COMPETITION IN WATER SUPPLY

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The CRI is pleased to publish Occasional Paper 18 on *Competition in Water Supply* by Peter Scott, who is director of an independent business economics consultancy company, MMD. The long awaited water bill has just been published and will implement a limited extension of competition. This promotes far less competition than the radical advocates of competition had hoped for, given particularly Ofwat’s earlier stance that the Competition Act 1998 provided a framework for competition through common carriage. Indeed, both Ofwat and the water companies invested much effort in the development of ‘access codes and conditions’.

However, debate will continue and the experience of competition as it is developed under the thresholds set by the water bill will provide a foundation for possible extensions in the near or distant future (and indeed the bill might be changed in its passage to an act). We hope that Peter Scott’s paper will have contributed to fostering that ongoing debate.

The CRI would welcome comments on the occasional paper. Comments should be addressed to:

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**Peter Vass**  
Director, CRI  
March 2003
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Introduction

The government’s long-awaited proposals for introducing competition in water supply turn out to be so modest that it is hard to see them yielding the gains in efficiency, price, service and innovation the government claims they will bring.\(^1\) There is much good sense in what is proposed but the reasons for this timidity are perplexing. The document could even be read as restricting competition under the guise of favouring it. The initial consultation paper on competition two years ago confined itself largely to saying how difficult it all was.\(^2\) What is now clear is that competition which delivers greater efficiency, lower prices, more innovation and better customer service will depend on how far the government is prepared to adjust its proposals as the new Water Bill goes through parliament.\(^3\) This paper analyses the consultation paper from this perspective, and offers some suggestions.

Structure of the industry

The restructuring of the government-owned water industry in England and Wales in preparation for its privatisation a dozen years ago was unique. It took the form of the establishment of ten large, vertically-integrated companies with a monopoly on the supply and treatment of fresh and waste water in geographical areas based on water catchments.

Water privatisation was controversial. There were loud objections to the idea of the private sector taking over, and making profits from, the supply of water “next they’ll be selling off the air we breathe”. It was a surprise to many at that time to discover how much of the water industry was already in the private sector before the privatisation. In fact, a quarter of the households in England and Wales had long been supplied with water by private companies (themselves statutory local monopolies) and most water used in commercial and industrial premises came from private supplies, which represent more than half of all fresh water abstracted.\(^4\)

The public water industry had at the time only recently been reorganised into geographically sensible units which each had charge of a major water catchment area. There was a desire by government to keep the benefits of integrated water basin management, and no great desire for another major restructuring. The hope was that the regulator could use competition by comparison, that is, try to abstract from the different characteristics of each of the ten companies and give each company an incentive to do better than the average level of efficiency.

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\(^1\) Department for Environment, Food and Rural Affairs and the Welsh Assembly (2002), Extending Opportunities for Competition in the Water Industry in England and Wales, Consultation Document, the ‘consultation paper’.


\(^3\) Introduced in the House of Lords on 19 February 2003 [HL Bill 36].

\(^4\) Consultation Paper, paragraph 23.

Peter Scott, Director, MMD business economics consultancy
Existing competition

The new consultation paper does provide a welcome attempt to set a coherent framework for direct competition to develop in the special circumstances of the water industry. Over the last few years, direct competition has been creeping into the public water industry in four ways:

- ‘inset’ appointments;
- ‘boundary’ appointments;
- contracting out;
- access to ‘essential facilities’ under the Competition Act 1998.

The first two of these relate to competition for the position of monopoly supplier. ‘Inset’ appointments allow other companies to become the statutory, monopoly water provider for a part of what was previously the territory of one of the twenty four geographical monopoly providers (known as ‘undertakers’). This has been a modest source of competition so far, the opportunities being limited and the process of appointment cumbersome and time-consuming. Few inset appointments have been made, and almost no new entrants have come in this way. Incumbent water companies, in addition to securing inset appointments in each other’s territory, can and sometimes do compete with each other to supply customers near the boundaries between their territories; by definition, this is not a route for new entrants. In theory, either of these types of competition might involve the building of a second set of pipes to supply water to premises already connected to the network of the original incumbent, leaving one set of pipes redundant. If that happened on a substantial scale, it might require regulatory attention to inter-incumbent access prices so as to avoid uneconomic duplication of pipes. In practice, such appointments have generally either been for new developments, where new pipes are needed in any case, or for premises in places where connection to an alternative network is not a major expense.

The third type of competition arises when incumbent water companies, in pursuit of greater efficiency and lower cost, outsource various traditional activities, from pipe laying and water treatment to meter reading. There is generally competition for the outsourcing contracts, though there have been a number of complaints about the way incumbents manage such competition and in some cases about the terms on which companies associated with the incumbent have been awarded the business. There are now Ofwat guidelines in place on this issue.\(^5\)

Finally, there is competition in supplying water to end-users through the network of pipes owned and operated by an incumbent, which requires agreement on the terms of access to that network. In what is probably a development government neither foresaw nor has particularly welcomed, the Competition Act 1998 is beginning to be used to prise open the grip of the incumbents on the network of water pipes, which can be regarded under that act as essential facilities to which owners must allow third-party access. It may be that this is the main spur to production of the consultation paper. Monopoly providers do not generally give access to their facilities unless they have to. The price at which they do so needs regulation, to see that it is not pitched artificially high so as to discourage competition in other parts of the value chain. There is also a risk that if the regulator imposes too low an access price, inefficient competition may be encouraged to the long term detriment of the system and the customers it serves.

