



Setting water and sewerage price limits: Is five years right?

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1. Introduction

1.1 When it assumes responsibility for Ofwat's functions in April 2006, the Water Services Regulation Authority (WSRA) may wish to reach an early conclusion on the period covered by the price limits which come into effect from 1 April 2010. To help the WSRA in its consideration of the issues, we are publishing this consultation paper. It indicates our thinking at this stage on some of the issues, but decisions on all the points covered are for the WSRA, and no conclusions have yet been reached.

1.2 We last consulted on this issue in 2002, during the early stages of the 2004 price review. Overall, no clear preference emerged, and we decided to consult on this issue well before the next price review in 2009 (PR09).

1.3 There are several dimensions to the apparently simple question – 'For how long should price limits be set?'. Although the original limits set at privatisation in 1989 and by us in 1994 were for ten years, it quickly became clear that they were not sustainable for that period. In the event they were reset for all companies at five-yearly intervals. But it would be possible:

- to set price limits for a longer or shorter period than five years;
- to use different periods for different companies (for example, where there was greater certainty about future investment needs for certain companies compared with others); or
- to set limits for a given number of years, with the specific proviso that a review would be carried out at a mid-point (similar to the original intention at privatisation to set limits for ten years, with the option to review after five).

Such changes would alter the balance of risk between companies, and their investors, and consumers.

1.4 There are well-established mechanisms to make adjustments during the course of a price limit period. These include the annual adjustment made automatically in response to inflation (the annual change in the retail price index); and specific safety valves that allow aspects of price limits to be reviewed in response to changing circumstances (known as interim determinations of K or 'IDoKs').

1.5 A long-term perspective is essential in an industry where major projects such as a new reservoir may take 20 years from inception to completion and where infrastructure installed many years ago is still fit for purpose. Over-frequent reviews may:

- disrupt planning;
- divert management from the long-term pursuit of efficiency;
- dilute incentives;
- leave consumers with uncertainty about the scale of their bills in years to come; and
- be disruptive to the need to take a long-term view of capital needs whilst pursuing greater efficiency. Price limits covering longer periods may help promote certainty by minimising such disruption and encourage investment at keen financing costs.

1.6 The quality of forecasts diminishes the longer the period they cover and price limits set for too long may fail to anticipate changes in investment requirements and in the financial markets. Price limits set for a long period may also mean bigger fluctuations in the rates of return earned by companies, with attendant effects on investors' perception of risk and therefore the rate of return they require. They may tend (as has happened at the last two reviews) to produce big changes in price limits in the first year of the new period, reflecting adjustments to take account of developments since the last price review. Big changes may be necessary, but are disruptive to customers' budgeting. Incentives and stability may be undermined if the safety valves of interim determinations and other adjustments are used too frequently.

1.7 Better regulation principles point to price limit periods which are not too frequent to avoid adding a significant administrative burden on the companies and regulators. Equally, too long a period might reduce the quality of companies' forecasts.

1.8 We could set different length price limits for different companies, depending on the information available. However, it would be harder to treat all the companies consistently if we reviewed price limits at different times. For example, we would need to review efficiency assumptions and the cost of capital in the light of the latest information, leading possibly to different conclusions from price limits set previously. There would be many practical difficulties, and inefficiency, if a pattern were ever established of setting price limits for a few companies each year.

1.9 Setting price limits for a longer period, with a commitment to review them at the mid-point, might appear to give companies more certainty about the future. However, if in practice it proved necessary to mount a full review at the mid-point, this would create more uncertainty than planning from the start for a shorter review. If some but not all companies in the event required a mid-point review, this would lead to the uncertainties outlined at 1.8 above. And a mid-point review, unless it followed the principles of an IDoK, would have to cover all the issues as for a full review – it seems to us unlikely to offer a saving of time or greater certainty for the various stakeholders.

1.10 Until now five-year periods have struck a sensible balance between these various influences, and the independent steering group's 'Report into the conduct of the 2004 Ofwat periodic review: August 2005' found little appetite for change in the future. The review identified the interaction between long-term planning and the price review cycle as a key issue. It supported our plans to consult further, but warned that extending the cycle could increase uncertainty. It found that the current five-year cycle commanded general assent as a period which looked as far ahead as could reasonably be projected. But it emphasised that reviews need to accommodate long-term planning.

1.11 Although the 2004 price limits are for only five years, they incorporate companies' views of the longer term. For example, the price limits take account of the 25-year water resource plans prepared by each company; long-term capital maintenance investment until 2020; and also finance investigative work for some major projects which would extend well beyond 2010. The change protocol (MD197), published in parallel with our price limits, provides a guide to the way in which changes to output requirements will be treated where they arise before PR09. If in future, companies were better able to look beyond the five-year period, then the price review could focus more on long-term plans.

