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3. Jim Griffiths	Veolia Water Projects
4. Nigel Hammond	Sutton & East Surrey Water
5. James Holman	Bristol Water
6. Raoul de Lange	Independent Water Networks
7. Sean Larkin	Dŵr Cymru Welsh Water
8. Paul Morris	Thames Water
9. Darren Rice	Anglian Water
10. Sarah Rigby	SSE Water
11. Katy Spackman	Northumbrian Water
12. Tim Stephens	South Staffordshire Water
13. Paul Tate	Albion Water
14. Liv Walton	South West Water

We separately spoke to Sarah Thomas of CCWater as she was unable to attend the seminar.

### 3. Our current approach

The granting of a NAV can potentially have an effect on existing customers' bills, as it affects both the revenues that the incumbent earns and the costs that it incurs from providing services to the new development.

To illustrate the possible magnitude of this effect, we routinely look at this potential impact by calculating the upper bound effect that could occur once a site is fully built. Specifically, we calculate the upper bound of the potential effect by comparing how much an incumbent might have expected to receive in revenue from serving the site directly, with the revenues it might expect from serving the site indirectly via bulk services to a NAV. This difference is then divided by the total number of existing customers in the incumbent's area, to provide a quantification of the 'per bill' potential upper bound impact on existing customers.

When presenting this potential upper bound bill impact, we have always stressed that the estimate does not take into account the costs that an incumbent would avoid as a result of a NAV serving the site. This estimate has been useful in providing an indication of whether or not we need to look at particular NAV applications more closely with regard to our policy of ensuring that no customers are made worse off. As the market matures, we consider that it is now necessary to consider a more sophisticated approach to assessing this impact.

## 4. Our new approach

Broadly, we are proposing two main changes to the way in which we estimate the potential impact of granting a NAV on existing customers' bills. First, as noted above, our current estimate does not account for relevant costs avoided. We propose to take the following avoided costs into account.

**Table 1: costs avoided by the incumbent**

Cost avoided	Data used in estimation
Retail costs	Accounting separation data on retail costs
Local network opex	Unit opex for new developments used when setting PR09
Capex – return	Unit capex for new developments used when setting PR09, NAV developer contributions and WACC
Capex – IRE	Assumed profile of IRE at a new development

Second, as noted above, our current approach assesses the potential impact of granting a NAV at a single point in time, when a site is fully built out. We propose to carry out a net present value (NPV) calculation over the approximate life of the infrastructure assets to ensure we are able to capture how revenues and costs change over time.

In addition to these two changes to our approach to estimating the impact of granting a NAV on existing customers, we also considered various other issues that may impact on the magnitude of this potential effect. All of these topics were discussed at the seminar. Below, we present the results of this discussion.

## 5. Discussion at the seminar

The following six topics were discussed in break-out groups and then fed back to all attendees to allow further discussion.

- a) Costs avoided by the incumbent.
- b) Relevant timeframe for assessing impacts.
- c) Risk transfer to NAVs.
- d) Spillover benefits to customers.
- e) Transfer of benefits to customers.
- f) Cumulative impact of granting more than one NAV.

The rest of this section sets out a summary of the discussion of each of the above points together with our view.

## 5.1 Costs avoided by the incumbent

Our current calculation of the difference between retail revenues and bulk supply revenues to estimate the potential upper bound impact of granting a NAV on existing customers does not allow for costs that the incumbent would avoid, namely:

- retail costs;
- local network operating costs, and
- capital costs.

We propose to take these costs into account, as outlined in Table 1.

We asked attendees:

- a) whether they agree that these costs are avoided by an incumbent if a new appointee serves a site;
- b) whether they think there is better data that could be used to take account of these avoided costs; and
- c) whether there are any other costs that incumbents avoid.

A summary of the discussion on the costs avoided by an incumbent is provided below.

### 5.1.1 Points raised by attendees

It was generally agreed amongst incumbents, NAVs and CCWater that an incumbent would avoid some costs as a result of a NAV serving a site. For example, the incumbent would only have to deal with one new contact (the NAV) rather than lots of individual contacts on a new development, if the incumbent served the development.

It was pointed out by some of the attendees representing NAVs that the costs avoided by the incumbent should reflect all the activities carried out by a NAV. The costs avoided by the incumbent in the short run include:

- billing;
- metering;
- customer services;
- network operating expenditure;
- bad debt;
- water sampling;
- design costs;
- emergency services; and

- costs associated with water loss.

The incumbent will also avoid capital costs associated with the local network.

It was noted that use of an entrant's data for estimating developer charges may not provide an accurate estimate of the incumbent's charge to a developer in the absence of a NAV.

