Response from Indepen

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### 1 Introduction

## 1.1 Background to Indepen

Indepen welcomes the opportunity to respond to the consultation on the framework and approach to the 2008 water price review. Our response reflects our experience in regulation and the water sector.

Briefly, our credentials are as follows.

- The majority of our business in the UK and in other countries of the European Union is with regulators and regulated infrastructure businesses. They are mainly in the water, energy, telecoms and transportation sectors.
- In water, we worked with Ofwat extensively on its first two periodic reviews and since then we
  have been working on strategy and regulatory matters with several of the water and sewerage and
  water only companies in England and Wales.
- We have recently been working with the state owned water industry in Scotland and its regulator the Water Industry Commission.
- In the 1990's, we worked with the Commission's predecessor body, the Office of the Regulator General, and subsequently with some of the energy and water businesses in Victoria.
- As you may know, the water regulatory regime in the UK is currently facing some substantial challenges and we are involved in some initiatives for its reform.

Our website contains more information - www.indepen.co.uk

In preparing this response we have worked with MWH Australia, utilising their experience in the areas of asset management.

## 1.2 Why we are making this response

The ESC has the opportunity to learn from the successes of others and, possibly more importantly, from their mistakes. Water regulation in the UK is a mature environment and as such it provides a useful reference point. In this response, we have drawn on our experience of regulation in the UK and work we have been doing recently on initiatives to reform the water regulation regime.

We do not suggest that lessons can or should be transferred directly from the UK to Victoria. From our own work in Victoria, we are aware of big differences between the two, which will have implications for regulation of the sector. These include differences in

- climate and geography
- the structure and ownership of the industry
- · the institutional structures of government and regulation

Our assessment of water regulation in England and Wales is that it has substantial achievements under its belt but that in current circumstances the way in which regulation is implemented may be inappropriate. The system has become increasingly regulator led and this has stifled innovation and regional diversity with the companies driven more by pleasing the regulator than delighting the customer.

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As for the future, there are concerns that, unless it changes, the regime will not address important challenges facing the industry. Criticisms from Westminster and in the media relate to several aspects of performance

- levels of leakage in some companies
- response to drought conditions in South East England
- wider concerns about the security of supply
- unreliable data
- · the lack of progress on competition and
- poor performance by some companies in meeting the needs of customers.

Ofwat has been the object of much of this criticism and while in our view it is not solely responsible it is true that some of the issues in the sector have arisen because of Ofwat's approaches, particularly its engagement with the companies and other important players in and around the industry, its excessively short term focus and the ineffective but burdensome data regime which does not always provide relevant information.

We attach a copy of the memorandum of evidence, mainly focusing on the water industry, that we have just submitted to a UK parliamentary committee that is looking at the workings of infrastructure regulation. The above points and others are set out in the memorandum.

Our reason for mentioning the UK experience is to explore whether it is likely that the ESC and the Victorian water industry might in future face some of the same problems and to suggest ways in which the ESC can avoid replicating mistakes made in the UK. There may also be useful comparisons to be made with the water industry in Scotland which, unlike that in England and Wales remains in state ownership. It is regulated rather differently from the model that applies in England and Wales and is about to introduce a novel experiment in competition.

## 2 Issues arsing from the consultation

The consultation focuses mainly on the technical issues that regulators need to consider in setting prices for infrastructure businesses. We have focused on some of the broader issues that will need to be addressed by the ESC if it is to protect the long term interests of Victorian customers. Some of these are also being discussed in the UK regulatory environment.

Our observations are under the following headings.

- · Regulation and the future
- · Shared agenda among stakeholders
- The effectiveness of incentives
- Elements of the regulatory approach

We discuss each of these briefly below and conclude with some additional comments on positions the ESC takes in its consultation.

## 2.1 Regulation and the future

As noted above the UK regime has come under criticism for its short term focus and this has indeed has serious consequences that have not been in the interests of customers. Our observation is that the regime was designed in the early 1990's for a post privatisation era but has remained largely unaltered ever since even though circumstances are very different. Only towards the end of last year has pressure from stakeholders led Ofwat to invite the companies to start thinking longer term and submit information looking some 25 years ahead. Having made the request, however, it is not clear HOW Ofwat intends to use this information from the companies.

The ESC consultation does not explicitly consider the medium or long term. While this may be dealt with elsewhere, we believe it is important that decisions of the type that are covered in the consultation are taken with due regard to how the regime may need to develop in future.

