"Strawmen" for RPI-X@20

A CEPA workshop
Venue: Ofgem, Millbank
Date: 22 January 2009

Cambridge Economic Policy Associates (CEPA) organised a workshop on Ofgem's behalf on January 22nd 2009. The workshop was arranged to allow interested parties to debate the merits of four potential regulatory frameworks that could be used in place of the existing RPI-X regulation for energy networks. The workshop was attended by representatives from industry, the academic community, regulators from the rail, water, post and airport sectors and from the financial community.

The strawmen were developed by CEPA. They do no constitute Ofgem proposals nor do they necessarily reflect Ofgem thinking. The purpose of the workshop, and the strawmen, was to stimulate debate around the merits of RPI-X and potential changes to the framework.
The strawmen reflect the potential to change both the regulatory mechanics and the regulatory process.

The workshop was arranged as follows: Ofgem provided a brief introduction to the RPI-X@20 project. CEPA provided an introductory overview of the strawmen and criteria that could be used to assess them. Workshop attendees then split out into smaller groups to discuss the assessment criteria and the merits of each of the strawmen. Views from the small groups were fed back to the wider workshop. After which a general discussion of broad themes arising from the feedback was undertaken.

The meeting was carried out under the Chatham House rule. This note provides a summary of the discussions.

1. Introduction

At the start of the workshop, it was made clear that it was important to understand what we are trying to 'fix' when assessing the strawmen. This is consistent with the visionary phase of RPI-X@20, which is focused on understanding whether RPI-X regulation remains fit for purpose and identifying potential issues of concern.

Ofgem set out the overall purpose and objectives of the RPI-X@20 project. This included the key milestones. Final recommendations will be made to the Authority in Summer 2010, with the expectation that any agreed proposals will be implemented in TPCR5 at the earliest. The feedback from stakeholder and academic workshops was briefly summarised and the interaction with other Ofgem workstreams e.g. DPCR5 discussed.

It was made clear that Ofgem has formed no views on whether RPI-X regulation needs to be changed for the future and, at this early stage in the review, Ofgem has not assessed the relative advantages and disadvantages of these 'strawmen' (or other options). This was very much an early discussion of issues that need to be considered in RPI-X@20 and it is expected that the debate on these and similar strawmen will continue throughout the project.

2. Overview of strawmen and assessment criteria

CEPA provided an initial description of the 4 'strawmen'. The models were 'stylised' frameworks and variations on the ideas could be considered when designing a regulatory framework in practice. They were also not necessarily mutually exclusive. CEPA also emphasised that these were relatively extreme reforms and this should not preclude discussions around the option of more moderate reform. The inclusion of a strawman should not be taken to imply CEPA's or Ofgem's support for the approach, rather that potentially interesting issues could arise from the strawman.

The strawmen presented are summarised below. Copies of the slides outlining the four options are also provided on the Ofgem website.

- **Strawman 1**: **improved /enhanced role for consumers**: a distinction was made at the outset between transmission and distribution. It was envisaged that there could be different levels of involvement for transmission customers compared to distribution customers. The former would negotiate and seek to agree the level of the key building blocks including cost of capital, level of opex and level of capex. For the customers of distribution companies involvement is likely to be more limited because of the diversity of consumers, perhaps needing a pro-active role for Ofgem or consumer champions. There is also a link across to the question of whether customers are allowed to appeal decisions.
- **Strawman 2**: **Competition in energy services - lessons from telecoms**: encourage competition in energy services at local level, with expectation that fringe competition could constrain behaviour of incumbent monopoly network.
- **Strawman 3**: **Utility bond and contracting out**: separate out a 'core business' that is regulated under a simple incentive based regime. Use contracting out as means of regulating new capex (replacement or enhancement).
- **Strawman 4**: **'Flexible incentivised':** longer 10-year price control with cap and collar arrangements and use of revenue drivers and/or re-openers to modify determination in known ways but generally avoiding full re-openers.

To stimulate discussion and debate CEPA presented some initial thoughts on the potential advantages and disadvantages of the strawmen. They emphasised that none of the 'strawmen' options was intended to be a perfect model but rather they were all possible regulatory options with good and bad aspects. Elements from each might be worth developing further.

