

## Briefing Note 4: The draft Water Bill

# Ensuring upside from upstream reform

## Summary

The draft Water Bill introduces provisions for retailers to buy raw water from a third party source, transport this using the networks of the vertically integrated appointed businesses, then sell it on to end customers. This approach, where retailers are able to access the appointed business' network, is also known as 'common carriage'.

The expectation is that stimulating competition in this way should lead to more efficient use of water resources.

Our analysis, however, indicates that these provisions could have unforeseen incidence effects for both business and household customers, including the unwinding of existing geographic cross-subsidies. These effects have social and regional impacts which, we believe, should be more fully understood and debated. Is it, for example, the intention to maintain average tariffs across an appointed business's area, as recommended in the Walker Review, or is it acceptable for that to fragment increasingly over time? If this fragmentation is allowed to happen for businesses, do we understand and accept the potential impacts on households?

In our view, all customers in an appointed business' area should benefit from upstream reform, rather than risk allowing some customers unduly to benefit at the expense of others.

We recognise that the draft Bill's provisions allow for reforms beyond those that have been put in place in Scotland.

This briefing note explains the potential incidence effects of these provisions and suggests three possible approaches to overcome them.

## Background

This briefing note considers an aspect of the draft Bill that has received little comment to date but which could have considerable impacts on companies, investors and customers.

This is the opportunity for a retailer to become licensed to: buy raw water from any third party with a source (including, for example, farmers or industrial sites); transport this water using the mains of the appropriate appointed business; and sell this on to end customers.

The aim of including these new types of licences<sup>1</sup> in the draft Bill appears to be to:

- increase resilience in the water supply system by allowing retailers to identify additional sources of water that can be used to meet customers' needs; and
- kick start a more innovative water industry, one that is prepared to countenance solutions that would not previously have been considered.

These aims are important and to be commended. However, achieving them under the framework of the current draft Bill could lead to substantial incidence effects that could affect not only business customers but also householders. To avoid such outcomes would require careful and detailed drafting of the rules on charges. We suggest two alternative approaches. Our concern is that any de-averaging in England could affect customers in Scotland. This is because the Competition Act 1998 applies equally across all of the UK.

<sup>1</sup>A retailer seeking to exploit these opportunities would require a water supply licence granted by Ofwat under the Water Industry Act 1991 (as proposed to be amended by the draft Bill) containing, first, a 'wholesale' authorisation (entitling it to inject water into the appointee's system and then use the system to bring the water to its customer's premises) and, second, a 'retail' authorisation (entitling it to establish arrangements with its customer for billing etc). The scope of each of these authorisations is set out in paragraph (5) and (3) respectively of the proposed new schedule 2A to the 1991 Act.

## Proposals under the draft Bill

The draft Bill seeks to make greater use of sources of water that may be currently underused. The source may, for example, have been passed over by the local appointed business when planning water resources on the basis that it was too small. If a new retailer can identify such a source, pay for the water to be transported, then sell it at a lower price than the customer is currently paying, this would benefit both the retailer and the customer.

The critical factors in whether such exchanges are likely to happen are:

- the charges that the appointed business would levy on the retailer for transporting the water (the 'common carriage' price); and
- that the end customer is located in an area of the appointed business' region that has a lower cost to serve than the average for the region.

As things stand, the charge for transporting water is likely to be constrained by requirements under the Competition Act not to impose excessive or unfair prices. It would be difficult, for example, for an appointed business to offer a retailer a price for using its network that resulted in a substantial profit being earned in that water supply zone. This would be the case even if, in the broader appointed business, that substantial profit were being used to subsidise the provision of a water service in a different supply zone where customers are more expensive to serve.

The opportunity for a retailer to enter the market would also require the cost of the new source to be lower than the cost of the source that the incumbent is using, or, at least lower than the combined cost of the water used by the incumbent and the difference between the regionally averaged price and the local area cost to serve.