## 2.2 Creating a shared agenda

The consultation recognises the health and safety, environmental sustainability and social obligations of the sector. From a different angle the ESC has a complex set of businesses and stakeholders to reconcile in the price review. It will need to deal with

- national, state and local issues
- businesses with very different origins and experiences
- · groups of customers that are in different circumstances
- drought and high level of media interest.

The consultation does not explain whether and if so how it intends to engage in debate to establish a shared understanding of the challenges facing the sector and ways of meeting them over time. It does focus on methods of dealing with uncertainly within the next price control period but in the absence of any shared thinking on what the future might hold and how the sector might need to respond it is difficult to see how decisions should be made on the best methods.

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This might be particularly problematic for the ESC given the discussion in the consultation of inputs from a number of different governmental bodies, including the public shareholders in the water businesses and the very limited time available for these to coalesce.

#### UK Example - water framework directive

An example in the UK concerns the extensive programme of work to bring together what the implications for the sector will be of the EU's Water Framework Directive. In the opinion of some observers, the way in which this process is being conducted is an object lesson in how not to do it but nonetheless it is a source of experience to benefit from. In our view, it requires more consideration at a senior level in all stakeholders and critically better working relations between the economic and environmental regulators and this view has been endorsed by a House of Lords Select Committee

The objective of the WFD is to restore rivers and groundwater to good ecological status. This is not dissimilar to one of the objectives in Mr Howard's statement of January 27 that river and groundwater systems should be returned to environmental health

It is interesting to note that some obligations that will affect prices have not yet been finalised. Given the short time available to set prices, unless a coherent view can be created, there is a risk that issues are inappropriately ignored. These will often be those issues with a longer term dimension. Alternatively they may be added to the agenda in an uneconomic way to agendas that are already stretched for delivery thus creating greater risk and uncertainty for all stakeholders.

In order to relieve the congestion, some of the issues covered in the consultation, such as customer contributions and miscellaneous charges could be placed in separate clearly defined work-streams with different timetables so as not to slow down work on the central issues.

#### 2.3 The effectiveness of incentives

The consultation does not address what seems to us to be a fundamental issue, that is how effective will regulatory incentives be in a sector that is in various forms of public ownership with very different histories and constitutions.

In our view, the absence of pressure from shareholder investors and effective competition is an issue that the consultation should have dealt with. It proposes approaches that are similar to those applied in the energy sector and by Ofwat but these relate to privately owned businesses with the profit motive to incentivise improvement.

In the UK water regulators have to deal with companies of various kinds including

- quoted companies (such as Severn Trent and Kelda)
- companies owned by corporate parents (such as Wessex Water, owned by YTL of Malaysia)
- those owned by financial institutions (such as Macquarie that has recently acquired Thames Water)
- companies limited by guarantee (Welsh Water)
- state enterprises (Scottish Water).

The challenges and solutions in these cases differ substantially.

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#### UK Example - Scottish Water's gilts reserve

The Scottish Executive, the state shareholder in Scottish Water, has agreed to the creation of a financial reserve that will be created by out-performance relative to its price limits. The reserve has been referred to as "an involuntary interest free loan from customers to Scottish Water" although it will be invested in government securities and the interest may be used to offset price increases.

The purpose of the reserve will be to enable Scottish Water to respond to external shocks without recourse to customers. Part of the reserve will also be available subject to the agreement of the executive, for incentive payments to Scottish Water employees as approved y the regulator.

The ESC's duties include reference to competition but this is not discussed in relation to incentives. Again the Scottish situation, where the market for retail competition for industrial and commercial customers will open in April this year, might offer interesting ideas for consideration by the ESC.

## 2.4 Elements of the regulatory approach

We comment briefly on some of the regulatory policies underlying the ESC's approach.

#### 2.4.1 Allocation of risk

A key consideration for the ESC will be how it chooses to deal with risk. The consultation document refers to risk in several contexts<sup>1</sup> but does not adopt any general principle that would allow it to make consistent decisions on a range of issues. In a regulated situation risk is either borne by the shareholder or the customer. Thus, the question of the length of the price review period is really "Is it reasonable for shareholders to bear the risks for longer or should customers underwrite it?"

