

Consultation on the scope and balance of developer charges and incentives

Severn Trent Response

June 2021

WONDERFUL ON TAP



The scope and balance of developer charges and incentives

Summary of response

We are pleased to have this opportunity to respond to Ofwat's emerging thoughts on the shape of developer charges going forward.

On balance, we agree with Ofwat's proposal that developers should not have to contribute to strategic investments. While we agree with Frontier Economics' view that new development does drive some of this cost, much of it is driven by population growth. Allocating the element that should be attributed to new connections could be complex and opaque to developers. We are also mindful of the impact that it could have in combination with the withdrawal of the income offset.

We agree that the "income offset" should not continue in its current form beyond AMP7. If a company contribution does continue then it should be repurposed as an incentive to fund environmental incentives or encourage development in areas where there is greater capacity. Given the significant regulatory changes that have already been made in this area, we think that such measures could be phased in over the course of AMP8. Developers will be keen to see stable and predictable charges in relation to their housing developments.

Frontier's report discusses the time horizon for charges and whether company infrastructure charges should be differentiated to send better pricing signals about the costs of developing in parts of the network where there is more limited capacity. We believe that balancing infrastructure charges against reinforcement expenditure over five years is too short a period for a long-term investment. While it may balance out for the largest companies, it is already giving rise to "first mover advantages" and "second mover disadvantages" for many. For this reason, we would not favour any approach which led towards infrastructure charges based on sub-regional costs.

In principle, we think that differentiation could be the right approach. However, water charges represent a small proportion of developers' costs which are likely to be dominated by land values. Since any changes we make may have limited influence, we think that any guidance or rules around this should be proportionate.

More detailed answers to the specific questions raised in the request are included below.

Kind regards

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Director of Regulation and Strategy

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

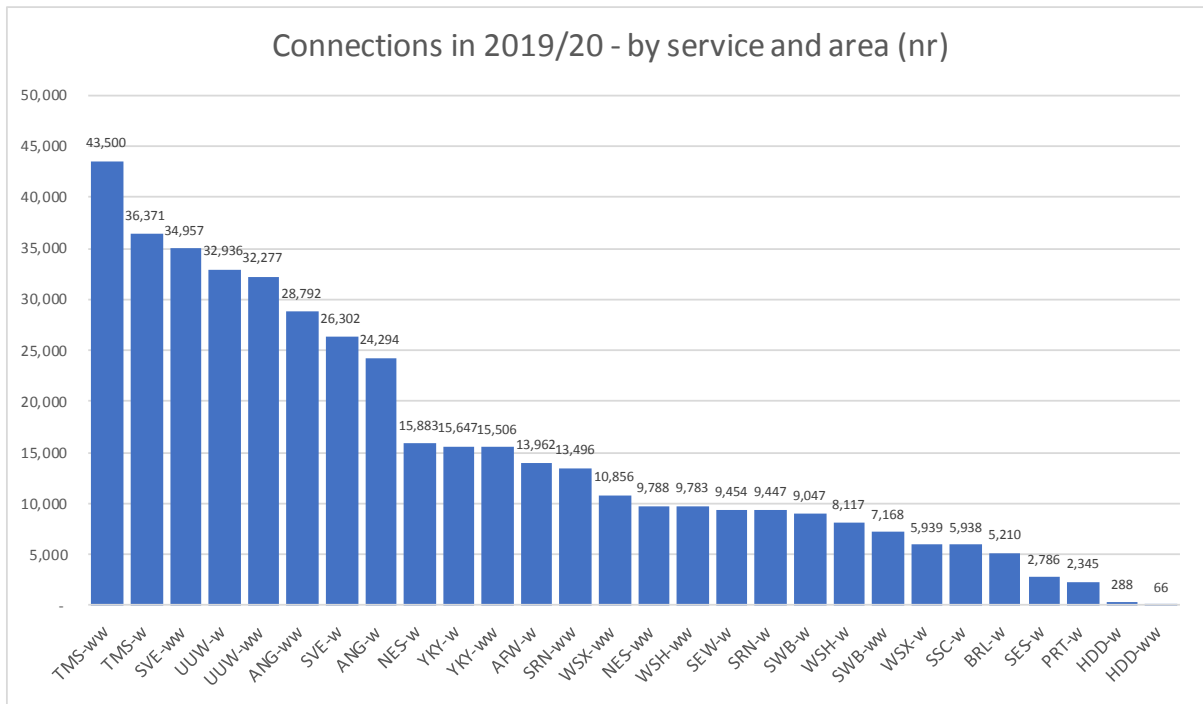
Frontier’s recommendations on the income offset, contributions to strategic assets and environmental incentives are covered by questions 2 and 3, so this section deals only with some of the other topics raised in the report.

