

RPI-X, competition as a rivalrous discovery process, and customer engagement

Paper presented at the Conference

The British Utility Regulation Model: Beyond Competition and Incentive Regulation?

LSE 31 March 2014

Revised version 11 July 2014

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Introduction

1. At the 2003 conference I explained in some detail how RPI-X came into existence, or more precisely came into my Report.¹ Since then we have had publication of the impressive two volume *Official History of Privatisation*.² The first volume devotes three entire chapters to the decision to privatise BT, the regulation of it, and the flotation. I found absolutely fascinating the detail about the development of thinking by the Department of Industry, the Treasury and Ministers, not least on what to do about my Report. I can recommend this not only as authoritative but also as a rattling good read.
2. I want to draw on the *Official History* in the first part of my paper today, in looking yet again at how the RPI-X proposal was developed and why it was adopted. Then I want to look at subsequent developments in regulation, and make a suggestion for the future.
3. It was said of my 2003 conference paper
"Characteristically, Stephen Littlechild concludes his contribution with how he is exploring other means by which we may be able to do away with the need for price regulation by a regulatory agency of even the most natural monopoly-like element of utility services."³
4. Characteristically, I want to return to that today, by reflecting on the nature of competition as a rivalrous discovery process, and the role that customer engagement has played in that process and the even greater role it could play in future. I identify a number of respects in which the concept of competition as a rivalrous discovery process characterised the initial course that regulation took. I then show how this

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¹ Stephen Littlechild, "The birth of RPI-X and other observations", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, University of Bath, July 2003. The 2003 conference, on The UK Model of Utility Regulation, was held at Cass Business School, City University, 9 April 2003.

² David Parker, *The Official History of Privatisation, Vol I The Formative Years 1970-1987*, Routledge, Abingdon, 2009; *Vol II Popular Capitalism 1987-97*, Routledge, Abingdon, 2012.

³ Jon Stern, "What the Littlechild Report actually said", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, University of Bath, July 2003, p 23.

theme of a rivalrous discovery process has surfaced in the subsequent development of regulation, particularly with the recent use of different forms of customer engagement by four UK regulators. I conclude by suggesting the possibility of competition in the designing and setting of price controls themselves.

Background: the nature of competition

5. Let me begin by looking briefly at a paper that I published in 1981, a couple of years before the 1983 Report, because that sets the scene for my thinking when I embarked on the Report.⁴ As far as I know, it was the first systematic and published attempt to examine the economic case for widespread privatisation of the UK nationalised industries and how this might be done. Inconceivable though it seems today, in the 1960s and 1970s it was professional suicide for an economist to write about privatisation. It was only when privatisation became government policy and some companies actually began to be sold off in 1980 that it became acceptable to write about it.⁵
6. My 1981 paper begins by asserting that "There is widespread agreement that the nationalised industries should (a) attempt to discover the goods and services that consumers want and produce them in the most efficient way, subject to b) not exploiting the monopoly power that they frequently have and c) acting in the wider public interest (ie uncommercially) when called upon to do so."
7. Note that I did not simply write that the industries should produce the goods and services that consumers want in the most efficient way. There was an explicit acknowledgement that it was first necessary to discover what consumers want. The same concept underlies some of my earlier writings,⁶ and a joint paper on a similar theme a few months after my Report.⁷
8. This is of course the Austrian concept of competition as a rivalrous discovery process taking place over time, associated particularly with Schumpeter and Hayek, and more recently Kirzner.⁸ It stands in contrast to the more familiar neo-classical concept of

⁴ Stephen Littlechild, "Ten Steps to Denationalisation", *Journal of Economic Affairs*, Vol 2 No 1 October 1981.

⁵ The *Official History* (Vol I pp 77-82) documents the development of thinking about privatisation within government and particularly praises a Central Policy Review Staff (CPRS) Report of October 1982. Unfortunately that Report (which was subsequent to my own paper) was not published.

⁶ E.g. my monograph *The Fallacy of the Mixed Economy*, Hobart Paper 80, Institute of Economic Affairs, London, June 1978, and in the final chapter of my textbook *Elements of Telecommunications Economics*, Peter Peregrinus Ltd on behalf of the Institution of Electrical Engineers, 1979.

⁷ "Companies which succeed in discovering and meeting consumer needs make profits and grow; the less successful wither and die." Michael Beesley and Stephen Littlechild, "Privatization: Principles, Problems and Priorities", *Lloyds Bank Review*, No 149, July 1983, pp 1-20, at p 4.

⁸ Key contributions to the concept of competition as a rivalrous process over time include JA Schumpeter, *Capitalism, Socialism and Democracy*, Harper & Row, 3rd edn, 1950 especially chapter VII "The process of creative destruction"; FA Hayek, "The Use of Knowledge in Society" *American Economic Review*, XXXV (4), 1945, 519-30 and FA Hayek, "The meaning of competition", Stafford Little Lecture, Princeton University, 20 May 1946, both reprinted in Hayek, *Individualism and Economic Order*, Routledge and Kegan Paul, 1948; FA Hayek, "Competition as a Discovery Procedure" in FA Hayek, *New Studies in Philosophy, Politics, Economics and the History of Ideas*, University of Chicago Press, 1978; IM Kirzner, *Competition and Entrepreneurship*, Chicago University Press, 1973; IM Kirzner, "The Perils of Regulation: A Market Process Approach" in IM Kirzner, *Discovery and the Capitalist Process*, Chicago University Press, 1985; IM Kirzner, "Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach", *Journal of Economic Literature*, 35(1),

competition as a static state of equilibrium with price equal to the lowest cost of production, where demand and cost curves are taken as given.

9. At the 2003 conference I conjectured that my Report pushed regulatory economics in the direction of the Austrian approach to competition, particularly with respect to the greater emphasis on information and incentive mechanisms, discovery and innovation.⁹ This is, fortunately, an approach that has been endorsed by UK competition authorities. In 2003 the Competition Commission provided a definition of competition as a rivalrous process (though one would have liked a more explicit acknowledgement of the discovery aspect).¹⁰ Successive Commission chairmen explicitly endorsed this approach.¹¹ So has the Chairman of the new Competition and Markets Authority.¹²

The 1983 Report revisited

10. One other observation about my 1981 paper: it identified three aspects of the institutional framework where changes would improve the attainment of the stated aim. The three aspects were organizational structure (nowadays restructuring), market environment (removing obstacles to competition) and capital structure (the introduction of private ownership). Each industry was considered from these three aspects. It was suggested, inter alia, that three area electricity boards be majority privatised with notice of a reference to the Monopolies and Mergers Commission (MMC) after five years. The MMC could assess the effect of privatisation and if necessary suggest remedies for any observed problems. But regulation was not mentioned in my 1981 paper: the implicit assumption was that competition law and its institutions would provide any necessary protection against market power.
11. When it came to privatising British Telecommunications (BT), the Government had decided to create a new regulatory body Oftel, so of course the main focus of my Report was the nature of that regulation. But I also had the three aspects of my 1981 paper in mind in approaching the project. Restructuring of BT had been considered and ruled out. Private ownership had been considered and decided upon, provided that

1997, 60-85; IM Kirzner, *How Markets Work: Disequilibrium, Entrepreneurship and Discovery*, Institute of Economic Affairs, Hobart Paper No 133, June 1997, available at www.ica.org.uk.

