more generally (see section 2.3).

To further aid transparency, we could set out in the rules a series of principles for what each charge is expected to recover.

5.4.1 Infrastructure charges

As discussed in section 3.4, having infrastructure charges set separately to charges for off-site network reinforcement, gives rise to concerns of double charging for the same output, and a lack of transparency around what developers are paying for. It may also have unclear implications on the balance of charges between customers and developers in the case of where investment ahead of need is an efficient solution.

Therefore, our emerging thinking is for us to set a rule that water companies can only levy a single charge for each service for work that is remote from the site, rather than recover some of the costs through infrastructure charges and some through requisition charges (the single charge may vary depending on the nature of the

development). To aid transparency, we will set a requirement for companies to set out a clear methodology statement explaining how they have calculated this charge.

Companies may use a zonal approach (as described in chapter 4), or an alternative methodology. But any approach must reflect the costs of network reinforcement resulting from new developments (and not of reinforcing, upgrading or otherwise changing existing network infrastructure to address pre-existing shortfalls in capacity or capability).

To enable this rule, we would need to remove condition C (and potentially make changes to condition D) from water companies' licences, which currently specifies how infrastructure charges must be calculated. Given that this would be a straightforward change and that consistency across water companies (at least in each country) will be expected, this might best be done as a consequential licence modification under section 55 of the WA14⁹. We welcome views on the removal of condition C and whether or not that would be best done under section 55 of the WA14 or by individual agreement with each company under section 13 of the WIA91.

This removal in the current cap on infrastructure charges could lead to a change in the charges levied. Water companies would be financially neutral to such changes, due to the single-till price control (see section 3.5.1), and therefore would not have an incentive to increase charges to developers.

To demonstrate that the current balance of charges between customers and developers is broadly maintained, we would expect water companies to cross-check their new charging approaches against the current framework in terms of where costs are recovered from.

5.4.2 Asset payments and self-lay charges

The differences in approach between the current water and wastewater charging frameworks are arbitrary. We have therefore been considering whether there is merit in setting a rule requiring asset payments and self-lay charges to apply for wastewater adoption agreements.

⁹ Section 55 of the WA14 allows Ofwat, after consultation, to modify water company licences where we consider it is necessary or expedient to do so in consequence of provision made by or under Part 1 of the WA14 (including, for example, sections 16 and 17 of the WA14).

However, there is the potential for such a rule to come into tension with the UK Government's guidance that the current balance between contributions to costs by developers and bill payers should be broadly maintained. To date, we have not been provided with any data/analysis on the extent that asset payments and self-lay charges for wastewater would offset each other in aggregate. Therefore, our emerging thinking is to not set this as a requirement for April 2017, but we would welcome stakeholders' views on the potential magnitude of these charges, and the appropriateness of such a rule for future years.

As stated in section 5.1, our emerging thinking is to allow companies to move away from the current 12-year income deficit calculations if they so wish. If they were to choose to do so, they would need to apply a consistent approach to the asset payments to ensure a level playing field with any SLO. Our emerging thinking is that we would set a rule to this effect.

5.5 Transitioning to the new framework

Moving from one framework to another can include a degree of complexity. Currently, disputes can be raised for us to determine under the current framework. After rules are in place, we will assess compliance with our rules.

We intend to publish final rules in autumn 2016. Water companies are required to publish their wholesale charges at the start of January, ahead of them coming into effect from 1 April. We currently propose to align the process for new connections charging with wholesale charging because of the interlinkages (see section 3.5.1).

This would mean that there will be a three-month window for parties to transition from one framework to the other. But we recognise that in some instances negotiations between water companies and developers can take a number of months. Therefore, changing the basis of charging during the process of negotiation may create a degree of uncertainty.

We consider that having three months' visibility of the new framework should enable water companies and developers to agree to a reasonable set of terms for any works taking place near to the point of new rules taking place. However, we would welcome views on any specific transitional provisions that stakeholders consider should be put in place to help smooth the transition (both for the initial implementation of the new charging rule framework, and for future changes in charging approaches that companies may adopt in the future).

6. Next steps

We welcome feedback on our emerging thinking set out above by **21 April 2016**. Following any feedback we receive, we will look to formally consult on charging rules for companies operating wholly or mainly in England over the summer, and issue our final rules in the autumn.