CEPA also described a set of potential assessment criteria that might be used to test the existing RPI-X regulatory framework and to consider the relative merits of the alternative strawmen. These criteria were described in the context of the better regulation principles:

- value/quality efficient service for customers;
- certainty/predictability for customers expenditure and company's income;
- long term viable /efficient industries;
- environmental and social policy; and
- security of supply.

Workshop participants were asked to comment on these criteria, as well as the merits of the four strawmen.

3. Missing strawmen

Much of the general feedback focused on the issue of environmental and social policy and whether there needed to be a 'directing mind'. The model in water was discussed, where government sets policy, the Environment Agency and the Drinking Water Inspectorate provide more precise definitions of required quality and work with companies at regional level to determine what needs to be done, and Ofwat assesses the efficient costs of undertaking required projects. All four meet through a quadrapartite process to discuss environmental and social requirements in the round.

Attendees at the workshop noted that the GB energy sustainable development targets are not discussed in this way and there was a discussion as to whether changes may need to be made to the regulatory process. The two main issues identified were: (1) who decides on the cost vs environmental benefits trade-offs? and (2) how do network operators facilitate others in a way meant to meet the environmental objectives?

The group agreed that there was a missing strawman that had a 'guiding mind' setting more specific environmental or social requirements. There was a discussion as to whether this should be Ofgem, government, industry or another (potentially joint) body. One question asked was if Government does not lead, is there enough leadership in the industry?

There was also a view that there should have been a strawman reflecting the most recent version of RPI-X regulation in energy networks (i.e. the status quo or developing ideas from DPCR5).

4. Strawman 1

There was general agreement from all the groups that an increased customer role couldn't be a bad thing. However, the full extent of customer engagement proposed under strawman 1 raised some key questions:

- What do we mean by customers – consumers, users of the networks or wider 'citizens'?
- What is the appropriate representation of a range of customers?
- How do you make sure that current and future customers have full access?
- How do you avoid specific interest groups distorting the outcomes to suit their interests?
- How do you tie this process into cost/ ability/willingness to pay?
- What would the engagement process focus on – individual capital projects, investment plans for a fixed period (e.g. the five year regulatory period), or long-term investment planning?
- What might the parties agree on – outputs, costs, wacc?
- What would be the role of the regulator?

It was noted that there would need to be clarity on what improvements customer engagement was expected to bring. It would not help with productive efficiency of the investment but it may help decisions to be made on trade-offs between different policy objectives or individual capital projects. It may also provide improved information on demand for capacity (current and future).

The CAA experience was discussed. The problem is that 'talk is cheap' but it is also difficult to reconcile output quality and willingness to pay. The varying interests of the different airlines were also noted. Environmental targets and how these might apply would be at least as difficult to meet all interests. There were lessons to be learned from TAR here.

There was general agreement on the need for the 'shadow of the regulator' to make constructive engagement work. There was also agreement that customers, or their representatives, would need to provide some sort of commitment to their proposals, providing a clear indication of what they are willing to pay for. The group also noted that the outcomes would be sensitive to the design of the engagement and decision-making process.

The impact of the industry structure was identified as important particularly in electricity where it is difficult to see how it would work given the current bundling between network/supply. The international experience in Argentina was discussed and it was suggested that these examples demonstrate what is feasible.

The question was asked whether customer engagement only works as long as there is unanimous agreement but becomes difficult where disagreement means there is no default option to fall back on.

It was noted that in some ways, the UK model is well suited to customer engagement, certainly in electricity transmission with big customers and a regulator of last resort. One view was that unless the cost and quality of the specific product supplied to a particular consumer or group of consumers could be isolated from others then this would not work. An example of where the former condition holds is the US gas grid. For distribution the same problems were identified only worse because of the more diverse consumer base. Here the use of consumer champions to represent a right of consumers' views might be considered. It was suggested that even where greater consumer involvement might help in determining the key issues, it was still important for the regulator to set out a clear regulatory methodology so the negotiators understand the impact of their negotiations.