Time horizon and geography

The Frontier report spends some time considering the five-year timeframe over which companies are required to balance their network reinforcement costs and charges. We agree that this creates “first mover advantages” and “second mover disadvantages”. While this is a simple approach, we think it is not actually transparent because costs that new development will drive over time are not reflected within the charge.

When averaged across the largest companies such as Severn Trent, the 5-year approach is unlikely to cause problems. Severn Trent could carry out around 35,000 connections per year, which would mean that there is likely to be some reinforcement in our area every year and this has a pooling effect. The infrastructure charge operates something like an insurance model – everyone pays a contribution and the pool pays when there is a need. Like insurance, this avoids loading the incidence effect onto connections that trigger the need for reinforcement, because these would be disproportionate.

For smaller companies, there may be no reinforcement activity for one or more AMPs – this is true for Hafren Dyfrdwy in AMP7 and we know it has been the case for other small companies in a number of control periods. A 5-year average already gives rise to free rider / excess charge issues for these companies.



Frontier are correct to say that there will be cross-subsidies within the current approach, because the investment required in different areas of a company's network will be different. However, we do not think that any form of zonal charging based upon the costs in a given area would be the way to address this.

Zonal charging

We considered how an infrastructure charge based on expenditure within each zone over a 5-year period might work out using a stylised example. This company averages 9,000 to 12,000 connections for each service per year (45-60k each AMP), which is in line with the industry median last year. We break this down into 3 zones for infrastructure charges: one is characterised by high growth and reinforcement costs, one medium, one low. However, at the start of the cycle the timing of past investment means that there is a different level of existing capacity in each area.

Table 1: Assumptions – connections each AMP in stylised example

Number of connections (000s)	Lower	Upper	Unit cost £
Company total (each service)	45,000	60,000	£350
Zone 1 (high growth, high cost, but starts with capacity)	20,000	25,000	£400
Zone 2 (medium growth and cost, some existing capacity)	15,000	20,000	£350
Zone 3 (low growth, low cost, but no existing capacity)	10,000	15,000	£300

The costs in zone 1 are high but in our example there is no requirement at the start of the cycle, whereas zone 3 lacks any capacity at the start. The "unit cost" is the amount of reinforcement that will be required for each extra connection in the long run. In this stylised example we assume that 15 years would be a reasonable period for reinforcement to be required for zones of this size; in reality it might be longer for small zones. This stylised company is undertaking over 100 times as many connections as the smallest service in the sector (Hafren Dyfrdwy wastewater).

Reinforcement is a classic example of a semi-variable cost. If we are upgrading infrastructure to accommodate growth it makes sense to build in some extra capacity so that we will not have to revisit the same areas year after year. This means that once an investment is made, the capacity is there to be used up by developers who connect in the following period.

Table 2: Reinforcement expenditure £m in stylised example

	AMP1	AMP2	AMP3	AMP4	AMP5	AMP6	AMP7	AMP8	Total
Company	11.3	18.4	27.0	11.3	18.4	27.0	11.3	18.4	142.9
- Zone 1	-	-	27.0	-	-	27.0	-	-	54.0
- Zone 2	-	18.4	-	-	18.4	-	-	18.4	55.1
- Zone 3	11.3	-	-	11.3	-	-	11.3	-	33.8

With a randomised number of connections in each zone per control period (within the parameters set out in table 1), the infrastructure charges become highly variable. As Frontier note in their report, there is a significant problem with "free riders" – for example, as table 3 shows developers in zone 1 give rise to an investment need but contribute nothing towards this in AMP1 or AMP2, whereas all connections in AMP3 are very expensive.

Table 3: Infrastructure charges on a zonal and company basis (5-year average method) in stylised example

	AMP1	AMP2	AMP3	AMP4	AMP5	AMP6	AMP7	AMP8	Total
Company	£215	£363	£501	£228	£364	£514	£218	£352	£2,755
Zone 1	-	-	£1,175	-	-	£1,128	-	-	£2,303
Zone 2	-	£1,147	-	-	£1,196	-	-	£937	£3,280
Zone 3	£1,011	-	-	£1,102	-	-	£847	-	£2,959

Large fluctuations in the charge would not be the only problem with a zonal approach operating in this way; it would also send inappropriate pricing signals to developers based on the timing of investment. In the stylised example, in AMP1 and AMP2 this method sends a signal that developers should build more in zone 1 when this is actually the area that has the highest long-term cost of reinforcement.