⁹ Littlechild 2003 *op cit*, pp 40-1.

¹⁰ "... the Commission sees competition as a process of rivalry between firms or other suppliers ... seeking to win customers' business over time". CC3, *Market Investigation References: Competition Commission Guidelines*, June 2003, para 1.16. It reaffirmed this approach a decade later. "Competition is a process of rivalry as firms seek to win customers' business." CC3 Revised, *Guidelines for Market Investigations: Their role, procedures, assessment and remedies*, April 2013, para 10.

¹¹ Sir Derek Morris referred to "competition as quintessentially a process of rivalry through time" in "Dominant firm behaviour under UK competition law", paper presented to the Fordham Corporate Law Institute, Thirtieth Annual Conference on International Antitrust Law and Policy, New York City, 23-24 October 2003. Peter Freeman remarked that "The process of competition is the means by which good ideas succeed while bad ones fail, well-run firms thrive while bad ones reform or perish, and a constant pressure for innovation is maintained" in "Investigating markets and promoting competition: the Competition Commission's role in UK competition enforcement", Beesley Lecture Series, 18 October 2007.

¹² "... the Austrian School's view of markets and competition as a process of rivalrous discovery, with continual change and evolution, rather than embodying the concepts of optimality and equilibrium, is more helpful ..." Lord David Currie, "The case for the British model of regulation 30 years on", Currie lecture given at Cass Business School, 21 May 2014.

sufficient regulatory protection could be provided against monopoly power. There was still scope (in my view) for further increasing competitive pressures, so my Report mentioned several possibilities here.

12. Subject of course to the objectives set out in my Terms of Reference, my aim was to design the form of regulatory protection that gave maximum scope for competition to continue to function as a discovery process. From this perspective, an attraction of the RPI-X price cap was that it did not apply to all BT's products: it was focused on the subset of products where it was commonly agreed there was most market power and least prospect of impending competition. For other products the competitive market process was left unrestricted. The cap did not specify particular prices: BT would have flexibility, within an overall tariff basket, to adjust individual prices in response to competitive market pressures. This stood in contrast to US practice, which actually fixed (and generally still does fix) the specific prices that the regulated company is allowed to charge. The cap did not specify what products should be produced, other than assuming continuation of the existing basic products within the basket. It was for BT to discover and respond to market demand and innovate with new products as appropriate. Finally, the price cap did not specify or seek to calculate particular costs or rates of efficiency improvement. What could be achieved in the way of cost reduction was for BT to discover and implement, though an assumption that there was indeed scope for efficiency improvement did underlie my proposal for a positive level of X to be determined.
13. Why was RPI-X chosen as the preferred form of regulation? My own view as expressed at the time in my Report was that it scored better than the viable alternatives on all five of the identified criteria: Protection against monopoly, Efficiency and innovation, Burden of regulation, Promotion of competition, and Proceeds and prospects.
14. Reading the *Official History's* account of how my Report was received in Government, it is tempting to argue that the explanation was much simpler. It could be summed up in two main factors. First, RPI-X was not Rate of Return Regulation, which the Prime Minister's advisor Sir Alan Walters could not accept. Second, it was not his proposed Output Related Profits Levy (OPRL), which almost everyone else could not accept.
15. This is of course an oversimplification. It was broadly accepted that some variant of the Department of Industry's maximum rate of return scheme could indeed "prevent excessive profits". But it was also widely felt, not only by Walters and not least by BT and some ministers, that regulation of profits, via a variant of US rate of return regulation, was the wrong way to go and could or would be inconsistent with successful privatisation. As an alternative, Walters proposed his ORPL, which would reward BT for exceeding a target performance level by reducing its taxation. This incentive mechanism did have at least a few supporters. But it raised the question of who should set the target performance level and how. In addition, at that time BT's investment programme was so substantial that it was not paying tax, so that a new tax would need to be introduced in order to be able to reduce it. It became clear that

something different was needed than what was on the table when I was invited to opine.

Designing regulation as a rivalrous discovery process

16. Reading the *Official History* today, in light of the theme of the present paper, it is apparent that we were all engaged in a rivalrous discovery process. The challenge was to ascertain the preferences and requirements of the various key parties (notably the Government and BT, who were in effect the "customers" in this process), and to devise a form of regulation that would best meet these needs. The various alternative regulatory schemes (and their proponents) were competing with each other for acceptance.
17. I am struck by how one-sided at first was this discovery process. It took place entirely within Government: primarily the Department of Industry, the Treasury and the Central Policy Review Staff (CPRS) within the Cabinet Office, later other departments and the MMC and Office of Fair Trading (OFT), and the Department of Industry's merchant bank adviser Kleinworts. Ministers, too, were occasionally allowed to chip in. But the *Official History* does not indicate that BT was asked for its view. The first reference to BT in the context of regulation is its objection that it was not consulted on the terms of reference of my study. The first attempt to ascertain BT's views on the subject of its future regulation appears to have been my dinner meeting in the chairman's flat.
18. In order to make progress with a proposal, it is necessary to get buy-in from the parties involved. As explained last time, not only did I talk to BT people to understand where they were coming from, I found the Buzby Bond concept developed by its merchant bank advisers to be an interesting and potentially appealing concept. As I recall, adviser Michael Valentine commented to the effect "We are concerned about the onerous nature of US rate of return regulation and what the Department is proposing. In the context of the Buzby Bond, which was for BT to borrow in the private capital market, we proposed this concept of limiting BT's price increases to RPI-2% as a means of disciplining the company. Can't we do something with this?"¹³
19. So I started thinking: is there some way of using that concept as a basis for a form of "regulation with a light rein" as the Secretary of State had requested? I sounded out officials at the Department, and I see that the *Official History* reports them beginning to think about this themselves.¹⁴ I must say I had reservations about the idea: the last

¹³ He later explained that the concept was developed with – and primarily by – his colleague Andrew Smithers. Michael Valentine, *Free Range Ego*, Antony Rowe Limited, 2006, p 131.