1.12 Looking ahead, the Water Framework Directive (WFD) could be seen as a reason to change from the current five-year review period, particularly since the WFD has a six-year cycle and the early stages do not align directly with PR09. In response to the Environment Agency's consultation on river basin management plans, and specifically on the relationship between the WFD and our price review, respondents recognised the importance of including WFD implementation requirements in price limits, but made few suggestions about the practicalities of achieving this. This is discussed in more detail at 5.17.

1.13 The price limits represent a package, in effect a regulatory agreement for the delivery of high quality services by the company to its customers. This is a package which takes account of expected revenue, and of specific outputs and outcomes to be achieved within the price setting period. If it fails to deliver, the company will face financial adjustments at the next price review and, where appropriate, sanctions.

1.14 This paper focuses on the duration of price limits from 2010, but we are open to comments on all the various issues that have a bearing on this question. A change from the five-year period between price reviews would require a licence change. It would therefore impact on subsequent periods unless there were further licence changes with consequential damage to regulatory certainty.

1.15 We will shortly consult on our approach to the implementation of our new duty to contribute to the achievement of sustainable development. We will also issue a paper, jointly with Ofgem, on financing issues for the regulated utilities sector. A long-term perspective is essential for this and other purposes. The WSRA will consider the responses to all these consultations before reaching its decisions.

1.16 We currently expect to consult on the methodology for setting price limits in the autumn of 2007, two years before making our final determinations in November 2009.

2. Regulatory objectives

2.1 In line with our statutory duties, we see our task as setting price limits as high as they need to be to enable efficient companies to carry out their functions, but no higher than they have to be in the interests of the consumers of services who, for the most part, have no choice about their supplier. (On 1 December 2005 new rules to foster price competition for large business users within the sector were launched and will be taken into account in the next price review. It is as yet restricted in its coverage.)

2.2 In setting the length of the review period we want to achieve the following objectives.

- Clarity for consumers, businesses, households and investors about when and how price limits will be set.
- Appropriate incentives to the companies to deliver high quality services more efficiently, which benefits consumers and investors.
- An appropriate degree of certainty which encourages investors and enables the companies to finance large programmes.
- An appropriate balance between the various drivers for investment (for example, long-term resource requirements, the WFD, sewer flooding and other improvements).
- A framework that fosters the objectives of sustainable development in relation to long and short-term investment programmes.
- The need to contain the costs of regulation, both direct and indirect, to a necessary minimum in line with the principles of better regulation.

3. Consultation issues

3.1 When we consulted on the length of the price review period in 2002 several companies argued for a period longer than five years between reviews, although there was no clear consensus on how long the period should be. Some sought to relate future periods to the WFD implementation timetable. Others made any support for a longer period contingent on changes to make it easier to trigger interim determinations between reviews. WaterVoice (then the representative body for consumers, now succeeded by CCWater) did not want a longer review period. It felt that this would lead to more interim determinations and would not be to the benefit of customers.

3.2 We have resisted the temptation to produce a simple table of the advantages and disadvantages of shorter and longer periods for the objectives at 2.2 above. This is because the weight to be given to each factor will depend in turn on other factors. For example, how far are the regulator and companies in a position:

- to make forecasts with reasonable certainty?
- to assess how far the adjustment of a single factor, such as the scale of the capital expenditure programme for environmental enhancement, would require amendments to other factors in price setting, such as the efficiency assumptions or cost of capital?

3.3 In chapters 4 and 5 of this paper we elaborate on the issues but in very broad terms:

- **A short-term** (say two or three years) price review would have very significant disadvantages in terms of creating regulatory uncertainty for customers and investors, disrupting long-term capital programmes, and adding to regulatory cost. The only likely justification for such a change would be if the uncertainties around significant elements of the inputs and forecasts required for price limit setting were so great as to make it unsafe to use a longer time period. Merely to seek alignment between price setting and the timetable for one of the many inputs to price limits (for example, capital expenditure under the Water Framework Directive) seems unlikely on its own to provide sufficient justification for such an approach.

- **A five-year** period for setting price limits is now well understood by all stakeholders and has been shown to work reasonably well in the water and other utility sectors. So far it has achieved a broadly satisfactory balance between:
 - the needs for long-term stability to foster efficient investment and operational management;
 - limitations on our and other stakeholders' ability to forecast key elements within reasonable margins of certainty; and
 - avoiding excessive use of interim determination mechanisms whilst retaining the necessary flexibility to take account of unforeseen or uncertain new developments post-price setting.