Having the final rules in place before the end of the calendar year, will give water companies sufficient time to take account of any changes in the amount of revenue they expect to receive from new connections, when they set their charges schemes for 2017-18.

We will continue to engage with the Welsh Government about the development of its guidance, and seek to apply our connection charging rules (or develop new ones if appropriate) for the companies operating wholly or mainly in Wales in due course.

We welcome feedback from respondents to the questions below

Questions

- Q1** Have we missed any key issues with the current framework?
- Q2** Do you agree with our emerging thinking to require work that is remote from the site to be recovered through infrastructure charges only, to increase transparency?
- Q3** Do you agree with our emerging thinking to allow companies to develop new approaches to charging?
- Q4** Do you agree with our emerging thinking to promote a level playing field through increased transparency?
- Q5** What would be the impact of requiring wastewater asset payments?
- Q6** Do you agree with our emerging thinking regarding information provision from companies to improve transparency?
- Q7** What further information should Ofwat seek to collect from companies to aid transparency of charging in relation to new connections, as well as enabling ongoing monitoring and enforcement?
- Q8** Do you have any specific suggestions on the draft rules set out in appendix A1?
- Q9** Do you consider it to be appropriate for Ofwat to set requirements for companies to engage with their stakeholders as part of the charging rules?
- Q10** Do you consider that any additional actions will be required to ensure an effective transition?

Appendix 1: Potential charging rules for discussion

WATER SERVICES REGULATION AUTHORITY

WATER INDUSTRY ACT 1991, SECTIONS 51CD, 105ZF AND 144ZA

Draft Charging Rules for New Connection Services

Introduction

1. These rules are issued by the Water Services Regulation Authority under sections 51CD, 105ZF and 144ZA of the Water Industry Act 1991.
2. These rules come into effect with regard to charges payable on or after 1 April 2017 [in relation to water undertakers and sewerage undertakers whose areas are wholly or mainly in England].
3. The rules apply to water undertakers and sewerage undertakers when they are making Charging Arrangements.
4. The rules are supplementary to statutory provisions that apply to relevant undertakers under any enactment, or instrument made thereunder (including the conditions of their appointments). In the event of any conflict between the rules and any statutory provision, the latter shall prevail.

Interpretation

5. Unless the context otherwise requires, in these rules:
 - a) “**Charging Arrangements**” means a document setting out the charges applied by the water or sewerage undertaker in accordance with these rules.
 - b) “**Charging Year**” means a calendar year running from 1 April in a given year to 31 March in the following year.
 - c) “**Contestable**” means work or services that a Water or Sewerage Undertaker or persons other than a Water or Sewerage Undertaker may provide.
 - d) “**Developer**” means any person or business which is responsible for a Development.

- e) “**Development**” means premises on which there are buildings, or on which there will be buildings when proposals made by any person for the erection of any buildings are carried out are carried out, and which require connection with, and/or modification of, existing water or sewerage infrastructure.
- f) “**Domestic Premises**” means any premises used wholly or partly as a dwelling or intended for such use.
- g) “**Fixed Charges**” mean charges resulting in a given Charging Year which are fixed in amount or which are calculated by reference to a predetermined methodology set out in the undertaker’s Charging Arrangements, the application of which allows calculation at the outset of the total amount owing in that Charging Year in respect of the charges in question. Such charges are to be fixed for a Charging Year, as defined above.

For the avoidance of doubt, and subject to the above, Undertakers may impose Fixed Charges by reference to a unit measurement (for example, per mega-litre). Furthermore, Undertakers may offer more than one Fixed Charge in charging for a service provided in accordance with the present rules (for example, by differentiating between Water Resource Zones).

