



# Scope and balance of developer charges and incentives – consultation response June 2021

8 June 2021



**Q1: Do you have any comments on key conclusions from the Frontier Economics report?**

- 1.1 We address each of the key findings in turn. For ease of reference we have broken this down into each of the findings in the Executive Summary.

**It is not clear that there is an economic rationale for developers paying less than the full cost of connecting new developments**

- 1.2 We agree that there is an internal conflict in the current charging guidelines between “cost reflectivity” and maintaining the balance of charges which means that developers do not pay the full costs of the impact of their developments on incumbent’s networks. We acknowledge that there are multiple drivers of growth and a need to differentiate between the costs of property growth and population growth. We believe it is appropriate for developers to contribute to the costs of property growth in full, but their exposure to the costs of population growth should be limited.
- 1.3 In the analysis produced by Frontier Economics they state that “developers are required to pay for the cost of on-site work and for the cost of reinforcing ‘local’ assets.” We believe that this is a fair reflection of the current rules where developers pay requisition and connection costs in full and the infrastructure charges collectively fund the reinforcement in our network that has arisen directly from applications received under the specific sections of the WIA as defined in the charging rules.
- 1.4 This means that strategic assets are funded by end customers rather than developers. This will include network assets which are constructed in advance of any qualifying applications under the WIA as well as any upgrades of water resources and water/wastewater treatment facilities. Under some circumstances this may adversely influence incumbent companies’ decisions, perhaps to favour a “just in time” network upgrade (funded by developer contributions), rather than more efficient longer term solution which allow for future growth (funded, in part, by end customers).

**Ultimately, we find that it would be more cost reflective and in line with the principle of cost causation if developers did pay for all of the off-site costs.**

- 1.5 This should only be the case if everyone agrees to the principle that all network growth is attributable to property growth and not population growth.
- 1.6 The question then turns to which developers should pay the off-site networks costs. Currently we are expected to balance Infrastructure charges with Network Reinforcement over a five-year period. Infrastructure for areas with significant growth is planned on a twenty year plus growth projection and in most cases is put in before development starts or in line with early phases. For example, the waste infrastructure for the North East Village Developments in Swindon is being built and installed now and sized for potential growth over the next twenty years. We currently envisage 30% of this being paid for through Infrastructure charges by developers (likely to apply to us under the WIA prior to the assets being completed), and 70% funded as strategic growth by end-user customers.
- 1.7 In order to achieve the recommended outcome, the current definition of network reinforcement needs to be widened to go further than growth attributed to applications already received under the WIA. We have raised this issue with Ofwat in previous



consultations on charging over the last few years. We believe we are applying the definition consistently with other companies, but that the actual impact does not align with the intent of putting all off-site costs in the network onto developers.

**We recommend exploring whether charges could be higher in areas where network reinforcement costs are higher and lower in areas where costs are lower.**

- 1.8 We have looked at variable Infrastructure charges in the past and consulted on it prior to implementing the new charging rules in April 2018. The results of this show that developers clearly do not favour a geographical or zonal approach and prefer consistent and simple charging across our whole region.
- 1.9 The administrative burden of managing multiple different rates (from the perspective of calculating them as well as billing them) and the complexity it would add to the balancing of Infrastructure Charges with Network Reinforcement are not justified by any potential benefit, and there may be conflict with government or local authority plans to redevelop in certain areas
- 1.10 CCW have told us that they fear this approach would be a detriment to homeowners undertaking home improvements as they cannot choose where they connect to our network and would therefore be penalised based on where they live.

**We also recommend greater use of environmental incentives such as developers being charged less if they build water efficient homes, provide sustainable drainage systems, rainwater capture or grey water recycling.**

- 1.11 We agree that incentives could be used to encourage developers to go further on water efficiency initiatives. This should only incentivise them to go beyond standards that are already embedded within building regulations and planning requirements.
- 1.12 There are other initiatives and activities that we can work with developers to ultimately reduce consumption and demand on our networks. We explore these in more detail in our response to Question 3.