The document appears to suggest that data integrity is a company risk but it also says that the regulator will take account of it. This may result in an adverse incentive. Companies will not act at their own initiative to improve their data unless they pay the price of having poor data.

More generally in the consultation, there seems to be a tendency to favour an interventionist position when it comes to information and reporting, for example the use of quarterly and annual reporting and some of the monitoring that seems to focus on inputs not outputs. Again, this shifts risk and responsibility away from the companies.

ESC should provide clarity about who should carry which risks and the cost of capital can then be estimated accordingly. Examples of company and customer risks are as follows.

- company risks reliable data, delivering inputs (i.e. capital schemes), managing pressures on costs generally, delivering efficiency and ensuring assets do their job
- customer risks unpredicted new obligations, specific cost pressures, and factors such as extreme weather (normal variations in weather are company risks.

If there is clarity about this then the companies can produce appropriate plans and ensure that they understand the risks they are bearing and take steps to manage or mitigate them. This might move the argument on to what should be the correct allowance for risk in the cost of capital for the water companies.

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<sup>&</sup>lt;sup>1</sup> For example, with respect to the length of the price review period but then moves on to other risk issues of dealing with unforeseen events and new obligations that arise during the period.

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#### **UK** example

In the UK Ofwat has sought not to regulate companies on their inputs, because to do so would place the risk of whether the desired output is achieved (for example the leakage target or an asset serviceability indicator such as sewer collapses) on the customer. Instead it wants companies to take the risk of delivering the outcome, which provides an incentive for the company to make sure it understands the relationship between inputs and outputs better and to make better estimates of the necessary inputs and their prices.

It has found it difficult to maintain this stance in cases of poor performance, however, and in some instances (e.g. Thames Water's leakage) it has been drawn into specifying inputs as well.

#### 2.4.2 Diversity among the companies

Some questions about how the ESC will deal with the very different companies it has to regulate are as follows.

- What will the ESC's position be on differences in costs and service levels between the metropolitan, non metro and rural companies and companies of very different sizes?
- To what extent will it seek convergence or will it welcome diversity and local differentiation where efficiently provided?
- If the latter how will it make effective comparisons and take account of local preferences?

There seems to be a focus on compliance with standards but the consultation says little about how customer preferences might be used in setting standards or about the scope for the standards to be different in different circumstances.

This is a weakness in UK infrastructure regimes but it is also an area where there is political pressure to do more.

#### 2.4.3 Information requirement

How substantial should the regulatory data requirement be?

A burdensome data regime would place significant costs on the sector and the ESC. Given the stage of development of the regulation of the water sector in Victoria, there may be a good case for encouraging all the companies to establish a sound base of asset information by compulsion rather than the economic incentives that come with a clear allocation of the risk to the companies.

It would be appropriate to consider the pros and cons of this before committing to it. On this as well as a number of the other issues we have raised, the answer may depend on how the ECS sees the regime developing in future rounds.

The reliability and sustainability of assets is not a major theme in the consultation although it is covered in the section on capital expenditure. It may be that concerns about the assets are not widespread in Victoria but in the longer term it may be. A framework that permits trade offs between prices, investment in enhanced quality (water or environmental) and the maintenance of above and, particularly, below ground assets so that they remain resilient is a key regulatory tool. It is also one of the more data intensive areas of regulation. Appendix C gives an overview of an approach to water asset management that has been adopted in New Zealand that might be of interest to the ESC.

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### 2.4.4 Intervention by the regulator

An important aspect of the regime will be whether and how the ESC decides to intervene if a company is not performing.

In the UK regulators have initially sought clarification and then increased monitoring from companies on the reasons for failures before embarking on the hierarchy of interventions at or between price reviews. There has been much debate and scepticism about whether this approach has proved effective. This has come from both the more and the less camps.

A recent Public Accounts Committee hearing soundly criticised Ofwat for having persevered with this approach with Thames Water and not resorted to tougher actions sooner.



Appendix A: MEMORANDUM OF EVIDENCE BY INDEPEN TO

HOUSE OF LORDS SELECT COMMITTEE ON REGULATORS: INQUIRY INTO UK ECONOMIC

**REGULATORS** 

#### **Background**

- Indepen is a consultancy that advises organisations addressing the challenges of regulation, deregulation, competition and restructuring. We work with clients at a senior level across the energy, water and transport infrastructure sectors and for regulators and government departments. We have considerable experience of the regulatory bodies and matters in which the Committee has expressed interest.
- We welcome the Committee's inquiry and the opportunity to submit evidence. Our input focuses on "working methods and effectiveness" and we have looked mainly at issues to do with the Ofwat and the water sector, which is currently illustrating a number of relevant matters.
- 3 There are opportunities for cross-sector and agency learning, however, and we also refer to comparisons between Ofwat and some of the other regulators on the Committee's list, namely Ofcom, Ofgem and the CAA.