While we have used a stylised company in the discussion above, we could point to our real-world examples of lumpy reinforcement expenditure. In AMP6, Severn Trent undertook a significant wastewater reinforcement project at Newark, which has a population of around 28,000 – about three quarters the size of Hafren Dyfrdwy’s wastewater service. The project cost £65m of which £4.3m was classified as reinforcement. If the developers connecting in the Newark area alone had been required to pay these costs over five years then they would have faced an absurd charge – perhaps £10,000 per connection. The requirement for investment was the result of decades of growth in Newark, not development over a short period of time. If we want to send price signals about capacity and the environmental impact of developing in particular locations, then we should consider alternative approaches.

One method would be to extend a simple averaging approach over a longer period – say, 15 years – which would broadly match the return period in the stylised example. This could be a trailing average or a combination of historic and forward-looking expenditure from business plans. A longer period would more accurately reflect the economics and the nature of the assets. The problem would be that some of the zones created might be too small to assess an average charge over any reasonable period – we think that HD’s wastewater service is already too small for such an approach to work.

A more accurate result might be derived by adopting a modelling approach akin to the Water Resource Management Plan, where forward-looking costs are estimated over very long periods. The cost of future investment could be discounted back to the current AMP, making the infrastructure charge represent a contribution to investment that is expected to be driven by new connections rather than sunk costs. But as with WRMP forecasts the estimates would be dependent on a large number of assumptions which may or may not come to pass. The charge would lose its link to the costs that companies have actually incurred, and which developers have funded.

A compromise might be to operate a basket approach whereby infrastructure charges are balanced to expenditure at a whole-company level, but varied between zones based on expected costs. This could be combined with forward-looking modelling of future costs to determine the variation. For example, if charges are increased in zones where the long-term costs are high then charges in all other zones would need to be reduced in order to compensate. In our view, the balancing should still occur over more than 5 years – as discussed above, we think that this is already too short for many companies.

Method	Pros	Cons
Longer time frame Zonal charges over 15 years e.g. 5 years historic, 10 years forecast	Simple, transparent link to costs incurred. Zonal variation less extreme than in 5-year average.	Probably still too short for small zones. Risk of “free riders” and inappropriate pricing signals
Modelling approach Forward-looking costs are discounted.	More accurate reflection of expected investment.	Complex, link to actual costs less transparent.
Basket approach Charges are differentiated, but balance back to company expenditure over (say) 15 years	Allows for price signals without extreme variation in charges.	Complex, 15 years might still be too short for the smallest companies.

In principle it is probably right to allocate higher charges to areas where new development will driver higher cost. But an overarching question is the extent to which this economic signal would be strong enough to drive a change in behaviour. We think that the cost of water supplies is small relative to other inputs in the construction process – particularly the value of the land and market value of housing built on it. This suggests that any future guidance or rules should take a proportionate approach, recognising that charging policy will have a limited effect on where development takes place.

Unbundled charges and competition for off-site services

In principle, we agree that NAVs which choose to provide some or all of the activities that would be encompassed by the infrastructure charge ought to receive a discount on the infrastructure charge. In practice, we think this is likely to be very problematic. It is clear that a full service NAV should not pay because it has no relationship with the incumbent, but we have not yet seen any NAV whose business model involves a broader range of activities but which still requires a bulk supply or discharge.

A discount from the average charge is unlikely to bear any relationship to the specific costs that a NAV would incur when undertaking these activities itself. In addition, we imagine that reinforcement (as covered by the infrastructure charge) would be on the existing network which would remain the property of the incumbent. If this is the case, then Frontier’s discussion about competition for this work is more relevant – the incumbent would simply pay a NAV or other provider for the work undertaken.

It seems very unlikely that any reinforcement scheme would satisfy the criteria laid out for Direct Procurement (DPC); they are unlikely to be large enough or separable from the rest of the network. A patchwork of network assets owned by different operators bounded by legal agreements could be difficult to operate in a coherent and integrated way. This might impact on the resilience of services provided to customers – for example, in hot weather it might not be possible to respond to demand pressures by routing supplies through the network in a different way. There could be friction caused by the contracting arrangements which would impede this – for example, limits on the flow that another appointee was required to transport through its network – with a requirement for measurement in and out of each section.