**We find the economic rationale for the income offset to be weak, or at the very least, that further evidence would be required to continue providing an income offset.**

- 1.13 We would favour the phasing out of income offsets as the link between the original intent and the current reality has been broken.
- 1.14 The income offset has its roots in the Discounted Aggregated Deficit (DAD) schemes and Guaranteed Extended Mains Schemes (GEMS) which were introduced to offset the cost of requisitioned assets in the WIA 1998. The principle was that provided revenue from end users connected to the new asset were sufficient to cover the full cost of financing its construction over 12 years then developers need not contribute (It was in effect a sliding NPV calculation) to ensure the water company was no worse off than had the asset not been constructed.
- 1.15 In order to ensure level playing fields with SLPs and NAVs (from a market for new connections perspective) these rules have been amended over time, with GEMS schemes



stopping, asset payments (DAD) being made to some NAVs (despite no assets being vested in the company), and now being replaced with a flat per property income offset.

- 1.16 The current scenario still has level playing field issues for full-service NAVs who do not make any connection to incumbent company networks and hence do not receive income offsets.

**If there is to be a discount, how should it be applied? Options include applying it as a flat rate per connection or using it to incentivise particular behaviours such as building away from water-scarce zones and building water efficient homes to further strengthen environmental incentives.**

- 1.17 Any discount scheme that is implemented needs to be easily understandable and deliver specific objectives. The current income offset is easy to understand but isn't linked to developers having to deliver better solutions for incumbent companies or the ultimate occupiers of those premises.
- 1.18 It is unclear how changes to infrastructure charges or incentives can be sufficiently large as to incentivise building away from water-scarce zones and comply with charging principles such as cost reflectivity. As a result, as well as for the reasons outlined in 1.8-1.10, we do not believe this is the right approach.



**Q2: We seek views on our reasoning and proposals with respect to charges for strategic assets, income offset and the balance of charges rule**

2.1 We have captured the key proposals in bold below with our comments on each one.

**We are not proposing to introduce developer charges for strategic assets (In this context that means additional water resources and treatment works capacity).**

2.2 We agree with not charging developers for strategic assets, as it would be too complex to administer a charge that reflects the developer's contribution to this cost. However, we disagree with the assumption that all growth in strategic assets is driven by population growth, and expenditure would therefore be incurred irrespective of where development takes place.

2.3 Whilst there is undoubtedly a variable element to this, the real costs of expanding strategic assets to cope with growth is NOT agnostic to where the growth is occurring. Different areas of the region have different sized works, with significantly different technologies used for treatment (water and waste). This means that both investment and operational costs differ. The environment is also better able to cope with abstraction and discharges in some areas over others and hence costs will differ.

2.4 If development is not completely flat across all areas of the incumbent's region then costs will be unlikely to be averaged out and only driven by population growth. For example, if a 3,000-house development is being built in rural Oxfordshire, then that may well result in a bigger upgrade requirement to treatment works than if the same development was built on the edge of a major town.

2.5 Given the impact that developments have on the location of strategic assets that require upgrading it could be beneficial to review how these are funded. Currently the allowance for this spend is covered in the base plan linked to population growth, however it may make more sense for this to be enhancement expenditure which can link planned developments to the costs of upgrading the relevant strategic assets. We believe that this discussion is better suited for the upcoming consultations on PR24 methodologies.

**We agree with this (*weak economic rationale of income offset*) and propose that water companies cease to offer income offset, at least by 2025.**

2.6 We agree with reasoning to drop the Income Offset and balance of charges rule however it might be simpler to make all changes to charges at once rather than in multiple stages. We are aware that Ofwat is also currently reviewing other aspects of the New Connections Charging rules, with another consultation to be published shortly.

2.7 We believe that it is in the interests of incumbent companies and developers to make all changes to charges in one go and then leave the system to bed in for a number of years. Our developer customers have indicated that price certainty is the most important factor for them, and the system changes incumbents may need to make can be costly to implement and would be more efficient if only changed once.



**We do not propose to prevent companies setting simple infrastructure charges. We accept that many developer customers prefer the benefits that these highly averaged charges bring.**

- 2.8 We agree that this is consistent with the feedback we have had from our developer and end-user customers.