When discussing the differences between transmission and distribution it was noted that suppliers might be able to represent consumers, but that this would only be possible if they were unbundled from upstream and network interests.

The case for more bilateral negotiations was also considered. It was noted that it would need to be supported by both parties knowing what they have to trade with. A need for instance for charges to cover costs would be necessary to avoid the negotiations ending up in arguments over whether additional activity can be carried out by the transmission companies at no extra cost or about the accuracy of costs.

In summing up the group discussion on the first option, it was agreed that it was about degrees of engagement rather than taking to extremes. Customers were not fully informed and this would affect their ability to engage and make decisions. Some process including users as well as producers was good but the key was the design and how to build in all necessary considerations. A regulatory fall-back would be needed.

5. Strawman 2

It was noted by the group that the option may be worth considering given the needs for significant energy saving, the potential of microgeneration and the potential merits of experimentation, e.g. city wide trials.

The general feeling from the groups was that competition between networks was an interesting 'theoretical' idea but it was difficult to see how it could be applied in practice across energy networks. It might work for new build developments, potentially, and there could be other peripheral areas worth exploring.

There was also a discussion about what the benefits would be. It was noted that there would be increased transparency but that might be the only advantage. The point was also made that other solutions might deliver the same benefits.

The group were reminded that there are scenarios for microgeneration for the future, and it was important that these were not ruled out. There may be a case for experimentation in localities, where efforts are made to facilitate entry.

A question raised was whether there was evidence that the current regulatory arrangements are acting as a barrier to innovative developments. Some anecdotal evidence was available. For example, it was suggested that local authorities shy away because it is too difficult. There are no obligations to facilitate entry or to provide access terms on bits of the network. It was suggested that incumbents may need to be more proactive when thinking about new ways of providing networks services. This raised questions about whether business separation was still fit for purpose or whether more integrated solutions were needed.

However, even if this were true, it was noted that you can't assume this approach on its own will work. The pricing level and structure are important. If average pricing is used, as at present, 'cherry picking' would be encouraged. But if there is local cost reflective pricing on the network, the implications on end users need to be understood. There would also need to be a level playing field across all networks (e.g. requirements to face social costs of digging up roads should fall on all networks).

While the 19th century network was developed in this way, it was noted that it stopped being developed this way so not necessarily a good idea to re-introduce. It was argued that economics and time will tell if the idea if feasible. Regulatory framework should not create a barrier to it but it is unlikely to be the main game for the next five to ten years. The idea should not be ruled out but it should not be depended on either.

6. Strawman 3

The general idea of putting investment out to tender and passing through the costs was seen as a reasonable option by some.

It was recognised that it was the precise design of the framework that is important. It was recognised that the industry structure and where the lines of separation would be drawn are important in determining the success of this approach. In particular, what elements play naturally to market testing or contracting-out?

It was pointed out that the market should determine the appropriate split in roles but there is lots of uncertainty in the current world. Incentives should be placed on the 'bundle' of activities and the market would decide where contracting out is efficient. It was argued that whenever artificial lines are drawn conflicts are created. It was suggested that by specifying a line to constrain the market model a "non-market" model of a market philosophy was being proposed.

The Glas Cymru example was discussed but it was recognised that the split could be done in a different way. However, there was a feeling that leaving the incumbent with the existing network and opex to keep it going while contracting out for the rest was an odd way to split the structure. There would need to be flexibility in any regime.

One question raised is what you do with new investment once made, as this part of the network would then need ongoing enhancement more suited to the network company than the contracted out party who built the investment. It was also noted that the old investment to maintain the current networks is not necessarily low risk. The repacking or separation of risk would not necessarily lead to overall reduced cost of capital. There would also be transaction and organisational costs involved.

In the Glas Cymru case, capex is included in the RCV and a regulated cost of capital is provided. In this model capex is done outside the regulated company and this has an impact on the level and balance of risks. It was noted that this may not be consistent with providing returns to encourage innovation. The group also noted that this may not be a reasonable direction to go in given the current situation in financial markets.