- **A longer period of between six and say ten years** could be justified in terms of the greater long-term stability, but is dependent on stakeholders and us being in a position to forecast further ahead with more confidence at PR09 than was the case at PR04. A longer review may be more appropriate for some companies than others, so different companies may have price limits set for different periods. If the review period was extended substantially it may be helpful to have a mid-point review to deal with any unexpected changes in circumstances.

3.4 This issue is not unique to the water industry, although a number of specific factors are. Although the five-year period is commonly used, other regulators and regulated industries have used price limit periods of less than or more than five years on occasions. We have included a brief outline of the length of price control periods in other sectors both within and outside the United Kingdom in appendix 1.

3.5 We want your views on all the issues raised in this paper, and in particular in response to the following questions.

- 1. For how long do you consider the price limits should be set for the companies at PR09 and why?**

- 2. Do you favour establishing at PR09 mechanisms which will increase certainty beyond the end of AMP5? If so, how should these be achieved, for what period and why?**

- 3. Whether or not we change the period of price limits, can we do more to encourage companies to plan for the longer term? Can this be done without increasing risk for customers?**

4. How can we achieve an appropriate balance of risk between consumers and investors in the measures to deal with uncertainties arising between price reviews?

3.6 We have considered, as set out in our 2005-06 forward programme, which index of inflation might most appropriately be used for setting price limits from 2010. The retail price index (RPI) has been used as the general measure of inflation for all incentive based price cap regulation in the UK since the first privatisation in 1983. The new consumer price index (CPI), now used as the measure for the national inflation target, offers a possible alternative. We believe the choice of index would not have a major impact on the level of bills for water and sewerage customers. However, there would need to be compensating changes to the quantum of the K factor. Therefore, we consider that there are strong arguments for retaining RPI at PR09. We explain our reasoning in appendix 2. We are not consulting specifically on this point in this paper, but we are confident that the WSRA will consider any comments which respondents wish to make on this.

4. Uncertainty and risk

4.1 Like all businesses, the water industry is subject to external influences and change. Changes carry a risk to the companies and investors, for example through unanticipated reductions in revenue or increases in costs. Longer or shorter price limit periods would have obvious consequences for the precision of estimates. The more predictable the future, the stronger the case for a longer review period.

4.2 The future is uncertain. Any approach must be able to cope with the unexpected, and share risks appropriately. In relation to setting water price limits, the main potential instruments available include the following.

- The use of indexing to effect automatic adjustments to prices, most obviously through the adjustment of each year's limit by reference to general inflation. Four companies have a licence condition which allows them to claim an adjustment if changes in the index of construction prices (COPI) are significantly different from changes in the retail price index (RPI).
- 'Logging up or down' the regulated asset base at the following price review for changes to requirements, or shortfall adjustments for outputs not delivered.
- The change protocol sets down the procedures we have established for dealing with changes to the funded improvement programmes for the period 2005-06 and 2009-10 (AMP4).
- Interim determinations, either for major changes having a very significant and unavoidable effect on a company's revenue or costs (substantial effect), or following well-tested principles for specified areas of uncertainty with a significant impact (standard IDoK).
- The early start programme, introduced at PR04, to enable each company to plan well ahead for the more predictable early elements of its capital programme, minimising uncertainty over the later stages of the review process.

4.3 In this paper, we assume that all these instruments will continue to be available at PR09. During PR04 we consulted on a number of licence modifications around the IDoK and substantial effect mechanism. In MD194 we concluded that these changes could not be made ahead of PR04 but that we would return to them before PR09. We expect the WSRA will wish to consult separately on a package of licence changes following on from that earlier consultation.

4.4 In the past there have been problems for the construction industry and suppliers as companies reduced the level of investment around the time of price setting whilst they reviewed their plans. In setting the price limits for 2005-10 we agreed a programme of schemes for 2005-06, based on each company's proposals, in advance of the final determinations. This was known as the 'early start programme'. It gave companies the opportunity of knowing a year before the final determination that specified schemes were funded and allowed them to commission contractors to carry out the work in 2005-06. The intention was to reduce the dip in work that contractors often experience following a price review as companies decide how to schedule work. We recognise that the early start programme introduced for PR04 was less extensive and not as successful as anticipated. We hope that at PR09 companies will be able to propose more work for an early start programme.

4.5 Changes in the length of the review period are likely to affect the balance of risk between consumers (as customers and as users of the environment) and investors. A longer period with the inherent reduction in certainty about future requirements might lead investors to seek a higher return which would be paid for by the consumer. Customers might face greater risks of step changes in price limits following less frequent reviews. Equally, less frequent assessments of the scale and scope of environmental or other improvements might lead to less sustainable outcomes in the long run.