\(^5\) Ofwat (2000), Transfer Pricing in the Water Industry, Regulatory Accounting Guideline 5.03, especially section 1.7.
Market opening

The consultation paper contains a declaration of the government’s belief in the virtues of competition in the water industry.\textsuperscript{6} The development of competition (and the improvements in efficiency, price, service and innovation sought from it) will be expected to take place in the context of other government objectives for the industry. These include protecting public health, protecting and improving the environment, meeting the government’s social goals and safeguarding services to customers.\textsuperscript{7} Apart from any wider concerns, any significant public health incident attributable to the arrival of a new entrant in the water supply industry would very likely bring the opening of the market to an abrupt halt.

The two key new measures now proposed as means of opening the water supply market to competition are:

- access, that is a clear right for a new entrant to have its water conveyed to its customers by an incumbent monopoly supplier;

- wholesale purchase, that is, the right for a new entrant to buy water wholesale from an incumbent monopoly supplier in order to sell it retail to its own customers.\textsuperscript{8}

These measures are proposed only for certain water consumers, a point which is explored further below. Whoever is allowed to benefit, there are some curious features in the government’s proposals for the way in which competition would work by these means.

\textit{Wholesale purchase from whom?}

First, the consultation paper says that “\textit{whilst the water which a licensee inputs to a network is unlikely to be the same as that which [its] customers use, the right to common carriage must be related to the physical conveyance of water}”.\textsuperscript{9} This is odd because, on the one hand, any input of water into the network will of necessity be related to the physical conveyance of water, else the water would have to stop as soon as it entered the network. On the other hand, the sentence accepts that the water input by a new entrant will not normally be conveyed to the new entrants’ customers.

What appears to be at issue is the question of monopoly in the wholesale supply of water. Somewhat later, the consultation paper goes on to say that a licensed water retailer will only be able to buy water from the local incumbent, and that a new entrant licensed to put water into the network will only be able to sell it to its own end-user customers. The argument put forward for this unusual arrangement is that it “\textit{ensures simplicity and clarity in the lines of responsibility for the quality and continuity of water supplied}”.\textsuperscript{10}

This is a difficult argument to follow. The quality and quantity of water put into the network will be the subject of an access agreement with the owner of a treatment works licensed to put water into the network. Once in, it will be consumed by all sorts of customers: customers

\begin{itemize}
\item \textsuperscript{6} Consultation Paper, paragraph 1, lines 1-3, and paragraph 24.
\item \textsuperscript{7} Consultation Paper, paragraph 9.
\item \textsuperscript{8} Consultation Paper, paragraph 39.
\item \textsuperscript{9} Consultation Paper, paragraph 101.
\item \textsuperscript{10} Consultation Paper, paragraph 111.
\end{itemize}
of the incumbent, customers of the owner of the treatment works, customers of other new entrants. If there are quality problems, or problems of continuity of supply, which arise from the activities of the owner of the new treatment works, then those problems will affect all sorts of customers and the access agreement will presumably provide as clear and simple lines of responsibility as possible. It is not obvious how these issues are affected by whether other retailers buy their water from the undertaker or from the owner of the new treatment works.

**Location of wholesale purchase**

The consultation paper proposes that water retailers can only buy water (from the local incumbent) at the point of connection with an eligible customer’s supply pipes. As discussed further below in connection with the nature of competition, this does not provide any obvious margin for the retailer (the ‘downstream’ activities of water management within customer premises, and preparing and collecting bills, do not require responsibility for the supply of water). Is there any good reason why retailers should not be able to buy water at any point convenient to them, from the boundary of a treatment works (belonging either to the incumbent or to a new entrant) to the boundary of the customer’s premises, and pay a regulated access charge for water transport, whether before or after the point of purchase? Whether they would want to buy water at any other point obviously depends on the nature of the access charging régime, which is not yet clear. But it is difficult to see the case in principle for such a restriction.

**Eligibility for competition**

The government’s modest proposal is that a maximum of 7% of the market now served by public water companies should be open to these new forms of competition. No doubt a good many of the 2,000-odd customers involved will stay with their present supplier even if offered an alternative; only 500 of them are not already able to switch (with some effort) to alternative suppliers under the existing arrangements for large-user ‘inset’ appointments. This is so timid as to be likely to defeat the object of the exercise.

**Eligibility thresholds**

The consultation paper proposes that only consumers of large quantities of water should be eligible to choose their supplier. The minimum threshold suggested is 50ml a year, but government says it is open to alternative suggestions.

Important questions to consider in choosing a minimum threshold should surely include:

- will the scope for competition under the proposed criterion be great enough for it to be plausible to expect to see the benefits government wants from competition?

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11 Consultation Paper, paragraph 110.
12 Consultation Paper, paragraph 77.
14 Consultation Paper, paragraphs 70-77.
are there any serious arguments of public policy against a lower threshold?

The risk with the proposed threshold of 50ml is that the answer to the first of these questions is almost certainly negative. It is extremely optimistic to hope for any significant gain in efficiency or customer service or prices from opening so small a part of the market. As noted above, 7% will be open under the proposals, but three-quarters of the customers concerned are already eligible for ‘inset’ competition. A lower threshold would be better than a higher threshold, but the prior question is whether there is a case for a threshold at all. The public policy arguments offered against reducing the threshold are discussed below.

Households

In particular, the consultation paper argues that households should be excluded and, indeed, that competition to supply households should be prohibited even where it is already taking place.\textsuperscript{15, 16} The reasons given are that:

- water is expensive to distribute;
- cross subsidies between customers might unravel;
- public health, environmental and social objectives would require costly regulation;
- outcomes would be uncertain;
- there would be added complexity and extra costs to customers.