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

Strategic assets

On balance, we support Ofwat’s view that developers should not be required to contribute towards the cost of strategic assets. We agree that population growth is a key driver for strategic level of schemes and that this will

occur whether a development takes place or not. However, in the absence of new development, it would probably occur in areas where the company already has resources in place. For example, in the absence of new development in rural locations or at the edges of a city, the additional population might well remain in areas where a company has capacity – or remain in different regions that are served by other water companies.

In practice, we think it would be difficult to allocate which element of a strategic scheme had been caused by intrinsic population growth and how much was down to new development driving *where* that growth occurred. Any such allocation would appear opaque to developers and would probably lead to challenge. We are also mindful of the fact that the removal of the income offset may drive some increase in the burden on developers without asking them to bear additional reinforcement costs.

Removal of the income offset and the balance of charges

We agree that there is little objective justification for the income offset in water. New development does not drive economies of scale except to the extent that it utilises existing capacity in a particular area and – as discussed in our response to question 1 – the existence of that capacity is probably a matter of timing. Where there is no capacity, it drives extra cost and now that companies operate under a revenue cap it does not drive growth in revenue. As Frontier’s report notes, there is no equivalent in other utilities or even on the wastewater service.

While we think that the income offset should not continue in its current form, we are mindful of the impact that this step would have upon charges. These will be proportionally larger for small developments which only started to receive the deduction following Ofwat’s changes at the start of AMP7. Ofwat should therefore consider whether it could:

- Phase this change in over the course of AMP8, so that the change does not cause charges for the most impacted group to rise by more than 10% per year; or
- Consider Frontier’s option of rebranding the “income offset” as a “company contribution” used to promote environmental incentives.

All companies will have different starting points. We know Northumbrian Water has removed the income offset already because other changes in rules enabled it to do this while maintaining a “balance” between developers and other customers – i.e. infrastructure charges would have fallen due to the application of the 5-year rule and this change broadly negated the loss of the income offset. Severn Trent’s AMP7 plan included a fairly significant programme of reinforcement and thus we continued to apply the deduction. We interpreted the “balance” as providing the same contribution as we would have funded against requisitions before AMP7. For developers in our area, this change will therefore have an impact which needs to be managed appropriately.

Differentiating infrastructure charges

In principle, we support the notion of differentiating infrastructure charges to provide better price signals about costly developments. Ofwat gives the example of remote connections, and charges based upon the length of network reinforcement required, which is possible. But as we have discussed in Q1, the specific costs of any development that triggers the need for reinforcement could be very high, even if a development is not very distant. Because the activity is irregular, it would be difficult to establish the “average” length of reinforcement that is implicitly funded by the average rate. Therefore, we think that if Ofwat does encourage differentiation it should not be prescriptive when setting out this approach. If companies have a requirement to balance their various infrastructure charges to overall expenditure this should be sufficient to ensure that developers - as a whole - are not being overcharged.

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

Severn Trent has operated an environmental efficiency scheme for new developments since early on in AMP6. This offer discounts against the water infrastructure charge for homes built to a 110 pppd standard. For wastewater, we offer discounts for developments that either don't connect or drain via a SUDS which will attenuate the flow.

We think that discounts against the infrastructure charge are the right way to apply such incentives, because more sustainable developments should reduce the need for the reinforcement which the charge is designed to provide for. The incentives also flow to the developers that implement the measures. The occupants of the new properties will benefit from reduced charges because of reduced consumption and (in the case of non-connection) the removal of charges for surface water drainage.

An issue with these incentives is the longevity of the benefits. While developers may install water saving measures, there is nothing to stop residents from removing many of them once properties are occupied – for example, replacing water-efficient shower heads with power showers. The industry might need to provide higher incentives for measures such as grey water recycling that can be expected to provide longer-term benefits.

NAV's are eligible to apply for our water efficiency scheme in the same way as any developer that approaches us directly. As we have set out in our response on bulk charging for NAV's, we do not think that the bulk charge is the right way to provide environmental incentives after connection. Unlike incumbents, NAV's do not have a revenue cap and therefore if they promote water efficiency measures to their customers this will reduce their income. This is not something that can be addressed through a bulk supply charge which is based on the volume of water supplied to a NAV site. We think that NAV's should probably have regulatory incentives to deliver water efficiency. These may not be the same incentives as incumbents – applying a revenue cap to NAV's might be disproportionate.

As noted in our response to Q2, we think that customer funds that are currently distributed to all connections through the "income offset" could be used to support environmental incentives. This would enable the industry to demonstrate that the balance between customers and developers had been maintained and offer a rationale for the use of customer money.