



independent
Review
panel

Independent Water Review Panel

Strand One Report
Costs and Funding

October 2007

INDEPENDENT WATER REVIEW PANEL

STRAND ONE REPORT – COSTS AND FUNDING

PREFACE

In 2004, while the Northern Ireland Executive and Assembly were suspended, the direct rule administration announced far-reaching reforms in our water and sewerage services. It was proposed that the Water Service, which had been part of the Department of Regional Development, would become a government owned company (GoCo), and that all households would be required to pay a direct water charge. The aim was to make the services self-financing.

There was widespread opposition to the proposals. Some people objected that they had already been paying for water through the rates and should not have to pay twice; some argued that water was a human right not a commodity, and so should not be treated like other utilities; some saw the creation of a GoCo as a step towards eventual privatisation and opposed the selling off of public assets. Whatever their reasons, the public has lost confidence in the reform process. This was articulated in the March 2007 Assembly elections, when all political parties expressed concerns about the reform proposals.

To help restore public confidence, the new Executive announced on 11 June 2007 that privatisation was no longer an option. The Minister for Regional Development set up an Independent Review Panel to carry out a comprehensive analysis of the reform process;

to make recommendations on the level of funding needed; and to advise him on how they should be paid for and governed.

This is the Panel's first report and covers costs and funding: the second report will deal with governance and other issues.

I have been very fortunate to have as colleagues on the Panel Charles Coulthard, Professor John Fitzgerald and Joan Whiteside. Collectively we have substantial experience, knowledge and skills from utility regulation, the representation of consumers' interests, social justice, economic research, sociology and social policy.

Northern Ireland is divided in many different ways. It has been described as a 25/25/50 society with 25% of households living in hardship, 25% in comfort and 50% with a good standard of living. The latest government statistics show that some 21% of individuals and 29% of children live below the official poverty line (60% of UK median income). Any increase in the outgoings of poor families will push them into further poverty.

We have had to balance economic, social and environmental objectives. Current economic policy emphasises efficiencies, customer relations, management incentives and driving down costs to the benefit of customers. These values can clash with social policy objectives like social cohesion, rich community support networks and lower levels of poverty and inequality. Moreover, these economic and social objectives may conflict with environmental objectives.

There is now a broad consensus among scientists that global warming is at least partly a consequence of human activities. Flash

floods similar to those that caused severe hardship in parts of Northern Ireland in June 2007 are expected to become more common. Consequently we need to reduce our carbon footprint and develop sustainable ways of delivering clean water and disposing of our sewerage. As a society, we will have to pay more in the short term to achieve these objectives: but we must do so for the sake of future generations.

Regional public services in Northern Ireland have two main sources of income: the Block grant from Westminster and the regional rate. If water and sewerage services are paid for from either of these sources, there will be less available for other public services. If as a society we want to replace our out-dated Victorian sewers or stop the discharge of sewerage into our beautiful coastal waters, we will need to invest in new infrastructure. The money for this will have to be found, whether through the rates or user payments. There is no other option. We face hard choices.

The Executive has to agree its expenditure plans for 2008/9 shortly. It was therefore necessary for us to complete our review by the end of September. Our tight timescale made it impossible for us to consult as widely as we had wished. We therefore adopted a policy of targeting a representative sample of key voices in the community, but we regret that it has not been possible to listen more widely.

I would like to thank the Panel members for their commitment, dedication and good humour and fitting the work into their already overstretched schedules. I would also like to thank our two economists who conducted the research and provided succinct

accounts of the complexities of public finance. Our thanks go too to our receptionist, secretaries and security officer. Finally, a special thanks to Bill Smith, who sorted out the difficult problems, captured our main arguments from numerous discussions, and drew them all together in this report.

Professor Paddy Hillyard

Chair of the Independent Review Panel

30 September 2007

FINDINGS AND RECOMMENDATIONS

Summary

- Direct rule ministers' proposal for water charges should be abandoned, saving householders around £143m in 2008/09 and £153m in 2009/10
- There should be no separate bill for water and sewerage services
- Plans for metering domestic customers should be discontinued
- Future household payments should be based on property values and supported by an improved affordability scheme to prevent water poverty
- Households should not have to pay for unfair costs such as roads drainage and the extra cost of the shareholder's dividend
- No cross subsidy between domestic and non domestic users
- Northern Ireland Water's efficiency savings target should be almost doubled
- Northern Ireland Water's contract with Crystal Alliance should be fundamentally reviewed
- Under direct rule there was a lack of openness and transparency in the water reform process

- Ratepayers have paid a substantial annual contribution towards the costs of the Water Service
- The level of investment in our water and sewerage infrastructure has been less than in Britain
- NI would lose annual spending power of around £100m if the Water Service continued to be funded directly from the rates or the Block grant
- Privatisation is not an option, as set out by the Minister in our terms of reference.

Funding recommendations in detail

- From 2008/9 an annual sum of around £109m should be taken from the domestic regional rates in recognition of ratepayers' historic contribution to water and sewerage services: this payment will be worth around £160 for the average household (3.9)
- In 2008/9, this will be households' only contribution to the services: the balance should be paid from the NI Block (2.35)
- In 2008/9, the rates relief scheme should continue to apply both to the rates and to domestic water and sewerage payments (2.35)

- Householders' payments for water and sewerage services should be clearly and separately identified on their rates bill and earmarked for Northern Ireland Water (2.36)
- From 2009/10 water and sewerage payments should be collected through the same billing and collection system as the rates: there should not be a separate system (2.36)
- From 2009/10 these payments should be sufficient to ensure that the services are self-financing at the lowest possible cost to users (2.36)
- As with the rates, householders' water and sewerage payments should be calculated on the basis of property capital values (2.36)
- There should be no standing charge or volumetric element (2.36)
- Payments should be eligible for new improved affordability arrangements about which we will be making recommendations in our second report (2.36)
- Payment arrangements for the non-domestic sector should proceed as planned, and should be reviewed by the Regulator in due course to ensure that there is no cross-subsidy between the two sectors (2.10)
- The implementation of domestic metering should be discontinued for the foreseeable future (2.36)

Cost recommendations in detail

- Northern Ireland Water's operational cost efficiency target should be raised to 40% for the period ending 2009/10 (5.16)
- Northern Ireland Water should review its capital expenditure efficiency targets and submit more challenging targets for the Regulator to consider in the light of our other recommendations (5.35)
- As Shareholder, DRD, on behalf of the Minister, should review NIW's arrangements for performance related pay to ensure that any enhanced payments are directly related to outperforming the prescribed efficiency targets (5.17)
- Given the high level of drinking water compliance already achieved and the substantial investment required to effect further marginal improvements, the Executive should consider as a decision properly to be taken at the political level the cost effectiveness of increasingly exacting drinking water compliance targets (5.26)
- Despite the potential costs to the NI Block, there should be at least a partial waiver of the dividend extracted from NIW by DRD, such that customers will pay no more than they would under a debt financed model (6.9)

- NIW's contract with Crystal Alliance should be fundamentally reviewed, given that our recommendations will considerably alter the nature and scale of the work required (7.5)
- From 2008/9 liability for the costs of road drainage should be transferred from sewerage users to the Roads Service (7.8)
- The Reasonable Cost Allowance Scheme for developers should be reviewed to ensure that it is cost reflective and is operated at no cost to other users (7.11)
- NIW assets which have already been identified as surplus should be disposed of to maximise their value to customers and taxpayers (7.17)
- The Regulator should review NIW's portfolio of assets with a view to identifying additional assets which are surplus to requirements and disposing of them (7.17)

Findings in detail

- Under UK-wide changes in Treasury accounting rules in 2002, if we had continued to pay for the Water Service out of the rates, the NI Block would have lost annual spending power of around £100m and increasing: in this respect the shift in status from agency to public corporation is already substantially benefiting the people of Northern Ireland. Moreover, the change is also releasing a further £60m

annually for capital investment in other public expenditure priorities (2.8)

- There was a lack of openness and transparency in the water reform process from 2002: the potential costs and alternative policy options may not have been adequately assessed (1.15)
- Ratepayers historically paid a substantial annual contribution towards the costs of the water service through the regional rate: this was roughly equivalent to £109m at today's prices (3.6)
- After 1998 the linkage between the regional rate and payments to the Water Service was broken: but the rate was not reduced and ratepayers understandably believed that they were continuing to contribute (3.7)
- The revenue raised from the regional rate did not cover the full costs of the Water Service (3.8)
- Our level of infrastructure investment has been lower than in Britain since 1989. (4.19)
- £50m was added to the NI Block in 1989 to reflect the public expenditure consequences of the privatization of water and sewerage services in England and has continued to be paid (4.21)

- Volumetric charging (metering) should not be extended to domestic users here until and unless:
 - there is a foreseen water shortage requiring additional investment in extraction or storage capacity
 - other more cost-effective conservation measures have been implemented (2.33)

- The N.I. Consumer Council and the office of independent Utility Regulator have a significant role to play in protecting the interests of service users, and should continue their respective responsibilities (7.13)

- The proposed Affordability Tariff is better than comparable schemes in Britain, but suffers from targeting and take-up problems.