**We are...considering whether for English companies to have a requirement of more bespoke infrastructure charges for some of the most remote developments.**

**Income offset is a discount that is unavailable for NAVs without bulk supply and/or discharge agreements with incumbents. Removing income offsets would reduce barriers to such NAVs competing with other NAVs and with incumbent water companies to serve sites.**

- 2.9 We do not believe that the argument in favour of bespoke infrastructure charges has been fully explored, and think that it would introduce inconsistency of when developers pay for strategic assets and there is no current evidence that it would incentivise developers to change their mind on where to build.
- 2.10 There are potentially two drivers for incumbents in implementing these bespoke infrastructure charges:
- Make full-service NAVs viable in these locations
  - Incentivise developers to build where there is capacity rather than in remote locations
- 2.11 We agree that the combination of removing income offsets and encouraging bespoke infrastructure charges in remote developments would encourage competition by full-service NAVs who may become viable in certain developments as a result.
- 2.12 This is likely to increase overall costs for developers in those circumstances as they are in effect having to pay for the investment in “strategic assets” by the full service NAV which other developers in other locations will not be required to do per the proposed Ofwat approach to treatment works growth costs in this consultation. We believe that this is likely to be unpopular with developers. At a recent scrutiny panel that we held large developers were expressing their concern about future price rises as a result of losing the income offset.
- 2.13 In respect of remote locations having a different rate of Infrastructure Charges to “most” developments, we believe that this could be in conflict with other planning incentives issued by government for example this might encourage significantly higher infrastructure charges for the OXCAM arc conflicting with central government objectives for this area.
- 2.14 The aim of introducing these different Infrastructure Charge rates would be to influence developer behaviour but water companies may not be able to offer a price differential on a scale that would change developer’s decision on where to invest. For Thames Water a “remote location” may have a different meaning compared with other water companies operating in more rural areas. This would apply specifically to areas at the edge of our supply area where it would be hard to provide additional capacity for example Ebbsfleet in North Kent, which would not necessarily meet other people’s definitions of remote.



- 2.15 The scale of rate increase required in “remote” locations would also adversely impact smaller homeowner customers that need to make home improvements who already live in these more “remote” locations and could make the cost prohibitive. We believe this would not be consistent with Ofwat’s principle of “Fairness and Affordability”.
- 2.16 This concern over Fairness is supported from the responses received when we consulted on variable infrastructure charges ahead of the Apr18 changes to the charging rules, particularly from smaller customer groups. Issues over complexity of charges was also an issue raised by customers in the consultation.

**We propose to have rules that define charges or discounts relating to environmental impacts, with the expectation that there are incentives for water efficiency and reductions in surface water drainage.**

- 2.17 We welcome the clarity and consistency that clearly defined rules will give to both developers and incumbent companies.
- 2.18 We maintain the position that given developers already have a requirement to meet a reasonable (if theoretical) water performance standards from building regulations, local planning requirements Future Homes Standards (FHS), any future direction for water efficiency incentives through wholesaler water company charges/incentives to developers, should be focused on outperforming these requirements.
- 2.19 There are many ways in which early collaboration in the planning and design of new developments can improve the water efficiency and carbon footprint of developments. In our response to question 3 we explore these in more detail. Whilst there may be a part for developer services charging schemes to play in that process, they should not be thought of as the main lever to pull.
- 2.20 NAVs are already incentivised through Bulk Discharge agreements with discounts for Sustainable urban Drainage schemes (SuDs). This would need to be reviewed to ensure the benefit from any water and waste efficiency discounts is not duplicated in Developer Charges and Bulk Supply or Discharge agreements.

**...environmental incentives should be applied at the point of new connection, and not earlier in the process.**

- 2.21 We support the intent to drive and deliver greater environmental performance through new development, primarily focusing on water efficiency and SuDs. However, incentives payable at the Point of Connection are unlikely to drive take up of these more strategic incentives as they are required well ahead of building works and will often form part of the drainage strategy required to obtain planning permission.



**Q3: What environmental incentives should water companies be offering developers and NAVs?  
We are interested in examples of good practise. How can we better support this?**

- 3.1 Incentives offered by water companies to developers and NAVs should only be used to deliver outperformance on the obligations that the planning process and building regulations already place on developers.
- 3.2 We believe there are five ways that water companies can incentivise improvements:
- Work with developers and others to improve viability of long-term technology solutions such as grey water recycling/ rainwater harvesting or SuDs and retention schemes
  - Incentivise efficient fittings and appliances at the build stage
  - Promote water neutrality within the local area of the developments
  - Encourage end-users to maintain or improve efficiency of new properties e.g. Green Redeem schemes
  - Incentivise retailers and NAVs to implement or encourage water efficiency through ongoing tariffs
- 3.3 The first and last of these do not sit within the scope of the proposals in this consultation as they do not work as incentives at the point of connection, they do however both represent significant opportunities that we are already engaged in.