4.6 In the event of a longer or shorter period we would need to consider how the balance of risk between consumers and companies had changed and whether changes to the IDoK mechanism were desirable.

Financing

4.7 How would the cost of capital be affected if there was a change in the period of the price limit? We have said in the past that we do not expect the companies to link their borrowings to the period of the price limits. We think it appropriate that the companies should use a mixture of long- and shorter-term financing of investment as a way of spreading the associated risks. We note as a further general point that the companies benefit from a degree of certainty on their future revenue streams following price reviews in a way available to few other private sector companies. This helps to hold down the cost of capital, to the benefit of customers. However, companies still face a degree of business risk that can arise from the challenge function of the regulator; and the uncertainties associated with future cost increases, which are only moderated by the IDoK mechanisms.

4.8 The evidence of independent surveys of investors indicates that our consistent and transparent approach has helped to avoid unnecessary uncertainty and thereby minimise the cost of capital. The scale of the capital programme and the negative cash flow associated with it have worked in the opposite direction.

4.9 We will be publishing a consultation paper jointly with Ofgem on financing issues for the regulated utility sectors. This paper will explore options for improving the setting of the cost of capital. It will also look at alternative approaches to the additional returns for ‘financeability’ which we incorporated in the larger companies’ price limits for the latter part of the current period as a means of enabling them to finance their functions.

4.10 Options for a better way of setting the cost of capital include front-loaded returns, fixing the cost of capital for the life of the asset and the concept of a split cost of capital. These options for change are not necessarily linked directly to the question of the length of the review period. It might, for example, be possible to assess the cost of capital for a period longer or shorter than a price limit period or for the expected life of an asset.

4.11 It has also been suggested that the risk of general market volatility affecting the cost of capital could be mitigated for companies and investors if it were possible to adjust the cost of capital, in some way linking it to an external index. This would be a factor that would bear on the length of the review period. This proposal has been put forward to avoid the need for the regulator to forecast the likely cost of capital over a period of years, which would become more difficult if the price limit period were extended. A price to be paid under an indexation approach would be the loading onto customers of more of the risk of volatility (which might work either in their favour or against it) by indexing the allowed return to market outcomes in some way.

4.12 If there was a change in the length of the review period, the possibility of indexing the cost of capital during the review period is just one example of where we might need to consider how the balance of risk between customers and investors had changed and whether changes to the IDoK mechanisms were desirable.

5. Long-term outcomes

The water industry is a long term industry and we need to regulate for the long term.

Operating costs

5.1 Operating expenditure accounts for about one-third of the customers' bills. Assumptions in price limits for operating expenditure are based on actual company expenditure in the penultimate year of the previous price limit period (for example, 2003-04 for PR04). Companies make proposals for adjustments for changes to expenditure for the future price limit period which they believe will not be fully reflected in the RPI. At PR04, for example, we accepted the need for significant adjustments affecting pension and power costs.

5.2 In practice, operating costs overall were very significantly reduced in the first 12 to 13 years after privatisation, due mainly to the companies' success in improving their efficiency. Unavoidable rising costs, especially energy costs, have slowed this progress in the last year or two. Had we set price limits for more than five years in 1999 we could not have anticipated the economy-wide issues which are currently affecting energy and pension costs.

Major capital projects

5.3 Between privatisation and 2010 the water companies will have managed a programme of investment totalling around £70 billion in England and Wales with great improvements in efficiency and for the most part working within time and budget. They have, however, been helped by the overall characteristics of the programme which, however difficult and complex, has largely consisted of projects that are relatively small in proportion to the overall scale of the programme. In many cases, they had elements of repetition which facilitate improved efficiency (for example, improvements to sewage or water treatment works; relining and renewing mains). There have been few major long-term projects. This position may change and more large-scale projects may be needed in future. At PR04, we accepted the need for investigative work before 2010 on up to five new reservoirs, mainly designed to help improve security of supply in south-east England. A major project or series of projects for the interception of storm sewage affecting the Thames in London is under discussion.

5.4 We do not expect price limits ever to be set for a period long enough to encompass a major capital project such as a reservoir, extending perhaps for 20 years from inception to completion. The company and its financial investors (and by extension the regulator on behalf of the customers of a monopoly) would need to take stock of emerging information and changing parameters over such a period. Such evaluation might lead to significant changes to the project.