¹⁴ "At a meeting with BT on 22 December 1982, Department officials suggested a compromise between the Department's two-tier rate of return regulation and Littlechild's proposals, namely 'an overall rate of return ... to be ended as soon as effective competition was established in the market – ie. probably by 1992 – and some formula on domestic tariffs such as the RPI-2% agreed for the Buzby Bond'. In other words, even before Littlechild's final report was submitted recommending the use of some form of price cap, the Department of Industry had already begun to consider the idea of a formula for domestic tariffs along the same lines." (*Official History*, Vol I p 277) My notes say that on 23 December I discussed with the Department the possible application of RPI-2% especially to rural phones. (Littlechild 2003 *op cit* fn 3 p 33) I doubt this was the first time I had raised the Buzby Bond formula with Department officials. It seems more likely that on 22 December

thing I wanted was to go down in history as a man who invented another price control. But as explained last time, I came to the view that a limited RPI-X price cap was better than the alternatives.

20. So my proposed form of regulation built on a suggestion that BT's own advisers had made. As Valentine (2006 *op cit*, p 131) points out, in a previous context this concept had been accepted by the Treasury and the Department of Industry. This must have encouraged the company and these Departments to accept at least the principle of that form of control.
21. The *Official History* explains that BT had considerable reservations about the level at which X might be set. Indeed, all the parties involved had various reservations about the RPI-X proposal, not least how X would be calculated. Nonetheless, the concept seems to have been accepted relatively quickly. Attention soon moved to the question of what level of X to set. This in turn led to discussion of various associated parameters: the duration of the cap, the scope of the cap, the extent of tariff rebalancing to be allowed, possible additional steps to increase competition, the capital structure and level of gearing of the company, and so on.
22. In assessing RPI-X in my Report, I judged that it had a lower burden of regulation than other forms of regulation. It is perhaps difficult to reconcile this with the actual process of setting X that the *Official History* now reveals. Negotiation was painful and protracted: it went on for over a year. Valentine (2006 *op cit* ch 10) corroborates this from BT's perspective. Yet there was apparently never any suggestion of abandoning RPI-X as a concept. And all the other issues just mentioned would have to have been negotiated and ironed out anyway. Experience from subsequent privatisations suggests that resolving all the issues is never easy.
23. The conclusions that I draw from all this are as follows. The process of setting the first price control for BT can be seen as a rivalrous discovery process. It was ultimately helpful to that discovery process to have representatives of all the main parties (or "customers") at the negotiating table. The process covered not only price (X) but a range of other considerations and dimensions of the price control. The negotiating process was a means by which the parties gradually discovered their own preferences as well as those of others. The parties made tradeoffs between the various different considerations and dimensions in order to reach agreement. And the outcome of the agreement, once reached, was better for all concerned than if one party (the Government) had simply asked for views then tried to dictate what would happen. As I shall shortly indicate, all these factors have characterised successful instances of customer engagement.

Developments in regulation since 1983

24. Let me now look briefly at the experience of regulation over the last thirty years since the Report. In the years immediately following 1983, an RPI-X type of regulation was adopted, in one form or another, for all the UK privatised and regulated industries.

they were responding to my previous interest (and Warburg's) than that the Department had initiated this option itself.

Not only in this country, but in many overseas countries too, including Australia and New Zealand, Latin America and the EU. Even some US regulation was modified in this direction, notably in telecommunications.

25. What happened over subsequent years? In a relatively few respects, competition has been facilitated to the extent that RPI-X price controls have been withdrawn, notably at the retail level.¹⁵ But for the most part, the question has been what kind of price control to retain. The 2003 conference yielded the following delightful summary.

"So although regulators regularly assess the merits of RPI-X against other forms of control at each price control review, equally regularly the merits of RPI-X are restated. But in reality, Littlechild's 1983 model of a simple control of a relatively narrow basket of prices has changed out of all recognition".¹⁶

26. I suspect that many might reach the same conclusion today, but even more so. There have been many more changes in regulation, and more far-reaching changes, over the last decade. (Except in the baleful case of Australia, where the regulator is not allowed to make changes in the form of regulation.) I would nonetheless conjecture that, despite all these changes, most of this regulation retains a focus on the forward-looking incentive arrangements that lay behind RPI-X.
27. But I come to this conference neither to bury RPI-X nor to praise it. The point that I wish to make about developments in regulation since 1983 is that they, too, can be seen as reflections of a rivalrous discovery process. Regulators have been continually trying to discover new forms of regulation that better achieve their statutory objectives, while these objectives themselves have also been evolving. Often the regulatory changes are a matter of detail, like the scope of a tariff basket. Sometimes they are fairly fundamental, like "menu regulation" (offering companies a choice of packages of investment and rate of return) and RIIO.¹⁷ Regulators have repeatedly proposed new ideas, discarding some during the review process and implementing others. Over time, they have tended to keep the successful concepts from one review to the next, and abandoned or modified the unsuccessful ones.
28. In this process, regulators have been discovering not only their own preferences but also something about the preferences of the firms they regulate. Firms themselves have been learning in the light of their own experiences of these various controls. And regulators have been learning from each other.
29. There have also been important elements of rivalry. At the beginning of each review the parties are frequently arguing for different regulatory models, whereas later they

¹⁵ It took 22 years before Ofcom finally removed BT's original RPI-X retail price control in 2006. For an exposition of how retail competition was enabled in the electricity sector from day one, see Littlechild, "The creation of a market for retail electricity supply", in Eric Brousseau and Jean-Michel Glachant (eds), *The Manufacturing of Markets: legal, political and economic dynamics*, Cambridge University Press, May 2014.

¹⁶ Chris Bolt, "The future of RPI-X and the implications for utility investment in the UK", in Ian Bartle (ed), *The UK Model of Utility Regulation*, CRI Proceedings 31, 2003, pp 67-8.

¹⁷ "The RIIO model (Revenue = Incentives+Innovation+Outputs) builds on the success of the previous RPI-X regime, but better meets the investment and innovation challenge by placing much more emphasis on incentives to drive the innovation needed to deliver a sustainable energy network at value for money to existing and future consumers." Ofgem website.

focus more on the parameters to be used to implement the chosen model. Over time, some forms of regulation supercede less successful ones: the ones best fitted to the circumstances survive. In this sense there is product improvement. There may even be rivalry between different regulatory bodies, some of whom would like to be seen as intellectual leaders, and none of whom want to be seen to be unsuccessful in the regulatory rat race.

30. However, until now, this rivalrous discovery process among alternative regulatory models has been almost entirely a single-buyer model of competition. That is, after a consultation process characterised by the rivalrous discovery process just described, each regulator decides the form of regulation it wants on behalf of the entire industry that it regulates. The regulator may specify small variations tailoring the form of regulation to what it sees as the needs, or just deserts, of each regulated company. But the basic form of regulation is generally uniform, and determined by the regulator rather than by the firms or customers in the industry. The views of customers or their representatives exercise only limited influence, to the extent that the regulator listens and responds to their submissions in the course of consultations. There is no market or regulatory process tending to discover and bring about regulatory models that better reflect the preferences of customers. Put rather provocatively, the regulator is a monopsonist exercising its market power.