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APPENDIX 1: MEMBERSHIP AND TERMS OF REFERENCE

APPENDIX 2: ORGANIZATIONS WHICH GAVE EVIDENCE

1. INTRODUCTION

Context

- 1.1 Following its decision that new charges for water and sewerage services would not be collected in 2007/2008, the Northern Ireland Executive on 11 June 2007 announced the terms of reference for a comprehensive review of the water and sewerage reform process, to be undertaken by an independent panel. Our membership and terms of reference are at Appendix 1.
- 1.2 The purpose of this, the first of our two reports, is to advise the Minister for Regional Development on the level of funding needed to finance our water and sewerage services now and in the future, and on where the funding should come from.
- 1.3 The body of the report comprises three sections:
 - funding mechanisms (chapter 2)
 - costs (chapters 5 to 8)
 - affordability (chapter 9)
- 1.4 We were also asked to consider:
 - how much people already contribute through the regional rate (chapter 3)
 - the true costs of rectifying the legacy of under-investment (chapter 4)

1.5 The questions we have tackled are complex. We have reviewed a considerable volume of documentation and have taken oral evidence from 25 groups and organisations (as listed at Appendix 2).

1.6 In the course of our work we have:

- gathered and analysed information on the regional rate during the 1990s, its contribution towards the costs of the then Water Service, and the public expenditure regime then in place
- assessed the extent of under-investment relative to Britain, including the level of spend needed to match compliance standards and historic patterns of expenditure
- revisited the level of efficiencies required of Northern Ireland Water
- examined the potential for reducing the cost of capital for infrastructure investments
- assessed the impact of various tariffs on different household types

1.7 We are continuing to research and examine potential alternative models of governance and their financial implications, which we will address in our second report.

The Change Process

- 1.8 In December 2002 direct rule ministers announced that our water and sewerage services would become self-financing. Following a consultation exercise, they decided in August 2004 that the services would be provided by a government owned company (GoCo). The new company would be regulated by expanding the role of the Northern Ireland Authority for Energy Regulation. All households would be required to pay a direct charge. Household metering would be introduced when charges were fully phased in and there would be a discount scheme for those who were unable to pay. The original aim was to implement the changes in April 2006, but for various reasons they were delayed for one year. In April 2007 Northern Ireland Water became a GoCo but in response to representations from the political parties the Secretary of State agreed to defer the introduction of charging. When the new Executive was established in May 2007, it announced that privatisation was no longer to be held open as an option.
- 1.9 From the evidence available to us, there were five main drivers to the reform process. First, the privatisation of the water industry in England in 1989 took water and sewerage services outside the public expenditure regime. As a result, Northern Ireland ceased to receive additional incremental funding through the Barnett formula in respect of these services.

- 1.10 Second, this loss was heightened by the consequences of a new system of budgetary controls which became fully operational after 2002. This new system - Resource Accounting and Budgeting (RAB) – affected water and sewerage services particularly heavily because of their large asset base.
- 1.11 Third, the Executive in 2002 estimated that £3 billion in infrastructure investment would be needed over the next twenty years if our services were to meet increasing demand and comply with European Union Directives on water quality and environmental protection. The Executive recognised that it would be difficult to find the necessary amount out of the existing Northern Ireland Block.
- 1.12 The Treasury then offered to defer the full application of RAB until 2006 on condition that the Executive agreed to introduce charges to users from April 2006. This offer meant that substantial additional capital charges would be covered by the Treasury for the intervening period, rather than being a cost to the NI Block. The Secretary of State suspended devolution in November 2002 before the Executive had formally responded to this offer.
- 1.13 Fourth, direct rule ministers wanted to reduce the gap in households' contributions to local revenues between Northern Ireland and England: in 2004 the average household payment there was £1216 compared with £509 here.

1.14 Fifth, the Treasury wanted the private sector to play a more important role in water and sewerage here as it does in England. Direct rule ministers ruled out immediate privatisation, but it was nevertheless the policy favoured by the Treasury. A letter dated 8 July 2004 from the Secretary of State to the Chief Secretary to the Treasury noted: “This [the GoCo proposal] does not rule out future privatisation, and indeed there may be the opportunity for a private sector equity stakes as well, although I remain unconvinced this is feasible from the outset of the new GoCo.”

Assessment

1.15 From the evidence available to us, it appears that there was a lack of openness and transparency in the reform process; and that the potential costs and alternative policy options may not have been adequately evaluated in advance. Moreover, direct rule ministers’ disregard for public opinion deeply damaged confidence in the integrity of the process. We believe it is vital to be open and honest with the public in carrying this issue forward. We wish to place on record a number of observations to help ensure that lessons are learned for the future.

1.16 First, there appears to have been no serious attempt to estimate the cost of the reform process itself. It must have been obvious that transforming the Water Service into a public corporation and introducing a separate charging system would involve substantial costs: and that this would mean either cutting other areas of public expenditure or

obliging users to pay more. We have obtained figures on the costs of the DRD Water Reform Unit, which include salaries, administrative expenses, consultancy fees and funding for the Consumer Council and Utility Regulator. They amount to £12.4m over the four years to March 2007, of which external consultancies accounted for £7.2m. These costs are just one element in the reform process: the total will have been considerably higher.

1.17 Second, there was a lack of openness and transparency, and in one instance clear misrepresentation, in direct rule ministers' presentation of the changes. We consider it regrettable that the public was neither consulted nor informed about the decision that the Water Service would no longer be funded out of the regional rate, without any corresponding reduction in the rate. People reasonably assumed that they were still paying for the Service through their rates when it was announced in 2004 that there would in future be a direct charge. This rightly gave rise to the objection that users and ratepayers were being asked to pay twice for the same service.

1.18 NIO ministers' stealthy tactic was compounded by a policy of deliberately planning for above average increases in the rates prior to the introduction of water charges, to be followed by below average increases afterwards which were designed to make the new charges more acceptable. This was spelt out in the Secretary of State's letter of 8 July 2004. Recognising that the introduction of water charges would

lead to significant increases in total household bills, he wrote: “That is why we have drawn up proposals to make *above* trend increases in Regional Rates immediately before the introduction of water charging, so that we can *moderate the total increases in household bills* (rates and water charges combined) during the following few years when we are introducing water charges” (italics added).

1.19 Third, more attention should have been given to the accuracy of the data on which the proposed new charging system was to be based. As the bulk of the new funding was to be raised through direct charges, it was essential that data on connections for water and sewerage services was as accurate as possible. Yet in the course of our research we encountered large variations between different documents in the estimated number of domestic and non-domestic connections. Moreover, we observed a significant differential between the number of connections and the number of new houses and apartments completed each year as recorded in DSD statistics. These variations could lead to significant differences in the estimated amounts to be raised from the average household in the form of direct charges.

Public concerns

1.20 NIO ministers’ proposals met with deep and widespread public opposition. Many people felt that they were being expected to pay twice for the same assets and services, since charges for water and sewerage had previously been incorporated into their rates bills. Ministers declared that this

practice had been discontinued in 1999, but people could not comprehend why in that case their rates bills had not correspondingly been reduced.

1.21 Research conducted for the Northern Ireland Consumer Council early in 2007 found that:

- Respondents were deeply concerned about three issues in particular: the ownership of water; drinking water quality; and water pollution
- They generally accepted the need for improved services and infrastructure
- They had lost confidence in the water reform process
- Almost three quarters did not believe that direct rule ministers' proposals for water charges were fair.

1.22 Our meetings with voluntary sector and community representatives have reinforced the Consumer Council's findings. The people we spoke to have lost faith in the water reform process. One person referred to it as 'government smoke and mirrors' and another as 'so many untruths'. They want transparency and integrity restored. They insist that those who cannot afford to pay should not have to, and there is particular concern about the potential impacts of charging on families with low incomes. Some of the people we spoke to opposed all forms of charging; others saw a need to raise additional money to invest in a modern infrastructure.

1.23 We did not find any consensus on charging methods. We heard arguments for and against both metering and charges

based on capital values. We found evidence of concerns that volumetric charging would increase health risks for people on low incomes; that if charges were based on capital values they would rise in line with house prices: and that once charges were introduced they would rapidly rise to levels which would cause many people real hardship.

Privatisation

1.24 We also discovered deep hostility towards private ownership in principle. The Executive has made clear that it has reversed direct rule ministers' policy of keeping the door open for eventual privatisation. Nevertheless the suspicion remains in some quarters that the Executive intends ultimately to transfer ownership of NIW to the private sector. We are convinced that this is not the case.

1.25 The Executive's decision to rule out privatisation has significant implications for the governance and funding of our water and sewerage services. Now that privatisation is no longer an option, this removes the need for NIW to present itself as an attractive candidate for potential private investors. It also raises issues about the cost of capital.

1.26 We will touch on these as necessary for the purposes of this report: and we will address them in more detail in our second report.

2. FUNDING MECHANISMS

The public expenditure context

- 2.1 In the course of our work we encountered a deeply and widely held view that additional charges could not be justified until and unless the Executive had satisfied itself that the necessary funding could not be released from within its existing spending plans. It is beyond our remit to comment on the relative merits of other spending programmes or to assess the overall need for more revenue, but we note and welcome the fact that the Executive is already committed to a rigorous examination of regional public expenditure, including efficiency savings within the central administration.
- 2.2 In formulating our recommendations we have assumed that no additional revenue will be available from outside Northern Ireland.
- 2.3 We have taken account of the rules governing public expenditure in Northern Ireland and the constraints set by Treasury guidance. The controls on public expenditure are complex and vary according to the status and structure of the organisation responsible for service delivery. Consequently the different options for structure and governance which we will be considering in our second report may have very different impacts on public expenditure. This has been an important consideration for us, since we have been determined (a) to minimise costs to users and taxpayers in

Northern Ireland and (b) to minimise impacts on other areas of public expenditure.