- h) “**Income Offset**” means a sum of money offset against the charges applied for connecting a Development to the water or sewerage network in order to take into account income likely to be generated as a result of the establishment and operation of this connection or these connections and “**Income Offsetting**” shall be construed accordingly.
- i) “**Infrastructure Charges**” means the charges described in section 146(2) of the Water Industry Act 1991.
- j) “**Lateral Drain**” means (a) that part of a drain which runs from the curtilage of a building (or buildings or yards within the same curtilage) to the sewer with which the drain communicates or is to communicate; or (b) (if different and the context so requires) the part of a drain identified in a declaration of vesting made under section 102 of the Water Industry Act 1991 above or in an agreement made under section 104 of this Act.
- k) “**Network Reinforcement**” refers to work other than Site Specific Work, as defined below. It means work to provide or modify such other water

or sewerage infrastructure 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 in consequence of the exercise of rights under section 106(1) (Right to communicate with public sewers).

- l) “**Non-contestable**” means work or services that only a Water or Sewerage Undertaker (or an agent acting on their behalf) can provide.
- m) “**Public Sewer**” means a sewer for the time being vested in a sewerage undertaker, whether under the Water Act 1989, the Water Industry Act 1991 or otherwise.
- n) “**Service Pipe**” means so much of a pipe which is, or is to be, connected with a water main for supplying water from that main to any premises as— (a) is or is to be subject to water pressure from that main; or (b) would be so subject but for the closing of some valve, and includes part of any service pipe
- o) “**Sewer**” includes all sewers and drains (not being drains within the meaning given by section 219(1) of the Water Industry Act 1991) which are used for the drainage of buildings and yards appurtenant to buildings
- p) “**Site Specific**” refers to work on, or the provision of, water or sewage structures or facilities located on premises or buildings which comprise as well as work to provide and connect a Water Main, Sewer, Service Pipe or Lateral Drain in the immediate vicinity of the Development required as part of the installation of these items on the Development. It does not refer to costs or work required as part of **Network Reinforcement** as defined above.
- q) “**Undertaker**” means a water undertaker or sewerage undertaker.
- r) “**Water Main**” means any pipe, not being a pipe for the time being vested in a person other than the undertaker, which is used or to be used by a water undertaker or licensed water supplier for the purpose of making a general supply of water available to customers or potential customers of the undertaker or water supply licensee, as distinct from for the purpose of providing a supply to particular customers. This definition includes

tunnels or conduits which serve as a pipe and to any accessories for the pipe.

6. Unless the contrary intention appears, words and expressions used in these rules have the same meaning as in any provision of the Water Industry Act 1991.

Consultation

7. Before making Charging Arrangements Undertakers must consult groups of persons likely to be significantly affected by the proposed Charging Arrangements (or their representatives). Consultation may include (but is not limited to), as appropriate, the Consumer Council for Water, the Company's Customer Challenge Group, Developers, local authorities, and persons carrying out contestable works (self-lay organisations). Such consultation is to be conducted in a timely and effective manner.

Publication and Transparency

8. Charging Arrangements prepared pursuant to these rules must be published in a single document on the Undertaker's website and in any other manner the Undertaker considers appropriate for the purpose of bringing the Charging Arrangements to the attention of persons likely to be affected by it. The publication must be accompanied by a statement of assurance confirming that the Undertaker has complied with these rules.
9. The Charging Arrangements are to be written and presented in a clear and accessible manner, which takes due account of the varying levels of expertise of all Developers or other customers who may rely on the Charging Arrangements.
10. The Charging Arrangements must identify which charges are associated with contestable and non-contestable services.
11. The Charging Arrangements must include provisions providing a reasonable choice of times and methods of payment of the charges.
12. From [January 2018], the Charging Arrangements developed pursuant to these rules must set out how the Undertaker's actual Network Reinforcement costs compare to the assumptions it used in developing its Infrastructure Charges. Undertakers must take these matters into account in setting their charges.

General charging principles

13. Relevant undertakers whose areas are wholly or mainly in England must determine what types of charges may or may not be imposed and the amount of any charges that may be imposed in accordance with the principle that charges covered by these rules should reflect:
 - (a) fairness and affordability;
 - (b) environmental protection;
 - (c) stability and predictability; and
 - (d) transparency and customer-focused service.

