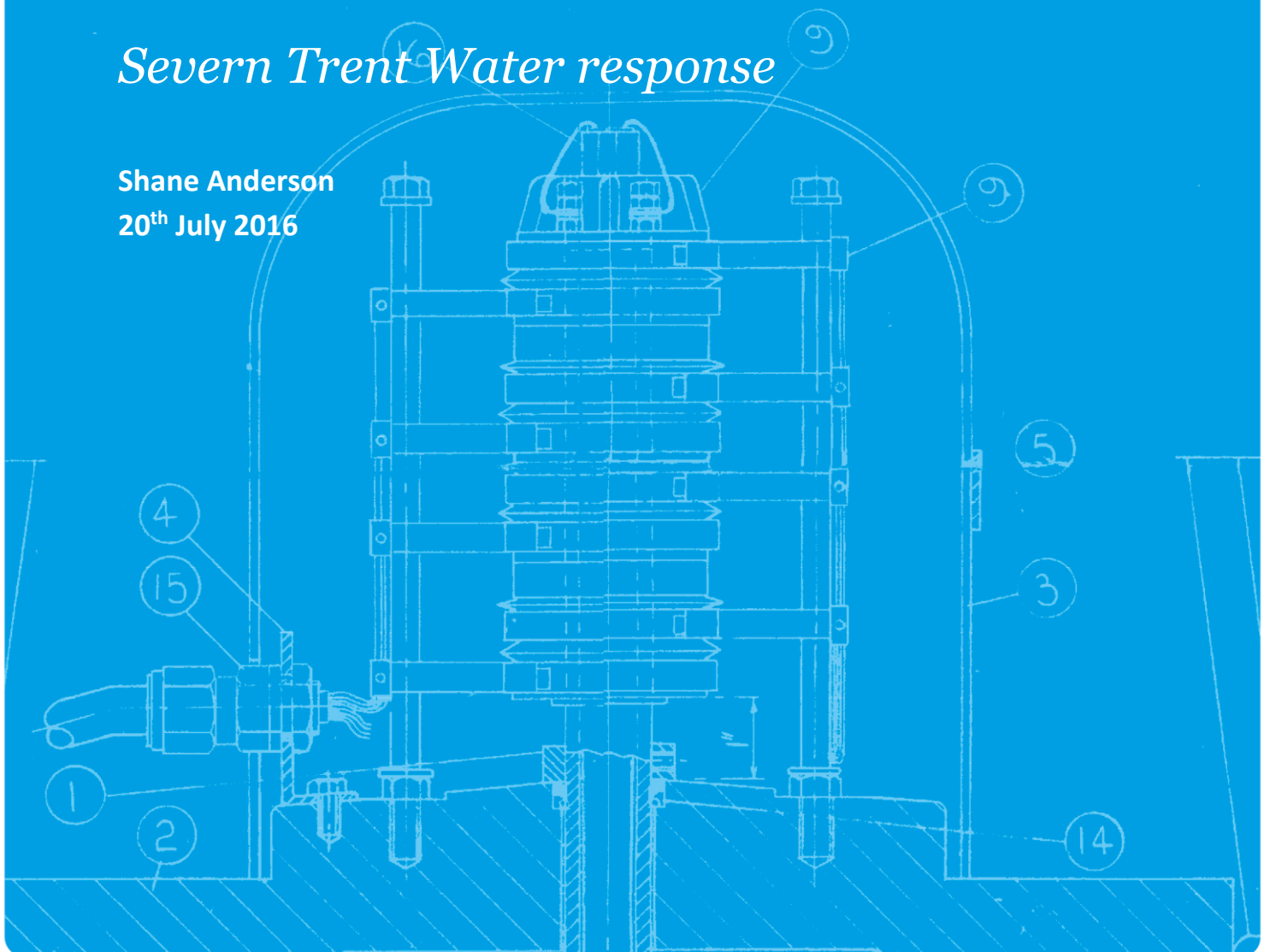


Water 2020 : our regulatory approach for water and wastewater services in England and Wales

Severn Trent Water response

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Our response

We welcome Ofwat's consultation on the design of the water resource and bio resource markets, along with the treatment of developer services/capital income and long term outcomes.

Our response to the technical questions is set out below.

