



An Interdisciplinary Research Project

FIRST RESEARCH WORKSHOP

The Economics of Private Sector Participation in Water and Sanitation

Paper:

“Competition and restructuring in the UK water industry”

Peter Vass

Centre for the Study of Regulated Industries
University of Bath

**School of Geography and the Environment
University of Oxford
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Peter Vass is Director of the Centre for the Study of Regulated Industries (CRI), School of Management, University of Bath. He is a qualified accountant, member of the Chartered Institute of Public Finance and Accounting (CIPFA). As Director of the Centre for the study of Regulated Industries (CRI), his primary research interest is the theory and practice of incentive regulation applied to privatised utilities and network industries. Current research is directed towards corporate governance, consumer representation and accounting for regulation. He was appointed special adviser to the House of Commons Trade and Industry Committee for the 1996/97 Inquiries into Energy Regulation and Telecommunications. He also edits and contributes a chapter to the annual CRI Regulatory Review including the "Millennium edition" 2000/2001. Recent research reports include Accounting Requirements for Regulated Industries and Common Carriage and Access Pricing: a Comparative Review.

For enquiries on this paper, contact Peter Vass: P.Vass@bath.ac.uk

I would like to start with some general observations. We do not have competition for its own sake; we have competition as a means to an end and therefore I think we have to consider competition in water in terms of the framework of the system as a whole.

The background note written for this workshop started off with the objective of the barriers to and conditions for involved private capital and enterprise. It went on to say though that in the developing world the problem is more often caused by policy and institutional failure rather than technical failure so we do need to set policies like competition policies in a broader governmental framework. Further on it said that, while the reasons officially stated for the promotion of private participation by governments and multilateral institutions - and this includes competition - are legitimate and important, it then went on to say there are also policy goals such as those related to social equity, democratic accountability and environmental sustainability that have a similar degree of significance and legitimacy. This was put as though there might be a contradiction between these things rather than them being complements for one another to be dealt with appropriately through the institution and regulatory framework. I just

want to emphasise to a couple of these matters within which we can set competition. It might in actually provide a brief overview of some of the points in the other papers. Where I start is that we try to analyse regulation within an analytical framework. Hopefully this will be of benefit for setting a framework for the understanding and interpretation of government policy in the UK, although, this might be an ex-post rationalisation of course but hopefully it evolved towards this.

We have looked at the problems to be addressed, and hardly a market or conduct failures the government needs to pay attention to, (?) or do we rely entirely on a freely operating competitive market. Such is the hierarchy of regulation B, the institution of accountability ... parliament ministers, government and down to this issue of independent - independent for what? – regulators (?).

Then there is the issue of the efficiency of regulation: the instruments used. This means that we should consider whether we should have demand control systems for environmental regulation or whether we should use market instruments as a more cost-effective way of achieving the desired outcomes. Do we use competition or do we use direct price control or do we use rate of return?

We have a choice of different instruments and we must match those instruments to the cost and incentives and the outputs that they achieve. There are then the issues of legitimacy, processes and procedures: licenses, consultation and due process. The key message that I think we always have to pay attention to is that regulation, like government or competition, should be there for a purpose and not for its own sake. The objective perhaps being correct market accommodate failures (?) consistent with applying the principle of better regulation(?).

I think it is important to reflect that governments internationally are trying to observe the development of the principles of better regulation, our own better regulation: a task force in the UK cabinet office brought out the 5 principles that Chris Bolt referred to. The OECD has done a lot of good work on regulatory reforms since its 1997 report and it does country studies on applying the principles, and I think the EU has just recently issued a white paper on governance that incorporates the principles of good governance. These ought to be in a sense the framework against which we test our proposals. Although this is a simplified analysis, I think it is quite helpful if we want to consider why the regulatory structure in water has evolved as it has done. I would perhaps go as far to say that maybe we should focus on three types of market failure which governments wish to address. Firstly the abuse of monopoly power - anticompetitive practice, abuse of dominant position for which we have the MMC and now the Competition Commission. Economic regulation was the area that we have traditionally been concerned with, and there may of course be, in the utilities and network industries, monopoly power because to some extent they are natural monopolies: a single provider can provide the outputs required by consumers more cheaply than any combination of multiple providers. So if there was a natural monopoly, we would have to consider whether that natural monopoly would abuse its monopoly power. We should distinguish quite sharply the other potential market failures or conduct failures from that kind of economic regulation, the issue of public good and externalities where private costs do not measure effectively the social costs, under provision due to free rider problems, quality standards in the Third World that are too low, and now also environmental damage and pollution. If producers can get away with