Negotiated settlements and customer engagement

31. There are, nonetheless, some signs of competition being allowed to break through. The remark that I mentioned at the beginning of this paper referred to the following words at the end of my paper at the 2003 conference.

But do we need to stay with this method of setting X for ever, or even with this kind of price control? There is great pressure for uniformity across companies in setting price controls, and this has disadvantages as well as advantages. For some time I have been suggesting that it might be possible for customer groups to negotiate directly with regulated utilities as to the levels of X. More generally, they could negotiate for whatever kind of control they prefer, whether on price or earnings or revenue, and with what basis of sharing and for whatever duration. Some of this is already happening in Florida, but that is another story. (Littlechild 2003 *op cit*, p 49)

32. Over the ten years since the 2003 conference I have been telling this other story, documenting international experience with such regulatory approaches.¹⁸ Florida was where I started, where negotiated settlements were particularly extensive and successful.¹⁹ I looked, too, at the Federal Energy Regulation Commission in the US, where settlements first started, and at the National Energy Board in Canada, where

¹⁸ I first talked about this new approach at a conference held a couple of months after the 2003 conference. "Consumer Participation in Regulation: stipulated settlements, the consumer advocate and utility regulation in Florida", Market Design 2003 Conference, Stockholm, 17 June 2003, *Proceedings* at www.elforsk-marketdesign.net. An early review of experience is "Negotiated settlements: the development of legal and economic thinking", (with Joseph Doucet), *Utilities Policy* 14, December 2006, 266-277.

¹⁹ Subsequent publications on Florida included "Stipulated settlements, the consumer advocate and utility regulation in Florida", *Journal of Regulatory Economics* 35(1), February 2009, 96-109, and "The bird in hand: stipulated settlements in Florida electricity regulation", *Utilities Policy*, 17 (3-4), September – December 2009, 276-287.

they had recently flourished, and at an isolated experience involving the ACCC in Australia.²⁰ There was also related and successful experience of users determining transmission investment in Argentina.²¹ The CAA pioneered the concept of constructive engagement here in the UK, as discussed below.

33. These experiences had in common a somewhat different philosophy of regulation from that which underlies conventional practice. It is not incompatible with the statutory duties of regulators, but it invites a different way of implementing those duties. The difference, quite simply, is that, instead of taking all the key decisions about prices, capacities, quality of service etc, the regulator seeks to facilitate a process whereby the market participants themselves – the regulated firms and their customers or customer representatives - are encouraged to try to agree these parameters between themselves, and recommend them to the regulator for consideration and approval.
34. In the cases where the parties were able to reach agreement, the process of setting the price control involved concentrated effort, but typically took less time and was less frustrating – indeed, it was sometimes positively fulfilling. Attention focused more on the issues most relevant to the parties, resulted in outcomes that were acceptable to and preferred by the parties, and led to better understanding of the concerns of the other parties and of the options available to the parties themselves. In many cases the processes were characterised by the development of aspects of the regulatory control that were either novel and/or could not have been imposed by the regulatory body itself.
35. It seemed to me worth encouraging further adoption of such an approach in the UK. Four UK regulators have effectively responded: the CAA, Ofgem, Ofwat and WICS. There is not space here to review their policies and experiences in any detail, but let me make just a few remarks.

The CAA: from constructive engagement to what?

36. The CAA pioneered customer engagement in the UK with its policy of constructive engagement, first proposed in 2004 as part of the process (called Q5) of setting the 2008-14 price controls at the three London airports. The airports and their airlines were invited to seek to agree on certain parameters, primarily a traffic forecast, a future investment plan and standards of service, leaving the rest of the price control setting to the CAA. There was initial scepticism, an initial failure to agree at Stansted, and criticism from several parties and the Competition Commission. Nevertheless, the parties thought that it was an improvement.²² The process worked sufficiently well for

²⁰ "Negotiated settlements and the National Energy Board in Canada", (with Joseph Doucet) *Energy Policy*, 37, November 2009, 4633-4644. "The process of negotiating settlements at FERC", *Energy Policy*, 50, November 2012: 174-191. "The Hunter Valley Access Undertaking: elements of a negotiated settlement" (with Stephen Bordignon), *Transport Policy* 24, 2012, 179-187.

²¹ "Transmission Expansion in Argentina 1-6", *Energy Economics*, 30(4), July 2008, 1367-1535.

²² "While stakeholders raised some concerns with the form of its implementation in Q5, on balance there was support for the introduction of CE, which was regarded as a welcome regulatory innovation and an improvement over previous arrangements." Stephen Jones of Davison Yarrow Ltd, *Review of Q5 Airport Price Control Processes: Lessons for Q6, A Report for the CAA*, Final Report, 6 October 2010, p 1.

the CC itself to use it in setting Stansted's price control, and for the CAA to repeat the exercise in setting the air traffic price control. In the light of experience the CAA modified the process by more firmly defining, monitoring and enforcing the process of engagement and attendant responsibilities. (The original policy had left the nature and extent of engagement rather to the discretion and inclination of the parties.) The process went smoothly.

37. In approaching the 2015-19 airport price controls (Q6), the CAA invited the parties to seek to agree on a more extensive and far-reaching set of parameters, including in principle the price control itself. This worked well at Heathrow, particularly with respect to opex and the capex plan, though the CAA determined the cost of capital and set the price control. The process produced useful information at Gatwick. There was no agreement at Stansted.
38. The process was affected by the fact that the Civil Aviation Act 2012 was in course of enactment. This provided that an airport could only be regulated if it had market power. At Stansted and to some extent at Gatwick, some airlines were concerned that reaching agreement with the airport might indicate that it had no market power, hence would not be regulated, hence they would lose the protection of a price control. Both these airports argued that, in an increasingly competitive market, bilateral contracts were more appropriate than collective agreements, and some airlines agreed.
39. In the event, the CAA initially held that all three airports had market power. Later it accepted that, by virtue of voluntary agreements signed between the airport and airlines, Stansted did not have market power and need not be regulated. The CAA also accepted Gatwick's proposed undertaking in lieu of a price control determined by the CAA itself, although it insisted that this be incorporated into a formal licence condition. So the outcome has been some diversity of form of regulation, reflecting the different market conditions at each airport, and determined in part by the market participants themselves as well as by the CAA.
40. From the perspective of this paper, with its focus on the interrelationship between regulation and the nature of competition, another interesting feature of the recent airport price control process was that, for the first time, the CAA had to take account of a new duty to protect the interests of consumers, and to do so where appropriate by promoting competition. (Unlike other sector regulators, the CAA had not previously had such a duty.) The CAA's published documents discussed at length protecting the interests of customers, but almost completely ignored the reference to promoting competition. They provided no discussion of what competition meant, how it would best be promoted, and when it was or was not appropriate to promote competition in order to protect the interests of consumers.
41. In assessing whether airports had market power, the CAA examined a wide range of product and service characteristics affecting demand. In proposing regulation for