- 2.4 The importance of the public expenditure context can be illustrated by comparing the budgetary regime faced by the former Water Service as an agency within DRD with that faced by NIW as a public corporation.
- 2.5 The Water Service operated within the normal budgetary regime applied to government departments. Its operating expenditure scored against DRD's Resource DEL (Departmental Expenditure Limit). Financing and depreciation charges would also have been counted against Resource DEL but for a temporary concession from the Treasury which applied for an agreed three year period from 2003. The Water Service's assets were valued on a Depreciated Replacement Cost basis, and in 2006/07 their estimated value was some £6bn. This gave rise to cost of capital charges of £213m and depreciation charges of £112m. Thus without the Treasury concession, charges totalling £325m would have been counted against DRD's Resource DEL. This would have reduced the amount available for other public expenditure by around £90m in 2006/07 alone (that is, £325m less the 2002/03 baseline of

235m¹). Finally, the Water Service's capital expenditure would be counted in full as capital DEL.

- 2.6 As a public corporation, Northern Ireland Water is subject to a very different financial control regime. The cost of capital to NIW is counted against the Department's Resource DEL and offset by dividend and interest payments: in 2007/08 these will amount to an estimated £45m. Any shortfall in these offsetting payments will be counted as a cost to the Department's Resource DEL, while any extra returns will create increased spending power. Subsidies to NIW as a public corporation will also count against Resource DEL. Non-cash costs (such as depreciation) are not charged to Resource DEL: nor are operating costs, since they are covered by NIW's earned revenue. This treatment avoids the rapidly growing financing charges which would apply to an agency. As indicated in the previous paragraph, the agency control regime would have cost NI Resource DEL £90m annually by 2006/07, a cost which would have continued to increase quite rapidly for the foreseeable future.
- 2.7 Additionally, as a public corporation NIW can use the cash flow released from its non-cash costs to finance capital expenditure internally, without impacting on DRD's Capital DEL. In 2008/09, for example, even though NIW anticipates spending £256m on capital investment, only its borrowing

¹ The full resource budgeting regime went live in 2003/04 and so the baseline for changes in expenditure was the 2002/03 depreciation (£72m) and cost of capital (£163m) charges— with the cost of capital charges restated using 3.5% rather than the 6% in place during 2002/03.

needs of £192m will count against Capital DEL, which will release £64m for investment in other priorities.

Finding

2.8 Under UK-wide changes in Treasury accounting rules in 2002, if we had continued to pay for the Water Service out of the rates, the NI Block would have lost spending power of around £100m annually and increasing. In this respect the shift in status from agency to public corporation is already substantially benefiting the people of Northern Ireland. Moreover, the change is also releasing around £60m annually for capital investment in other public expenditure priorities.

Non-domestic users

2.9 We have examined the balance in the proportion of revenue to be collected from domestic and non-domestic users under direct rule ministers' proposals. We consider that it is appropriate to charge a commercial rate to the business and agricultural sectors, and that the total collected from the sector should accurately reflect its proportion of service usage. From the evidence presented to us, we are content with the planned total to be collected from the non-domestic sector, and with the proposed arrangements for collecting it. Our main concern is that the collection system should be efficient and effective.

Recommendation

2.10 We recommend that for the non-domestic sector charging should proceed as planned, and should be reviewed by the Regulator in due course to ensure that there is no cross-subsidy between the two sectors

Conservation

2.11 We have been concerned to ensure that whatever funding mechanism we propose should contribute towards the conservation of water supplies and environmental sustainability. The argument was put to us that volumetric charging (that is, charging on the basis of water usage) should be introduced as a conservation measure. Environmental Link in their evidence to us argued that it is essential to make a direct link between payment and the amount of water used through metering to prevent the attitude “I have paid for it and therefore I should use it”. However, the evidence we have examined indicates that volumetric charging would not in fact be cost-effective as a conservation measure in Northern Ireland for the foreseeable future. International research suggests that it can reduce consumption by around 10%, but that this effect diminishes over time. It costs a substantial sum to install and maintain meters and the supporting infrastructure of reading, billing contact and collection. This expenditure may be justifiable if water is scarce and major investment is required to increase supply: but neither of these conditions currently applies here.

There are more cost-effective ways of promoting conservation which have not yet been fully implemented.

2.12 Within the home, toilet flushing accounts for about 35% of household demand. Flushing toilets with storm water or converting old inefficient toilets to use less water could save up to an estimated 45 million litres per day. There is scope also for savings in the use of baths, power showers, washing machines and garden hoses. The introduction of monetary incentives to encourage householders to replace old toilets and high-flow showerheads could reduce water consumption substantially. Public information programmes could make children and adults much more aware of the need to conserve water. Building Regulations could be changed, for example to require toilet flushing with storm water instead of drinking quality water in new homes.

Finding

2.13 Before volumetric charging is considered, a thorough appraisal should be completed of its anticipated costs and benefits relative to other possible conservation measures.

Criteria

2.14 In assessing alternative future funding mechanisms for our water and sewerage services, we have been guided by the following criteria:

- that the funding mechanism provides the best possible value for money for the people of Northern Ireland as citizens and service users
- that the mechanism is fair and progressive
- that it does not increase levels of poverty or harm vulnerable groups in society
- that the public has confidence in it
- that the service provider receives a secure income stream such that it can run its operations and plan long-term capital investments with confidence
- that payments fully and transparently cover the costs of providing water and sewerage services and only those services
- that it encourages sustainable water and sewerage provision
- sustainability.

2.15 Guided by these criteria, we have identified and assessed four broad options:

- the NI Block option
- the Property Values option
- the Direct Rule option
- the Metering option

The NI Block option

2.16 Under our first option, the arrangements in place prior to the water reform process would largely be restored. The costs of domestic water and sewerage services would be met

predominantly from the NI Block. The charges for non-domestic users and increases in trade effluent charges which were introduced in 2007 would be retained.

2.17 The extra revenue needed to finance new investments would be raised either by substantially increasing the regional rate or by cutting back on other areas of public spending.

2.18 This option offers a number of advantages:

- It would accord with the popular sentiment which sees water and sewerage as essential public services, to be funded in the same way as roads and hospitals
- The public is accustomed to it and accepts it.
- Households on low incomes would qualify for rates relief (which is not a charge on the NI Block)
- It would save the cost of running a separate billing and collection system

2.19 The counter-arguments can be summarised as follows:

- Under Treasury rules, if funded from any form of taxation the service provider would be subject to the agency financial control regime outlined in paragraph 2.4, which would create a substantial and increasing drain on other areas of public spending of around £100m and rising
- It would not satisfy the principle that the services should be transparently self-financing
- There is a risk that the services would lose out in annual negotiations with other spending areas over capital for investment

- It is unfair to ratepayers who are not also water and sewerage service users: some 80,000 households, primarily in rural areas, who are not connected to the sewerage network would be paying for a service they do not receive.

The Property Values option

2.20 This is our preferred option. Domestic users would be required to pay an amount based on the capital value of their property just as the regional rate is. There would be distinct payments for water and sewerage services, which would be separate and clearly identified on customers' rates bills. Only those who used each service would be required to contribute. There would be no standing charge and no volumetric charging for domestic users.

2.21 The case for this option may be summarised as follows:

- As already demonstrated, there are substantial benefits arising from the technical differences between the public expenditure accounting regimes which apply to revenue from (a) rates and other forms of taxation and (b) payments from service users
- NIW as a public corporation financed by service users is in a better position to plan and carry out its long-term investment programme since it can secure access to finance for a greater period than would be available to an agency

- The services would be transparently self-financing with a guaranteed revenue stream.
- Capital value is a broadly acceptable proxy for ability to pay
- It is more progressive than any of the other options
- The basis for charging is similar to that for the rates, which is widely accepted in relation to other public services
- It avoids the substantial extra costs associated with metering and volumetric charging
- Information gathering, billing and collection could be integrated with the rates, resulting in single combined bills and efficiency savings

2.22 In this context we have also noted the other advantages of retaining NIW as a public corporation:

- It is not protected by Crown Immunity, which opens it up to positive environmental regulation
- It is subject to independent economic regulation, which should keep its costs down.

2.23 We recognise that under this option rates reliefs will not apply to water customers, and that alternative affordability arrangements will accordingly be needed for households which are asset rich but income poor. This applies in particular to (a) families on low incomes who do not qualify for welfare benefits and (b) pensioners. Such arrangements will be needed to complement any of the four options. We

will look at this again in chapter 9, and will be examining the possibilities in detail for our second report.

The Direct Rule option

2.24 Under direct rule ministers' proposals, the charging system which already applies to non-domestic users would have been radically reformed and extended to domestic users from April 2007. Charges were to be set on the basis of full cost recovery, and any shortfall was to be met from the NI Block. Income from domestic and non-domestic users was scheduled to increase from £37m in 2006/7 to £217m in 2008/9 and to £425m by 2013/4.

2.25 The proposed Charging Scheme was a hybrid which included a standing charge, a variable charge derived from property value, and provision for optional metering. Domestic users of both services would have paid a standing charge of £105 annually and a variable charge of £180 for every £100,000 of their property's assessed capital value. Certain population groups - primarily people aged over 60 - who opted to have a meter installed would have paid a standing charge of £120 for the two services plus volumetric charges.