#### Overall assessment

4 The working methods of the regulators that are of interest to the Committee differ substantially and each can learn from the others.

#### Ofcom

- 5 Since its creation, Ofcom has promoted competition, adopted a 'light touch' approach, set regulatory parameters as opposed to prescriptive regulatory requirements and operated with a 'bias again intervention', seeking 'the least intrusive regulatory mechanisms'<sup>2</sup>. Unusually compared with other regulators, Ofcom has recently simplified BT's regulatory financial report thereby reducing the burden on the company and the regulator.
- 6 As well as reforming the content and methods of the regime Ofcom has paid attention to the calibre and seniority of its staff. Its approach is, we believe, leading to better regulation as a result of having better regulators.

#### Ofgem

- 7 The focus of the regulatory regime for electricity and gas has been different from that in water, although the mechanics have a lot in common. Offer and Ofgas, and Ofgem since 2000, have concentrated on ensuring a competitive market for the supply of electricity and gas to all retail consumers and in some unbundled ancillary markets.
- 8 It is generally agreed that the regulatory framework served customers well through times of surplus gas supplies and power generation capacity in the 1990s. A tight supply position then led to high energy prices and these have dominated the sector in the last three or so years. There is now a prospect that normal service will be resumed although there is a question about whether market mechanisms will ensure sufficient energy supply at the same time as delivering an increased proportion of low carbon energy sources.

<sup>&</sup>lt;sup>2</sup> Ofcom's Statement of Regulatory Principles.



#### CAA

- 9 In its regulation of BAA's airports, the CAA has recently adopted an innovative approach to customer involvement that we believe could be beneficial in other sectors. The CAA has encouraged the industry (airports and their airline customers) to take responsibility, under a process known as "constructive engagement", for service quality, incentives and investment. Evidently, these are central to the regulation of the airports and they have been controversial and contentious in the relationships between BAA and the airlines.
- 10 The process is described briefly in the Annex to this memorandum. We are not suggesting that it could apply directly in other regulated sectors rather that with thought and commitment a constructive approach can be devised to deliver benefits even in contentious situations.

#### Water

- 11 At a top level, our assessment of water regulation is that it has substantial achievements under its belt but that in current circumstances the way in which it is implemented has become inappropriate.
- 12 There are concerns that the regime will not address important challenges facing the industry. There has been criticism in Westminster and the media on a number of fronts: levels of leakage in some companies, response to the drought in South East England, wider concerns about the security of supply, unreliable data, lack of progress on competition and poor performance by some companies in meeting the needs of customers. Ofwat has been the butt of much of this.
- 13 In our view, the issues arising in the regime are to do with working methods and many concern engagement.

#### Working methods and effectiveness

- **14** The following observations apply to the way in which the regulatory regime is implemented in the water industry.
- 15 Our theme is the need for better engagement and it follows that not all of the issues we identify are the sole responsibility of the WSRA (formerly Ofwat). Evidently, other interested parties including the companies and other regulators have their part to play in improving engagement.

#### Internal focus

- 16 The statutory duties of UK regulators are broad, as are their powers. It is important to remember, however, that regulators can only promote the national welfare via the decisions and actions of others. The main actors in regulated industries are the businesses and their investors, and their customers. In some cases other stakeholders play a key role, often where there are important externalities. For example the impact of the water industry on the aquatic environment makes the environment an important consideration in water regulation.
- 17 Experience suggests that regulators fail when their thinking focuses on their own duties and approaches to the exclusion of the motives and duties of others with interests in the sector. When this happens, regulatory policies and decisions and their implementation will be sub-optimal and will result in unexpected and unintended consequences.
- 18 As an example, it might seem likely that shareholders, customers, Ofwat and the EA would all want water and sewerage infrastructure that is properly looked after and capable of providing good services to customers and the environment over the long term. Of late, the water industry's performance on this has been patchy and the assets of some of the companies are not in good