**Planning and building regulations**

- 3.4 The biggest impact for delivering efficiency savings through new development include strengthening the building regulations, local planning powers and requirements, master planning of large multi-use sites, Future Homes Standard, minimum fittings standards (to eliminate poor performing devices), and mandatory water labelling. The Government has started a phased consultation to change / strengthen building regulations through the Future Homes Standard (FHS). Water UK are coordinating a task force of key experts to develop a FHS roadmap. Water UK and DEFRA are also looking at reducing the automatic right of connection for Surface Water (SW) flows to sewers and the potential to enact schedule 3 of the Flood and Water Management Act (FWMA) 2010, and compulsory adoption of sewers.
- 3.5 Given that developers already have a requirement to meet a reasonable (if theoretical) water performance standards from building regulations, local planning requirements Future Homes Standards, (and in future the outputs resulting from the above reviews), any future direction for water efficiency incentives through wholesaler water company charges/incentives to developers, should be focused on outperforming these requirements.
- 3.6 Our input into the FHS task force is to move away from the 'water calculation' approach used as one of the two water performance options in Part G of Building Regulations. The water calculation approach uses a 'litres per person' metric, which relies on a range of assumed behaviour scenarios and values, which developers/builders cannot control, nor appropriately influence. In late AMP6 we tested the actual water use performance of new homes built to specific water performance levels - Code for Sustainable Homes level 3 & 4, which uses the 'water calculation' approach to achieve a 105 litres/person/day result.



We monitored water use data for 2 to 8 years post-build. Using meter reads of actual consumption data, we reported that actual average water consumption of these Code level 3 & 4 homes, ranged from 110 to 140 litres/person/day - far exceeding the intended water performance. This higher usage was due to two main factors; developers/builders cannot influence the water use behaviours of owners/tenants and that the 'water calculation' approach (litres/person/day) allowed too much flexibility in the specification of water devices/appliances which meant that whilst 105 l/p/day was achieved on paper, the calculation approach did not require/guarantee that water efficient devices/appliances were actually installed throughout the new build house.

3.7 We worked with several large developers during the course of this study and discovered the following;

- Local authorities / building control were not undertaking any physical checks or inspections of water devices/appliances to confirm that they were in line with the required water performance levels in Building Regulations
- Developers did not keep satisfactory records of what water use devices/appliances were being installed in new homes to meet specific Building Regulation water performance levels
- No post-build auditing was being done to confirm that actual water use was in-line with the intended water performance levels from Building Regulations

3.8 Following our study into actual water consumption in homes built using a 'litres/person/day' approach, we would recommend that any water efficiency incentives offered to developers, did not use or rely on a 'per capita consumption' or 'litres per person per day' approach.

3.9 Several water companies already offer water efficiency incentives to developers, but we do not believe their impact is significant and that there is minimal validation post-build to confirm that the actual physical water efficiency improvement was implemented. We believe these should be validated such as through Water Regulation inspections before the developer receives a discount to be sure a benefit can be delivered. Most of the incentive offers currently being offered to developers are not actually driving water performance beyond the levels already required/encouraged in current Building Regulations Part G, and any future incentives should only seek to give discounts for going beyond these requirements.

### Long-term Solutions

3.10 Significant interventions, e.g. Rainwater Harvesting (RWH), Greywater Recycling (GWR), have the combined benefits of reducing discharge to sewers and lowering demand for potable water. Whilst the cost-benefit of these technologies is improving, as quantified by



the recent Waterwise cost-benefit study<sup>1</sup>, it remains very challenging to demonstrate that investing or incentivizing their installation in new development is a cost-effective way of spending to deliver against demand reduction targets. Also, these technologies require routine maintenance which will not be something that we can guarantee to achieve a sustained water savings. The current BREEAM (Building Research Establishment Environmental Assessment Method), standards require such systems to be maintained for a minimum of 2 years post installations. For water companies to assume longer term demand reductions as a result of their use, would require a minimum obligation of 7-10 years operation. We do not think that an incentive at the point of connection is suitable for these types of solutions as. It comes too late in the lifecycle of the development and would not guarantee usage of solutions for significant periods after development without any enforcement or consequences on the developer. We are working closely with developers and other water companies on alternative innovative solutions in this space. This is likely to form a collaborative bid through the Ofwat innovation scheme in the near future.