The possible role for an external procurement agency was discussed. Experiences from rail were also discussed, where it was noted that there was a need to clearly understand where trade-offs are being made with this model.

It was also noted that efficiency incentives should encourage companies to contract out where this is efficient. It will be important to review whether incentives are aligned in this way.

The general conclusion was that contracting out may be beneficial for some investments and it would be appropriate to look at existing procurement processes. The model that formally split the base business from a new capex business was not widely supported.

7. Strawman 4

With strawman 4, there was a general consensus that 10 years was too long for a control period and any benefits were outweighed by the costs. This does not enable proper thought about how to deal with uncertainty about investment needs.

The role of incentives was identified as important as you could have regulatory incentives that are more sophisticated. Different period lengths could be used but other options to design stronger or more ‘clever’ incentives should also be explored.

The idea of having different period lengths for different parts of the price control (e.g. efficiency, funding, and investment) was discussed. It may have benefits but synergies might be lost.

Experiences with long-term fixed price contracts in other sectors were discussed. In rail, franchise length has been set long to facilitate investment in some cases, while shorter in other cases where major investment is absent. There is lots of potential for opex efficiency once the project is completed but there are risks to the company of cost shocks during the fixed contract period. It was also suggested that lessons from Ofgem’s Offshore arrangements should be considered further.

The issue of cost shocks taking place during this longer control period was discussed. A re-opener could be used but this would need clear criteria for why the settlement was being re-opened. There was also some concern that more re-openers would provide less incentive to firms to manage their own risk. There was a discussion about how trigger reopeners might work and whether symmetry would be needed. It was also noted that the price review process essentially involved re-openers every five years.

It was recognised that a long term perspective from the company, particularly relating to investment planning, was important but that this was not necessarily helped by a longer control period. A credible regime was needed for this, and it was important to consider whether this could be provided with five year price controls. It was suggested that the regulatory framework should maintain flexibility and that networks should look at the longer-term strategic context when making investment plans.

The option value of the re-opener of investment is the key to the relative value of 5 or 10 year control periods. The re-opener should stop as well as start investments, when option values are considered. There was discussion of the existing mechanisms used to manage uncertainty. It was noted that it was important to think about the service being provided to customers, and that revenue drivers should capture increased investment for increased service. The option of decreasing asset lives to reduce risks was also discussed, although the impact on consumers was noted.

The general view was that there was merit in considering how to strengthen incentives and make the regime more flexible to accommodate uncertainty (particularly with respect to investment). A ten-year period was not necessarily the answer and it was important to start with a review of existing mechanisms.

8. Summary discussion

It was agreed that the next twenty years are unlikely to be like the last and there would be a period of disruptive change. It was important to clarify what the problems are that need to be addressed.

Discussions from the workshop indicated that a key problem was determining how to make decisions about future investment, both what was needed and how much it would cost.

The group noted that RPI-X with modifications deals or could deal with many of the problems discussed in the workshop. The options available are not mutually exclusive.

Greater customer involvement almost certainly increases the benefits available. While you might want consumers to be involved in investment choices this isn't likely to be enough, not least given the absence of future consumers at the negotiations.

It was observed that there may be no right answer on the investment issues unless a 'directing mind' provides guidance. It was important to consider whether the regulatory framework could be designed to answer the question of 'what needs to be done'.

It was noted that a 'directing mind' can be 'deranged'. Focusing on the 'how' is better than on the 'what' or 'who'.

It was also noted that the 'LENS' work showed a huge range of possible outcomes. It was felt that it was not Ofgem's job to choose between them. It might be Ofgem's job to make sure that the choice is done as honestly as possible. It was thought important to be clear on Ofgem's role.

It was noted that vertically integrated monopoly firms tend to think in a particular way. Benefits may be available from shaking this up, for example encouraging organisations to think outside the box and bring new ideas and competencies into the mix (for example, R&D funds might help in meeting the very different needs in the next 20 years and these could be allocated through new market-orientated mechanisms).

It was thought to be important to look and learn from international practice and be careful not to throw anything out without good reason.

The summary discussion concluded with a view that regulation should continue on 'auto pilot' if incentives are enhanced and appropriately aligned.