Principles for Determining the Nature and Extent of All Charges Covered by these Rules

14. In setting charges in accordance with the present rules, Undertakers should take reasonable steps to ensure that the present balance of charges between Developers and other customers is broadly maintained, and provide details as to how this has been assured. An Undertaker may only depart from this general requirement where (and to the extent that) this is rendered necessary by circumstances providing clear objective justification for doing so. Any such justification must be clearly identified in any Charging Arrangements prepared pursuant to these rules.
15. Consistent principles and approaches must be applied to the calculation of charges for different classes of customer.
16. Relevant undertakers must publish any charges developed under these rules in a single document. This document must explain how each charge has been calculated or derived. Where an undertaker determines the applicable charges other than by Fixed Charges, the methodology for the calculation of such charges must be explained clearly in the Charging Arrangements.
17. For the avoidance of doubt, Undertakers may recover reasonable administrative expenses and other overheads incurred in discharging any rights or obligations under the provisions of the Water Industry Act 1991 addressed in the present rules. Charges for such overheads should reasonably reflect the costs of the overheads in question.

Charges for the Requisition of Water Mains, Public Sewers and Lateral Drains

18. Each Undertaker shall set out Charging Arrangements in respect of any charges imposed by that Undertaker for work carried out by it in accordance with the duties imposed by section 41(1) (provision of requisitioned Water Main), section 98(1) (provision of requisitioned public sewer) and section 98(1A) (provision of lateral drains) of the Water Industry Act 1991.

19. These charges are concerned with the cost to the Undertaker of providing Site Specific infrastructure necessary for the provision of a Water Main, Public Sewer and/or Lateral Drain.
20. In establishing charging arrangements an Undertaker:
 - a) must provide for the option of an upfront Fixed Charge in respect of any work carried out by the Undertaker;
 - b) may also provide for other alternative methods for calculating charges but, where it does so, each alternative method must be explained clearly in the Charging Arrangements.
21. Charges imposed in accordance with Paragraph [18] must relate to physical infrastructure required to provide the requisitioned Water Main, Public Sewer and/or Lateral Drain. Such charges may not include Network Reinforcement costs, that is to say, charges for providing such other infrastructure (including Water Mains, Public Sewers or Lateral Drains) as is necessary in consequence of the installation of the requisitioned Water Main, Public Sewer and/or Lateral Drain.
22. Any charges imposed by an Undertaker in accordance with Paragraph [18]:
 - a) must relate only to Site Specific work carried out and costs incurred by the Undertaker in order to meet its duties under sections 41(1), 98(1), 98(1A) of the Water Industry Act 1991; and
 - b) must not relate to work needed or desired to modify or enhance existing network infrastructure in order to address pre-existing deficiencies, in capacity or capability, unrelated to requirements associated with the requisition.
23. Where an Undertaker provides a Water Main, Public Sewer or Lateral Drain pursuant to a requisition and, in so doing, decides to increase the capacity of pipes or other infrastructure beyond that which is needed to meet the Undertaker's duty under section 41(1), section 98(1) or section 98(1A) of the Water Industry Act 1991, charges for this work shall be apportioned so that the person making the requisition only pays costs which are in proportion to the particular capacity required by his or her requisition.
24. In laying down Charging Arrangements in accordance with Paragraph [18] an Undertaker may (but is not required to) provide for Income Offsetting arrangements so that the costs of meeting a requisition of a Water Main, Public

Sewer, or Lateral Drain is offset against a sum which takes into account the income likely to be generated through the installation and connection of these items over an appropriate time horizon.

25. As regards the methodology for the calculating of Income Offsetting arrangements:
- a) Each Undertaker has discretion as to the methodology to be applied to calculate Income Offset sums. Such methodology must, however, be clearly explained in the applicable Charging Arrangements.
 - b) In addition as regards Water Mains and Service Pipes, the methodology for the calculation of any Income Offset applied in respect of requisitioning charges must be equivalent to the methodology applied in calculating any asset payment an Undertaker may make in respect of the adoption of Water Mains or Service Pipes.
 - c) Nothing in these rules prevents an Undertaker from providing for Income Offsetting arrangements in relation to the requisition of Public Sewers or Lateral Drains if it does not make any asset payments in respect of the adoption of Sewers or Lateral Drains. But if the Undertaker does make asset payments in respect of the adoption of Sewers or Lateral Drains then the methodology for the calculation of any Income Offset applied in respect of requisitioning charges must be equivalent to the methodology applied in calculating any such asset payment.