These objections are considered in turn below.

Water is expensive to distribute and there is no national grid

It is not self-evident why the cost of distribution should affect the argument about households being able to choose their supplier. There is a competitive market for the supply of bottled water, just as there is for a variety of other bulky, relatively cheap products which are expensive to distribute. If the market is unattractive, people will not enter it: that is not much of an argument for legislating to prohibit them from doing so.

Prices are now averaged across the areas served by a particular statutory monopoly supplier, and competition to supply households might involve reducing the element of cross-subsidy to households within the area served by a particular statutory monopoly supplier which are expensive to supply with water, ‘which includes many rural communities’

This appears to be the heart of the government’s argument, but it remains an odd point. Water for households is not priced the same around the country. Why should government require people who live in areas which are cheaper to supply within one of twenty four particular regions of the country to subsidise others in that region who live where it is expensive to supply? Concern about the costs incurred by rural communities is surely a national concern,

\textsuperscript{15} Consultation Paper, paragraph 25-27.
\textsuperscript{16} Consultation Paper, paragraph 68.
not a sub-regional concern, and this looks an expensive way of only very partially addressing it.

If government is determined to sustain sub-regional cross subsidies for water, then it would be open to it to do so by way of the access charge. After all, the part of the value chain in which differences arise in the cost of physical water supply within a sub-region is the part between the treatment works and the customer’s premises. For new entrants under the proposals in the consultation paper, this will be a part that continues to be provided by the incumbent under access arrangements. It would be open to government to require access charges to make no distinction in respect of the location of the customer to be supplied, that is, to reflect average distribution costs but not the cost imposed by the particular access in question. It is not self-evident that such an arrangement would survive a challenge under the Competition Act 1998, but then that is a difficulty to which the present arrangements are also subject.

**Public health, environmental and social objectives for water supply could only be achieved with competition for household supply by way of elaborate and costly regulation**

In respect of ‘retail’ competition, that is competition to supply water to customers which has been bought wholesale from an existing water company, it is hard to see what effect on public health and environmental objectives there will be. If the supplier of water to a household buys the water wholesale from one of the present incumbents, then it will be the same company as now, under the same rules, that abstracts the water, treats it and transports it. Responsibility for the quality of the water supplied will lie with the supplier, but as discussed below in relation to the obligations on licensees, it will have to rely (under contract) on the incumbent to discharge that responsibility in practice. Why should such an arrangement affect the government’s public health or environmental objectives?

In respect of competition from new entrants with their own sources of water and treatment works, whose water is transported to households by incumbents under common carriage arrangements, there does not appear to be anything specific to supplying households about the potential impact on public health and environmental objectives. That is, the consultation paper accepts the idea of new entrants having new sources of water and having their own treatment works, from which water is put into the incumbents’ pipes. As with electricity, the source of the product put into the distribution system is not identifiable at the point where it is taken out of the distribution system. Once the new entrant’s water is in the pipes, that water will physically be used by households whether or not the new entrant has the right to supply households. It is hard to see what difference the absence or existence of that right could make to the government’s public health and environmental objectives.

There may be a concern on these grounds about the scale of new entrant water in the system or the speed with which the amount builds up. That sort of concern might be grounded in such aspects as limited means available for testing and monitoring new treatment plants, or uncertainty about enforcement through new types of contract. If that is the nature of the concern, then it could perfectly well be met by other means. There might be a limit to the number or scale of new treatment licences available in the early years, rationed either by giving them to the first suitable applicants to ask for them, or by charging for them. It is, however, difficult to see what the right to supply households has to do with it.
Social objectives

There are a number of different objectives grouped under this heading:

- affordability;
- protection of vulnerable groups, the disabled and pensioners;
- protection of consumers in rural areas;
- promotion of efficiency and customer service;
- maintenance of acceptability to consumers in terms of taste, smell and appearance;
- an effective emergency and drought regime.  

This is a curious list of points to set out as an objection to competition in the supply of water to households. Product acceptability is in most businesses in competitive markets a pre-condition for finding customers. In the water industry it is, like public health, a matter of testing and monitoring what is put into the system, and then how the system is operated and maintained, not a matter of who has the commercial right to supply which sort of user. In relation to the effectiveness of the emergency and drought regime, neither retail competition nor competitive sourcing and treatment appear to raise any different issues with a right to supply households than with a right to supply large industrial premises. The government says it expects competition to deliver lower prices and better service, so affordability, efficiency and customer service are arguments on the other side. The protection of vulnerable groups, the disabled and pensioners, if the lower prices and better customer service expected of competition are not enough, could presumably be achieved through licence conditions, as they are with the statutory monopoly providers.

That leaves the issue of rural areas, and may bring us back to the question of cross subsidy which was touched on above. The difficulty is to know what such customers are to be protected from. If it is just from missing out on the benefits of competition because they are not an attractive market and incumbents will be able to go on charging them more than customers pay who are cheaper to supply, that is also true of other essential commodities like food and fuel, and government in those cases sees no need to legislate to enforce sub-regional cross subsidies.

There may be a concern about what the incumbents do if they lose significant market share. But this seems a little back to front as an argument, since it is up to government to decide whether incumbents can react by raising the prices they charge to the customers they still have, or whether like most businesses they have to trim their costs to fit the scale of the market they continue to serve (the fixed costs in the pipe network being recovered through access charges). The consultation paper contains a welcome presumption that incumbents will not be able to pass on to ineligible customers (if there are some) any costs they incur as a result of market entry by competitors.