- condition. We argue that Ofwat has been overly focused on its methods and processes and that in the mean-time assets in some parts of the country have been deteriorating over a number of years.
- 19 A related observation is that after more than 15 years of regulation intended to promote the interests of customers, few water companies could reasonably claim that customers are central to their business. Some believe that Ofwat has too much say in what the outputs of the sector should be and that these do not necessarily reflect consumer preferences and expectations. Such comments could be made of other regulated sectors.
- 20 Regulators should engage more completely and more explicitly with others. They should begin by agreeing how their duties fit or conflict and then decide how to deal with those who have legitimate interests that are in conflict with those of the regulator. This process of joining up the silos might involve co-operation or compromise, or joint work on defining the problem and interpreting the evidence. In extremis it would involve changes in duties and roles.
- 21 As consequences of the inward looking approach we observe that
  - there is insufficient understanding and involvement among the most senior people on all sides
  - there is insufficient input from senior people to important decisions, and decisions can be made on inappropriate technical grounds
  - judgements about materiality may be inappropriate
  - there can be excessive attention to obtaining and validating data not all of which is required and used to good effect in making regulatory decisions.

#### Lack of flexibility

- 22 The way the water regulatory regime is implemented has changed relatively little since privatisation in 1989. As a result, innovation and regional diversity have been stifled and possibly desirable changes in the industry's structure have been constrained.
- 23 If anything, this has strengthened the regional monopoly positions of the companies and despite pro-competitive legislation in 2003, service competition, which has been effective in other privatised sectors, is struggling to begin. To date no industrial customer has switched supplier and the regulators have shown no interest in promoting market mechanisms for raw or treated water or to deliver environmental policies.
- 24 Consideration should be given to why there has been no progress, both in terms of the market parameters set and the access pricing arrangements within which Ofwat has had to work<sup>3</sup>.
- **25** Given the quite different situations of the water companies in different parts of the country, there is an obvious need to promote more diversity among the companies driven by regional customer preferences, rather than the current one-size fits all approach.

#### Institutional arrangements

26 A conclusion of the House of Lords Science & Technology Committee Report on Water Management (June 2006) was that the institutional arrangements were too fragmented. The creation of the Water Services Regulation Authority in 2006 should be taken as an opportunity to reform the regime in England and Wales.

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<sup>&</sup>lt;sup>3</sup> Ofwat wrote to the Minister of State at Defra outlining these concerns in November 2006.



27 Even if there is no change in the statutory arrangements, reform should give high priority to improving engagement among Ofwat, the companies, the quality regulators, and customers and the Consumer Council for Water. Ofwat's role relative to these bodies should change. Its recently acquired statutory duty of contributing to sustainable development suggests it should be facilitating trade-offs between the interests of investors, customers and the impacts of the sector on the environment and society rather than the more deterministic approach it currently adopts.

#### Short-term focus

28 The regime has pushed the companies towards short term planning in five-year cycles and this has been inimical to the development of strategies to deal with the challenges facing companies and the industry. Regulatory mechanisms such as comparative benchmarking and the Overall Performance Assessment promote short-term efficiency rather than longer-term approaches to sustainable water resources, security of supply and good asset condition and serviceability. In some cases, they have not resulted in sustainable, resilient infrastructure.

#### Information overload

- 29 Another undesirable consequence of water regulation is that the reporting burden is substantial and not proportionate to the uses to which the data are put.
- 30 Regulators often say that they do not require any information that a well run business would not need. Currently, however, the information requirement is driven by the regulator. It is for the companies to decide on their strategic directions and the actions and behaviours to achieve them, develop plans and performance measures and then agree what information their Boards will need if they are to know whether the businesses are on track and that they are taking account of the risks and opportunities in scenarios about the future.
- 31 More effective engagement between the company and the regulator about this process would make sure that both understood what data they needed to derive the necessary information. It would help to streamline regulation and resolve issues that are currently contentious.

#### Lack of evaluation

- 32 There is a need for explicit evaluation of key existing aspects of the regime and any important changes, in particular their effect on incentives and the creation of unintended consequences. One way in which this might have happened would have been at referrals of licence amendments to the Competition Commission. In recent years there have been no referrals (with the exception of water merger referrals, the subject matter of which is narrowly defined) and therefore no opportunities for independent scrutiny of many aspects of the regime.
- 33 This has not always happened in the past and the implications for customers, investors and stakeholders of many aspects of the water regulatory regime have not been evaluated.