2.26 Other features of the proposed scheme were that:

- the charges were to be phased in over three years
- the government was to contribute a pegging subsidy for three years to ensure that charges here would be no higher than the average in England and Wales

- bills were to be capped so that no household would have to pay more than £770
- there was to be an accompanying Affordability Tariff, funded out of the NI Block, for people on low incomes.

2.27 We are not attracted to this option for the following reasons:

- the standing charge and cap are both regressive, transferring a disproportionate burden onto those least able to afford it
- even with the Affordability Tariff it would push a significant proportion of households into water poverty
- it would require a separate billing and collection system, which would be complex and expensive to administer
- it is difficult for customers to understand
- the public has rejected it

The Metering option

2.28 Under the Metering option, the arrangements for volumetric charging which have applied for some time to large non-domestic users would be extended to domestic customers. Currently only those domestic users aged 60 or more have the choice of whether or not volumetric charging applies to them.

2.29 It is important to note in any discussion of volumetric charging that the actual cost of the water is a small proportion of the total cost of providing water and sewerage

services: the National Consumer Council has estimated as little as 3.5%.

2.30 We found evidence of a pervasive public perception that individuals would pay less with metering. Clearly, this cannot be the case for everyone: if some pay less, others will have to pay more. Moreover, it costs substantial sums to set up and run a metering system: even if tariffs are set so as to ensure that some low volume users pay less, users collectively have to pay more. For this reason the National Consumer Council has come out firmly in opposition to optional metering and does not support general metering.

2.31 In their evidence NIW told us that for every 50,000 meters there would be a capital cost of £7.18m for installation with a further £1.27m annually for activities such as meter reading, volumetric billing, handling additional queries, and meter maintenance. This works out at around £144 per meter for installation and £25 annually for operating volumetric charging. This compares with the conclusions of the National Consumer Council which reported an average installation cost in 2000 of £119 and operational costs of £30 per household per annum higher than those of the system of charging by rateable value. OFWAT has calculated that metering costs the average user £43 per annum. Finally, NIW has calculated a total annual cost for selective metering to the average user of £47. Whilst these estimates vary, they all agree that metering exacts a substantial extra cost.

2.32 The following points are relevant to any consideration of this option:

- volumetric charging systems are expensive to set up and operate
- they are not genuinely cost-reflective, since such a large proportion of costs is fixed
- they are less cost-effective than other conservation options, as explained earlier in this chapter
- they are less useful and less cost-effective where water is plentiful as it is here than in regions like the South of England
- they have limited impact on usage over time
- they transfer the costs of conservation from NIW to its customers
- they are regressive unless the charges are related to ability to pay
- the belief that they will reduce household bills generally is a popular misconception
- the Consumer Council for Water has expressed concern that the expansion of metering could create problems for people on low incomes
- optional metering is less cost-effective than universal metering

Finding

2.33 In the light of our examination of the evidence available, we have concluded that volumetric charging will not be appropriate or cost-effective for Northern Ireland for the

foreseeable future. No more time and money should be spent on preparing for more extensive domestic metering until and unless:

- there is a foreseen water shortage requiring additional investment in extraction or storage capacity (according to the NI Water Resource Strategy this is not forecast to occur before 2030)
- other more cost-effective conservation measures such as those we have outlined have been implemented.

Recommendations

2.34 We recognise that it may not be practicable to implement our funding recommendations fully in time for the financial year 2008/9.

2.35 *We recommend that pending the introduction of the new arrangements:*

- *the balance of expenditure required by NIW (taking account of our recommendation in chapter 3) should be paid out of the NI Block*
- *the present rates relief scheme should be applied both to the rates and to households' water and sewerage payments*

2.36 *We further recommend that:*

- *householders' payments should be clearly and separately identified on their rates bill and earmarked for Northern Ireland Water*

- *from 2009/10 householders' payments should be collected through the same billing and collection system as the rates: there should not be a separate system*
- *from 2009/10 these payments should be sufficient to ensure that the services are self-financing at the lowest possible cost to users*
- *as with the rates, householders' water and sewerage payments should be calculated on the basis of property capital values*
- *there should be no standing charge or volumetric element*
- *payments should be eligible for new improved affordability arrangements about which we will be making recommendations in our second report*
- *the implementation of domestic metering should be discontinued for the foreseeable future*

3. PAYING TWICE

The contribution from the regional rate

- 3.1 Our terms of reference asked us to ascertain how much people already contribute to water and sewerage services through the regional rate, since they should not be expected to pay twice for this service.
- 3.2 We have examined a range of sources on historic ratepayer contributions to water and sewerage services, of which the rates leaflets published in the 1990s are the most significant. This was the information provided to the public on the level of their contributions to various areas of expenditure.
- 3.3 The 1998/9 leaflet is particularly relevant since it was the last to include specific information on water and sewerage services. The Water Service's total planned expenditure for the year was £195m. The leaflet states that £178m was earmarked as regional rate revenue for water and sewerage services, of which we understand £80m was attributed to the domestic regional rate. We estimate that this equates to an average household contribution of £129 during 1998/9, which is close to the widely reported estimate of £127.
- 3.4 We then calculated that this would be the equivalent of just over £107m in 2006/07, which equates to an average household contribution of around £157 under today's rating system. This is close to the figure of around £160 cited by

the Finance Minister in the Assembly on 11 June 2007, which implies a regional total of around £109m.

Past infrastructure investment

3.5 Another common concern is that under direct rule ministers' proposed charging scheme ratepayers would be expected to contribute towards the capital costs of investments which they had already paid for. The evidence available to us indicates that the revenue recovered from ratepayers covered the annualised costs of providing water and sewerage services, rather than the full capital costs. The rates leaflets indicated that the charge for all services included an amount for notional loan charges. This was derived from estimated loan repayments as if capital expenditure had been financed by borrowing, much like the monthly repayments on a domestic mortgage.

Findings

3.6 Ratepayers historically paid a substantial annual contribution towards the costs of the Water Service through the regional rate. This was equivalent to around £109m at today's prices.

3.7 After 1998 the linkage between the regional rate and payments to the Water Service was broken, but the rate was not reduced and ratepayers understandably believed that they were continuing to contribute.

3.8 The revenue raised from the regional rate did not cover and was not intended to cover the full costs of the Service.

Recommendations

3.9 *We recommend that from 2008/9 an annual sum of around £109m should be taken from the domestic regional rates in recognition of ratepayers' historic contribution to water and sewerage services. In 2008/9, this should be households' only contribution: the balance should be paid from the NI Block.*

4. UNDERINVESTMENT

- 4.1 It has been argued that Northern Ireland has been disadvantaged by a legacy of underinvestment in water and sewerage infrastructure over the last 20 years relative to England, Wales and Scotland. We were asked to look at the cost of rectifying the legacy of underinvestment and to establish whether there is a case for seeking a contribution towards addressing it.
- 4.2 This is a complex area and different approaches yield very different results. We have considered two different aspects of under-investment, relating it to :
- the levels of investment needed to match the compliance levels currently being achieved in England and Wales;
 - the amount invested historically in water and sewerage in Britain
- 4.3 We have also considered a number of factors specific to the region which could affect investment efficiency.

NIW's estimate

- 4.4 The issue of underinvestment was identified in the Water Service's Second Asset Management Plan of August 2003. This estimated that backlog expenditure amounted to £953m

(at 2001 prices) or virtually 1/3 of the 20 year investment programme set out in the Plan.

4.5 In their evidence, NIW gave us an updated estimate of £1.9bn. The increase from 2001 can be explained by:

- the impact of adjusting the previous figure to current prices
- the impact of raising the levels of compliance to those currently being achieved by England and Wales
- the more stringent standards now set by the Environment and Heritage Service
- the inclusion of IT and transformation costs associated with the transition from the Water Service.

4.6 NIW estimate that some £393m has already been spent in the past four years on tackling the 2001 backlog.

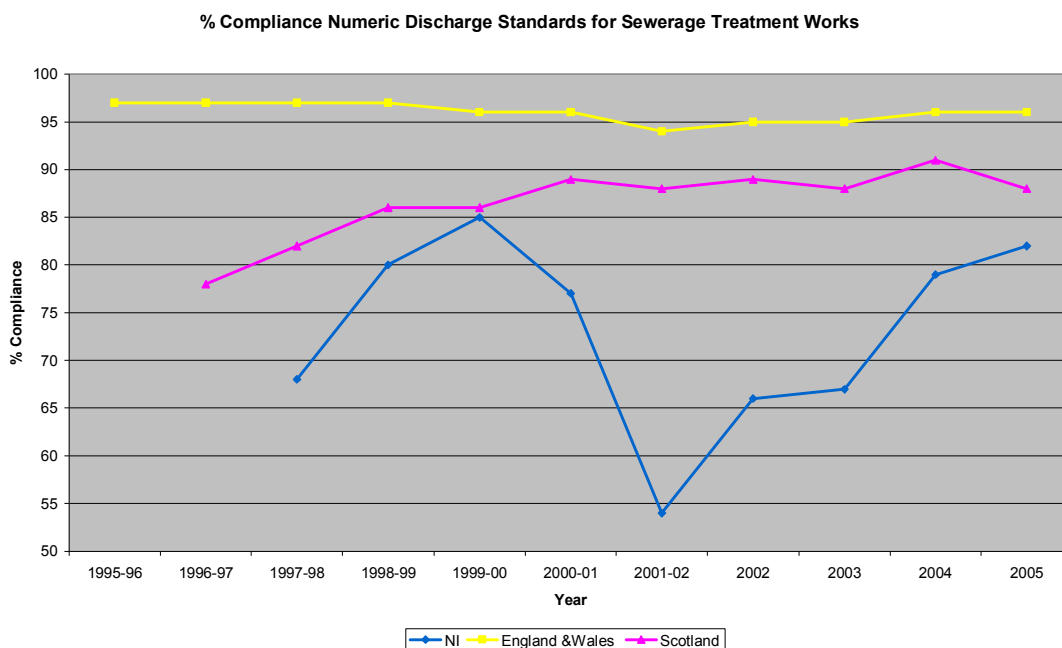
Relative compliance

4.7 NIW's estimates are based on the level of investment required to match current compliance levels in Britain. However by 2006 our Water Service had achieved a drinking water compliance rate of 99.34% compared with 99.44% for Scotland and 99.96% for England and Wales. As far as drinking water quality is concerned, this does not suggest a major overall problem of underinvestment.²