A point was raised by an attendee representing an incumbent that we are considering average retail costs, rather than the level of retail costs that would actually be avoided by an incumbent if a NAV served a new site, i.e. marginal costs. In discussion, it was suggested that long run marginal retail costs are likely to be higher than short run marginal retail costs, and average costs may not be a bad proxy for this.

It was suggested by an attendee representing one of the NAVs that at some sites there may be further costs avoided, for example, the NAV may perform functions such as treatment or the provision of sustainable solutions. There was further discussion on whether or not there would be an impact on existing customers if the incumbent would not have carried out these activities if it had served the site, i.e. if these activities were not in the counterfactual. It was agreed that these additional activities should perhaps be considered in situations where the incumbent would have carried out these functions too.

There were views from representatives of incumbents that while the costs we proposed to take into account in our revised calculation would be avoided, there are also extra costs that an incumbent might incur as a result of a NAV serving a site. For example, in theory there may be one pipe connecting the site to the incumbent's supply system; however, in practice there may be a need for a different configuration of pipes in the interim, and so, not all of the local infrastructure cost would be avoided, as further costs may be incurred.

In relation to this issue, there was a point made about different practices across incumbents with regard to the use of income offsets for NAVs supplied under section 40. This may result in differences in the level of avoided cost.

There was a view from an attendee representing a NAV that the costs that a NAV incurs at a site should also be considered when estimating the impact of granting a NAV on existing customers. However, in discussion, it was pointed out that the potential for an impact to arise is because of a difference in revenues earned and costs faced by the incumbent; therefore, it is these differences that need to be measured to derive an estimate of the impact of granting a NAV on existing customers.

It was suggested by some incumbents that the large user tariff charged to the NAV already excludes the local network and retail costs, so these items should not be considered when estimating the impact of NAVs on existing customers. However, in response, representatives from Ofwat pointed out that this suggests that the large user tariff provides the appropriate bulk supply tariff, but this does not preclude an impact on existing customers arising as there will still be a difference in revenues earned and costs faced by the incumbent, had it served the site.

We also received a written representation which queried the timing of our proposed approach in relation to avoided infrastructure renewals expenditure (IRE). Specifically, given that Ofwat has now consulted on the PR14 methodology, which includes the introduction of totex (and therefore the removal of IRE as such), it was suggested that the proposed modifications to our assessment should be aligned with the post-2015 price control mechanism.

### **5.1.2 Our view**

In our view, taking into consideration the comments made at the seminar, we consider that it is appropriate to take into account the costs associated with the local network that an incumbent would avoid when a NAV serves a site. We note that there were no suggested alternative data sources that should be used in place of those proposed for avoided retail costs, avoided local network operating and capital expenditure. So we propose to take these costs into account in our revised framework, as described above (at Section 4).

Where a particular NAV application involves the NAV carrying out some extraordinary function that an incumbent would have, had it served the site, we propose to consider these costs separately, as required, rather than building these potentially differing cost items into our general framework. These particular cost items may be considered qualitatively or quantitatively, depending on the information available in these applications.

We note the important issue raised about differences in information requirements and availability in the next price control period. We will keep this aspect of our framework under review. In the mean time we propose to implement our approach as proposed here, that is, consider the retail costs and local network costs avoided by an incumbent when a NAV serves a site.

## **5.2 Relevant timeframe for assessing impacts**

Our current approach assesses the impact of granting a NAV at a single point in time, when the site is fully built out. Calculated in this way, we would expect this impact to increase as more properties are built. Further, even if we were to take account of costs that an incumbent would avoid (as proposed above at 5.1),

assessing the impact at a single point in time would not take into account how these costs change over time. We propose to carry out a net present value (NPV) calculation over the life of the local infrastructure assets.

We asked attendees:

- a) whether they agree that it is appropriate to look at the NPV of any impact over time, rather than considering the potential impact at a single point in time; and
- b) if so, whether they agree that the life of the local infrastructure assets is the appropriate timeframe.

A summary of the discussion on the relevant timeframe is provided below.

### **5.2.1 Points raised by attendees**

There was generally a view amongst NAVs, incumbents and CCWater that it is sensible to look at the potential impact on customers over a longer period of time, rather than at a single point in time. As such, it is appropriate to carry out an NPV calculation.

There was some discussion about the timeframe over which the impact should be assessed. One view from an attendee representing an incumbent was that the timeframe should match up with how incumbents treat assets, for example, IRE is currently based on 100 years.

Another view from an attendee representing a NAV was that the life of the infrastructure assets is too long, and that a NAV would typically consider the viability of a site over 20-30 years, so the impact should be assessed over this time period. In response to this point, it was pointed out that the assets will continue to incur costs and be used to generate revenue beyond this 20-30 year period, so perhaps the life of the asset is the correct timeframe.