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17 Consultation Paper, paragraph 9.
18 Consultation Paper, paragraphs 176-178.
COMPETITION IN WATER SUPPLY

The outcome would be uncertain, notably in relation to the effect on individual consumers’ bills

It is perfectly true that opening up a market to competition does not provide certainty about the effect on individual customers’ bills. The nature of market development is that some will gain more and quicker than others, and where there has been cross subsidy, some will lose, at least in the short term. The curious point about this argument is that it is very much more likely that more individual customers will lose (that is, pay more for their water than some other users) if competition is introduced only for very large industrial users. Is it possible that what is meant is that the political arithmetic is hard to do?

The added complexity would militate against effective competition and the extra costs would have to be borne by customers

The points above do not give reason to suppose that the arrangements governing competition to supply households need be significantly more complex or costly than the arrangements for competition to supply large industrial users. If the complexity arises from the potential scale of new entry, then again there are readily available means of limiting the scale of entry in the initial period without excluding households.

Indeed there is a strong argument on the other side here. This is that the arrangements for introducing competition into the public water industry are quite complex and will involve cost, therefore it is important to make sure that the scope for competition which results is large enough to make it reasonable to expect the benefits of competition to appear. Including households is likely to make it significantly easier to attract new entrants, without greatly increasing the cost and complexity of introducing competition.

Nature of competition

In the small part of market which government currently proposes to open to competition, new entrants will not have an easy time.

In the first place, a new entrant’s treatment works will have to compete with the dominant market share and opaque, intra-company pricing of the incumbent’s treatment works. Under existing licence conditions, and the fourth of Ofwat’s Regulatory Accounting Guidelines, public water companies have to show a breakdown of operating costs between the different functions in water supply. This includes costs for ‘resource and treatment’ as a whole, but not the costs of individual treatment works. In consulting on changes to these guidelines in May 2001, Ofwat referred to “the need for companies to make significant progress to ensure their access charges meet the criterion that they should charge entrants as they would charge themselves”. Ofwat’s proposed remedy, to “require disaggregated profitability information that reflect[s] potential market segments”, not surprisingly proved unattractive to incumbents. Ofwat backed off: “[W]ater companies do not at present internally recharge revenues and so do not have systems in place to produce this information … We have decided

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19 Ofwat (1992), RAG 4.01 – Licence Condition F, accounts and accounting information, Sections 5.1(1) and 5.1(3), Guideline for the analysis of operating costs and assets.
not to pursue proposals to disaggregate profitability information”. More limited progress has been made with a new breakdown of costs and a new requirement to publish the principles underlying the allocation of costs to the different functions; among significant costs not allocated by function are financing costs (one third of total water company costs), doubtful debts and local authority rates. We are still some way from a robust and transparent comparison between access charges and what public water companies would charge themselves.

In the second place, as Ofwat has pointed out, the margin likely to be available to retailers of water under the proposed new arrangements who do not treat their own water is likely to be exiguous. The margin is the difference between the wholesale and the retail price of water. Normally, the differences between wholesale and retail prices reflect the different costs involved in the two activities: the wholesaler provides large quantities in a single place, the retailer takes smaller quantities through a spread of retail outlets or directly to individual customers. Here, that distinction has disappeared.

An incumbent supplies 50ml of water to a single customer’s premises, where the water is metered and billed. Enter a new water retailer under the government’s proposals, allowed to buy water only from the incumbent and only at the point where it enters the premises of the single customer buying the 50ml of water. The incumbent measures and bills the water supplied to the new entrant at the same point as it used to measure and bill the water supplied to the customer. So the cost to the incumbent is unchanged.

If there is no difference in cost, why should government expect the wholesale price to be any different from the current retail price? If there is a difference between the wholesale and the retail price, on what grounds could the incumbent refuse to offer the wholesale price to the end-user customer concerned? If the current retail price is what the new entrant pays the incumbent, how can the new entrant expect to make money supplying the water to the end-user, who is not going to switch suppliers if the result is more expensive water?

22 Ofwat (2002), Ofwat’s Response to DEFRA Competition Consultation Paper, paragraph 2.6.1 and under Q7.
An alternative

If there were no threshold, all water customers would be eligible for competitive supply. That would both make it more likely that the benefits government expects from competition would materialize, and avoid the various problems to do with the definition of eligibility on which the consultation paper dwells at some length.

There may, as noted above, be public policy arguments for restricting in an initial period either the size or the number of new treatment works to be assessed, or the number and scale of new suppliers operating under new and untested forms of contractual relationship. Such arguments might lead government to restrict the scale of entry in an initial period. That could be done either by announcing ahead of time the number or scale of licences government is prepared to issue, and issuing them to the first eligible applicants to come forward with acceptable licence applications, or by charging for (or auctioning) licences, or both. There is, however, no visible reason of public policy why the restriction should take the form of prohibiting competitive supply to certain classes of customer, defined by the scale of their water consumption or by the nature of their use of water.

The department could review with the Drinking Water Inspectorate whether it is appropriate on public policy grounds:

- to set a minimum size for any proposed new treatment works;
- to limit the number of new treatment works licensed in the first (say) three years of the new regime;
- to limit the number of new retail suppliers licensed to enter the market, or the volume of water they can supply, in the first (say) three years of the new regime.