Focusing on current and future customers

Q1. What are your views on our preferred approach to long-term commitments?

We are supportive of the principle that a longer-term view should be taken at price reviews. In relation to long term commitments any approach taken needs to find an appropriate balance between providing companies with incentives to deliver improvements for customers over the long term, and ensuring that there will be no change in the underlying premise on which the PC (and ODI) has been set. And in the light of the latter, we do not believe it would be appropriate to include longer term PCs in every instance.

In the example of option 2, if long term projections are applied, it is important that they are meaningful to both customers and the company. This may not be the case if:

- The premise for why a PC has been created (i.e. the area of service which it covers) could change. Companies may introduce innovative and very specific PCs to drive improvements in response to customers' preferences at present (for example, in relation to digital service channels), but these may no longer be relevant in 10 years' time.
- The premise for the level at which the PC has been set may change. For example, forecasting the number of customers who are helped by a social tariff would require understanding the future need for the help, and customers' willingness to support it – both of which will be dependent on the future economic climate.
- The nature of the measure requires a degree of specificity that may be difficult to forecast with appropriate accuracy – for example, an asset health measure set at 'stable' is likely to be more future proof than a specific numeric forecast.

With regards to the application of financial ODIs to PCs over the longer term (options 3 and 4) one of the critical requirements is ensuring companies have certainty about financing. From an operational perspective ODIs are a fantastic innovation because the underlying parameters are defined and that information is used to develop business proposals to support performance improvements. If PCs and ODIs were set for a period longer than the price review there will be uncertainty about whether the funding is available. This will reduce the effectiveness of the regime.

Similarly as we noted earlier the future is uncertain. Extending performance commitments beyond 5 years will inevitably impact the risk profile. Therefore consideration of longer term PCs and ODIs would also need to consider risk and reward. For this reason we do not think it is appropriate to consider options 3 and 4 in isolation.

Moving beyond waste

Q1. Do you agree that sludge holding tanks with only passive thickening should be network plus assets?

Sludge competition has enormous potential to deliver benefits to customers. This market will deliver the greatest benefit to customers if appropriate assets are included in the price control and there is genuine rivalry between parties.

The definition of sludge for the price control should cover transportation, treatment and disposal as it is the optimisation of this system (and its associated costs) that can be achieved through markets. For this reason we agree with Ofwat that the clearest definition is for sludge activities to start at the point that transport begins. We also agree that sludge storage tanks on a wastewater treatment works should be wastewater treatment assets (i.e. part of network plus). However we do not wholly agree with Ofwat's view that assets which have moving mechanical parts that thicken sludge prior to it being transported should be sludge assets.

Thickening assets, mechanical or otherwise, should be treated as wastewater treatment assets. This definition will:

- simplify the sludge boundary, as sites that do not treat or dewater sludge will not have any designated sludge assets;
- simplify the information requirements, simplify future trading arrangements; and
- reduce burden with regard to recharging for return liquors.

Reducing the number of sites with split asset ownership will also make dealing with odour nuisance simpler i.e. assigning responsibility, who rectifies, who owns the odour management plan etc.

However, we believe a distinction should be made between sludge thickening assets (typically thicken to 5-6% tonnes dry solid) and dewatering assets (typically thicken to 25-30% tonnes dry solid). In a very limited number of cases, raw sludge will be dewatered prior to transportation (e.g. as feedstock for Thermal Hydrolysis Plants). Where this is the case we would recommend that this be a Sludge asset, not network plus.

We also disagree with Ofwat's view that with sludge thickening assets in the Sludge definition, transport costs and additional processing costs will be avoided as they can be optimised as part of the sludge operation. Through pricing signals, sludge service providers will drive wastewater processors to deliver sludge at the right quality and thickness.

We also note that all activated sludge plants and oxidation ditches will have dedicated mechanical thickening for Surplus Activated Sludge (SAS). The ability to remove surplus activated sludge from such plants is process critical – failure to do so can eventually result in process (and discharge permit) failure. It is therefore critical that these assets remain in the network plus price control.

We would also draw Ofwat's attention to the fact that some small sewage works (RBCs, SAF plants, Septic Tanks) do not have separate sludge holding tanks. Standard practice for removal of sludge from such plants is to empty the entire plant and tanker the contents to the inlet of large sewage treatment works. As this is effectively a transfer from one wastewater treatment asset to another, we propose that such activities are clearly defined as network plus and not in the Sludge price control. Similar rules would apply when sludge is pumped in to the sewer for onwards conveyance to a downstream sewage works.