throwing toxic waste into the river, they do, and in so doing impose the costs on others and minimise their own private costs. This clearly has to be regulated.

Economics text books often place the economic efficiency issues - whether allocative or technical efficiency - in parts one and two and set on one side to distribution issues. They ask you to consider the economic issues and then to say that distribution issues are somehow a political issue and it is just about re-distribution. But I think if we look at the regulatory framework in water and across the other regulated industries, we ought to treat it as a sort of market failure because it is saying that: if we did not have regulation, we would have an outcome in the form of uncorrected distribution of income or opportunities or access to essential services which somehow is politically unacceptable, either to the community or the government. The government is going to act on behalf of the population to correct that uncorrected outcome and what we are really saying is that it is a form of market failure which is to be corrected by a political response.

If we use that as an initial framework for deciding what the government is trying to do, then I think we can move quite quickly to the idea that the approach might want to separate roles, that we might want to recommend that the government retain responsibility for the policy, to delegate responsibility to regulators. We call regulators independent but they are not independent in the sense that they can make arbitrary decisions, they are independent in the sense of the day-to-day executive implementation of a known government policy. Sometimes we can think of details as policies, but I think that within a democratic system we would expect the regulators to be appointed by ministers and subscribe to the overall policy which the government is operating. But by being independent, ministers can save themselves from themselves because they always

want to intervene on a day-to-day basis, but, because it is at arm's length, they are stopped from acting inappropriately. The point I really want to raise here is that the role of the regulators has really... (?) The institutional framework in that hierarchy has been divided between the three types of market failure. We have economic regulators, in the traditional OFWAT form, to deal with economic regulation and abuse of monopoly power. We have environmental agencies to deal with the environmental market failures and we have other agencies, albeit less clear here, to deal with the issues of social disadvantage with respect to essential services. My key point is that focussing on the problem that you are addressing, rather than trying to solve all the problems at once. So, quite legitimately, the economic regulator could say we are not agents of social justice, as I think Sir Bryan Carlsberg(?) the telecoms regulator said two years after OFTEL was formed in 1984. By that he did not mean that he disagreed with social justice or that he was not really in favour of social justice, but simply that it was not his job as an *economic* regulator, that is just regulating for the avoidance of the abuse of monopoly power to redistribute income between various parties, for which ministers must be held accountable and institute the required mechanisms. with respect to the environmental public service as a social equity issue, the last two should be the responsibility of ministers rather than independent economic regulator because they effectively involve decisions of taxation or set standards of service which are offered to all, and the legitimacy of these decisions should be backed by the democratic or equivalent mandate. Although, in practice sometimes, service standards will be set by regulators.

I believe that this shows, perhaps that we can actually see our three types of market failure dividing into agencies and corrective mechanisms. First of all, in respect of monopoly power, we look to our economic regulator, OFWAT, to control the abuse

of monopoly power. This is government policy, to encourage competition where appropriate. It is now the first duty if we look at the Utilities Act 2000 and the new regulators for the gas and electricity markets authority, the primary duty to introduce competition where competition is used as the mode of consumer protection. However, it does use the words "where appropriate", which leaves open the idea that if there was a natural monopoly and competition was inappropriate in that area, then another form of regulation would be viable, in particular long term periodic price control of natural monopoly businesses. This would be preferable to profit control to rate of return regulation, and this would imply cost reflective tariffs, that is, people should be charged a price which reflects the true cost of the service, and there would be a regulatory role and a competition authority, which I think we have seen evolve.