5.5 Price limits therefore, however long the period, must be able to take account of projects which cover two or more periods. The system can and already does do so, but we recognise that there may be a need to provide clearer assurances to companies and investors for very long-term major projects. There may also be a need to define more clearly intermediate outputs for single price limit periods. Such projects may sometimes carry a level of risk which differs from the construction, financial and regulatory risks associated with capital programmes to date. We see this as an issue which may need to be considered at PR09, but not as one which particularly affects the length of the review period.

Capital maintenance

5.6 The industry will need to continue investing to maintain serviceability – fitness for purpose – both now and in the future of its asset systems. The development over the last five years of a common framework for capital maintenance planning has placed increased emphasis on forward-looking analysis of asset-related risks and maintenance needs. At PR04 companies provided capital maintenance plans for 15 years ahead. We used estimates for the 2010-15 period to drive assumptions about accounting charges. In our final determinations we included details of estimates for expenditure for 2015-20 as well as for 2010-15. We consider that our approach at PR04 can be adapted to fit with longer price limit periods, but that retention of five-year limits is still consistent with a long-term outlook.

Supply and demand

5.7 Long-term planning is essential to establish an appropriate strategy for changes in population and housing growth, and in the demand for water. Since 2000, there have been significant developments in the Government's strategy at national and regional level on the provision of new housing and the distribution of population.

5.8 At a strategic level, the challenge of meeting additional demand from housing development is likely to be acute in the south-east of England, one of the driest parts of the country. Companies, especially Thames Water in London, face a significant challenge in achieving the appropriate security of supply index, with headroom, by 2010 although their price limits allow resources for this purpose. In the short term, several companies in the south-east, faced with nearly 18 months of below average rainfall have been obliged to use the flexibility in the system to constrain non-essential demand, for example through hosepipe bans. In the longer term, it is probable that new reservoirs will need to be built and new mains will need to be laid. Some of the early costs for such additions to the network have been taken into account in the price limits for 2005-10. Similar issues will affect the sewerage network.

5.9 However, companies already work to a long-term strategy, encapsulated in their 25-year water resource plans, which are updated on a rolling basis as new information becomes available.

5.10 None of these factors in our view is likely to have a major impact on the choice of period for PR09, other than broadly to encourage a long-term outlook.

Sustainable development

5.11 We will be shortly consulting on the issues raised by our new duty to contribute to the achievement of sustainable development. We consider that the new duty underlines our obligation to take a long-term view.

5.12 In considering the future capital programmes of the water companies the challenge of global warming is particularly relevant. Within large margins of uncertainty, the UK is expected to be subject to drier summers, wetter winters and more sudden intense downpours within weather patterns that are subject to wider ranges of variation than in the past. However, as yet, we lack specific predictions at regional or company level.

5.13 In these circumstances, we consider that the strategic response should not be an unqualified one of 'predict and provide'. Rather, we should appraise future plans on the basis of risk and the costs and benefits of upgrading systems to reflect climate change. We assume for the purpose of this paper that the strategy will be one of adapting to the likely consequences of climate change along with mitigating the industry's contribution to it.

Environmental improvement and quality enhancement

5.14 For PR09, the long-standing European Directives may again be a significant driver for additional investment. But in addition, the period from 2010 will see the implementation of the WFD. These work programmes will aim to achieve good ecological status for all water bodies by 2015. The principles underlying the WFD are welcome. They focus on outcomes; acknowledging, unlike earlier Directives, that economic analysis should be taken into account when deciding how to deliver improvements and that disproportionate costs may be a reason for setting less onerous environmental objectives.

5.15 Our approach at PR04 was to require each scheme proposed by a company in response to ministerial guidance on statutory and discretionary requirements to meet a set of criteria before its proposals could be reflected in price limits. These criteria included the need for the company to set out firm proposals to meet the specified environmental improvements with validated estimates of cost. Meeting these criteria ensures that customers are protected from unnecessary increases in water bills. We also challenged company costs to ensure that water customers' bills only included the efficient costs of carrying out improvements.

5.16 Our aim is that the requirements of the WFD are incorporated into future price limits in such a way that water company customers pay a fair share, but no more, of the cost of implementing the directive. We are discussing the implications with Defra, the Welsh Assembly Government, the Environment Agency and other stakeholders. We aim to ensure that the processes:

- adopt a realistic approach to the environmental objectives;
- ensure that all the specific improvements to be carried out by water companies represent broad value for money, are worth doing in their own right, and represent a reasonable approach to risk, rather than being unduly risk averse;
- are in accordance with the polluter pays principle;
- take account of the recognition in the Directive that it may not be possible in all circumstances to achieve good ecological quality by 2015, with the provision for second and third programmes extending to 2021 and 2027; and the opportunity to set realistic environmental objectives which take into account the technical feasibility, and the costs and benefits, of the measures necessary to meet them (including any costs associated with any uncertainty about what measures would be effective); and

- conform overall with the principles of sustainable development as set out in the Government's strategy.