### **5.2.2 Our view**

We believe that we should consider the impact over a long time period that broadly reflects the life of the infrastructure assets. For the purposes of NAV applications, we propose to use a 100 year timeframe to calculate the NPV, as suggested at the seminar.

## **5.3 Risk transfer to NAVs**

If the provision of water and sewage services to a new development involves a number of business risks around demand (e.g. the speed of take up of new development) and service provision (e.g. cost overruns). If the incumbent undertakes



the new development) then any risks that materialise may be borne by existing customers, whereas the risks are transferred to the NAV, if the NAV undertakes the new development. The size of the benefit will depend on the contractual arrangements between the incumbent and the developer. It is therefore difficult to quantify this impact without further detailed information on the arrangement that an incumbent might reach with a developer. We do not propose to make an adjustment to the calculation to account for this benefit to the incumbent.

We asked attendees:

- a) whether they agree that there is a transfer of risk to the new appointee if it serves the site;
- b) if so, whether they have any suggestions for how this risk transfer could be accounted for when considering the impact of granting a NAV on existing customers; and
- c) whether they agree with our proposal not to make an adjustment for the risk transfer.

A summary of the discussion on risk transfer is provided below.

### **5.3.1 Points raised by attendees**

There was generally a view amongst attendees and CCWater that there is a risk transfer from the incumbent to the NAV when a NAV serves a site. For example, there is a build risk, in that new sites may not be developed as quickly or as fully as the new appointee initially expected.

It was pointed out by various attendees that there may be factors that affect the extent to which risk is transferred to a NAV. For example, it was suggested that NAVs are supported by financial security in the form of a Parent Company Guarantee or bond which may mitigate the risk they take on. Further, NAVs are subject to the special administration process if their business folds, in the same way that incumbents are.

### **5.3.2 Our view**

In our view, there will be a risk transfer from the incumbent to the NAV when a NAV serves a site. However, the extent of this transfer is likely to be idiosyncratic, and will depend on contractual arrangements between parties. We do not propose to quantify this benefit to the incumbent in our framework, but we think that it is important to acknowledge that there will be some transfer of risk.



## 5.4 Spillover benefits to customers

The estimate of the potential upper bound impact on existing customers (as it is currently calculated) does not take into account the value of potential efficiencies achieved by the incumbent as a result of the competitive impact of new entry and the threat of new entry at new sites, and potential spillover effects to customers in other regions. Quantification of these benefits is extremely difficult. Therefore, we propose not to make a quantitative adjustment for this benefit. However, it is important to note that dynamic efficiency benefits are likely to be large and related to the size of the development – a larger development is likely to result in greater benefits. We will therefore consider this benefit qualitatively.

We asked attendees:

- a) whether they agree that there are dynamic benefits from competition; and
- b) if so, whether they have any suggestions for how these benefits could be accounted for when considering the impact of granting a NAV on existing customers.

A summary of the discussion on spillover benefits is provided below.

### 5.4.1 Points raised by attendees

There was generally a view that there are dynamic efficiencies and spillover benefits to customers, although these are difficult to quantify. For example, there are incentives for existing appointees to improve in terms of price, service levels, and relationships with developers. CCWater stressed that we cannot be sure of the magnitude of these effects and whether or not they would outweigh any potential impact on existing customers without quantification of dynamic efficiencies.

There was a view from an attendee representing an incumbent that inefficiencies should also be considered. For example, there may be an increased administrative burden associated with identifying which customers belong to which company.

There was also a question raised with regard to the extent of spillover benefits arising from the NAV regime when retail competition is introduced as proposed under the Government's Draft Water Bill.

### 5.4.2 Our view

Economic theory and empirical evidence from other sectors suggests that dynamic efficiencies are large. We consider that spillover benefits to all customers from competition between incumbents and NAVs are likely to be large. We do not propose to take these benefits into account in our revised framework given the difficulties in

robustly estimating these impacts; however, we acknowledge stakeholders' views that the likely magnitude of these effects cannot be confirmed without quantification.

## **5.5 Transfer of benefits to customers**

We might expect IRE to be much lower for a new development and slowly rise over long term. The profile of this increase will vary from site to site, depending on the specifics of the infrastructure installed and circumstances of the site. The current estimate of the potential upper bound impact on existing customers' bills assumes that any surplus the incumbent generates on a new development is passed through to other consumers. In order for this to be the case, IRE levels should not be adjusted to take account of new development sites with lower IRE costs when setting price limits. However, the number of new developments is unlikely to be material in the estimation of IRE for the purpose of the price control, so this effect may not be captured. If this is the case, any surplus generated by the incumbent would sit with the company, and therefore, shareholders, rather than customers.