² Whilst overall the quality of our drinking water is very high in comparison to the rest of the EU there are a range of parameters used for calculating compliance and against some of these NI is not yet complying with regulatory standards. For example, research has indicated that there may be a link between levels of trihalomethanes (THMs) in drinking water certain cancers and adverse pregnancy outcomes. Our compliance in respect of THMs (78.7% compliance) is much lower than for England and Wales (over 99.9%) and for Scotland (94.75%).

4.8 We did not perform nearly so well in terms of compliance with EU Directives on the collection, treatment and disposal of sewerage. Figure 1 shows the proportion of significant waste water treatment works achieving compliance with industry discharge standards. Major investments since 2001 have raised our overall compliance from 54% to 82%, but we are still lagging behind Scotland (88%) and England and Wales (96%).

Figure 1: Percentage Compliance of Sewerage Treatment Works with Numeric Discharge Standards



4.9 In the past the Water Service also delivered a lower standard of performance on such serviceability indicators as mains bursts, supply interruptions and leakage levels.

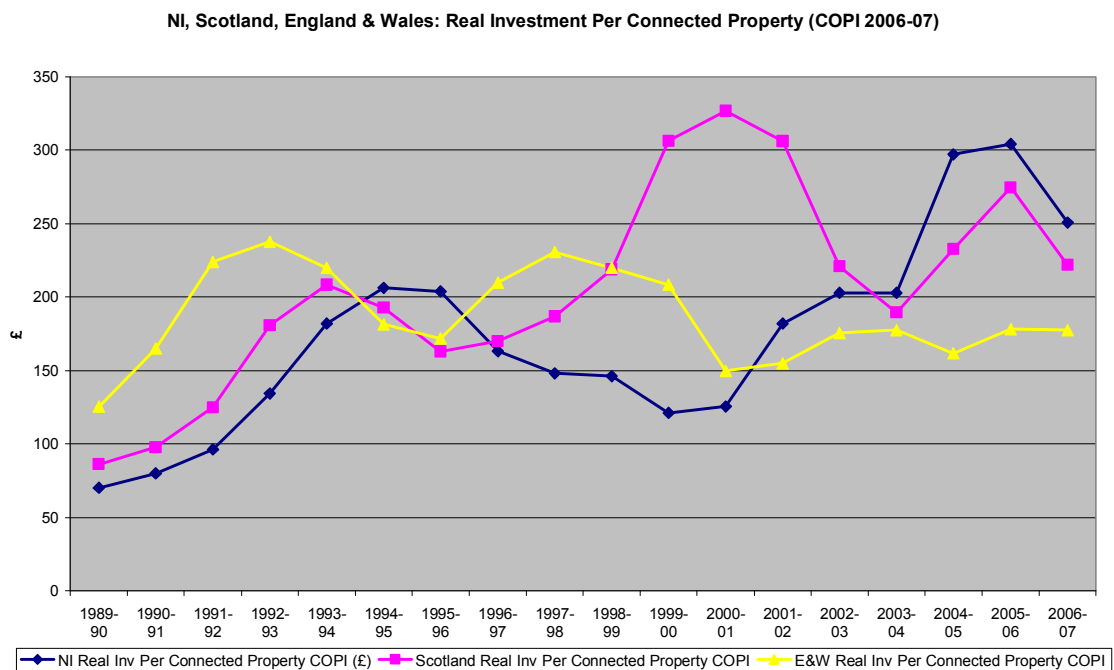
4.10 Overall, the comparative evidence on performance points to a continuing need for substantial infrastructure investment, but does not of itself prove that we suffered serious under-investment relative to Britain.

Relative investment

4.11 The second aspect of under-investment is the comparison with historical levels of investment in Britain, rather than their impacts on compliance. We looked at this taking as our starting point 1989, when water companies in England and Wales were privatized.

4.12 For most of the period since 1989 we lagged behind Britain in terms of annual investment as Figure 2 shows.

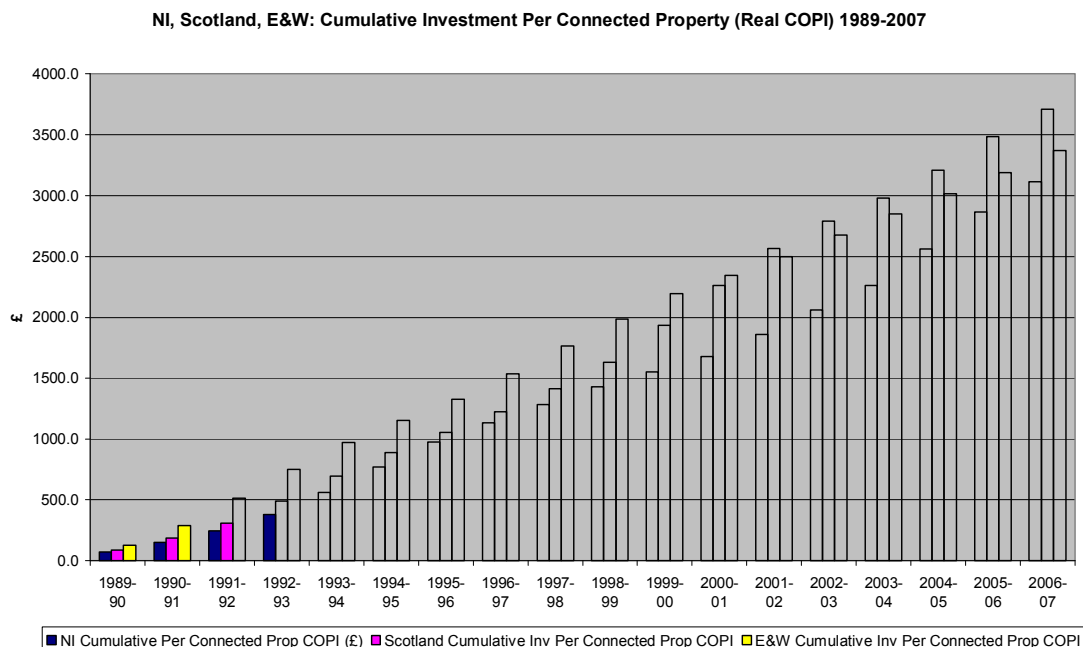
Figure 2: Investment per Connected Property in NI, Scotland, England and Wales, 1989 -2007



4.13 We estimate that between 1989/90 and 2000/01 an additional investment of £433m³ would have been required to bring levels of investment here up to the level of England and Wales; or £414m to match Scotland. However since 2001/02, Northern Ireland has witnessed a surge in investment, which by 2006/7 had reduced the gap with England and Wales to £109m and with Scotland to £413m.

4.14 We also looked at this in terms of cumulative investment per connected property over the period to 2006/7. This amounted to £3,117 here compared with £3,708 for Scotland and £3,369 for England and Wales (see Figure 3).

Figure 3: Cumulative Investment Per Connected Property 1989/90 – 2006/07



³ Note: all figures have been adjusted by the Construction Output Price Index and are in real (2006/07) terms.

Regional factors

- 4.15 We have considered a number of factors which could impact on the relative costs of upgrading our water and sewerage infrastructure: the length of water mains per connected property; relative labour costs; levels of leakage; and geographical and topographical features.
- 4.16 Northern Ireland is characterised by a large and dispersed rural population. Consequently, the number of properties connected to each kilometre of water mains here (30.6) is significantly lower than for England and Wales (71.8) and Scotland (52.7). This increases the cost of infrastructure development and potentially of pipe maintenance, although these increases may be partly offset by the lower costs of undertaking construction work in rural environments.
- 4.17 Labour costs represent a substantial element of the costs of delivering a capital investment programme. Wages in the construction sector here are and have been much lower historically than for the UK as a whole: for example in 2006 the median weekly wage here was £367 compared with a UK average of £462. This would suggest that the investment delivered in NI has been less efficient than in Britain. However, we note that wages in the sector grew by 11.3% between 2005 and 2006 compared with 4.3% for the UK as a whole. Should wages in the sector continue to grow at this rate any labour cost advantage will be eroded and this in turn will impact on the real level of investment undertaken.

Alongside the rise in wage levels, we note that over the last 5 years labour productivity in our construction sector has grown by almost 89%.

- 4.18 Levels of leakage can provide an indication of the quality of the water infrastructure. Northern Ireland has higher levels of leakage at 226 litres per connected property per day than England and Wales (109 litres), but lower than Scotland (387 litres). Since 2000/01 there has been a steady reduction in leakage levels here, and NIW have told us that they are on course to meet their economic level of leakage target of 157 megalitres per day by March 2008.