5.17 The first set of WFD River Basin Management Plans, including programmes of measures will be published in draft for consultation in December 2008 and will be finalised in December 2009. This comes after we need to set PR09 price limits. It is also unlikely that the programmes of measures will set out the outputs required of water companies in sufficient detail for specific schemes to be included in price limits. Companies will need to submit business plans in summer 2008 and finalise them by April 2009. We will expect companies to put forward specific proposals. We are not planning to include any contingency in price limits and will expect company proposals to meet the usual criteria for inclusion in price limits.

5.18 The problem of a mismatch in timing is not new. For example, at PR04 outputs required for the Habitats Directive were not known at the time of price setting. We set out in the AMP4 change protocol (MD197) how any projects required before 2010 would be funded once it had been clearly established that they were needed. The Habitats Directive projects are still to be finalised, but we consider that the use of a change protocol could again help to achieve integration, this time between the WFD and the price limit timetables at PR09. This approach comes at a cost in terms of uncertainty for price limits, and it would become unsustainable if the costs of additional projects proposed between price reviews were so great as to have significant consequences for other key elements of the price review such as the cost of capital.

Service improvements

5.19 The extensive consumer surveys carried out jointly by all the main stakeholders at PR04 identified a willingness to pay for significant improvements in service in relation to sewer flooding. By 2010, the properties put forward by the companies in 2004 as being at the highest risk of internal flooding, and a significant proportion of those exposed to flooding in gardens and surrounding areas, should have been resolved or mitigated, under the price limits established at PR04. However, one of the implications of climate change may well be that further properties at risk are identified over the coming years and that the need to deal with sewer flooding remains a significant driver of expenditure. Cost benefit issues may become increasingly significant as schemes with very high costs and relatively small benefits to customers are identified. But we do not see these issues as having a major bearing on the length of the PR09 period.

Revenues

5.20 In general, water company revenues have proved reasonably predictable at past reviews but the extent and pace of metering will increasingly affect this in future. For each review, companies are expected to set out their assumptions in their business plans. We analyse each company's forecasts and challenge them where necessary. These forecasts clearly take account of past experience. But there have been some cases of significant change, for example changes in demand from major industrial customers or unexpected changes in the pace of new development. Even so, the substantial effect mechanism has only been used twice to adjust for major changes in industrial demand between price reviews that have had an adverse effect on specific companies.

5.21 From 1 December 2005 the largest customers (2,200 companies that are likely to use 50Ml/year or more) can choose their water supplier, which may introduce a new element of uncertainty. But the statutory basis on which existing undertakers may charge new entrants is designed by the Government to avoid disadvantage for existing domestic customers and thereby minimise shock effects for company revenues.

5.22 Changes in domestic demand only affect the revenue companies recover from metered households. However, a number of factors will increase the proportion of metered customers and the associated uncertainty including:

- people choosing to switch to a metered supply to reduce their bills;
- measures being taken to change water consumption, especially in water stressed areas;
- company applications for water scarce area status; and
- metering on change of occupancy.

5.23 Meanwhile, we note that companies now have increasingly clear information on proposals for the location of major housing growth and on Government measures to constrain the resulting growth in demand, especially in areas of water stress.

5.24 Our current approach to price reviews involves setting limits on the changes in a basket of prices (price caps). Another approach to RPI-X regulation is to use a formula based around limiting the revenues that companies are allowed to recover. The latter is used, for example, by Ofgem as one element in its price controls for monopoly network businesses. This approach is relevant to considering the length of the review cycle, as it may provide a way of dealing with uncertainties about a company's revenue base.

However, it could raise other issues. We have begun a tentative exploration of whether an 'allowed revenue' approach would offer any advantages in the water sector by comparison with the existing 'price cap'. But we have not decided whether this would merit further consideration, for example through a consultation. We are however conscious that such a change would introduce a significant new uncertainty for stakeholders in the price process and that it would take very powerful perceived advantages to outweigh the potential disruption.

Incentives and efficiency for operating and capital expenditure

5.25 The current incentive mechanisms for water companies to seek greater efficiency were designed to mimic competitive markets. We concluded it was right for companies to maintain the benefit of efficiencies for around five years. Where companies incrementally outperform operating cost assumptions they keep the benefit for five years before the savings are passed through to customers in price limits. We have designed a specific mechanism to work with a five-year price review.