We asked attendees:

- a) whether they think that any surplus generated from serving a new development is passed on to customers; and
- b) if so, how is the benefit passed on to customers and whether there is evidence to substantiate this.

A summary of the discussion on this issue is provided below.

### **5.5.1 Points raised by attendees**

There was little consensus on this point. Many attendees representing incumbents considered that IRE forecasts would not be adjusted upwards. This then takes into account the limited IRE at a new development in early years, and so, cost savings at new developments would be passed on to customers. Others disagreed.

There was a view from an attendee representing a NAV that prices in some areas are increasing beyond inflation, so this might suggest that lower cost new developments are not being used to cross-subsidise existing customers; however, it was noted that this could be for a variety of reasons.

It was also noted that the treatment of this issue may vary from company to company.

It was suggested by attendees representing incumbents that this would not be an issue if new appointees were subject to their own specific price controls.

### **5.5.2 Our view**

The extent of new developments undertaken by the incumbent will be one of many factors taken into account when setting IREs at a price review. While, it is possible that the IRE will broadly reflect the total number of new developments, it is not clear that individual developments would have a material impact on the IRE calculation. Therefore, we propose that our assessment should consider scenarios with and without the assumption that the benefit from serving a lower cost new development is passed onto customers.

### **5.6 Cumulative impact of granting more than one NAV**

It might be argued that the cumulative impact of NAVs undertaking new developments is to increase the average age of the incumbent's local network over time and therefore result in rising costs for the incumbent's existing customers. We consider that it is likely to be highly misleading to cumulatively add together upper level estimates of the impact of granting a NAV at individual sites. Further, we consider that it would be appropriate to consider dynamic benefits in assessing cumulative impact. We do not propose to quantify potential cumulative effects.

We asked attendees:

- a) whether they think that there are cumulative impacts from granting more than one NAV; and
- b) if so, whether they agree that cumulative impacts will be positive, taking account of dynamic efficiency benefits.

A summary of the discussion on cumulative impacts is provided below.

#### **5.6.1 Points raised by attendees**

It was generally agreed that it would be misleading to refer to a cumulative upper bound based on our current approach to assessing the impact on existing customers.

However, there was a view from attendees representing incumbents that there is a tangible negative impact on existing customers from granting NAVs, and so there will be larger cumulative impacts from granting more than one NAV in an existing appointee's area. It was suggested that we should attempt to take account of historic NAVs when we calculate the impact figure to address the possibility of large cumulative impacts. CCWater agreed with this view.

There was another view from an attendee representing a NAV that, on average, an existing appointee would have a mix of old and new assets, therefore, it would not be

sensible to add the impact of granting a NAV now, to the impact of granting another NAV in 10 years' time.

There was support for the idea that, if we were to consider cumulative impacts, dynamic efficiencies should be accounted for. However, it was pointed out that these would need to be quantified.

It was noted that there is a difference between reviewing NAV policy and assessing individual applications, and it may be too complex to assess cumulative impacts mechanistically as part of the assessment of each and every potential NAV application.

### **5.6.2 Our view**

We consider that it would be misleading to simply add together estimates of the potential impact of granting NAVs on existing customers to arrive at a cumulative impact. Further, when considering the impact over time, it would be important to take into account dynamic efficiencies, which we cannot capture due to difficulties in quantification.

While there may potentially be an impact in the short run, due to low capital maintenance associated with a new development, capital maintenance will rise as these new developments as the assets age. We agree with the view that, on average, an incumbent will have a mix of old and new assets and this would not change if the incumbent served new sites rather than a NAV. Therefore, it would be misleading to arrive at an assessment of cumulative impacts of granting more than one NAV in a particular incumbent's area. We therefore do not propose to calculate cumulative impacts in our revised framework. Further, we do not consider that the decision to grant, or not to grant, a specific variation is the right place to consider the cumulative impacts of numerous NAV applications.

## **6. Next steps**

In conclusion, taking into account stakeholders' views on our proposed approach, we do not consider that any major revisions to the framework proposed here are required. So, we have formally adopted our new approach to assessing the impact of granting a NAV on existing customers. The reasons for doing this are the following.

- a) Our new approach to assessing this potential impact indicates more robustly where granting a NAV may not satisfy our policy objective of ensuring that no customers are worse off.
- b) The calculation, though significantly more sophisticated than our previous approach, is relatively straightforward to carry out.

- c) Adopting a single approach to assessing this impact removes the possibility of confusion arising from running two separate assessments in parallel.

We will continue to keep the framework under review and revise it as is necessary, as new information comes to light, and in line with the next price review.