Aggregation

If there is a minimum threshold, then the question arises of whether different premises can be counted together, so that their aggregate demand exceeds the threshold. If there are to be eligible and ineligible customers, then there are two categories of aggregation worth considering. One of these is the one discussed in the consultation paper, namely the aggregation of separate premises owned by the same entity (for example, shops in different places in the same supermarket chain). Government offers four objections to this:

- the practical difficulty of defining which premises to aggregate: a simple answer to this would be to allow the aggregation of those premises for which a single entity at a single address is prepared to take responsibility for paying the water bill;
- aggregation across the boundaries of statutory monopoly suppliers would add extra complexity and cost: it is true that the supplier of an aggregation of premises in different undertakers’ territory would need to negotiate common carriage and perhaps wholesale

23 Consultation Paper, paragraphs 86-88.
purchase in more than one area, and that might make the arrangement unattractive. If so, it will not happen; that is not much of a reason for prohibiting it;

- aggregation “would effectively be permitting individual users of smaller volumes of water to enter the competitive market. This would be inconsistent with the government’s policy”, that is not a public policy argument, but a circular matter of definition.  

- The lack of an economic case because there is no national grid for water and no national market. This point seems:
  - significantly to understate the value to large users of central management of procurement;
  - difficult to make against a new entrant considering the establishment of a new treatment works and looking for buyers for its water;
  - irrelevant to aggregation within the region served by a single incumbent, which is the most likely application (see second objection above).

Thus, if there is to be an eligibility threshold, this kind of aggregation does not look difficult, and would serve the interests of trying to make the market attractive enough to new entrants to make it plausible to expect to see the gains from competition which the government apparently wants.

In addition, there is a case for allowing aggregation of premises in the same place (for example, on an industrial estate or a development of houses), regardless of ownership or nature (household or otherwise), where they are served by a single main, so that the wholesale purchase of water from the undertaker can be at the point where the supply to those customers becomes separate from the supply to other customers. In this way a retailer of water could aggregate local demand and have a better chance of an acceptable wholesale/retail margin than under the present proposals.

Permitting aggregation will not self-evidently result in greater cost; it will allow the benefits of competition more chance to arrive and to be more widely spread.

## Networks other than the drinking water network

### Sewerage

The consultation paper proposes to exclude sewerage from the area for which competition can be considered.  

There is no visible pressure for this part of the market to be opened to competition. Where there is competition in piped sewerage services in other countries, it comes in the form of separately owned waste water treatment plants and disposal services competing to provide services to the water suppliers or their customers. The regulatory issues are closely analogous to those involved in separately owned treatment plants putting drinking water into the public supply. The main point here concerns the government’s attachment to the vertical integration of the existing monopoly suppliers. That point is discussed below;

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24 Consultation Paper, paragraph 87.
25 Consultation Paper, paragraph 35.
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meanwhile it seems a pity to exclude the possibility of competition in piped sewerage services, when parliamentary time for water bills is limited.

Non-potable networks

The consultation paper is more open to the idea of including the separate networks operated by some statutory monopoly suppliers for water of less than drinking water quality, used for industrial purposes. These ‘non-potable’ networks carry some 12% of the water supplied by public water companies to non-household customers. There seems no reason not to include non-potable networks. Competition here should be simpler to regulate as it does not raise the same public health issues. It would, however, be unwise to expect much competition to develop, unless new entrants can find new sources of water in appropriate places: this is a low-cost, large-user part of the business and the retail margin available is not likely to be attractive.

Licensees

The consultation paper contains a long list of responsibilities which the government proposes to place on those it licenses to enter the market for water supply. The Drinking Water Inspectorate has suggested some entirely sensible additions. Some of those proposed by government look heavy handed for the scale of competition government is proposing, though they might make more sense if competition was to be extensive. Most of them, as Ofwat has pointed out, are best covered in access agreements. They do not all seem to meet the criterion set by government that “in a competitive market, burdensome regulatory requirements on new entrants should be avoided”.

It is clearly right that those who want to put water into the public network should have to satisfy the Drinking Water Inspectorate that they can and do treat (and, if appropriate, transport) water to acceptable standards. But the consultation paper goes a good deal further. Even those new entrants who do nothing but buy water wholesale and sell it retail are to be required to have official certification of their competence, through a proposed ‘annual certificate of adequacy’. It is left unclear in the paper how ‘adequacy’ is to be assessed. The Drinking Water Inspectorate wisely wants nothing to do with this area. It is irrelevant to the quality of the water supplied, and it requires a judgment which is not a judgment of technical competence in the treatment or transport of water. In fact it is not clear what sort of judgment government has in mind here, nor who is qualified to make it. The public policy gains from such an approach are far from obvious, and it risks exposing government to liabilities which government may find very uncomfortable, in the event of failure by licensed retailers whose ‘adequacy’ has been officially certified. Why not restrict certification to the technical and operational issues surrounding water treatment and water pipes?

26 Consultation Paper, paragraphs 269-272.
27 Consultation Paper, paragraph 270.
28 Consultation Paper, paragraph 125.
29 Drinking Water Inspectorate (2002), Response by the Drinking Water Inspectorate, under Q11.
30 Consultation Paper, paragraph 135.
31 Drinking Water Inspectorate (2002), Response by the Drinking Water Inspectorate, page 2, in the comment on paragraph 59.
It is not clear either what purpose is served by government placing an obligation on licensees to be responsible for billing their customers and arranging how their customers pay them. Most businesses pay attention to being paid without government standing over them to make sure they do.