The underlying economics of these potential exchanges are very complicated. In essence, however, our concerns relate to the fact that the market could be skewed (for example by the provisions of the Competition Act and because costs are currently averaged across the networks of the appointed businesses). As a result, it could be viable for a retailer to develop sources that are more expensive than the source that is currently being used by the appointed business.

The economics are such that in the short run there is a loss in efficiency if the cost of the water the new retailer uses is higher than the marginal cost of the current incumbent. Short-term losses could be off-set by future gains if the retailer's source has a lower long run marginal cost than the one the appointed business was using. However, it could be possible for there to be a permanent loss in efficiency if the costs of the new source are higher than the long run marginal cost but not so much higher that its use would mean that the revised local costs (using this new source) exceed the regionally averaged price across the appointed business's area.

We could end up rewarding new entrants whose activity increased costs in an appointed area without any material benefit to household or non-household customers or to the environment. In other words, it could potentially be profitable for a retailer to exploit new sources which are not, in fact, otherwise economically viable or efficient. This would seem likely to undermine the original purpose of including the common carriage provisions in the draft Bill.

### Issues arising

These opportunities are only available to new retailers. However, as we understand it, there would be nothing to stop an appointed business establishing a new retailer and using this new entity to pursue the same opportunities. Indeed, given that the appointed business is likely to know more about potential sources of raw water than any other, it may be better placed to pursue these opportunities than the new entrant.

If the appointed business regards as credible the threat from the new retailer it might respond by pursuing these new opportunities in order to limit its potential loss in revenue. This would, of course, benefit the end customer (for whom the supply has been procured) but would disadvantage all other customers, including households, in an appointed area. This is because the costs incurred by the appointed business will not have fallen by much as a result of the activity of the new retailer (or pro-active response of the appointed business to maintain its relationship with the customer). Indeed, the pursuit of such opportunities would, over the long term, result in the unwinding of regional cross-subsidies. This is especially likely to disadvantage customers in higher cost to serve (often the more rural) areas. As such there could be a potentially very significant impact on business customers in Scotland. The attached Appendix provides an illustration of these potential impacts.

## Critical questions

- How can Scotland be fully insulated from the potential adverse effects identified?
- Would there need to be an extension of water abstraction licensing to cover smaller sources?<sup>2</sup>
- How will Ofwat choose to implement its regulatory obligation to “finance the functions of an efficient company”?
- How long would it take to gain the level of understanding required to price the use of the network at a local level accurately and how would it be done?
- What would be the impact on the industry’s cost of capital if there is uncertainty about the return earned on assets that were built, in good faith, to meet the requirements of Government and regulators?

## Potential options

There are three ways in which the potential adverse effects of encouraging the industry to improve water supply resilience could be mitigated while still encouraging more innovative approaches.

### Through charging rules

One way would be through the charging rules. For example, it could be mandated that access to the network is priced in such a way that there can be no negative impact on the regionally averaged wholesale price. In this case, a retailer would have no incentive to procure water at a price higher than the long run marginal cost of the source that the appointed business currently uses.

Some thought would need to be given about how increases in cost over the remaining life of assets (caused by the price of the new retailer’s water being higher than the appointed business’ marginal cost) would be handled. Investors would seek to quantify the risk to their returns and price their cost of capital accordingly.

Thought would also need to be given to how any additional revenue (beyond that allowed for in a regulatory price determination) that the appointed business receives from pricing the network in this way could be kept ring-fenced and ultimately clawed back by the regulator such that there was no detriment to customers.

In such a scenario, retailers could focus on serving customers and meeting their needs and could bring more pressure to bear on incumbent wholesalers. This is because the opportunity to trump a competitor by identifying regional price/cost anomalies would have been removed. Moreover, retailers’ challenges to wholesalers could not be deflected by claims that they were ‘cherry-picking’ customers.

### Through an independent procurement entity

A second approach was suggested in the Cave Review. This would be to create an obligation on a water company to buy services from the most efficient supplier and to average the wholesale charge it levies on all customers to take account of the benefits or costs of its selection of water resources across all customers.