Charges for the Provision of Lateral Drains, the Connection of Water Mains and Communications with Public Sewers and for Ancillary Works

26. Each Undertaker shall set out Charging Arrangements in respect of any charges imposed by that Undertaker for work carried out by it in accordance with the duties (or rights) created by the following sections of the Water Industry Act 1991: section 45(1) (connection with Water Main); section 46(1) (ancillary works for purposes of making a domestic connection); section 101B (construction of lateral drains following construction of a public sewer) or section 107(1) (right of Undertakers to make communication with Public Sewer).
27. In establishing charges arrangements an Undertaker:
- a) must provide for the option of Fixed Charge(s) in respect of any work carried out by the Undertaker;

- b) may also provide for other alternative methods for calculating charges but, where it does so, each alternative method must be explained clearly in the Charging Arrangements.
28. Any charges imposed by an Undertaker in accordance with Paragraph [27] must relate only to Site Specific work carried out and costs incurred by the Undertaker pursuant to sections 45(1), 46(1), 101B or 107(1) of the Water Industry Act 1991.

Charges and Asset Payments in respect of an Agreement under Section 51A or 104 of the Water Industry Act 1991

29. Each Undertaker shall set out in the applicable Charging Arrangements the charges to be imposed and the asset payments, if any, to be made in respect of an agreement under section 51A or section 104 of the Water Industry Act 1991.
30. These charges are concerned with the cost of providing Site Specific structures or facilities necessary as part of the adoption of a Water Main, Public Sewer and/or Lateral Drain. Such charges may not include Network Reinforcement costs, that is to say, charges for providing such other structures or facilities (including Water Mains, Public Sewers or Lateral Drains) as is necessary in consequence of the installation of the requisitioned Water Main, Public Sewer and/or Lateral Drain.
31. Insofar as section 51A agreements are concerned, Water Undertakers shall provide for asset payments (the amounts described in section 51CD(3) of the Water Industry Act 1991) where the Undertakers calculates the requisition charge for a Water Main to include an income off-setting arrangement.
32. Insofar as section 104 agreements are concerned, Sewage Undertakers may provide for asset payments (the amounts described in section 105ZF(3) of the Water Industry Act 1991).
33. Where an Undertaker provides for asset payments in respect of the adoption of a Water Main or Service Pipe pursuant to an agreement under section 51A of the Water Industry Act 1991, or the adoption of a Sewer or Lateral Drain pursuant to an agreement under section 104 of the Water Industry Act 1991, such payments shall be equivalent to analogous requisition charges imposed by the Undertaker under the Charging Arrangements.

Charges for Diversions of Pipes and other Apparatus under Section 185 of the Water Industry Act 1991

34. Each Undertaker must set out Charging Arrangements in respect of any charges imposed by that Undertaker pursuant to section 185(5) of the Water Industry Act 1991. In establishing charges arrangements an Undertaker:
- a) may provide for the option of upfront Fixed Charges in respect of any work carried out by the Undertaker;
 - b) may also provide for other alternative methods of calculating charges but, where it does so, each alternative method must be explained clearly in the Charging Arrangements.
35. Charges levied pursuant to section 185(5) must be calculated by reference to the principle that the Undertaker is entitled to recover costs reasonable incurred as a result of complying with the duty imposed by section 185(1) of the Water Industry Act 1991.

Security/Deposit Arrangements

36. Where an undertaker seeks to require security, whether in the form of a deposit or otherwise, prior to commencing work pursuant to any provision under the Water Industry Act 1991, type and amount of security should not be unduly onerous, taking into account the risk to be borne by the Undertaker in carrying out the work in question.
37. The Undertaker must clearly set out requirements for security and any charges to be applied in its Charging Arrangements.

Infrastructure Charges

[These draft rules are included here for the purpose of this discussion paper, but please note that charging rules about Infrastructure Charges would be included in charges scheme rules made under section 143B of the Water Industry Act 1991.]

38. Each Undertaker must fix Infrastructure Charges in a charges scheme.
39. Infrastructure Charges shall cover the costs of Network Reinforcement that the Undertaker reasonably expects to incur in a given Charging Year. This includes work to provide or modify such other water or sewerage infrastructure as is necessary in consequence of the 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 some other way, or in consequence of the exercise of rights under section 106(1) (Right to communicate with public sewers).