Government also wants to state as an obligation the responsibility of a licensed supplier to its customers for the quality and quantity of water it supplies. Most customers will expect their suppliers to take responsibility for what they sell. In this case, the licensed supplier will actually have no physical control over the quality or quantity of water reaching its customers, so clearly its obligations to its customers on these points will have to be matched in its access or wholesale purchase agreement with the local incumbent by obligations to the licensee from the incumbent.\(^{32}\)

Under the government’s proposals, newly-licensed water suppliers will be providing some quite small fraction of 7% of the public market for water, which itself is less than half of all fresh water abstracted. The activities of such small players are not actually going to have much effect on drought planning, another field in which obligations are proposed. Talk of hose-pipe bans, which figure in the list, sounds strange in the context of a proposed minimum supply threshold of 50ml.

The list refers in several places to information about their customers which licensees are to be obliged to give to the local incumbent. This is potentially sensitive for obvious commercial reasons. It will need further thought in the context of proposals for the content of access codes and agreements.

The process of becoming a licensee does not look straightforward.\(^{33}\) Large users of water – indeed any users of water – are unlikely to sign contracts with a new supplier who has no water supply available and no licence to supply it. Yet under the proposals in the consultation paper, only a licensed supplier can connect a treatment works to the network or make a wholesale purchase of water, and in order to obtain a licence an applicant has to be able to show that it has customers for the water it proposes to supply. Thus a new entrant cannot obtain a licence without customers, and cannot obtain a supply of water or sign up customers until it has a licence.

The process will need to be iterative. That is, new entrants will need to have potential customers and potential sources of water, on the basis of which they can receive assurances – subject to conditions – about obtaining a licence. This is not in practice so difficult a process to manage as it may sound, and there is no reason to doubt that Ofwat can manage it. Ofwat will need to provide appropriate information to potential applicants and offer comfort – in a form which the potential applicant can use to reassure its potential customers – about the outcome of the application if the applicant meets reasonable conditions.

\(^{32}\) The same point recurs in paragraph 207, it is the incumbent who will have to remedy any problems of quality or quantity at the customer’s premises.

\(^{33}\) Consultation Paper, paragraphs 126-133.
Undertakers: vertical integration

The consultation paper makes it clear that government wants to keep the existing statutory monopoly companies as vertically integrated entities, doing everything in one company from abstraction and treatment through distribution to sale, metering and billing and (in the case of the large companies) to the transport, treatment and discharge of waste water.\(^34\) What is much less clear is why.

The point is not argued in the consultation paper. The statement is made that vertical integration will “help to maintain a necessary level of control over ... network operations, ... the quality of drinking water and protection of the environment”, but no evidence is adduced to show that vertical integration helps to achieve these ends.\(^35\) The same argument has been heard from all integrated industries under threat of restructuring, and it generally turns out to be specious. The electricity industry, for one, manages effective control of more complex network operations without vertical integration. Third parties can already supply raw or treated water to incumbents, and under these proposals will be able to put treated water into the incumbents’ networks; the drinking water quality and environmental consequences are manageable and accepted as such by government and the Drinking Water Inspectorate.

It is a pity that government does not seem prepared to look again at the issue of vertical integration on its merits, in the context of a professed desire to introduce more competition. The obvious way to introduce competition into this industry would be (and in other countries has been) by separating the main different parts of the value chain (abstraction, treatment, transport and distribution, supply to customers, transport of waste water, treatment and discharge of waste water).

The consultation paper suggests that incumbent statutory monopoly providers might set up or use separate ‘associated companies’ to take advantage of the opportunities offered by competition. This is supposed to help avoid any impression that incumbents will scoop whatever pool there may be by unfair means. The critical point here is surely to move over a reasonable time to clear accounting separation between the incumbent’s activities at different stages of the value chain. Only then will ‘arms-length’ transactions with associated companies be seen as properly arms-length, and only then will competitors be able to take a reasonable view on where they can beat the incumbent.

A timetable would have been welcome for the introduction of accounting separation, at least for large water companies. In the context of introducing greater competition, government could have insisted. Without accounting separation, potential entrants will be very hard to convince that the prices they receive or pay are fair, and so they will be discouraged. The consultation paper recognises this difficulty, but looks to Ofwat to solve it.\(^36\) As noted above, Ofwat has for the moment backed away from imposing accounting separation. Short of that, experience in other regulated utilities suggests that solving the problem is a tall order for a regulator. In its 1993 report on British Gas, the Monopolies and Mergers Commission discussed British Gas’s dual role of “seller of gas and owner of the transportation system which its competitors have no alternative but to use”. It concluded that “this dual role gives

\(^34\) Consultation Paper, paragraph 44 and paragraphs 144-145.
\(^35\) Consultation Paper, paragraph 145.
\(^36\) Consultation Paper, paragraph 146.
rise to an inherent conflict of interest which makes it impossible to provide the necessary conditions for self-sustaining competition”.

It is not obvious why the government should think vertical integration such a good thing that its maintenance needs no defence. The consultation paper points out how the pursuit of efficiency is leading the more innovative incumbents to contract out various different parts of the value chain, so that single responsibility for the whole chain is already exercised through contractual relationships rather than through operational control. In time, the logic of such developments may lead the incumbents to want to separate some parts altogether, and perhaps then the question will come back on to the table. In the case of Welsh water, Ofgem concluded in 2001 that competitive contracting out of all water supply and sewerage operations, while carrying “risks for the proper control of operations”, was acceptable in the context of the proposed new structure. If contractual relationships can deliver acceptable control of quality, there is no obvious reason why the same entity needs to be a party to all the contracts, rather than there being, as there is in most industries, a series of contracts between different parties linking each stage in the value chain to the next.