Findings

- 4.19 Our analysis supports the argument that the level of investment in our water and sewerage infrastructure since 1989 has been lower than in Britain. From 1989/90 to 2000/1, the gap amounted to £433m relative to England and Wales, and £414m compared with Scotland. However the substantial acceleration in investment here over the past 5 years has narrowed the gap to £109m (£413m relative to Scotland) over the period to 2006/07. This equates to less than 5% of our total investment expenditure over the period 1989/90 to 2006/07.
- 4.20 The substantial gap which still exists in our compliance with national sewerage standards, despite the small gap in investment levels, suggests that our investments may have been less efficient than our comparators. We are

nevertheless satisfied that a substantial programme of investment is still required over the next few years to reduce our continuing performance gap.

4.21 In the context of demands for a “green dowry”, we have discovered that at the time of privatisation in England and Wales, Northern Ireland received an adjustment through the Barnett formula in respect of the restructuring costs associated with the privatisation process. We understand that this added £50m annually to the NI Block, and that it is continuing to be paid. This and other factors will need to be taken into account in weighing up the case for seeking an additional contribution from the Treasury in respect of past underinvestment. This money could contribute to the affordability payments which we will consider in the next report.

5. EXPENDITURE

Overview

5.1 Water and sewerage services are a highly capital intensive business. They need substantial extra investment to meet higher environmental standards, replace an ageing infrastructure, and cope with increasing demands. This investment is already generating major increases in financing and capital renewal costs. In 2006/7 the Water Service's accounts included:

- £213m in financing costs
- £163m for operating expenditure
- £112m for capital renewal/depreciation

5.2 In this chapter we will examine NIW's operating and capital expenditure (opex and capex) with a particular emphasis on efficiency. In the next chapter we will cover financing costs.

Operating expenditure

5.3 NIW's opex budget of £190m for 2007/08 is some £30m higher than the comparable figure for 2006/7. In their evidence to us, NIW explained that this sharp increase results from:

- the application of more stringent regulatory requirements
- the transfer into NIW of costs previously met elsewhere in government

- once-off costs associated with the transformation process
- capacity growth
- the introduction of billing and metering

5.4 We acknowledge that NIW has been required to take on commitments which were not previously required of the Water Service, and that many of the once-off costs of transformation are necessary to produce the efficiency savings which will keep recurring costs down over time.

Opex efficiency

5.5 We take the view that efficiency targets should be both challenging and realistic. In relation to opex, we have concluded that there has been and still is enormous scope for improvement in NIW's efficiency.

5.6 When NIW was established in April 2007, DRD set it two efficiency objectives:

- to deliver substantially better quality services more efficiently and at lower cost
- to strive to outperform the efficiency and other targets set within the Strategic Business Plan (SBP) framework

5.7 The SBP indicates that NIW is committed to an opex efficiency target of 22%.

5.8 We have reviewed the information available to DRD when it was negotiating this target with the Water Service, much of which relates to the Service's performance relative to water and sewerage undertakings in Britain.

Evidence

5.9 The Financial and Strategic Review (May 2005) considered the relative efficiency of the Water Service through unit cost benchmarking against comparators in England, Wales and Scotland, and identified scope for opex efficiencies of between 20% and 40% to be achieved by 2009/10.

5.10 A Relative Efficiency Analysis commissioned by DRD indicated that the Water Service was very inefficient relative to companies in England and Wales, particularly in relation to opex.

5.11 On 7 February 2006 DRD wrote to NIW setting out an opex efficiency target of 35%. Although this was only an initial target, DRD indicated that it did not expect the final target to be any less. The Water Service then commissioned ICS Consulting to review the efficiencies required by DRD and the evidence upon which they were based. The ICS report confirmed the existence of large opex efficiency gaps but contested DRD's approach to converting the gaps into targets. However, some of the assumptions used by ICS acted to understate the efficiency gap in relation to sewerage opex - possibly by some £14m.

5.12 We have also considered evidence in relation to the 2001 Price Review by the Water Industry Commissioner for Scotland (WICS). This identified a 44% opex efficiency gap with companies in England and Wales and set a target of closing 80% of that gap for the new public corporation, Scottish Water. This was on top of the savings to be achieved from merging the three previous water authorities. We understand that Scottish Water has comfortably outperformed this target.

Assessment

5.13 The consultancy reports all agree that there is substantial scope for opex efficiencies in NIW. We have been impressed by the following evidence:

- in its first price control period Scottish Water (a public corporation) comfortably exceeded its opex efficiency target of 35%
- water and sewerage companies in England and Wales have demonstrated the ability to exceed the Regulators efficiency targets.

5.14 As far as target-setting is concerned, we take the view that DRD should not be constrained by applying inflexibly the Ofwat approach as used in Britain: the model should be adapted as appropriate to Northern Ireland's particular circumstances.

5.15 We have noted that NIW will be able to recover the investment required to buy many of these savings from

revenue, which would not normally be allowed in England and Wales. The provision of a “spend to save” allowance was one of the reasons for requiring a higher level of efficiency for Scottish Water.

Recommendations

5.16 We recommend that NIW’s operational cost efficiency target should be raised to 40% for the period ending 2009/10.

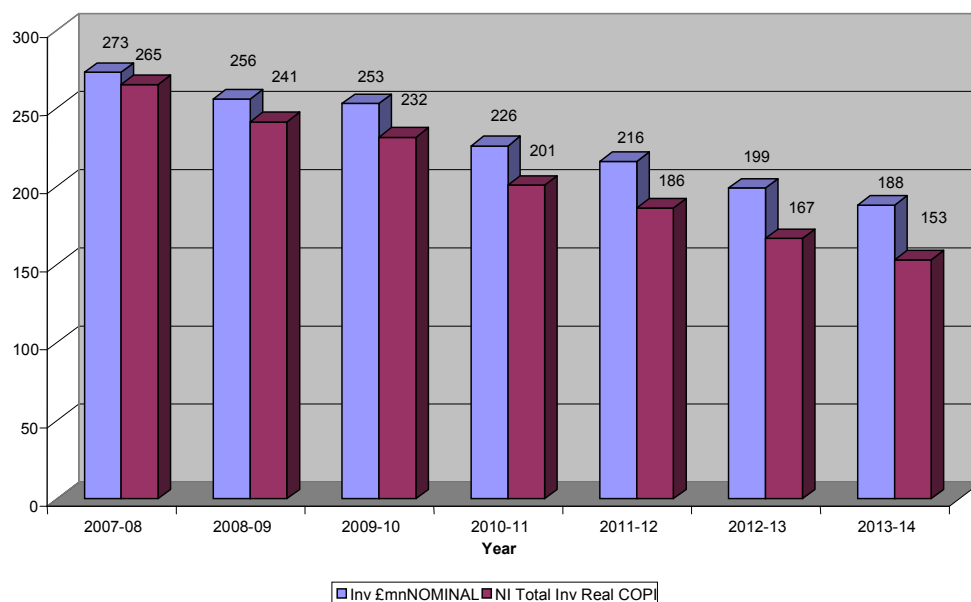
5.17 We recommend that DRD as Shareholder should review NIW’s arrangements for performance related pay to ensure that any enhanced payments are directly related to outperforming the prescribed efficiency targets

Capital expenditure

5.18 We were not asked to assess the validity of NIW’s investment plans in detail and it would not have been possible for us to do so in the time available. We have however reviewed in broad terms the capital investment plans set out in the SBP and the level of capex efficiencies which DRD has asked NIW to deliver.

5.19 The SBP identifies planned capital investment of £1.6 billion over the period to 2014 (see Figure 4).

Figure 4: Planned Investment in Water and Sewerage Infrastructure 2007 - 2014



5.20 The stated purposes of this expenditure are to:

- improve wastewater treatment and collection systems
- improve water treatment, storage and mains systems
- reduce supply interruptions and address pressure problems
- reduce water leakage
- reduce pollution
- increase efficiency
- roll out domestic metering

5.21 The SBP provides for capex of £273m in 2007/8, £256m in 2008/9 and £253m in 2009/10. The amount then declines steadily to £187m in 2013/4. The SBP gives priority to upgrading the sewerage infrastructure, which is clearly the

most pressing current requirement. However, new capital spending pressures may arise in future from the forthcoming European Water Framework Directive and other EU obligations.

5.22 We accept that there is a pressing need for substantial investment in our sewerage infrastructure to protect our environment and comply with EU Directives. We acknowledge the importance of taking into account the possible long-term implications for our water supplies of climate change. However, we note that the quality of our drinking water is already high by international standards and only marginally below that for England and Wales. It will improve significantly within the next two years with the completion of the Alpha project. Continuing investment will be required to ensure there is no risk to public health from our drinking water, but we believe that further consideration should be given to the procedure for setting NIW's drinking water compliance targets.

5.23 The SBP sets out a compliance target for 2014 of 99.90% for drinking water quality – a figure which is high by comparison with other Western European regions. NIW estimate that to raise drinking water quality compliance levels to the levels currently being achieved in England and Wales (99.96%) would require around £242m more than is already provided for in the SBP.

5.24 While it is always desirable in principle to increase compliance levels, the issue has to be addressed as to

whether the increasing investment required to effect further marginal improvements in drinking water quality represents good value for money. (We emphasise that this does not yet apply to our sewerage infrastructure).