It can be seen in the table below that by applying the above definition, the boundary between sludge and wastewater treatment is simplified.

Total number of SVT wastewater treatment works	1050
Number of sites with sludge assets on using Ofwat's definition	112
Number of sites with sludge assets on using STW's definition	36

Q2 a. Do you agree that sludge liquor treatment costs should be charged on the basis of a modified Mogden formula which includes a factor for ammonia concentration?

We are very supportive of the proposals to charge liquor treatment on the basis of a modified Mogden formula. Like Ofwat, our view is that this should be a 'modified Mogden' formula, which considers volumetric flow rate, suspended solids, chemical oxygen demand (COD) and also ammonia concentration.

We support this proposal as digested sludge dewatering liquors can be very high in ammonia and the cost of treating liquors strongly correlates with ammonia concentration, particularly if the wastewater treatment works receiving the liquors has a tight ammonia consent.

We also believe that companies should have the ability to apply additional charging factors if the return liquors contain high concentrations of metals and/or other hazardous substances that need treatment. The Water Framework Directive requires the control and/or eventual elimination of designated hazardous/priority hazardous substances. In addition, the Environment Agency have designated a number of specific pollutants which will also require control. Control of these pollutants may be required in the future and therefore sludge liquor returns costs would need to be reflective.

Q2 b. Do you agree that these liquor treatment charges should be calculated on a company average basis, as they are currently for trade effluent charges?

We are supportive of using a company average charge for liquor treatment. This approach aligns with regional average charging for end customers. However we think that as the market develops and information improves consideration should be given to site specific charging.

Q3. Do you agree that tonnes of dry solids should be used as the units on which to set the average revenue control for sludge?

We support the principle that tonnes of dry solids should be used as the units on which to set the average revenue control for sludge. We agree with Ofwat's analysis that tonnes dry solid is more of a 'commodity'-type measure, resulting in companies being paid for what they actually treat, and that this measure seems more likely to promote effective markets.

However, as Ofwat state, there are issues with measurement of tonnes of dry solids, with imperfect/non-existent measurement in locations. With time, we agree that the introduction of the market will improve measurement of tonnes dry solid, however in the interim there are risks regarding measurement.

Measurability

The use tonnes of dry solids will subject WaSCs to volume risk. The volume risk can emerge in two ways:

1. Volume risk associated with forecasting. If allowed revenues are set in reference to an overstated forecast volume of tonnes dry solid the average revenue allowed to companies will be understated. If the company were then to receive an average tonnes dry solid load then this could result in a shortfall in revenue. Conversely if forecast were understated customers could end up paying more.
2. Volume risk associated with variability in received loads. If the economy were to decline then there may be a reduction in tonnes dry solids from trade effluent producers. If weather were to become sustainably wetter, and sewage were to become more dilute, then an element of tonnes dry solid may be discharged directly to water courses (via storm overflows) and not recovered.

To reduce revenue over or under recovery risks and to minimise perverse incentives, we believe that very careful considerations needs to be given to how the price control is implemented. It is our view that given the uncertainty when forecasting tonnes dry solid the price control needs to be designed in a way to protect customers from over or under-recovery of revenues relating to the pre-2020 RCV.

Tackling water scarcity

Q1. On our judgement, demand and utilisation risks relating to bilateral market entry should be allocated to incumbent water companies rather than customers, subject to our policy to protect the pre-2020 RCV. Do you agree that the water resources price control framework should differentiate between utilisation risks relating to market-wide demand and utilisation risk relating to bilateral market entry?

We agree that the water resources price control framework should differentiate between utilisation risks relating to market-wide demand and utilisation risks relating to bilateral market entry. We support this approach, as it encourages efficient investment in supply-side / demand-side investments, it also encourages competition and the best use of water resources.

Q2. Do you agree that the price control arrangements for increases in water resources capacity should, at least in some circumstances, expose an incumbent water company to some degree of market-wide demand risk? If so, what circumstances?

We do not agree that the price control arrangements for efficient increases in water resources capacity should expose an incumbent water company to market-wide demand risk.