It is also curious that the Drinking Water Inspectorate is so firm a supporter of vertical integration. There certainly needs to be clarity about responsibility for the quality of the water, but there is no obvious reason why that responsibility should require single ownership of all stages of the value chain. It is already perfectly feasible with contracted out treatment, pipe laying, metering and billing; under the proposals in this consultation paper the Drinking Water Inspectorate accepts that it is feasible with separately owned treatment works. Food safety does not require that the supermarkets own either the lorries that transport the food they sell or the farms and factories which produce it.

There is a case here which needs to be made, if vertical integration is not to look increasingly anomalous in view of the government’s professed belief in the virtues of competition.

Effect on ineligible customers

The consultation paper suggests that Ofgem should be given a new duty to ‘promote’ competition, as distinct from its less activist current duty to ‘facilitate’ it. This duty, however, is qualified.

There is a curious, repeated passage in the consultation paper which asks Ofgem to promote competition ‘only where it is appropriate and where it is in the interests of consumers’. This passage seems to have in mind cases where it might be either appropriate or in the interests of consumers, without being both; such cases are not easy to envisage. More
seriously, the paper thereafter tends to fudge the question of which consumers it is, in whose interest competition needs to be for Ofwat to promote it.

If government means the short term interests of ‘all present consumers’, then critics would be entitled to conclude that government does not want competition introduced at all. Ofwat puts it more directly than the consultation paper: “some short term increases in prices may have to be tolerated to secure entry to, and development of, a competitive market”. Ofwat puts it more directly than the consultation paper: “the Director General ... will have to have regard to the interests of all consumers”; but leaves open the possibility that this may include their long term interests.

If government means ‘eligible consumers as a whole’ or ‘future consumers’ then the qualification to Ofwat’s duty to promote competition is unobjectionable but does not add much to the argument. The whole consultation, after all, is surely predicated on the view that competition will serve the interests both immediately of eligible consumers (else no competition will emerge) and in the longer term of all consumers.

Pipe laying powers

The consultation paper proposes that new entrants should not be given the same powers as incumbents to acquire rights to lay water pipes in other people’s land, but should be given the ability to require incumbents to do it for them. This seems an unnecessary complication. There is not a water quality issue here and the Drinking Water Inspectorate is unworried. The quality of the water, and of the pipes used to carry it in, are matters for the access agreement between the new entrant and the incumbent. Where new entrants can secure rights to lay pipes without special pipe laying powers, they will be free to lay their own, to standards set by the incumbent. The issue arises only where water has to pass through land, the owner of which does not agree to the pipe being laid.

The effect for the owner of the land in question will be the same whether pipe laying powers are exercised by a private company which has a statutory monopoly to supply water in the area or by a private company which is a new entrant, but the process will take longer, be more complicated and cost more if the new entrant has to require the incumbent to act. If the same safeguards are applied to the exercise of pipe laying powers by new entrants as to those by incumbents, it seems more reasonable that the same powers should be available to all licensed suppliers, new or incumbent.

Adoption of pipes

If a new entrant does lay a pipe to connect a new treatment plant to the network, the consultation paper proposes that the local incumbent should ‘adopt’ the pipe, that is take it

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43 Ofwat (2002), Ofwat’s Response to DEFRA Competition Consultation Paper, paragraph 3.3.1.
44 eg in paragraph 173.
45 Consultation Paper, paragraphs 117-123.
46 Drinking Water Inspectorate (2002), Response by the Drinking Water Inspectorate, under Q8.
over and become responsible for its operation and maintenance. The point is to maintain single control of the operation and maintenance of the whole network.

This is a cautious approach, which may be sensible at least in the initial period of competition in the industry, in the interests of reassuring the public about water quality. In the longer term, the issue is the ability to monitor and if necessary shut off water entering the network. In principle, that does not require the incumbent to adopt the pipes which bring the water to the network but it may make it easier at the start.
The framework for competition

Access codes and agreements

The framework proposed in the consultation paper involves Ofwat guidance, published access codes and individual access agreements. So far as they go, the proposals in this area seem sensible and workable. Much will clearly turn on the content.

There is likely to have to be something akin to the grid code in the electricity supply industry. That is, if competition develops to any significant degree then the manager of the network of pipes will need to “balance water sources, treatment operations and flows around their network, to maintain the quality of drinking water at the customer’s tap”, in circumstances where some of the water resources and treatment plants belong to other people. This is probably simpler in water than in electricity, so it can no doubt be done, but the operational control mechanisms (and their financial consequences) will need to be incorporated in the access code and the access agreements. Since such points will need to be so incorporated even under the government’s proposals, the need for this kind of network management is not an argument for retaining vertical integration, though it is used as such in the paper.

Water Bill and Competition Act

Part of the point of the framework proposed in the consultation paper is to get away from the Competition Act 1998 as the set of rules for access to common carriage in the network of water pipes. Some may indeed see that as the principal purpose of the whole consultation paper. The Competition Act requires the owners of ‘essential facilities’ to give access to the essential facilities on reasonable terms to their competitors. There is no legal requirement under the Competition Act for those who obtain access to have their ‘adequacy’ certified by government, and considerable uncertainty about how far reasonable access charges can include a share of all the costs incurred by statutory monopoly water suppliers in areas like security of supply, quality monitoring and maintenance and environmental protection.

The consultation paper cuts through the question of classifying the network of drinking water pipes as essential facilities under the Competition Act by simply proposing that incumbents should be obliged to give access to it under the new Water Bill but under conditions specific to the water industry, so that no one without a specific licence will be able to have access. This is a helpful clarification, provided that:

- government is not too restrictive in the conditions (such as high thresholds of water use on the part of new entrants’ customers) it imposes on the issue of licences;
- government does not impose excessive obligations on licensees;
- access charges are reasonable.