Gatwick, it also said that “The commitments [offered by Gatwick] should promote competition by facilitating innovation and diversity of offer.”²³

42. In contrast, in setting price controls (or accepting commitments) the CAA focused almost entirely on setting price equal to cost (what it called a “fair price” at Gatwick). It took the view that effective competition was not possible because of restraints on entry, so by implication the duty to promote competition where appropriate was not relevant. Alternatively, one might say that the CAA then saw competition in the static neo-classical sense, hence the duty to protect the interests of consumers and to promote competition where appropriate meant a duty to choose the best way to ensure that price would be equal to cost, which the CAA concluded would be achieved by setting a price control with price equal to cost, as it always had done.²⁴

Ofgem and Ofwat: fast-tracking in energy network and water regulation

43. Ofgem and Ofwat, in slightly different ways, decided to incorporate an element of customer engagement in their most recent and still on-going price control reviews. This meant, for example, less regulatory prescription so that companies could better discover and respond to the preferences of their customers.²⁵ Importantly, those companies that engaged fully with their customer representatives and got support for a well justified business plan would be eligible for fast-tracking in the price control process. This would involve the regulator spending less time and effort scrutinising the company's business plan. But Ofgem and Ofwat made it clear that they remained in control, that agreement with customers was a necessary but not sufficient condition for fast-tracking, and that the regulator would set the final price control.
44. In the event, both regulators reported that the customer engagement parts of the price control process went very well.²⁶ Companies were highly commended for their commitment to the process and responsiveness to customer preferences. From my

²³ CAA, *Economic Regulation at Gatwick from April 2014: final proposals*, CAP 1102, October 2013, para 6.

²⁴ Cf. “In considering airport charges in relation to efficient costs the CAA is trying to mimic what would happen in a fully functioning competitive market where there were no constraints on new capacity.” *Ibid*, para 2.12. See my “Competition, risk and airport regulation”, Martin Kunz Memorial Lecture, European Aviation Conference, St Gallen, Switzerland, 15 November 2013, revised version 31 May 2014, forthcoming in *Journal of Transport Economics*.

²⁵ “Like with a Lego kit, a prescriptive set of instructions for companies to build their business plans in line with may have been the easier option and would have resulted in a generic set of plans that look the same. We didn’t do this and we didn’t do this very deliberately because it has meant that companies have the opportunity, for the first time ever, to build a business plan that is right for their customers – we think that the benefits are worth it.” Sonia Brown, Chief Regulatory Officer, Ofwat, Keynote Opening Address, Water 2013, 13 November 2013.

²⁶ “All [electricity distribution network operators] have engaged with stakeholders in developing their plans and reflect consideration of stakeholders’ views.” Ofgem, Assessment of RIIO-ED1 business plans and fast-tracking, Letter from Hannah Nixon, 22 November 2013, p 3. “The challenge Ofwat put to all water and wastewater companies was to understand their customers’ needs and wants and reflect these in their business plans. Companies have risen to this challenge with a real change of approach. They have worked hard to listen to their customers and to use what they have heard to shape and inform their plans.” Cathryn Ross, CEO Ofwat, Press Notice PN02/14, 10 March 2014.

own limited discussions with companies, customers and regulators, I can wholeheartedly endorse this. Even though I was familiar with successful overseas experience, I was pleasantly surprised and impressed by the enthusiasm and innovation that UK companies and customer representatives brought to these processes.

45. It was therefore disappointing that only one out of 6 electricity distribution companies (responsible for 4 out of 14 networks), one out of 10 water and sewerage companies, and one out of 8 water-only companies were given fast-track status. The remaining companies did not clear the hurdles in other respects - typically (but not only) because the regulator deemed their efficiency projections not sufficiently challenging.
46. This means that the regulatory bodies will again need to determine the price controls of the great majority of the companies in these two industries. I understand that there was some scope for the companies to revise their plans in a fairly straightforward way, and thereby achieve a lesser degree of fast-tracking. And they engaged again with their customer representatives. But will experience of the process during the present reviews discourage companies, customers and regulators from committing to customer engagement in future? Put rather starkly, is the concept of fast-tracking inconsistent with successful customer engagement? I return to this question in the light of experience in Scotland

WICS: water regulation in Scotland and the Customer Forum

47. The fourth regulatory process involving customer engagement has been at the Water Industry Commission for Scotland (WICS). As in other sectors, the parties were interested in an alternative approach because they were conscious of the cost and confrontational nature of the traditional price control process, and the limited representation therein of the views of customers. CEO Alan Sutherland has indicated that the interest of WICS was stimulated by accounts of negotiation processes elsewhere, including at a conference held on this topic in 2009.²⁷ A Scottish Water attendee at the conference also commented: "It seemed to me that this was the next step for us in Scotland."
48. In September 2011 the main parties involved – WICS, Scottish Water and Consumer Focus Scotland (CFS, part of the National Consumer Council) – formally signed a Cooperation Agreement that created a Customer Forum. The chairman was to be jointly nominated by the parties, CFS was to nominate “5 persons with a strong customer-focused reputation” and WICS would seek nominations for two members from the largest water retailers and one from the Scottish Council of Development and Industry. The Customer Forum’s remit was to work with Scottish Water on a

²⁷ This was the SGBI conference held in London on 5 March 2009 on the theme *After RPI-X: What Next?* Speakers on customer engagement included Nick Fincham (CAA) on "Negotiation in UK airports price regulation", Kenneth Bateman (NEB) on "Negotiated settlements in Canada", Scott Thomson (Terasen Gas, Canada) on "Negotiated settlements from the perspective of a local distribution company", Jack Shreve (former Public Counsel [Consumer Advocate] in Florida) on "Regulation without regulators: delivering equity for all", and Tony Ballance (Severn Trent) on "Could constructive engagement work for the water sector?" These speakers and several senior attendees also participated in an informative discussion, which I chaired, at the conference dinner.

programme of research to ascertain the views of customers, to represent those views in the course of the price control process, and to seek to secure the most appropriate outcome for customers.