- 5.25 We take the view that NIW should be given clear direction on the water quality standards which it is expected to deliver. These should be determined at the highest political level, taking into account the expert advice and opinions of the economic and environmental regulators and other key parties. We note that the Scottish Government has adopted the practice of setting out detailed requirements for Scottish Water which include the achievement of specific percentage compliance levels. Consideration should be given to adopting a similar approach here.

Recommendation

- 5.26 Given the high level of drinking water compliance already achieved and the substantial investment required to effect further marginal improvements, we recommend that the Executive should consider as a decision properly to be taken at the political level the cost effectiveness of increasingly exacting drinking water compliance targets*

Capex efficiency

- 5.27 The SBP commits Northern Ireland Water to a 17% capex efficiency improvement by the end of 2009/10 (from 2006/7 as the base year).

Evidence

- 5.28 The Financial & Strategic Review of May 2005 found that the potential for capex efficiencies ranged from 20% to 40% by 2009/10.
- 5.29 The DRD Relative Efficiency Analysis identified a large gap in relation to water capital maintenance efficiency (37%). It also suggested that the Water Service's apparent efficiency in sewerage capital maintenance was actually more a reflection of historic under-investment. The Analysis was unable to produce a robust estimate of the efficiency gap in relation to new capital investments since the necessary information was not available in the form required.
- 5.30 On 7 February 2006 DRD wrote to NIW setting its capex efficiency target at 27%.
- 5.31 In relation to capex efficiency ICS Consulting found a significant efficiency gap in relation to water capital maintenance (30%) but concluded that there was no significant gap in respect of sewerage capital maintenance.
- 5.32 We understand that Scottish Water was challenged to bridge 80% of an observed gap in its capital efficiency, which entailed making cumulative capex efficiency savings of £613m over the regulatory period – an efficiency improvement of 31%. In terms of actual performance WICS has estimated that Scottish Water was on track to deliver efficiencies of around 30%.

Assessment

5.33 The capex picture is less clear cut than for opex. Although there is clear evidence of scope for substantial efficiencies on the water side, it is difficult to be precise about the extent of the efficiency gap on the sewerage side. While some of the simple unit cost analyses suggest a significant gap, econometric analyses suggest that there may be minimal scope in relation to sewerage capex. The Panel has noted that some of the econometric results could be more a function of under-spend on the sewerage network as opposed to true efficiency on the part of the Water Service.

Finding

5.34 We have concluded that while there may be some scope for requiring additional capex efficiencies immediately, they are likely to be small. We note and welcome the fact that the Regulator will have a responsibility to address this issue in the not too distant future.

Recommendation

5.35 We recommended that NIW should revisit its capex efficiency targets and submit more challenging targets for the Regulator to consider in the light of our other recommendations.

6. FINANCING COSTS

6.1 As already noted, water and sewerage services are highly capital intensive. Like electricity and gas transmission:

- they are natural monopolies
- they require costly infrastructural networks with a long life expectancy
- they are unlikely to be rendered obsolete through technical change
- they are unlikely ever to face meaningful competition

6.2 There is little risk to investors in such businesses. In financial markets this low risk would normally translate into low financing costs. In many parts of the UK the capital structure of network industries (whether private or public) has accordingly shifted increasingly towards debt finance. The clearest comparators are Scottish Water and Welsh Water. In Northern Ireland, ownership of electricity and gas interconnectors to Scotland has been moved to Northern Ireland Energy Holdings (NIEH) in order to reduce financing costs. NIEH is wholly financed through debt and the low risk of this enterprise is reflected in keen rates of interest.

6.3 In the light of these three examples we are attracted at this stage to a debt finance approach, perhaps through a company limited by guarantee or as in Scotland a public corporation. If NIW were refinanced on a debt basis (with the

existing shareholder equity being replaced by additional borrowing) this could reduce its financing costs. We still have more work to do on this, and we look forward to making detailed recommendations in our second report.

- 6.4 Our exploration of long-term financing and governance issues has raised the question of what should be done in the interim, before any changes in governance and structure take effect. We have in mind particularly the issues of equity and dividend policy. In our consultations we were struck by the deep public concern which exists over the concept of an equity stake in a service as fundamental as water. The issue became more emotive when people realised DRD's intention to extract a dividend of over £30m per annum.
- 6.5 With public confidence in the entire process at such a low level, we had a strong desire to recommend that DRD should waive the entire dividend payment for the benefit of NIW's customers, until an alternative structure could be put in place. However, we are conscious of the potentially substantial consequences for the NI Block. These could occur in two ways.
- 6.6 Firstly, under Treasury accounting rules DRD's shareholding in NIW is treated as an asset which attracts a cost of capital charge on DRD's resource budget. The dividend is treated as a receipt to this budget and so offsets the capital charge. A reduction in the dividend would produce a corresponding shortfall in the budget.

- 6.7 Secondly, the dividend waiver would reduce the value of DRD's investment, which could result in an impairment charge. If the dividend were waived until after 2009/10 the charge could be around £63m.
- 6.8 Given these potential adverse consequences, we recommend an alternative that would take account of our attraction to a debt finance model without incurring an undue penalty. For an interim period, we propose that customers should face a level of cost which would be no higher than under a debt finance model. This could be achieved through a partial dividend waiver of around £7m in 2008/09 and 2009/10. We acknowledge that this could generate an impairment charge of around £12m, more than the benefit to customers. We nevertheless consider that it can be justified as a response to the deep public hostility which we have encountered.

Recommendation

- 6.9 *Despite the potential costs to the NI Block, there should be at least a partial waiver of the dividend extracted from NIW by DRD, such that customers will pay no more than they would under a debt financed model*

7. COST ISSUES

Billing system

- 7.1 We are determined that the billing and collection system for water payments should comply with our overall commitment to value for money. Our recommendations on the funding mechanism will make it possible to release further substantial savings in relation to billing, collection and customer service.
- 7.2 As well as identifying the potential for future savings, we have in view of the concerns which were put to us reviewed the process which resulted in December 2005 in the award of a contract to Crystal Alliance in respect of billing, collection, customer contact functions. This contract was extended to include a mobile work management system at a further cost.
- 7.3 We have examined in detail documentation on the appraisal and procurement process which resulted in the award of the contract. The appraisal process included identifying and costing a range of options including in-house, outsourcing and joint venture options. We note that the option of handing billing over to the Rates Collection Agency was not taken forward to the full appraisal stage. With hindsight and in the light of subsequent developments we consider that it should have been fully appraised. However, we note that there were multiple bidders for the contract, and that the bid from Crystal Alliance appeared to offer best value for money.

7.4 Given our recommendations in relation to billing and domestic metering we consider that there has been sufficient change in circumstances to warrant a review of the Crystal Alliance contract and the nature and level of services to be delivered under it. We note that there is scope within the contract for it to be varied with limited financial penalties.

Recommendation

7.5 *We recommend that NIW's contract with Crystal Alliance should be fundamentally reviewed, given that our recommendations will considerably alter the nature and scale of the work required.*

Road drainage

7.6 Under direct rule ministers' proposals, the cost of road drainage would have been included in the charges to be recovered from sewerage customers. Given the principle that water and sewerage services should be self-financing and should exclude any extraneous items, we have concluded that it would be more appropriate to meet this cost through a specific transparent charge to the Roads Service.

7.7 In reaching this conclusion we have been influenced by the following considerations:

- Road drainage is a public good which it is appropriate to meet through general taxation
- It is not a service to water and sewerage customers

- There is an apt parallel with street lighting which is funded through the Roads Service

Recommendation

7.8 *We recommend that from 2008/9 liability for the costs of road drainage should be transferred from sewerage service users to the Roads Service*

Developers' Allowance

7.9 Anyone wanting to connect a new property to the water and/or sewerage network is required to pay connection charges of £190 and £100 respectively. This is often the only expense incurred, but the connection may also require the laying of a new stretch of water main or sewer pipe if there is none close to the property. Under the system of "Reasonable Cost Allowances" (RCA), NIW pays the builder or developer a subsidy for this work of up to £2,450 per property for water mains and £2,100 for sewerage pipes. Any cost above this is borne by the developer.

7.10 We are concerned that where developers are adding multiple houses to the network there may be scope for them to receive disproportionate subsidy. We understand that developers are required in principle to pay the full cost of road projects associated with new building developments, and we see no reason why the same principle should not apply to the water and sewerage infrastructure.

Recommendation

7.11 *We recommend that the Reasonable Cost Allowance Scheme for developers should be reviewed by DRD to ensure that it is cost reflective and that it is operated at no cost to other users.*

Utility Regulator

7.12 We spoke to individuals who expressed the view that the office of Utility Regulator was both an unnecessary cost and redundant once the Executive had decided to rule out privatisation. The Regulator himself has published his submission to us, in which he set out his role and invited us to emphasize its importance.

7.13 We have examined the arguments from both sides with care. We have concluded that the Regulator does have a significant role to play in protecting the interests of water service users and that this role should be retained. It is distinct from that of the Minister, the Consumer Council and the other regulatory stakeholders.

7.14 In reaching this conclusion we have been influenced by the following considerations:

- if the Regulator did not exist, this role would have to be undertaken by DRD civil servants at a similar cost
- they would be unlikely to have the credibility or expertise of a specialised independent regulator

- comparative international research suggests that independent economic regulators can be effective in improving the efficiency of utility undertakings
- the existence of separate regulators for water quality, environmental impacts and price control helps to ensure that all these dimensions are fully and openly addressed
- by combining the role with other utilities, costs have been kept to a minimum.