In coming to its decisions an independent procurement entity would have to consider both its operating and capital costs. It should also be under a clear obligation to pick the option with the lowest whole life cost and to have regard to sunk costs.

### Greater regulatory emphasis on creating resilience

A third approach would be to require the appointed businesses to work together to build interconnectors between and within their regions. This would allow more sharing of water resources and the development of more joint resources where this may be cost effective. For example there could be a commitment to create regional grids over, say, the next five years and to prepare interconnection options in time for the 2020 price review.

This would require current water resource plans to be strengthened. There would also need to be a much better understanding of the costs of water resource, water treatment and distribution at a local level than there is at the current time.

This approach would also require a mechanism by which, as a minimum, a company could be sure that it would not be penalised for any additional operating costs it incurs whilst being remunerated for the capital that was committed to the new interconnector. This would ensure that the costs of interconnection could be delivered at the low cost of capital the industry currently enjoys.

It may be possible to combine elements of the second and third options to create other workable approaches.

<sup>2</sup> We understand that abstraction licensing requirements in England do not, generally speaking, apply below a 20m<sup>3</sup>/day threshold.

## Increasing innovation?

The development of strong retailers that are independent of the wholesaler and single-mindedly focused on serving the needs of their customers should ensure that demand is reduced, capacity in the existing system is created, and the wholesale businesses do not try to commit unnecessary capital to interconnection.

In Scotland, Section 29E of the Water Services etc. (Scotland) Act 2005 gives customers and their retailers an incentive to reduce their overall costs of supply. If the need for an interconnector (between supply zones) to deliver a particular level of security of supply could be avoided through water efficiency, there would be benefits to the more water efficient customer and to other customers – a more resilient supply and lower prices.

If the water resource plans were published in sufficient detail and with sufficient costs information, then the same sort of supply chain pressures could be brought into play without any of the downside described above.

### Conclusions

We are concerned that the provisions in the draft Bill, which seek to encourage people to find productive and dynamic efficiencies through competitive behaviours, overlook the fact that profit is not simply a function of local costs but of area average costs. In this instance the application of normal, straight-forward micro economics will not work.

Under the current draft Bill, some customers could face bill increases for no reason other than where they are located (and therefore the relative cost of serving them). We consider that this could impact negatively on the legitimacy of water charges in the eyes of both non-household and household customers. Notwithstanding the provisions of the Water Services Act 2005, these same effects could have similar impacts on the Scottish water industry.

While on the face of it these are primarily economic matters, they encompass aspects of social and regional policy. Is it, for example, the intention to maintain average tariffs across an appointed business's area, as recommended in the Walker Review, or is it acceptable for that to fragment increasingly over time? If this fragmentation is allowed to happen for businesses, do we understand and accept the potential impacts on households?

We would welcome the opportunity to explore these issues further with the UK Government and through the High Level Group that Defra has tasked to establish an efficient and seamless Anglo-Scottish market.