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Friday 9<sup>th</sup> February 2007

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## Annex to Indepen's memorandum of evidence on the process of constructive engagement between BAA and its airline customers

In its regulation of BAA's airports, the CAA has recently adopted an innovative approach to customer involvement that we believe could be beneficial in other sectors. The CAA has encouraged the industry (airports and their airline customers) to take responsibility, under a process known as "constructive engagement", for service quality, incentives and investment. Evidently, these are central to the regulation of the airports and they had been controversial and contentious topics in the relationships between BAA and the airlines.

The process is described briefly in this Annex. We are not suggesting that it could apply directly to other regulated sectors rather that with thought and commitment a constructive approach can be devised to deliver benefits even in contentious situations.

Developing and agreeing Principles of Engagement was an important first step in the process and it took some time to discuss and agree the Principles with BAA and the airlines, their alliances and their representative groups.

The agreed Principles covered

- the general purpose, scope and objectives of the engagement
- the expected benefits from successful engagement
- the broad approach
- the nature of the discussion process and forum
- the outputs of the process in terms of agreement or disagreement on issues
- · representation of the customers in the process
- the approach and plan to addressing the different issues
- behaviours.

The core of the approach was a statement in the Principles that on any topic or issue a statement would be produced denoting either agreement (and stating what had been agreed) or disagreement (setting out the different positions). There was an incentive to agree on issues because if no agreement could be reached it would be for the CAA to decide.

Evidently, this was a process designed to work with a manageable number of corporate customers. At Heathrow, for example, there are 90 airlines. They agreed that the constructive engagement meetings would be attended by the three big Heathrow based carriers, the three alliances, three representatives of the smaller airlines and a representative of IATA - the airlines' trade association. The meetings were followed by open briefings of all airlines.



## Appendix B: Assessing expenditure - a note by MWH

#### **Operating Expenditure**

The consultation paper states that the ESC expects "businesses to be able to deliver efficiency improvements with respect to business as usual expenditure over the regulatory period" (sec 4.2.4 p 40). Historically water utilities, particularly the regional urban utilities, have operated their water supply and sewerage services in a reactionary way to respond to daily reliability issues when failures occur or complaints are received. Operating expenditure has traditionally been set aside in budgets based on on-going performance from one year to the next to generally maintain the services at their current levels of performance. Operating a business in this way will not lead to any efficiency improvements.

Improvements to information management and the reporting of system performance KPIs such as sewer blockage rates and water main breaks is providing these utilities with a better understanding of how the assets are performing relative to their agreed customer charter targets. Maintenance and repair works have been planned and implemented to address areas of concern for the water businesses. However few of the businesses' are preparing 3 or 5 year planned maintenance strategies because they have not analysed the fundamental reasons for their performance and they have not looked at the problem from a township, system or catchment perspective in any detail.

Maintenance expenditure can be allocated to address a KPI across the water business's geographical area but unless rigorous analysis of the problems occurs locally the knowledge is not available to make clever or informed decisions for targeted maintenance activity. For example individual asset categories such as a certain pipe type, size and year laid, etc can be a higher than average contributor to high KPI performance results. With detailed analysis this may be found to be a local system issue. Without system based analysis there is no differentiator for assigning appropriate operating and maintenance expense to these assets rather than areas with better performance.

The efficiencies from developing system based reporting will potentially come from managing levels of service and achieving performance targets at lower operating cost. It follows that localised customer service targets could then be developed with the local community to address local needs. High cost improvement actions could be individually negotiated with the local community to reach agreement on the appropriate level of funding.

Detailed analysis of system performance will take time but the water businesses would benefit from generic guidelines on what analysis and what reporting they should be undertaking and at what level of detail. Each business would be required to progressively improve its knowledge about the performance of the assets and report of asset based operating expenses over the regulatory period.

#### Capital Expenditure

Capital expenditure comprises the renewal and upgrade of existing infrastructure and the provision of new infrastructure to meet the needs and service expectations of customers. The ESC expects the businesses to have engaged in consultation with the community regarding their willingness to pay for service improvement. For the regional urban water businesses' in particular the confirmation or development of the capital works should be at the township, system or catchment level. Consequently the comments above about improving operating expense documentation equally apply for capital expenditure documentation.