On face value exposing incumbents to market-wide demand risk could have some merit on the grounds that it might drive more sensible decision making (i.e. not building extra capacity where it's not needed). However this policy could have significant unintended consequences that result in higher bills and lower levels of service. We therefore do not support this proposal.

One of the key challenges facing the water sector is a growing supply-demand imbalance. This reflects a number of factors that Ofwat cited in its Water 2020 publications, from population growth to environmental improvements.

To meet the growing supply-demand imbalance a range of solutions will be needed. These solutions are likely to include demand-side measures, entry of 3rd parties alongside medium-large scale investments. Our concern with the Ofwat proposal is that exposing companies to market-wide demand risk would:

- Dis-incentivise planning for the long term – this is because medium to large supply-demand solutions, which might represent the lowest whole life cost solution, may not be funded under this proposal. This is because such assets are built with extra headroom to service future growth. Given that the capacity would not be utilised in the early stages, it would not be fully funded and hence it's unlikely companies would consider such solutions. Instead the regulatory regime would favour smaller solutions which could generate inefficient long term outcomes as they might be higher cost; and
- Dis-incentivise development of solutions that deal with extreme events because the capacity would only be utilised for short durations. This would be sub-optimal if customers have expressed a clear desire, and are willing to pay, for service levels that would not result in supplies being curtailed during such events.

Targeting regulation for networks

The move to a total revenue control over the course of AMP5 and AMP6 has been a positive development in that it provides greater certainty over revenue. A revenue cap gives positive incentives to implement water efficiency measures. While it is true that saving water can drive up unit rates, it is important to note that the volumetric element of charges is set at a much higher rate than the actual level of cost that is variable in the short term (precisely to encourage customers to conserve resources). Cost savings will ultimately flow to customers through totex efficiencies in future controls.

Perhaps more important than the saving on cost is the effect on perceived revenue risk. Moving to a revenue cap reduced companies' exposure to fluctuations in demand - as noted by Ofwat and PwC when considering the cost of capital for PR14.

While the revenue cap has positive effects, changing the scope of the control to cover additional sources of revenue has created a number of issues:

- There has been confusion over what is meant by a "single till" approach. In Ofwat's original *Future Price Limits* consultation, it proposed to introduce a "single till" to take account of income from unregulated sources in price setting (similar to the approach in airports). Ofwat concluded that it would *not* do this – yet subsequent Ofwat documents have continued to refer to a "single till" approach.
- It has not been clear which revenues are included within the control and which are not. At some points during the PR14 process, income from other sources such as disposals was being deducted from allowed revenue. The definition of connection charges has also varied – to include income from requisitions and self-lay – yet does not encompass all capital income.
- The current approach takes account of non-primary income in different ways. Miscellaneous income - such as income from bulk supplies – is included in the income statement; a forecast is deducted from allowed revenue; but it is not included in the revenue cap. Connection charges are generally treated as capital income; do not appear in turnover; but are included in the cap.
- Connection charges are being considered in two places – both as a deduction from totex and as part of the revenue cap.

There are general issues associated with mixing capital income and turnover, as if companies should be indifferent to the sources of income. In theory the cash impact on the business is the same, but in practice changes in primary charges (turnover) have a much more immediate impact on company profit. If connection charges are treated as a deduction from totex as well as within the revenue cap, then companies have a significant problem when collecting contributions from developers:

- Every additional £1 of cost that is recovered will have to be returned, via the revenue control. If balanced through primary charges (as may be required), this reduces company profit.
- The capital contribution will net off actual totex, appearing as an efficiency. Half of this benefit will be returned to customers at the next review (meaning customers receive 150% of outperformance).

This system presents companies with a perverse incentive to avoid any improvement to collection efficiency. It also takes no account of the volume of new connections – any significant variation would have to be addressed through dialogue with Ofwat.

The issues arising from the PR14 approach, frame our response to the specific questions in the consultation, below.

Q1. Which of the options described in Section 7.3.5 (and/or which other options) should be used to treat developer services in the network plus total revenues?

In our view, the treatment of developer services income should aim to:

- Protect regular customers (i.e. those paying primary charges);
- Protect developers from excessive charges;
- Provide positive incentives for companies to recover the appropriate costs from developers.