40. In any Charging Arrangements, Undertakers must set out a clear methodology explaining how Infrastructure Charges have been calculated. The methodology applied in calculating such charges must reflect the costs of Network Reinforcement that the Undertaker reasonably expects to incur in the given Charging Year.
41. For the avoidance of doubt, Infrastructure Charges must not relate to the costs of reinforcing, upgrading or otherwise modifying existing network infrastructure in order to address pre-existing deficiencies in capacity or in capability unrelated to a requisition, to the adoption of infrastructure under a section 51A or 104 agreement or to connections described in section 146(2) of the Water Industry Act 1991.
42. In establishing Infrastructure Charges, an Undertaker:
 - a) must provide for the option of an upfront Fixed Charge;
 - b) may also provide for other alternative methods for calculating charges but, where it does so, each alternative method must be explained clearly in the Charging Arrangements.
43. Each Undertaker may determine the methodology for calculating any such Fixed Charge, as defined above, subject to the following:
 - a) Each Undertaker must set out clearly in Charging Arrangements how the Fixed Charges have been calculated.
 - b) Where Infrastructure Charges are applied in respect of the modification or redevelopment of existing buildings or premises, the calculation of any Fixed Charges must take due account of any previous usage associated with the buildings and/or premises to which the charges are to be applied and be discounted accordingly.
 - c) Undertakers may determine how such charges are to be calculated, including the period of usage they take into account. However, the methodology to be applied in determining such calculation must be clearly explained.

- d) These charges may vary to reflect specific categories of cost and Undertakers may differentiate the Fixed Charges applied by reference to the geographical location in which the relevant costs are incurred.

Appendix 2: Checklist of how our emerging thinking addresses known issues

Issue	Description
1. Administrative burden	<p>Our emerging thinking enables companies to simplify the charging calculations, and set out a series of fixed charges.</p> <p>In the longer term, we see there being a benefit of some degree of sector-wide standardisation. Our current preference is for this to be sector-led (within the parameters of their obligations under competition law), but we may reconsider this in the future.</p>
2. Risk of double charging	<p>Our emerging thinking is for there to be a single charge levied for off-site reinforcement. This should remove the risk of double charging through separate means.</p>
3. Unclear incentives to self-lay and harm to competition	<p>Our emerging thinking is for companies to indicate clearly which charges are associated with contestable and non-contestable services, which should help improve transparency.</p> <p>In the longer term, we may seek to introduce asset payments for wastewater services, subject to developing a further understanding of what the potential impact could be of doing so.</p>
4. A 'first mover' disadvantage	<p>Our emerging thinking is for companies charging a fixed fee for infrastructure reinforcement removes the first mover issue, as infrastructure reinforcement costs are averaged across developers (of a given area/type).</p>
5. Arbitrary calculations	<p>Our emerging thinking is for companies to set out clearly the way in which costs are balanced between customers and developers, and for charges to be developed in consultation with key stakeholders. This should help reduce the extent that arbitrary calculations are used, and where judgements are still necessary, at least stakeholders will understand the rationale.</p>
6. Weak price signals	<p>Our emerging thinking is for a rule that in developing their charges, companies must consider the role of charging structures that send environmentally beneficial price signals to developers.</p> <p>In the longer term, we may set more prescriptive rules that specify the required charging structures.</p>
7. Lack of transparency	<p>Our emerging thinking is for companies to publish a single stand-alone document setting out their new connections charges, and for those charges to be developed in consultation with key stakeholders.</p>
8. Interactions with planning framework	<p>As described above, the core operation of the planning framework is outside our vires. However, to the extent that our charging rules help address the investment ahead of need issue (see below), there may be a reduction in the scale of requirements placed on developers through the planning framework.</p>
9. Investment ahead of need	<p>Our emerging thinking is for companies to charge a fixed average fee for infrastructure reinforcement (of a given area/type). This will give a constant cash flow and therefore remove any disincentive to invest ahead of need where it is efficient to do so.</p>
10. Predictability of charges	<p>Our emerging thinking is for companies to set out a series of fixed charges and methodologies for calculating charges. This should provide a greater degree of predictability to developers of the charges that they will receive.</p>