5.26 In addition, we agreed at PR04 that the best performing companies from 2010 will receive a 50% enhanced outperformance benefit. This provides an increased incentive for the best performers, who are likely already to have achieved all the easier gains, to continue to look for new ways of improving efficiency and to be prepared to take appropriate business risks in doing so. This is in the long-term interests of customers since greater efficiency will result in lower bills.

5.27 Incentives for outperformance of the capital expenditure programme work in a broadly similar way.

5.28 The incentive period needs to be long enough to drive efficiency but not so long that the customers do not share the benefits appropriately. Changing the incentive period to be in line with a shorter or longer review period would affect when customers would gain from efficiencies. However, it would also be possible to retain a five-year incentive for outperformance consistent with a shorter or longer price review period, although this might present some practical difficulties.

5.29 The use of incentives to encourage high quality service performance for consumers by the companies is directly linked to the price limit period. The overall performance assessment (OPA) is used to reward the best performing companies through the price limits and conversely to reduce the price limits of

any company whose performance falls below the industry standard. The OPA adjustments to price limits in PR09 are expected to reflect the companies' performance over the period 2004-05 to 2008-09. This method was established to encourage companies to maintain high service levels, whilst smoothing out transient 'blips' in performance.

5.30 If price limits were set over a longer or shorter period of time, the number of years over which performance was measured to set the OPA could be varied to correspond. But this would not be inevitable. We would need to guard against the danger that the rewards or penalties for good or bad performance followed too long after the actual performance if the price limit period were lengthened. Conversely, there would be some danger that a company's actual performance in the subsequent period, if it extended for many years, might vary so much from its past performance as to cause a perception of unfairness.

6. Conclusions

6.1 In an ideal world, where the future requirements of companies and the forecasts of costs are more certain, the price limits would be set for a longer period than five years, possibly as long as ten. This would provide greater certainty both for consumers and investors. It would encourage companies to take a long-term approach to the achievement of efficiency in a stable environment. It would reduce the uncertainty attached to planning and delivering a long-term capital programme. It would benefit the contracting industry, as well as other stakeholders.

6.2 In practice, we consider it extremely unlikely that there will be sufficient certainty about the key elements of operating costs, the capital programme, opportunities for efficiency gains, or revenues and financing costs to make practicable an extension much beyond five years. The risks of creating additional uncertainty and instability arising from overuse of interim determination mechanisms and big adjustments made at each review are too great.

6.3 However, we also want, if possible, to avoid the disruption for all stakeholders of a very short review period, of say two to three years, unless the uncertainty attached to the main drivers was so great as to compel us along this course. Such a review would be as costly and complex to conduct as a long one. It would be highly disruptive in terms of the uncertainty it would create for the regulatory system. It would foster short-termism. Fortunately, the WFD is the only factor that points to a shorter review period. And at this early stage we consider it likely that this element of the overall capital programme can be managed through the change protocol and interim determinations rather than requiring the whole of the price limit to be set on a short-term basis.

6.4 A possible option would be to set 'full' (say five-year) price limits for companies likely to be less affected by WFD, such as the water only companies, and to set shorter limits for the water and sewerage companies. But this too would be disruptive and potentially inconsistent.

6.5 We look forward to receiving your views and responses to the questions set out in chapter 3.

Your response – what to do next

E-mail

Where possible, we prefer your responses to be sent to us by e-mail. The e-mail address is victoria.botcherby@ofwat.gsi.gov.uk

Responses should reach us by **4 May 2006**.

On-line

You can also send your response via our on-line consultation form, which can be found on our website at www.ofwat.gov.uk/consultationform.

Post

If you prefer, you can post your responses to us. Please address them to:

Victoria Botcherby
Office of Water Services
Centre City Tower
7 Hill Street
Birmingham
B5 4UA.

Telephone

If you have any questions, you can call us direct on 0121 625 3620.

What we will do with your response

Responses will be placed in our library and on our website and made available to the public, unless you have clearly indicated that you do not wish this to happen. In general, we will honour this request, but there may be circumstances in which, under the Freedom of Information Act, the public interest requires all responses to be made public. In these circumstances, however, any details that may identify the person submitting the response will be removed prior to publication.

Appendix 1: Price control periods in other sectors

For the most part regulatory price limit periods set by fellow economic regulators for other utility sectors in the UK cover a period of four or five years. This has proved to be an appropriate point of balance between the need for reasonable certainty about the future period covered by the price limits, and a stable period within which the regulated companies can perform effectively and achieve efficiencies. However, there are exceptions, for example:

- Ofgem recently set price limits for only one year for National Grid Electricity Transmission Control to bring it in line with price control periods for other transmission companies in the gas and electricity sectors;
- the initial price control period set for the London Underground Public Private Partnership (PPP) anticipates that the PPP Arbiter will review prices and service standards every seven and a half years; and
- when the CAA set price limits for the BAA airports for 2003-08 they allowed Heathrow to bring some revenue forward from the next price review period. They did this to signal a commitment to the investment required for Terminal 5 and to smooth the input on price limits.