## Appendix:

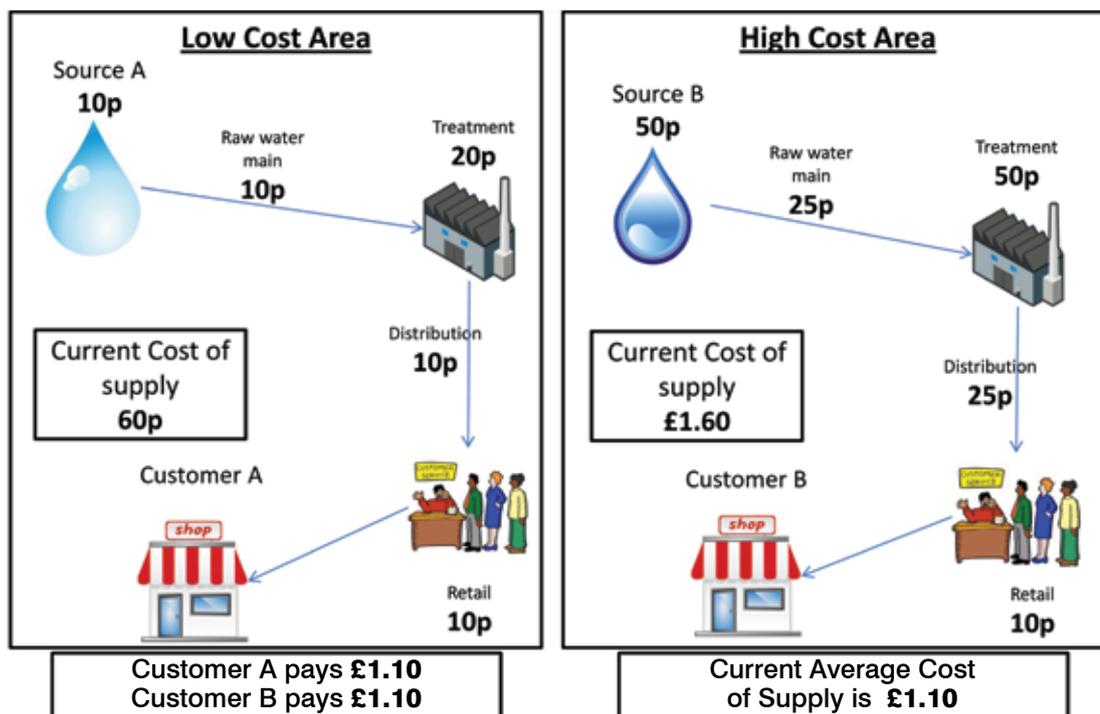
### Scenarios potentially resulting from ineffective upstream reform

The first illustration depicts a simplified water company with only two identical (groups of) customers, one being low cost to serve and the other being high cost to serve. Each pays the regional average.

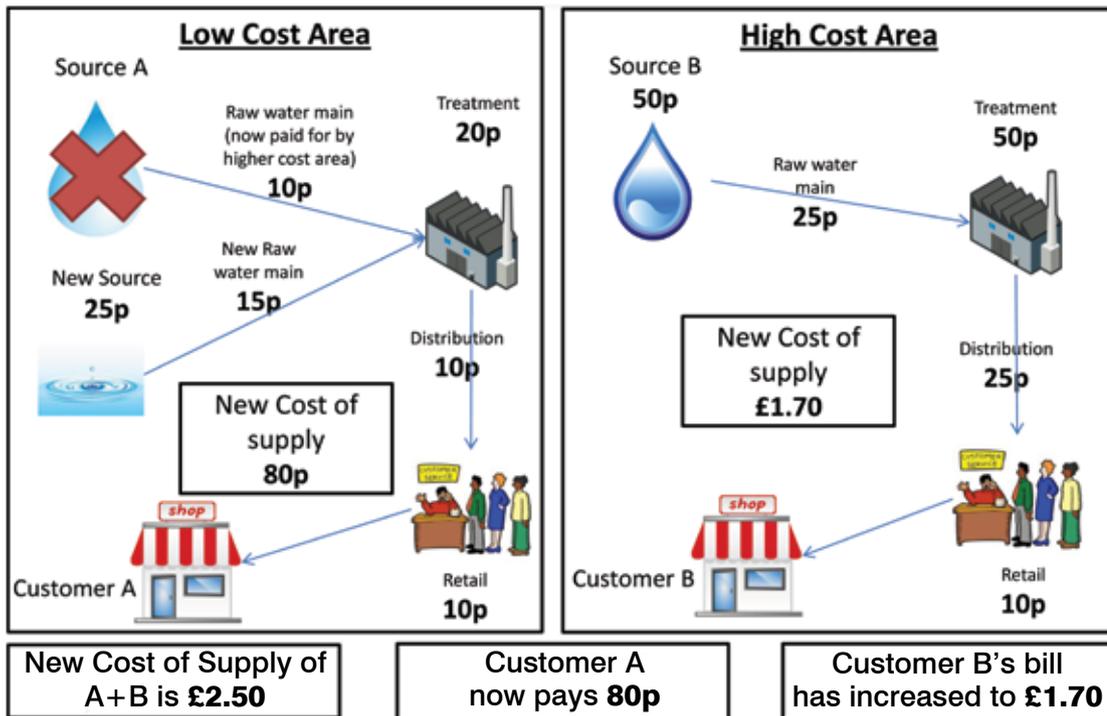
The second illustration shows what could happen if the low cost group were to opt for an alternative arrangement with a competitor of the current supplier. The competitor buys access to treatment and distribution from the current supplier and has the same retail costs. Even though the competitor's water and raw water distribution are higher cost, the competitor can undercut the current supplier and offer a lower price to customers in this lower cost to serve area. The consequence is that those in the higher cost to serve area end up paying more and costs are higher overall. Included in these customers' higher bill is the cost of the stranded raw water main that previously supplied the low cost area.