A key point that I want to make in relation to the second two types is the absolute importance of the cost-benefit test. This comes out of the principles of better regulation. The cost-benefit test should not be interpreted in a dry financial sense as it only includes things that have monetary value that can somehow be added up. We mean a cost-benefit test in its widest sense, that we are trying to make rational decisions, that we do not set standards where at the margin the level of standard is such that the marginal benefit of having that standard is very much lower than the marginal cost of having that standard at that particular level. That would seem to be irrational, so we have talked about rational decision-making in relation to OFWAT, and the present system is one in which the government sets the environmental standards and other public good standards and also deals with the redistribution of income as appropriate, but it must incorporate a cost-benefit test to inform itself that in principle these standards are at the right level or - as with redistribution - that it should use an

economic test to minimise any economic or financial distortions. So it might be preferable for the government to deal with direct income support to disadvantaged consumers while looking to the companies to use cross subsidies in relation to the sectors of the population in which other economic losses might be expected. It would be much more expensive to target income support directly to those who are needy, in order to give them the wherewithal then to purchase those cost reflective services from the privatised utilities.

When thinking about the possible institutional policy failures that may arise because every country is considering the introduction of private finance and perhaps privatising the utilities, that they must actually consider the framework as a whole within which each element is set. I would say that we need a kind of map, –which I call the two-way-tripartite model. This is simply because there are three horizontal parts which I have described: economic, environmental or public goods and the social equity issues, and then there are the three levels of government, independent regulation and the regulated companies themselves. I think this can form a map to put all the parts in the right position relative to each other, so that we might say we have government policy, we have the delegation of responsibility to different institutions to deal with the three issues. Of course the Environment Agency is, with the government, setting environmental standards, regulating companies to make sure their performance is monitored, and those standards will then be passed through to the economic regulator because the consumer has to pay for the imposition of those standards on the companies, . But at the same time, if the regulator were to impose an unreasonable settlement on the company, natural justice says it should be able to appeal to somebody through an appeals mechanism. I think many people talked about consumer

representation whereby the regulated company is looking at the customer, the first port of call for an agreed customer should be the company that provided the service to them. If they do not get satisfaction from that process because the individual consumer is a lot weaker than the company, then there should be a mechanism through which a consumer representative body should be able to take up their case. This can either be integrated with the economic regulator or independent, but if the consumer body, together with the company cannot agree an outcome, there must be some legislative or legal process either formal arbitration or it is passed back to the regulator for legal determination. Then we have the feedback mechanisms. We can see this very much this model in a little more detail. An example for water is to take this through to the European level. On the one hand there are water quality, environmental and other standards, such as the European Commission quality directives, then at a lower level there is the Department of State concerned with that area, and then down to the Environment Agency, which is in a sense the non-departmental public body that takes responsibility for water and has certain discretionary areas with setting standards and so on. There is a central core of economic regulation and then a line for redistribution and issues of equity and income support through benefits agency or other mechanisms. Clearly each country is going to have different structure but I think the map of the interrelationships can actually help inform policy and keep that on track. That actually provides a context for saying that, if we are going to think about competition, we can look at the duties of the regulator, which are not always set out like this. I think people, somewhat unwisely to some extent, look at the legislation which sets out a primary duty to allow the company to finance itself and a secondary duty of consumer protection. People would say clearly the government is not protecting the consumer but is looking after the interests of the

company. But if we look at the reality of how the regulators (?) have actually proceeded and how now the government is trying to enshrine this in legislation so the legislation sends an appropriate message to the public to give public confidence, I think we could draft this to say that the primary purpose of the economic regulator was consumer protection, by first promoting competition where appropriate so that the competition is the consumer's "policeman" so to speak, against the abuse of monopoly power. However, this primary duty is subject to certain constraints. The regulator must ensure that the business can finance itself, it cannot push the price control so low that the business cannot cover the three costs that are involved: operating expenses, capital consumption, depreciation, and a reasonable return on capital. In the face of that constraint, clearly the government will set certain specified environmental and service standards, however we must recognise that the RPI-X price system should be included 'for a given standard of quality and service' because price has no meaning if we do not specify the standards of service involved associated with that price. There are non-discriminatory tariffs based on costs enshrined in the legislation, so it rather conflicts with the social action plans which almost imply that the company should, to some extent, do some redistribution through cross subsidy, because cross subsidies do not imply cost reflective tariffs and then the general public service obligations, a good example of which is the flat rate for a stamp for posting a letter to anywhere in the UK, are not cost reflective but a universal service of obligation.