In each case, the choice of period reflected the particular circumstances of the industry concerned. Subject to the outcome of this consultation, we do not consider that there are major points of principle arising in other sectors that require a major rethink of the frequency of setting water sector price limits.

International experience

For the most part, incentive-based price cap regulation was developed in the UK and has been adopted in other countries which followed this model of privatisation.

In Australia the situation varies from state to state because of the federal nature of their government structures. In most of the states the length of the review period for urban suppliers ranges from three to five years. The regulators in New South Wales (Independent Pricing and Access Tribunal) and Victoria (Essential Services Commission) both use three-year periods, whilst the Northern Territories (Utilities Commission) has a variable review period that can last up to five years.

In Western Australia, the Economic Regulation Authority has just recommended to the state government a price setting system that defines a price path for ten years. They also suggested price reviews throughout this period, initially after four years, to allow revisions to be made to the price path.

The Scandinavian countries have no specific time periods. Municipal politicians decide each year on the price level.

In France, private operators provide 75% of water supplied. Local municipalities contract the provision of water and wastewater services out to them for set periods of time in delegated management arrangements. The contracts between the parties contain details on how the tariffs will be decided over the length of the contract. Some contracts set the tariff and include some adjustments for inflation and efficiencies. In these cases the tariffs are normally set for between 10 and 20 years. Other contracts contain stipulations that prices are set annually after a meeting between the supplier and the municipality.

Again, we see no major factors arising from international experience which suggests we should alter our approach to price control periods in England and Wales.

Appendix 2: Indices of inflation and PR09

Until recently there has been only one widely recognised and understood measure of inflation, the retail price index (RPI) which has derivative indices such as RPI excluding mortgage interest payments (RPIX).

The consumer price index (CPI) measure of inflation has been adopted from 2004 as the basis for the inflation target set for the Bank of England. Pensions, benefits and indexed linked gilts continue to be up rated using the RPI.

The Office of National Statistics (ONS) has produced a paper 'The New Inflation Target: The Statistical Perspective' presenting a detailed statistical analysis of CPI and RPIX, their similarities and differences, and their relative merits as indicators of inflation. It is available on the ONS website at www.statistics.gov.uk/downloads/theme_economy/New_inflation_target_031210.pdf

Ofwat has reviewed the properties of both measures of inflation and finds no overwhelming technical advantage for CPI over RPI as the measure of general inflation in the price cap. No other regulator has yet switched to CPI. Moreover, we see particular merit in retaining the use of RPI for PR09.

The level of bills for water and sewerage customers is likely to be unaffected by the choice of index (any difference would be likely to require a compensatory change in the quantum of the K factor). We note that the CPI is still a relatively young series. Published data may be revised as the index matures to include items such as housing costs that are at present excluded.

The inclination of customers to switch to cheaper alternatives as they emerge is implicit in the averaging technique employed in constructing the CPI but not in the RPI. In this respect the RPI is more aligned with the position of the vast majority of water customers who have no choice about their water supplier.

Price limits are set to provide adequate rates of return for water companies. The RPI is intrinsic to this rate of return. This is estimated by adding risk premium to the real risk free rate, calculated by reference to returns on Government gilts after adjusting for inflation, or on index linked gilts which are linked to RPI.

RPI is also embedded in the building blocks of the revenue requirement and financial calculations. Thus, our views of achievable efficiency savings have been based on real cost changes adjusted by RPI and nominal interest is adjusted to real using RPI (following standard financial convention). It is desirable to have consistency in the revenue requirement building blocks and financial calculations.

Our comparative analysis looks at trends on a real cost basis. To date we have used RPI in the calculation of real operating costs whereas for capital costs we have used RPI adjusted by the notified index (effectively the Construction Output Price Index [COPI]). Whilst changing to CPI does not pose conceptual difficulties it would require a large conversion exercise.

Individual price changes may affect different inflation indices at different times. Whilst not in itself an adequate reason to stick with the RPI at PR09, changing indices does carry a risk of double counting or of omitting individual price changes in the general inflation component of the price cap. We also see merit in a broad consistency of treatment between the economic regulators, to foster regulatory certainty. Accordingly, we proposed to recommend to the WSRA that Ofwat should continue to use the RPI as the measure of inflation in the price control formula for the price review in 2009.