For the reasons we set out above, we think that the current approach is only satisfying one of these objectives – protecting developers. Companies have strong incentives to avoid excess charges to developers – particularly if they are returning 150% of any additional charges collected. In the short-run, this would also be to the benefit of regular customers. But in the long run, if companies do not recover the right amount from developers, this will result in a less efficient allocation of cost. When there is more development activity, companies have an incentive to reduce charges or avoid pursuing payments. This means that regular customers could shoulder a greater proportion of growth costs.

A volume-adjusted control would represent a clear and obvious improvement over the current method. Where there is more development activity, companies should recover more cost from developers. However, this would not address the issues with regard to collection efficiency.

To some extent, “collection efficiency” is also outside of company control. For example, when new development takes place on brownfield sites where there is some existing infrastructure, the contributions from developers are reduced. This means that there will always be some difficulty in forecasting the relationship between new connections and the level of infrastructure charges or other contributions that will be received.

Placing all collection income outside of wholesale controls (reverting to the position before AMP6) gives strong incentives for companies to recover costs from developers. Regular customers received a benefit from the

sharing of efficiency as this reduced net expenditure. The maximum level of the infrastructure charge was also fixed, but it could be argued that developers did not receive sufficient protection.

We think there is some logic for including infrastructure charges within a volume-adjusted revenue control:

- Infrastructure charges have always been subject to some formal control.
- The charge represents a “joining fee”, which is not directly related to the specific cost that a developer places on a company.
- Although most companies treat these charges as capital income, the option of including them within the income statement is available to companies.

Through its separate work on charging rules, Ofwat is moving to a view that infrastructure charges should cover all network reinforcement costs. This is Severn Trent’s existing approach. The effect is that the cost of deep reinforcement is spread across the customer base, which should help protect developers against unpredictable charges when they connect. And if infrastructure charges are supposed to cover these costs, we think it is right to reconsider the level of charge (which has been fixed with an uplift for RPI for many years). This could be based on the average costs of growth.

We think that Ofwat should rely on competition and charging rules to regulate other connection charges that are currently within the control. It is important that these charges reflect the costs that companies incur – if they do not, this could damage competition. Provide Ofwat Rules govern the services that should be included in these charges, we think competition from Self Lay Organisations and New Appointees should provide sufficient options – and protection – to developers.

Contributions that are not included within the revenue control should be netted off totex, and any efficiencies shared with customers through incentive mechanisms. Any amounts included in the control should not be double-counted.

Q2. Are there any other wholesale activities that should be excluded from the scope of the network plus price controls? If so, what are they and what problems would be resolved by excluding them?

As set out in response to the question above, we think that the bulk of capital contributions should be excluded from the revenue control. Most connection charges can be regulated through other means; other capital contributions relate to specific works being carried out. Any increase in these contributions is already captured as an efficiency which is shared with customers.

There are a number of wholesale revenue sources that are not currently included in the revenue controls. In some cases, we see no obvious reason for doing so (given that capital income *has* been included). As noted, miscellaneous income – which is included within the income statement – is not included within the revenue cap. Forecast income is deducted from the allowance and companies receive the benefit (or risk) of any variation between each determination.

The effect of including any other sources within the control would be to reduce company risk associated with these variations and transfer that risk to customers. Before doing this Ofwat would need to consider how this interacts with its other policy objectives - particularly water trading – and might have to look at whether incentives to agree new bulk supplies should be strengthened to compensate.

Income from disposals – briefly considered as a deduction from allowed revenue at PR14 – should not be included. This is another capital-type item and there is an existing mechanism for sharing this benefit with customers.

Q3. Are there any costs that require clarification as to whether or not they should fall within the network plus price controls?

Further separation of price controls means that Ofwat will need to provide guidance on which costs *and revenues* belong with each control. Taking the example of bulk supplies (miscellaneous income), there is an element of the cost and revenue that could belong to water resources, and part to network plus. Depending on the nature of each bulk supply, an element of the charge ought to belong to network plus for transporting raw or treated water. This might be represented as a recharge of cost to the water resources control, and appear as income for network plus. There will be similar examples where assets are used by both network plus and the new sludge control – there will need to be an allocation of cost and recharges between the controls as currently exist between wholesale and retail.