Now, if we need to set competition in that context, Littlechild, Professor of Commerce at Birmingham*, [* I looked his name up on the internet to confirm and it seems he is now at Cambridge], became the electricity regulator, but it was his report that started this process in 1983 just prior to the privatisation of BT. He then wrote a

report for water as well, in which he asserted that regulation is essentially a means of preventing the worst excesses of monopoly but it is not a substitute for competition. I think there are very good arguments that the inefficient regulation of monopoly may be worse than unregulated efficient monopoly. I know this is big debate among US academics and I think in a sense in a prima-facie case it may indeed be true. But we talked about natural monopoly in industries and surely we do not want competition in natural monopoly industries, we give them exclusive rights. The water industry is a good example of where it lags behind the development of competition in other regulated sectors - energy and rail for example. So when we think about competition I think it is important that we should consider that there are many types of competition and that even though we may not want the first one direct product or service competition in natural monopoly areas, that is, we would not want competing companies setting up competing or duplicated high voltage transmission systems where one HV transmission system will do the job perfectly well at least cost. Even though we do not want that, we can apply competitive pressures through the other areas, for example competition for corporate control. So we are saying that even though we give a company an exclusive right to provide a service, we do not give it protection against takeover if it is found to be operating inefficiently or badly. Of course one of the problems of the abuse of monopoly power is not just that prices are higher than the long run costs of supply, leading to excess profits. I think the economist Hicks said that "the best monopoly profits are a quiet life" we have the taking of the abuse of monopoly power by taking monopoly profits as inefficiency. Now this is a problem of the principal agent relationship, whereby the managers of the company served their own interests. They looked for a quiet life, and if they are protected from takeover and other market

disciplines, then of course they may be able to indulge their self-interest for a long period. But if you imagine a very inefficient company, it might be noticed by another company that could offer the shareholders something for their shares, take it over, kick out the incumbent management and bring in a new management that will actually achieve the efficiencies that we require. So if we have competition for corporate control, then of course this can apply to natural monopoly and competitive businesses. I think to be fair that the UK has been extremely good in that the government has taken off the golden chairs which protected the companies from foreign takeovers progressively.

Some of the competition is based on periodic maximum price controls which of course give incentives to efficiency compared with rate of return regulations, and then there is - most importantly - the idea of competition procurement that we can contract out for inputs into the business even if we have got a simple supplier of the outputs for the business. This leads me to the idea that water is not intrinsically any different from any of the other sectors in terms of the potential for competition. Competition may not have developed there so much, but it may be less attractive. In principle I think the idea of the invulnerable supply chain is as relevant to water as any other of the businesses that, as in a sense they have a vertically integrated monopoly supplier with exclusive rights. We can look at that as a supply chain, for instance in the context of electricity whereby we have the generation of business, we can have seditative? generation, we may have competitive commodity businesses then we have the natural monopoly infrastructure; the pipes and wires - whether its the high voltage transmission of the lower voltage distribution systems, or the water pipeline or whatever - and then we have the potentially competitive supply businesses. So we can break these