47 Consultation Paper, paragraph 165.
48 Consultation Paper, paragraph 165.
49 Consultation Paper, paragraphs 93, 97, 99.
With limited competition, the main benefits to most customers are likely to come from incumbent reaction to the threat of competition, rather than from competitive entry itself. Limited eligibility for competition would mean that incumbents did not need to pass on to ineligible customers any price reductions offered by new entrants to their customers, and might even be able to recoup from ineligible customers in higher prices any loss of profit in the part of their business which was exposed to competition. It is therefore important that neither tariff rebalancing nor access charges make incumbents indifferent to the loss of customers.

Access charges might have that effect if, for instance, they were based on an efficient component pricing rule which assumed that existing prices for particular stages of the value chain were both identifiable and efficient, and which allowed incumbents to recoup through the access price not just the costs of the monopoly network of pipes, but also their (assumed identifiable) loss of profit on the business lost to new entrants in other parts of the value chain. It is outside the scope of this paper to discuss what access charges ought to be; the point here is only to note the risk.

The consultation paper does not remove all regulatory ambiguity from the introduction of competition. The implication of the government’s proposals is that the Competition Act 1998 would no longer be available to those wanting access to the network of water pipes, but it is not clear what would happen if someone who, say, did not like the access price offered under the Water Bill, tried to use the Competition Act instead.

In addition, treatment works (and pipes upstream of them) are not in most circumstances ‘essential facilities’ in the Competition Act sense, because in most cases it is economically feasible to build new ones. Where it is not, for instance because a new entrant has acquired a right to abstract water near the only feasible place for a treatment works, which the incumbent already occupies, it will generally be in the interest of both parties to agree for the water to be treated in the incumbent’s plant. If agreement is impossible, the consultation paper says that “it will be open to the licensee to bring a case to Ofwat under the Competition Act 1998”. Ofwat is concerned about the potential for conflict between Water Bill and Competition Act determinations on issues like access prices in such circumstances. That concern could be much reduced by accounting separation of water company activities upstream and downstream of treatment, on the assumption that treatment works and the pipes which supply them should not carry costs associated with the maintenance and operation of the natural monopoly network.

**Inset**

Government proposes to leave in place the existing arrangements for ‘inset’ competition. This would be better than nothing where no other competition is allowed but worse (because more cumbersome and still locally monopolistic) than replacing eligibility for inset appointments with eligibility for competitive supply. Ofwat’s view is that there is no point, and some disadvantage in regulatory cost and uncertainty, in having both regimes available in the same circumstances.

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50 Consultation Paper, paragraph 100.
51 Ofwat (2002), Ofwat’s Response to DEFRA Competition Consultation Paper, section 3.2.
52 Consultation Paper, paragraphs 149-150.
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Abstraction

A crucial element in the development of effective competition in water supply will be to put in place a better system than now exists for trading rights to abstract water, in the form of abstraction licences or parts of them. Work on this is in hand under the aegis of the Environment Agency, but on a slower timescale. If government is serious about making water supply competitive, it will need to make sure that that work is brought to a successful conclusion.

Under existing arrangements the holder of an abstraction licence, and the person who wants to take over all or part of the right to abstract water it confers, have to ask the Environment Agency to rescind the existing licence and issue a new one (or two, if the existing abstractor wishes to continue to use part of its entitlement). There is no presumption that the new licence or licences will confer the right to abstract as much water as the existing licence allows. The greatest scope for trading water rights is likely to be found where an existing licence-holder does not need all the water its licence entitles it to abstract. It is precisely in these circumstances that the greatest uncertainty lies about how much the Environment Agency will allow an acquirer to abstract. This is partly a legacy issue from the arrangements made when abstraction licences were first introduced, but there is no doubt that it is a considerable impediment to the trading of water rights. The consultation paper says that “the amended abstraction licensing regime, as proposed in the draft bill, will give abstractors more opportunities to trade licences and parts of licences, and will give greater clarity and flexibility to the abstraction licensing process”. It will need to.

Consultation Paper, paragraph 224.
Conclusion

There is much good sense in the government’s proposals. There are, however, a number of important areas where government’s declared belief in the virtues of competition seems at odds with what is suggested. Whether effective competition arrives in the water industry and delivers greater efficiency, lower prices, more innovation and better customer service will depend on how far government is willing to adjust its proposals as the Water Bill goes through parliament, in what spirit all the implementation decisions are taken and whether the Environment Agency does make water abstraction more competitive.

If government is serious in its commitment to greater competition in water supply, then helpful steps to encourage it will be:

- to remove from incumbents the monopoly on the wholesale sale of water;
- to remove the proposed conditions for eligibility for competitive supply, replacing them if necessary by a limit on the number or scale of licences awarded in the first, say, three years;
- to require large monopoly water companies to make progress towards accounting separation between different stages of the value chain;
- to reconsider the issue of single ownership along the value chain in water supply;
- to limit obligations on licensees to a reasonable test of financial soundness and, for any water operations the licensee proposes to undertake, a test of technical competence;
- to include non-potable networks and (in principle) sewerage networks in the scope of competition;
- to give new entrants the same pipe-laying powers as incumbents;
- to review in, say, three years the need for adoption by incumbents of new water pipes laid by new entrants;
- to ask Ofwat to ensure that the access charges levied for common carriage in the network of pipes owned by monopoly incumbents are not such as to insulate the other parts of their business from the financial consequences of losing business to competitors;
- to encourage the Environment Agency to make the trading of water rights simpler and more predictable than it is now.
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