49. A year later, when the Scottish Government initiated the Strategic Review of Charges, WICS asked the Customer Forum to seek to agree a Business Plan for delivery by Scottish Water in 2015-2020 (subsequently extended to 2021). "Such a Business Plan should be fully consistent with Ministerial Objectives and with the views and ranges that the Commission will set out in notes and papers over the period to early 2014, unless there are demonstrable reasons for going outside those ranges to the benefit of customers."²⁸
50. As in England and Wales, the commitment and enthusiasm of all the parties was quite remarkable. The Customer Forum gelled and operated very effectively. Scottish Water responded. The parties did reach agreement on a Business Plan, and on 20 March 2014 the regulator WICS formally proposed a price control consistent with it.²⁹
51. Further detail of this story has been given elsewhere.³⁰ And final implementation is contingent upon the formal consultation process just announced. Nevertheless, certain observations may be helpful here, with respect to regulatory inputs into the process and what was achieved.

Regulatory guidance

52. In order to facilitate and guide the customer engagement and negotiation process, and to assist in discharging its own statutory responsibilities with respect to setting a price control, WICS issued a series of Commission Notes indicating what it would be minded to find feasible and acceptable. These did not determine the final outcome but they did indicate the space within which negotiation could fruitfully take place. Since they were aimed at the Customer Forum rather than regulatory specialists within the company, the Notes were couched in more approachable and less technical language than conventional price control statements.
53. WICS provided preliminary views in autumn 2012 and further comments on Scottish Water's Business Plan in winter 2013/4. For example,
"Scottish Water completed its business plan and the Commission commented on this in detail. The Commission determined the ranges it expected the Customer Forum to keep within when reaching agreement on service improvements with Scottish Water. These decisions included: the appropriate levels of operating costs; inflation rates for costs; the financial parameters used in the tramlines; the size of the capital programme; the level of capital maintenance; assumptions on growth; and maintaining a benchmark with the OPA." (WICS *Draft Determination* p 11)

²⁸ Letter from Alan Sutherland, Chief Executive of WICS, to Peter Peacock, Chair of Customer Forum 15 October 2012, reproduced in *Draft Determination*, Appendix 3.

²⁹ *The Strategic Review of Charges 2015-21, Draft Determination*, WICS, 20 March 2014.

³⁰ Stephen Littlechild, "The Customer Forum: customer engagement in the Scottish water sector", 11 July 2014. Shortly available at www.rpieurope.org and www.eprg.group.cam.ac.uk

54. It is often asked whether there is asymmetry of knowledge and bargaining power under customer engagement arrangements. These regulatory Notes went a long way to alleviating that. For example, the Forum was able to rely on WICS advice as to acceptable levels of future efficiency improvement.
55. The "tramlines" referred to here were established by WICS with respect to Scottish Water's financial performance during the forthcoming price control period.³¹ If Scottish Water's performance runs – or looks likely to run - outside these tramlines, the parties will discuss how it should be brought back on course. For example, if the company appears likely to make excessive profits, there will be a discussion as to how those profits might be used – to reduce borrowing, to increase investment or quality of supply, to reduce prices, etc. Similarly, if performance is below a specified level, there will be discussion of options such as an increase in government funding, a reduction in the capital investment programme, an increase in customer charges, etc.
56. Formally, it is for Scottish Government to take many of these decisions. However, it was hoped that the tramlines, with their potential sharing arrangement, would provide assurance to all parties including Scottish Government. They could also reduce any concerns about possible downside risks of agreeing a Business Plan that could form the basis for a price control.

Outcomes of the Customer Forum process

57. The Customer Forum process, with the active cooperation of Scottish Water, has led to a more thorough investigation and understanding of customer preferences, certainly more than would otherwise have taken place as part of a conventional price control review.
58. The process has changed Scottish Water's approach in a number of significant respects. For example, the company has been forced to think through more thoroughly what investments and improvements it is proposing and why. This in turn has influenced the kinds of projects it has focused on – with greater emphasis on avoiding sewer flooding, for example. Scottish Water, like the regulator WICS, has become aware of the need to explain its thinking in a simpler, less technical and clearer way so that customers can better understand the significance for them. This applies particularly to its Business Plan. The company has become more sensitive to the needs of customers in the context of present difficult economic circumstances. As a result it has become more open to a price control settlement involving a lower rate of price increase than it might otherwise have considered appropriate.
59. Several participants have suggested that the negotiated outcome was better than could have been achieved via a conventional price control process: more open discussion could take place without the regulator, and the outcome was not limited to what the regulator could prove was reasonable in the face of company resistance. Importantly,

³¹ They were described as "An innovative approach that allows all stakeholders to have confidence that Scottish Water's financial performance is consistent with its price determination and that the industry is in a financially sustainable position for the longer term." *Draft Determination* fn 4, p 10. The financial tramlines are expressed in terms of three cash-based financial ratios: cash interest cover, funds flow and gearing.

too, Scottish Water believed that earlier and mutual agreement would allow the company to plan and operate more efficiently than would otherwise have been the case. In the view of the participants, such factors have enabled a better deal for customers in terms of both price and quality of service.

60. The negotiations led to – or at least facilitated - some innovative variants on the traditional price control. The Customer Forum argued that a price control related to CPI was more relevant to customers than one related to RPI. It also argued that customers needed some reassurance on actual prices for the first three years rather than a commitment relative to an inflation index. The parties agreed that it would make more sense to fold into the agreement the final year of the present price control rather than have a price increase followed by a decrease. This followed policy and experience south of the border.³²
61. The agreement negotiated between the Customer Forum and Scottish Water reflected these considerations.

"Taking into account Scottish Water's decision to limit the increase in household prices in 2014-15 to 1.6%, the Customer Forum and Scottish Water agreed that Scottish Water's revised business plan would assume nominal price increases for household customers of 1.6% per year for 2015-18; an overall cap on household charges of CPI-1.75% for the regulatory period 2015-21; and increases in wholesale charges of CPI-0.3% per year for 2015-21."³³

The WICS *Draft Determination* in effect accepted and implemented this agreement.

62. I am rather interested in this combination of inflation-related and fixed-price caps. When I proposed, defended and applied RPI-X controls in the 1980s and 1990s, inflation-indexation seemed to me to offer a necessary reassurance to both customers and investors. I still think this is true in substance but it doesn't always seem like that, especially to customers. When I was regulating the electricity sector I became very aware of the uncertainties involved in the determination of index-related prices – what future inflation would be, what levels of underutilisation of entitlement the different companies would build up, how far each company would choose to take this in any year, how it would divide any aggregate allowed increase across different products, and so on. Despite the simple RPI-X controls it was very difficult to predict what prices companies would set. UK energy retailers continue to have difficulties with uncertain network charges, for analogous reasons.
63. I note that negotiated settlements in the US and Canada, which do involve customers, are typically in money terms, holding prices constant for a specified period, albeit typically shorter than a five or six year UK price control. Bringing the Customer Forum into the price control negotiation process thus seems to have had a very useful outcome for customers in terms of the form as well as the level of the control. One

³² On 31 October 2013 the Ofwat chairman wrote to water companies noting the social and political concerns about water prices, urging that business plans embody price reductions over 2015-19, and pointing out that it was for companies to choose whether to implement price increase entitlements in January 2014 for the final year of the present price control. Two water companies proposed to bring forward reductions in bills to smooth changes in bills over six years rather than five, and others indicated that they were not taking up their allowed increases in 2014/15. "Ofwat is aware that other companies are considering whether to take their full allowed increase in prices in 2014/15." Water companies submit business plans to Ofwat, PN 11/13, 2 December 2013.