chains up. What we have seen has been energy supply competition, energy generation competition, a great deal of competition in energy trading but *with* the natural monopoly infrastructure of the national grid company - the high voltage transmission system - and then regional electricity companies for the lower voltage distribution systems. These have been regulated on a long term basis by the RPI-X system, with retail price caps being taken off and left with the wholesale price controls which were put in place by the regulator. In any of those businesses, the inputs can be as competitive contracted out in terms of constructions, operations, management services and so on. In water, which by many is considered to be inappropriate for competition, we should think of competition being very appropriate to it, but it may not cover direct competition in the market for water supply. Whilst competition hasn't been vigorous in water, in principle competition can apply within the structures that I have set up. But in terms of restructuring we have seen quite dramatic developments. A case here of the type of restructuring that we have seen post privatisation is the example of the SWEB and the SWALEC (South Wales Electricity Boards), two of the original regional electricity companies privatised in 1990. The Welsh water company bought SWALEC in order to make a multi-utility, probably to get economies of scale and scope. They would dig big trenches at the same time, put the electricity down the water pipe, and when the US government took off the golden chairs there was much interest by US companies to buy the energy companies and some company bought SWEB. Then came the introduction of domestic electricity supply competition in 1998. One of the innovations there was, instead of giving the license to the vertical integrated monopolies, licenses were actually given for different parts of different business activities. There were different licenses to supply electricity, and to distribute electricity. Then the electricity supply business

could be sold off, retaining the electricity distribution business. What we then found is that SWEB de-merged, the electricity supply business was bought by London Electricity, which was itself bought by Electricité de France. We see the French companies buy companies across Europe but it is not quite so easy to buy the French companies the other way round - but that's an issue for the EU. That then left the Western power distribution as the local distribution part.

Welsh water started to fail and this is an important point about privatisation, that the management has to be responsible for its activities. If it cannot manage the business then presumably somebody who can manage the business can take over. Welsh water started to fail the company and Western Power Distribution bought HYDA (the Welsh name for the company) after a take over battle with Nomura? But Western Power Distribution was not interested in the water element but was only interested in the SWALEC electricity distribution element of the business, and so hoped to get economies of scale by bringing the two distribution businesses together under one management. So it sold Welsh water to a new not-for-profit mutual company limited by guarantee. So the issue is whether this new structure without equity based on 100% finance is as efficient a system as the current equity lobby.

I just want to finish on this issue that there has been much restructuring, potential for competition, but now we have reached a point where people are not persuaded of the benefits of the equity model. I think one of the things we should consider here is that the equity model does have as much to recommend it in terms of transparency and clear adversarial relationships. I mean this in the sense that the regulator is there to regulate the company in the provision of services to the customers and avoid abuse of monopoly power, but the shareholders are there to incentivise the

company to provide its services efficiently so the regulator is providing incentives by providing a price control, therefore if the companies' costs rise above what can be financed by the price control they will earn less than the normal rate of return and that would be very bad, but also the shareholders want the company to outperform the regulators' forecast in order to earn additional profit. So I think there is a very clear role for the shareholders versus the regulators .

So we have a good incentive structure. The real concerns with the model of mutual ownership is that those incentives will be weakened and so I want to just end here with the idea that the customers are the owners, as the shareholders who used to benefit from the profit have been eliminated, but the problem is whether the customers - owners - will really have the right relationship with the company in terms of incentivising the company, or whether we will find the mutual beginning to serve its own interests in terms of the incumbent management. Although the regulator has got a primary duty of customer protection, the customers who own the company will risk in a sense become a danger of regulatory capture within this system. I think the regulators have certainly signalled that they are unconvinced at the present time that this model which is being now operated in Welsh Water is actually appropriate for extension to the rest of the UK. I have just given a quick overview of the industry life cycle: at nationalisation we have a certain level of efficiency but over the life of nationalisation we gradually get an accumulating inefficiency to the point at which we feel that nationalised industries are a very inefficient industry. We privatise them, this gives a shock to the system, we get improved efficiency down to a frontier of efficiency. The only way of outperforming at that point, the companies argue, is to move to a cheaper form of finance - debt only finance as opposed to some mix of debt and equity - but of

course there is no free lunch and this is done by transferring risks to the customers, which effectively were being ensured through the equity premium in a sense and the issue is that if the principle and agent relationship is weakened, this incentive of the equity shareholders putting pressure on the shareholders putting pressure on the companies then we may get a drift back to inefficiency in the same way that we saw with the nationalised industry.