The third illustration shows how, given the long term nature of water investment, it may take time to realise any benefit from identifying a cheaper source of water. In this case, the competitor supplier has identified a cheaper source of raw water and can match the cost of raw water distribution. But whilst the original raw water main has not been bought and paid for, there is actually no saving in local area costs. Only when the original raw water main would otherwise have needed to be replaced is there an overall reduction in the cost of serving the lower cost area. This reduction could, of course take very many years to be realised. Even when it is realised, the lower cost area only benefits materially if charges are de-averaged to the disadvantage of those residing in the higher cost to serve half of the region.

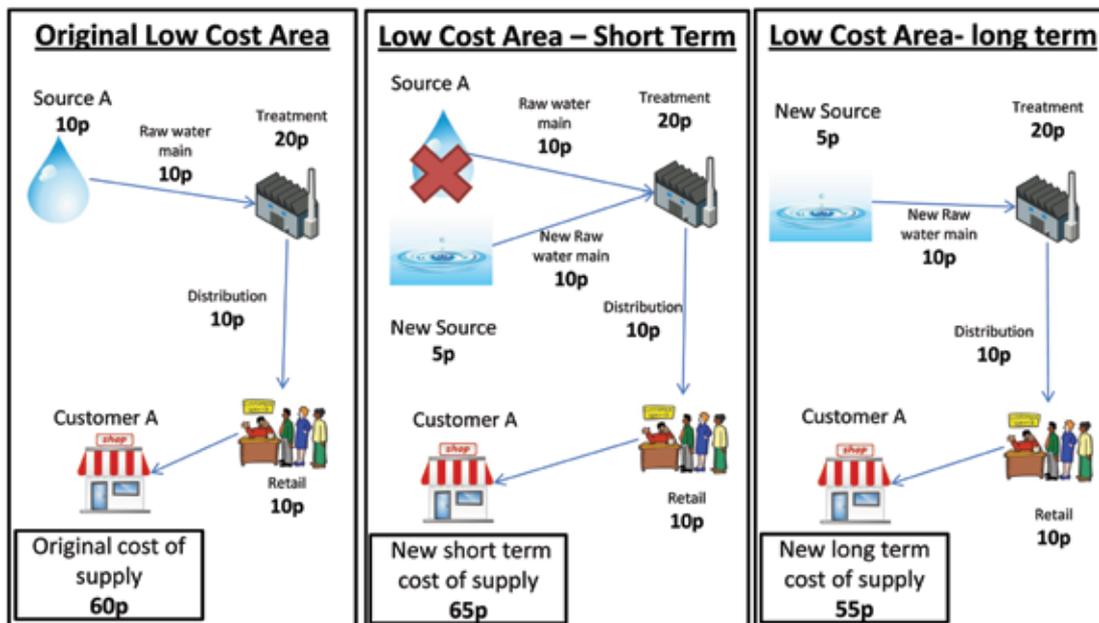
### Simplified company with two equal sized areas - one expensive, one cheap



## Competitor activity in the low cost area



## Cheaper water identified in the low cost area



November 2012