³³ *Draft Determination* p 17.

would hope that the involvement of retailers in other water and energy network price control processes would have a similar effect.

64. I am also struck by the form of the agreement between Scottish Water and the Customer Forum. It is not expressed as a typical price control document. Rather, it reads like a typical commercial contract. It does not spend time explaining and defending why particular options have been chosen. Instead, it focuses on saying what has been agreed, and precisely what each party is to do and when. It is intended to be operational from day one, to deliver what the parties have agreed, and to be capable of monitoring and enforcement. It also has a strong emphasis on agreed areas of future action, characterised by commitments and statements of intent to work together. It thus provides for developing over time the relationship that has been established with the initial engagement process.

Comparisons between the approaches of Ofgem and Ofwat, and WICS

65. There is surely much to learn from the ongoing experience of all these reviews. Pending that, I offer some initial reflections on whether experience with this particular Scottish price control review could have implications for price control reviews in sectors with many companies, such as the water and energy sectors in England and Wales. In particular, is it possible to design and implement a process where customer engagement is successful for all or most companies rather than for only one or two?
66. Admittedly the Scottish water sector has certain distinctive features. Scottish Water is the only wholesale water company in Scotland (though there is competition at the retail level for business users), it is government-owned, and Scotland is a relatively tight-knit community with a well-developed sense of community and shared values. These factors may well have been conducive to the success of the project.
67. However, I am minded to think they were not an essential prerequisite. The parallel experience with customer engagement in the England and Wales electricity and water sectors suggests that the enthusiasm of companies and customers to engage and negotiate successfully on business plans transcends market structure, ownership and cultural homogeneity.
68. There were numerous differences between the approaches of the three regulatory bodies, but consider the following five. First, in England and Wales the regulators invited companies to engage with customers, and indicated that they would take customer views of that engagement into account in assessing the case for fast-tracking a company. In Scotland the regulator went further: it asked the company and customers to try to agree a business plan. Formally, the Scottish regulator reserved the right not to accept or to modify any such agreed business plan, but increasingly the expectation at working level was that an agreed business plan would form the basis of the price control, and parties participated with that expectation.
69. Second, in England and Wales the regulators left the choice of customer representatives and mode of operation largely to the companies. In Scotland the regulator was an active participant in the choice of those representatives and in specifying their terms of reference and working timetable.

70. Third, during the process in Scotland the regulator issued nearly two dozen guidance Notes, on cost of capital and efficiency improvements and on many other topics. These gave the parties a clear idea of the space within which they could negotiate fruitfully, with realistic prospect of acceptance of the agreement by the regulator. There was no comparable advance guidance in England and Wales. Indications of what the regulators there regarded as acceptable, particularly on cost of capital and efficiency improvement, did not emerge until near the end of the process or even after business plans had been submitted.
71. Fourth, the regulator in Scotland, in one of those Notes, initiated the concept of financial tramlines, which did not obtain in England and Wales. These facilitated successful negotiation in the sense that either party would be less concerned about conceding too much if any adverse consequences could be addressed later.
72. Fifth, throughout the process, the Scottish regulator played an active role in facilitating successful negotiation between the parties. Indeed, some of the guidance Notes addressed issues that had first arisen in the course of those negotiations.
73. The obvious question is: could and should the regulatory process in a sector with many companies simply mirror the regulatory process adopted in Scotland? In most respects my feeling is that there would be advantage in giving serious consideration to this, while recognising that it may not be as feasible to give individual regulatory attention to, say, a dozen companies as it is to a single one. However, one feature of a multi-company sector needs further thought.

Assessing efficient operating costs

74. UK experience as a whole suggests that customer representatives do not at present have the experience, time and resources to make informed judgements on technical issues such as cost of capital and scope for future efficiency improvements. Nor do the regulatory bodies presently feel comfortable in delegating such judgements to customer representatives. In considering a practicable scheme, therefore, one must for the moment assume that the regulatory body will decide what is acceptable in terms of cost of capital and efficiency improvements for each company.
75. How should the regulator do that, should it communicate those views to the participants, and if so how and when?
76. The Scottish water regulator took the view that Scottish Water was now among the more efficient companies, and the main requirement was essentially to maintain that position. The English regulators, on the other hand, are faced with a much broader range of operating efficiencies. They have traditionally seen comparative benchmarking – and requiring the laggard companies to match the performance of the leaders - as a critical element of the price control process. But they have also gone further, and sought to predict what the leaders might achieve in future.
77. This time, the regulators have used the lure of fast-tracking to try to persuade the leaders to reveal what they could achieve in future. In seeking fast-tracking, all companies have "bid" their business plans and it appears that the regulator has accepted only the lowest bid (in terms of operating costs) in each category. In

fairness, competitive tendering works like that, and it might be argued that such a bidding process for fast-tracking enables the regulator to obtain the advantages of competition *for* the market.³⁴ Other companies can then be asked to match the performance offered by the winning bidder.

78. Whether this approach would work a second time is unclear. If a company does not submit the winning bid, its bid has no effect on the outcome. Any business plan it has agreed with its customers will be set aside because its assumed costs are not low enough. If it does submit the winning bid, its agreed business plan will presumably be the basis for the price control, but its efficiency target will be tougher, and its revenues lower, than they otherwise would have been. It may well seem better to wait for another company to make the running.

A competitive process for setting price controls?

79. The single-buyer characteristic of the usual price control process has been particularly marked in the present reviews. That is, the regulator has identified the most acceptable business plan and has effectively required the efficiency assumptions in all other business plans to be brought in line with it. Is there scope to achieve more potential benefits by extending the single-buyer concept to a multi-buyer concept, even more closely aligned to a competitive market process? That is, after some initial indication of what is acceptable to the regulator, can customers and companies play a more significant role in the process, by comparing the various different agreements that different companies and customers have negotiated, and reaching their own agreements in the light of these?
80. Could this work and what would kickstart the process? I am reminded of a remark made to me as we were opening the retail electricity market during the late 1990s. The chief executive of one of the regional electricity companies told me that he would rather like to sell his retail business, but he didn't know what a reasonable market price would be. At the time, there was no "market" in retail supply businesses. There was no "going market price". He didn't want to sell if it would shortly be revealed that he had accepted an unreasonably low price.
81. But after one or two transactions took place, "a going market price" soon evolved. (As I recall, retail businesses were valued at somewhere around £250 per residential customer.) It then became easier for companies to decide whether, at that sort of price, they were buyers or sellers of retail businesses. Numerous further transactions took place, at various prices reflecting a variety of different factors such as the size and profitability of the business, the nature of the customer base, and so on.
82. In the present context, the question is: How to establish a "going market price" for a price control? This requires an idea of what kind of business plan would be acceptable to the regulator, as a prerequisite for fruitful negotiation between companies and their customers.
83. Let us focus on one key regulatory parameter, the rate of efficiency improvement, expressed say in terms of the target efficiency to be attained by the end of the