Decisions on infrastructure renewal are related to meeting KPI targets and managing risk in the event that an asset fails. The monitoring of asset performance and condition (or remaining useful life) of the assets should be undertaken at a township or system level to facilitate the compilation of detailed



programs of asset renewal by the various asset classes such as pipelines, pumping stations, storage tanks and treatment plant process facilities etc. Without monitoring performance and condition at a system level the renewal works program can only default to a pool of renewal capital cost to be spread across the entire geographical region managed by the water business. A business may follow historical expenditure trends but it will not drive business efficiency improvement.

Levels of service for operating the water supply and sewerage systems incorporate hydraulic capacity considerations e.g. the EPA's requirement that sewerage systems should safely convey all flows resulting from a storm event that occurs on average every five years. To develop the upgrade capital works where the existing or short term future hydraulic capacity is deficient, hydraulic models are developed and improvement programs are developed. The outcomes of this analysis and the priority for upgrading one system over another all need to be documented in a logical, transparent form. The selection of works may also involve community consultation to assess their willingness to pay or to agree to delayed expenditure or acceptance of a lower level of service. Collective documentation by system as an asset management plan supported by the business's policies for the management of the activity will benefit the business and its customers.

The same concept applies to new infrastructure where detailed assessment and documentation of future demands, community consultation and impact on the environment and community amenities, etc should also be captured by the system.

#### **Conclusions**

In conclusion, the Commission should take into account the advances made by the water businesses since Water Plan 1 in documenting the basis and reasons behind both the operating and capital expenditure plans. This documentation should allow comparative assessment of need across the water businesses' geographical area, and where this detail does not exist or where improvements have not occurred since Water Plan 1 the business should get guidelines or examples or the level of detail expected and more time to tune their works programs subject to improvements resulting from more rigorous assessment and documentation.

It is important for the Commission to be confident that a water business is improving its forecast of operating and capital expenditure. The perception from Water Plan 1 to Water Plan 2 is that the businesses have not significantly improved the documentation or the basis behind decisions on expenditure.

The system or township based reporting of all issues associated with a system and its impact on the local community is the best way to manage both the water supply and sewerage activities. Addressing issues covering the whole management of an activity is also covered as system reporting facilitates rolled up reporting.

More detail and examples of system based reporting are available to the Commission should this be of interest.



## Appendix C: Asset management in New Zealand - The MWH model

Recent legislative changes have driven significant reform in asset management within New Zealand.

The owners of public infrastructure are now required to have a long term plan that covers a period of not less than 10 years. The financial forecasts have to be in detail for the first three years and in more general terms for the next seven. Appropriate performance measures and targets have to be prescribed for every activity; and a balanced budget that will assure achievement of the predicted levels of service provision, and maintenance of the service capacity and integrity of the assets throughout their useful lives, has to be shown.

The plan is audited by the Controller and Auditor General before it is issued for public discussion. One of the matters that the Controller and Auditor General has to comment on is 'the quality of the information and assumptions that underlies the forecast information' in the plan and the practical effect of this is to require him to review the sufficiency of the asset management plans that have been prepared for each asset.

When preparing their long term asset management plans the authorities are, amongst other things required

'to seek to identify all reasonably practicable options for the achievement of the objective of the decision and to assess each option in terms of present and future social, economic, environmental and cultural wellbeing. The practical effect of this, of course, is to force a wide ranging 'sustainability' examination of all of the issues.'

Customer involvement at all stages in the decision-making process is a fundamental requirement of New Zealand law. As a result of these requirements the emphasis has changed dramatically – away from the traditional approach that largely focused on the physical assets to what the services are that customers and other stakeholders actually want – and are prepared to pay for. The process for consulting them in order to determine what this is works well.

The MWH model creates an output which, in the case of water service, is a sophisticated plan for the whole service (levels of service - 'customer driven') supported by a sub-plan for every separate water supply or wastewater system – all written in a manner capable of readily providing all of the required information for a customer charter; for the Regulator and for management of the company. It can be used as the prime tool to manage the business day to day.

Amongst other things the process of preparing it

- · forces improved business discipline
- eliminates any silo mentality
- virtually always enables the organisation to 'see the whole picture' to a degree, and to a level of accuracy, that has not been the case before
- identifies more precisely the future priorities
- produces a detailed future improvement plan
- results in much more transparency than has hitherto been the case.