Let me start with two questions:

- What is most important to customers?
- What is most important to water companies and investors?

My high level answer is the same to both questions: certainty over how much revenue the industry will be allowed. Of course, customers want improving and more tailored services – but even a fairly cursory review of recent years will make it clear that they value above all a degree of stability in the charges that they pay. It could be a matter of some debate whether the tolerable level of change is a bit below inflation, inflation or the change in average earnings.

Water companies want similar certainty. They need to be able to plan over the long term. Responses to environmental, public health or growth investment drivers have typically to be long term – often much longer than the current five-year regulatory control period. Take resolving Glasgow's drainage and restoring the river quality in the Clyde to 'Good' status. This is likely to be a 15 year project. It is unlikely that the optimum solution will break down into nice, even five-year chunks. Might it not be better for all those concerned to agree the profile of funding required and ring fence the resources required even where they lie in future price review periods?

It seems to me that looking at final outcomes and allowing certainty over their funding could contribute significantly to the lowering of regulatory risk. But it may also allow the space for some experimentation. There may be solutions available that are low cost but uncertain. Customers want to be convinced that all such options have been explored before complex engineering solutions are adopted. Similarly, certainty on resource allocation could allow the investment to take account of assets that are scheduled for replacement or, in the case of Glasgow, the end of some relatively expensive waste water PPP solutions.

On other occasions the regulatory period is too long and there is insufficient certainty about what is required. This can lead to projects being included on a "just in case basis" almost certainly to the detriment of a company's performance, its customers and, almost certainly, leading to avoidable delays in addressing the most critical environmental and public health issues.

What steps are required in order to make progress in the delivery of solutions to problems at the lowest cost to customers? It seems to me that there are at eight steps that could potentially be beneficial:

1. **Introduce real customer engagement – not a rebadged customer consultation:** Customers need to understand and be involved in the trade-offs that are made on their behalf. This is one of the principal governance benefits of retail wholesale separation. The new retailers

can represent the aggregate views of customers because their interests are broadly aligned with those of the final consumers.

2. **Remove the bias in favour of capex:** It is clear that at least some companies would respond differently if there was not a bias in favour of capex. There are many ways in which a supply-demand balance issue within a company's area could be addressed. Regulators and customers should be indifferent as to how it is solved and so too should the company. That is not the case at the current time.

3. **Accept that five years is not the optimum planning period for each project:** The ebb and flow of the investment cycle is often remarked upon. There have been attempts to improve this with 'early start' programmes but with little success. The uncertainty surrounding the final outcome of a price review understandably dominates senior management time. It may be better then to recognise those projects which will be delivered over a number of regulatory control periods and allow a company certainty that the resources required for these projects will be made available. It may also be worth considering allowing for studies to be completed in one regulatory period, with an understanding that delivery of the required outcome will follow in the next period. Again this should offer benefits to the supply chain, more predictable revenues for the company and, as an important result, greater certainty for customers as to the level of charges that will apply.

4. **Allow companies to earn a higher return for a more innovative or more risky approach – provided, of course, that it is at lower cost overall to customers:** If a company could work with farmers to improve either raw water or water course quality, making payments for changes in land use or agricultural practice, it is possible that some expensive capital expenditure could be avoided. But even if there is no bias in favour of capex a company may still reasonably see working with farmers as a more risky solution. But should we not welcome a proposal from a company which wanted a higher return for pursuing such a strategy – provided, of course, that the overall cost to the customer will be lower? Perhaps too rigid an attachment to the 'polluter pay' principle is not in the interests of customers or the environment?

5. **Agree that experimental solutions can be attempted without blaming the company in the event that it does not work (customer engagement here is critical if there is a risk that in the event of failure the cost to customers could be higher):** The water industry has a commendable record for delivering safe drinking water and in improving our environment. It provides more than a product we all need and want but a whole range of social, amenity and environmental benefits. It is not surprising that it has adopted a risk-averse approach.

This is all the more understandable when one considers the sometimes hysterical response of the media to even temporary problems. Witness recent fretting about water shortages.... But it may be beneficial if companies felt that they had the space to experiment without being automatically blamed or financially penalised if the experiment proved to be unsuccessful. Each experiment that paid off could benefit both customers and investors! As such, even if such experiments occasionally resulted in a higher net present cost of solution in the long run, overall customers and investors could still come out on top.

6. **Allow for a smooth capital expenditure profile and, if necessary, the inclusion of ring-fenced capital expenditure for which outcomes may be defined at a future date:** Companies have different levels of certainty about the investment that they will be required to deliver within a regulatory control period. In my view, uncertainty should be recognised and ring-fenced funding made available. The additional outcomes to be delivered can then be agreed at a future date when there is greater certainty on what is required. This should avoid the tendency to stuff the list of projects with uncertain requirements – just in case. Having a smooth profile should also make the programme easier to deliver, provide greater certainty to the supply chain (thereby reducing costs) and, of course, makes the outlook for customers' charges much more benign.

7. **Allow incentives to innovate:** It seems to me that customers, retailers and wholesale companies should be able to share in the benefits of innovation. This is available in Scotland through Section 29E of our 2005 Act. Aligning the interests of each party to the innovation is likely to be crucial. A concrete example relates to the separation of wholesale and retail activities in Scotland. Not only has Business Stream managed to reduce its costs such that, even if there are not further savings, the retail competition framework will have a positive NPV of some £140 million and a payback of seven years from when the money was first spent. It has also been a pioneer in the development of a water services business, satisfying a demand from both large and small customers that was previously unsatisfied either by Scottish Water or smaller niche consultancies. There has also been a boon in the fitting of loggers to meters to provide more current consumption information to customers. The result? Customer service in Scotland has gone from being amongst the worst to amongst the very best. Bad debt levels are now at less than half the previous level in Scotland or the current average level in England. And retail unit costs are now some 25% lower as a share of turnover than the average in England.

8. **Set an expectation that there will be innovation:** Placing a simple requirement on a company to report every two to three years on how it has become more innovative and the benefits that have accrued to investors and to customers could be an interesting discipline.

> It seems to me that the industry is characterised by managers who want to be seen to have done a good job. As such they are not likely to want to be seen as laggards when it comes to adopting more innovative approaches.

But perhaps more important than any of these individual steps, we should all recognise that not all innovation is technological and that sustainable innovation must be valued by customers because they are the ones who will allow the innovator to earn a return on their investment. As such investment funds are not the answer. Nor is the sort of theoretical research that characterises the pharmaceutical industry. That is not to say that there may be opportunities for investors or for research driven innovation – but, in my view, that is for the supply chain to consider and not for customers to finance ex ante. The focus has to be on getting the governance framework of the industry right; involving customers and creating the climate where innovation is expected, value for money is prioritised and incentives align the interests of managers, investors and customers.