³⁴ Harold Demsetz, "Why regulate utilities?" *Journal of Law and Economics*, 11, April 1968, 55-66.

forthcoming period. Suppose that the regulator required each company to propose such a target efficiency, embodied in a draft business plan and after initial discussion with its customers, and perhaps after an initial process of benchmarking. After assessing and comparing these plans, the regulator would indicate a level of efficiency that it regarded as acceptable. This might be the “best” (toughest) of the proposals put to it, or several companies might propose levels regarded as acceptable, or the regulator might consider that none of the proposals were yet adequate.

84. This process would establish a benchmark of acceptability (which might vary according to the size or type of company) - either by business plans proposed by one or more companies after discussion with their customer groups and endorsed by the regulator, or as indicated by the regulator. Suppose that the regulator now invited companies and customer groups to see whether they could reach agreement on final business plans in the light of the draft plans already on the table and published regulatory guidance on efficiency and any other areas (e.g. on cost of capital).
85. The first such agreement would establish an “initial market price”. As companies and customer groups reached agreement, a concept of "the going market price" for a price control would evolve. This would be interpreted in broad terms, to reflect parameters such as cost of capital, efficiency improvement, quality of service and supply. It could vary with the particular requirements of particular customers, as in other markets.
86. This is not to say that every company and customer group would reach agreement quickly, or even at all. But it would become increasingly feasible for a company or customer group to justify (to its investors, to the media and to the regulator) accepting a deal in line with the going market price – that is, a deal that embodied comparable assumptions on cost of capital, efficiency improvement, quality of service and supply improvement – to those accepted by the regulator and by previous companies and their customer groups. And it would become increasingly difficult for a company or customer group to justify asking for something that was some way away from the going market price.
87. Not only "price" would be relevant, even expanded to include the various factors just mentioned. Experience shows that negotiation with customers puts all aspects of the price control in play: fixed prices, prices linked to a variety of indexes, profit sharing, duration of control, and so on. The nature of the price control itself is up for discussion.
88. Just as in other markets, one would expect that an innovative development by one company or customer group, that proved attractive, would encourage others to match and beat it. I noted above that negotiations in the Scottish water sector picked up on the proposals of some companies south of the border to combine the last year of the present price control with the forthcoming price control. Another example in the present review is that some water companies and their Customer Challenge Groups (CCGs) agreed sharing arrangements for financial outperformance, depending on the outturn level of RPI. Once it became apparent that some companies had accepted such agreements, it would be possible for other CCGs to propose such agreements to their own companies. Such comparative competition would make it more difficult for

companies to reject such proposals, or would put pressure on them to come up with alternative options that might be acceptable to their customers.

89. As a result of this competitive process, some companies and customer groups might reach agreement by virtue of the companies modifying their draft business plan assumptions to comply with earlier regulatory guidance. Others might not reach agreement at all, which would necessitate a regulatory decision. Yet others might find novel ways of modifying the parameters or the design of the price control in ways that the companies and customer groups deemed mutually beneficial and preferable to the template proposed by the regulator.
90. Whether, when and where agreements would be reached, and what they would look like, would no doubt reflect numerous factors. These might include the relative simplicity of some businesses compared to others, the advantages of early settlement, the desire by some to be seen as leaders, differential company policies with respect to cooperation, the personalities of the business executives and customer leaders, the stance taken by the regulatory body, perhaps the nature and extent of political pressures etc. But all agreements would need to reflect a recognition of "the going market price" – the best terms offered and accepted in the market. At the same time the path of such agreements would begin to indicate possible directions of change for the market price in future. As in a competitive market, these might be different directions to meet the various preferences of different customers and different companies, all considering the various options on offer by others, rather than a uniform approach determined by a single regulatory buyer.
91. For avoidance of doubt, in the present statutory context any agreements reached between company and customers would need to be ratified by the regulator, and if necessary modified. The regulator would need to satisfy itself that its own guidance and the customer engagement processes and outcomes were consistent with its statutory duties. But this is equally true of negotiated settlement processes elsewhere. Most recently, the *Draft Determination* issued by WICS is an example of how this consistency can be demonstrated and how WICS exercised its proper judgement throughout the process.

Conclusion

92. Finally, it might be asked: "What is the point of all this?" If RPI-X provided a workable form of price control thirty years ago that proved attractive in many different contexts and has since been developed in many different ways, why not just leave price controls to be determined by each regulator?
93. One reason, as almost universally accepted and as explained earlier, is that the conventional approach to setting price controls is a painful and costly process that does not necessarily lead to the best outcomes for customers or companies – or for regulators. There is a growing feeling that there must be another and better way, involving more customer engagement with the prospect of some form of negotiated agreement that can be proposed to the regulator.

94. I agree with this, but I have sought to argue an additional reason in this paper. The present price control process is limited by virtue of being a monopsony process: a single buyer model of regulatory design. A limited degree of customer engagement is already bringing some welcome customer focus, diversity and innovation to UK price control reviews. A further step in this direction would not only bring to monopoly network regulation the benefits of negotiation and agreement. It could also bring many of the benefits of competition, such as innovation and improvement in the nature of price controls and regulation itself.
95. My own guess is that this would lead to some significant changes compared to previous regulatory practice. For example, I doubt that any customer group would say to its company: "We don't really mind what you do as long as the price reflects the cost – you choose". So menu regulation would soon disappear. Agreements reached in the UK and settlements elsewhere suggest that price controls would be shorter – maybe about 3 years initially but with the subsequent development of "framework agreements" to provide reassurance and stability over a longer period. There would be more sharing of financial out-performance and probably under-performance, particularly due to factors outside the company's control. There would be more ongoing monitoring and discussion between company and customer representatives. There would be more flexibility to respond to changing circumstances.
96. But all these are just my guesses. The point of the proposed process is not to substitute my guesses for the decisions of present regulators. Rather, it is to discover what companies and customer groups find mutually beneficial, and to learn from a greater variety of ideas than is possible under present approaches.
97. In summary, my suggestion is that we can have competition in designing and setting price controls. Competition is here understood as a rivalrous discovery process in which companies seek to gain the approval of customers for the price controls they offer. And the regulator's task, as always and as in 1983, is to promote such competition.