- 3.11 Another potential offering to developers could be to install tank management systems on high rise developments. This would be beneficial in flattening the peaking factor. Systems like the one on the link below<sup>2</sup> enable you to control and manage the tank filling, enabling a system where tanks are replenished at different point of the day. The issue, similar to reuse systems, is that the tanks are not owned and maintained by the water company so someone would be required to look at how to incentivise/monitor off peak usage, and potential use of smart bulk meters to achieve this. This may be better incentivised through end-user tariffs rather than developer charges.
- 3.12 A potential approach could be to create an incentive that rewards the non-discharge of all surface water flows to sewers – via discharge to ground/watercourse/river etc. This would encourage the use of SuDs for soakage & storage (where possible) or the increased creation of green areas to help drive the required culture change. It is not clear whether a discount offered at the point of connection by water companies is the best approach to deliver this as decisions need to be made early in the planning process and maintenance costs need to be funded.

### **Water Neutrality**

- 3.13 We have been an active member of a Waterwise sub-group developing the definition and delivery opportunities for achieving water neutrality on new and existing developments<sup>3</sup>. This work stream is now being piloted with a leading housing developer for a large-scale development site in London.
- 3.14 We are considering the possibility of allocating the income offset that would have been paid to contribute to or completely fund the delivery of large-scale retrofitting and internal wastage fix activity within the same water resource zone (WRZ) as the development. The aim would be to achieve a water neutral or positive result, i.e. save enough water in

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<sup>1</sup> [https://www.susdrain.org/files/resources/evidence/Ricardo\\_Independent-review-of-costs-and-benefits-of-RWH-and-GWR-Final-Report.pdf](https://www.susdrain.org/files/resources/evidence/Ricardo_Independent-review-of-costs-and-benefits-of-RWH-and-GWR-Final-Report.pdf)

<sup>2</sup> <https://www.keraflo.co.uk/product/tanktronic-control-unit>

<sup>3</sup> <https://www.waterwise.org.uk/knowledge-base/a-review-of-water-neutrality-in-the-uk-2021/>



surrounding existing development to offset the projected new water demand of the new housing. We would then endorse the development as being water neutral.

### **Incentivising the end-user**

- 3.15 We could introduce an incentive at the point of connection to encourage the developer to promote water efficiency with the new occupant. For example, a reduction of charges could be considered where a developer signs up to Green Redeem<sup>4</sup> – working closely with us to promote/market/incentivise customers to sign up to this free service to encourage water usage reduction via their smart meter.

### **Incentivising Retailers**

- 3.16 We already offer an incentive scheme to retailers to carry out water efficiency work with their customers<sup>5</sup>. This helps us to achieve ongoing water efficiency indirectly with non-household customers.

### **Tariff structures**

- 3.17 In the future there will be an opportunity to utilise information from our smart meters in order to offer a rising block tariff which will actively encourage end-users to use water even more efficiently than our current charging structures do. This is likely to form part of our future water resources management strategy.

### **Other examples of how Thames Water are influencing water efficiency**

- 3.18 As part of our Vision 2050 work we are committed to eliminating pollutions and spills from our network. To achieve that we need to remove unwanted flows (including surface water) from our network. That means a lot of SuDs, especially in London.
- 3.19 We are also working with the GLA to look at integrated water management (essentially using rain and greywater to displace the demand for potable water and take the strain off our mains and sewers). We are working with the GLA to identify locations where we can work with the Mayor, local authorities, and developers to achieve this. This will include developing a range of business models to ensure that the systems that are implemented are maintained and customer safety protected.
- 3.20 The OxCam Arc presents a major challenge for us and an opportunity to deliver integrated water management at scale. We have been liaising with DEFRA, CLG and Oxfordshire CC about how to enshrine IWM in planning, so we as an industry will be able to deliver on it if it gets into planning law.
- 3.21 We have been the leading water company in promoting solution and addressing the 'leaky-loo' issue. Our Smarter Home and Business Visit activities, plus our consumption

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<sup>4</sup> <https://www.greenredeem.co.uk/water-customers/>

<sup>5</sup> <https://www.thameswater.co.uk/media-library/home/wholesale/market-data/wholesale-service-offering-for-retailers-april-2021.pdf> page 107



and continuous flow datasets from over half a million smart water meters, have been driving the multi-sector initiative to both understand and reduce leaky-loo water loss. We are engaging with developers to steer future device procurement and installation away from problematic WC designs and materials. Whilst reducing the future risk of internal plumbing loss ('wastage') is not an agenda that we see as requiring incentivizing through charge arrangements, we are working with developers, manufacturers and trade groups, as well as government, to improve the water performance of new development through stronger fittings standards and future mandatory product labelling.