Asset management

7.15 NIW's portfolio of assets includes some which have already identified as surplus to operational requirements. These have been valued at around £21m. We encountered three main areas of concern in relation to NIW's asset management:

- that NIW might sell off a valuable public resource for private profit
- that it might sell off its assets for less than their real market value
- that holding on to surplus assets would keep charges to customers higher than they need be.

7.16 Since the Executive has clearly ruled out privatisation, the question of passing any profit from asset sales into private hands does not arise. In relation to the other concerns, we note and welcome the fact that the Regulator's responsibilities include ensuring that NIW maximises its

return on any asset sales, and that it does not hold on to surplus assets.

Recommendation

7.17 We recommend that

- *NIW assets which have already been identified as surplus should be disposed of to maximise their value to customers and taxpayers*
- *the Regulator should review NIW's portfolio of assets with a view to identifying additional assets which are surplus to requirements and disposing of them*

8. COST SUMMARY

8.1 This section summarises our assessment of the financial impacts of our recommendations for the next two financial years 2008/2009 and 2009/10. We must emphasise that the figures shown are no more than the best estimates we have been able to produce within the time and resources available.

Impact on Households

8.2 We have calculated that NIW will require a total contribution from the domestic sector in 2008/2009 of £217m. We have recommended that a contribution of £109m should be taken from the regional rate. Other concrete savings which we have identified amount to around £34m. This leaves a balance of around £74 million which would be covered by the phasing and pegging subsidies totaling £84m which are already allocated in the SBP for NIW.

8.3 In 2009/10 the existing proposals would have required households to contribute a total of £237m on top of their rates. Against this, our recommendations will save them at least £153m leaving a balance of around £84m. This would be a saving of around £230 for the average water and sewerage customer.

8.3 In addition to the savings identified above, we have recommended other savings which cannot yet be quantified, to be achieved through the review of the Crystal Alliance contract and developers' allowance. We will expect still more

savings to flow from the recommendations which we will be making in our second report.

8.5 Figure 5 summarises, at a high level, the impacts our findings and the details of the known savings to date.

Figure 5 – Impact of the Recommendations

Revenue Implications ⁴	DOMESTIC SECTOR				NON DOMESTIC			
	FY 2008/09		FY 2009/10		FY 2008/09		FY 2009/10	
Full Required Revenue		≈217m		≈237m		≈134m		≈145m
<i>Less</i>								
- Partial Dividend Waiver	4m		4m		3m		3m	
- Extra Efficiencies	15m		23m		9m		14m	
- Metering	< 1m		1m		-		-	
- Roads Drainage	14m		15m		9m		10m	
Revised Revenue		≈183m		≈193m		≈113m		≈118m
<i>Less</i>								
- Household Rates Reduction	109m		109m					
Extra Revenue Required		≈ 74m		≈ 84m				

8.6 Our recommendation that domestic rates should be reduced by around £109m would save the average ratepayer around £160 every year.

8.7 Our recommendations on opex efficiencies and domestic metering would save domestic customers over £24m.

8.8 Our recommendation on road drainage would save domestic customers around £15m.

⁴ Figures might not always add up due to rounding.

Impact on the NI Block

- 8.9 Our recommendation on reducing the rates will cost the NI Block £109m annually relative to NIO ministers' proposals.
- 8.10 Our recommendation on the dividend would cost the Block around £7m. It might also result in a once off charge of around £12m.
- 8.11 Our recommendation on road drainage would cost the Block an estimated £25m, on the assumption that road drainage accounts for around 15% of allowed sewerage revenue.

Impact on NIW's revenue

- 8.12 Our recommendations on opex efficiencies and domestic metering could reduce NIW's allowed annual revenue during its first price control period by up to £38m. The partial dividend waiver would require a further £7m reduction to pass this saving onto customers.

9. AFFORDABILITY

- 9.1 Poverty is a major problem in Northern Ireland. The latest available figures on income poverty for 2005/2006 indicate that some 21% of individuals and 29% of children live below the official poverty line (60% of UK median income). The income distribution is heavily skewed towards lower incomes and over half the population have incomes of less than £300 per week. In 2004 the government published its anti-poverty and social inclusion strategy, *Lifetime Opportunities: Government's Anti-Poverty and Social Inclusion Strategy for Northern Ireland*. This forms the basis of the Executive's anti-poverty strategy and in making our recommendations we have been conscious of the need not to exacerbate poverty or widen social exclusion.
- 9.2 Under direct rule ministers' proposals, an Affordability Tariff for low income households was developed. The aim was that no low income household would have to spend more than 3% of their total income on water and sewerage services. It would have cost around £20m, which would have been met from the NI Block rather than other customers.
- 9.3 The proposed Affordability Tariff would have provided much greater support to those on limited incomes than the corresponding support offered in England and Wales under the Vulnerable Groups regulations. The latter were designed only to cap the bills of metered customers who for reasons of

family size or ill health use a disproportionate amount of water. The scheme has been criticised because only a very small proportion of those eligible have taken it up and it has done nothing to tackle broader affordability problems.

9.4 The Northern Ireland Affordability Tariff was expected to assist up to 180,000 households (27% of the total). It was initially guaranteed only until 2010, but NIW has prepared its SBP on the basis that the Tariff would continue at the same level indefinitely. Eligibility was to be determined through the social security system: those on Housing Benefit/Rate Relief as well as those who qualify for the new Special Rate Relief would automatically have qualified. Householders under the age of 18 or in full time education and young people leaving care might also qualify.

9.5 The Affordability Tariff would have taken the form of a three tier flat rate charge for water as follows:

Capital value up to and including £70,000	£14.83
Capital value from £70,000 to £100,000	£22.24
Capital value over £100,000	£29.65

Sewerage charges would have been additional and identical.

9.6 We examined the impact that the Direct Rule option would have had on the number of people in water poverty. Using data from the Family Resources Survey for 2005/2006, we found that without the Affordability Tariff some 14.4% of households would experience water poverty. Of those in

water poverty, over one-fifth were single female pensioners and another 17% were pensioner couples or couples with children.

- 9.7 When the proposed Affordability Tariff was taken into consideration, we found that an estimated 10.5% of households would still be in water poverty. But what is significant is that almost all those who qualified for the Tariff were taken out of water poverty, which suggests that there is a problem with capturing everyone who is in need of help. The pattern of those left in water poverty would not alter greatly but a higher proportion would be pensioners and couples with children.
- 9.8 We also examined the impact of our proposal that there should be no standing charge and that payments should be related solely to the capital value of the property. On this basis over 11% of households would be in water poverty. Once again the cost of the allowance was substantial, yet it reduced the number of households in water poverty by only a few percentage points.
- 9.9 Overall, this suggests that while the Affordability Tariff is efficient at helping those who qualify, it does not adequately target working families on low incomes or pensioners who either are not entitled to benefits or who have failed to claim them. This is inevitable in a system where eligibility is

triggered through the social security system. The problem with the pensioners could be significantly improved if there was a rigorous take-up campaign.

9.10 Our intention is that our proposals should not lead to water poverty or increase existing levels of general poverty. A lot more work is necessary to consider how best the Affordability Tariff can be developed so that no-one experiences water poverty. Work is also required on how best the different relief schemes for the rates and water payments can be simplified and if possible integrated into one system. This is unlikely to be simple because the Rates Relief scheme is designed to assist those who are not captured by Housing Benefit - some 5% of the population just above the Housing Benefit level - and those at the very bottom of the income scale. We intend to cover these issues in our second report.

Finding

9.11 We have examined the proposed Affordability Tariff and consider that while it is better than comparable schemes in Britain, it suffers from targeting and take-up problems. We intend to do more work on this with a view to making recommendations for 2009/10 onwards in our second report.

APPENDIX 1: MEMBERSHIP AND TERMS OF REFERENCE

Purpose

To advise the Minister for Regional Development on the level of funding needed as well as options to manage, govern and finance our water and sewerage services for all our citizens now and in the future. In particular, to ensure the ongoing and continued investment in our water and sewerage infrastructure needed to deliver quality, value for money services at the lowest possible cost and the highest levels of efficiency possible within a publicly-owned organization which protects the public interest.

Approach

The review is to be taken forward in an open and transparent way on behalf of the citizens as the real shareholders in our water and sewerage services. The aim of this review is to make sure that there is public trust and confidence in the arrangements for financing and delivering water and sewerage services. Privatisation of our water and sewerage services is not an option.

The Review will comprise two distinct strands:

- Cost of water and sewerage services and how these will be funded. This strand will be undertaken by the Independent Review Panel and report to the Minister for Regional Development, Executive sub-committee and Executive.
- Management, governance and delivery of high quality water and sewerage services within a public ownership model. This strand will also be undertaken by the independent review panel reporting to the Minister for Regional Development, Executive sub-committee and Executive.

Timing

It has been agreed by the Executive that this review will be short and focused. The Minister for Regional Development will report back to the Executive as follows:

Strand 1 Final Report in Autumn 2007

Strand 2: Final report in December 2007
(interim report in Autumn 2007)

It is recognized that the Minister and the review panels will have to conduct their work within a short turnaround time which includes the summer holiday period. All efforts will be made to manage this effectively. The Minister for Regional Development will give monthly updates on progress against time, objectives and delivery to the Executive sub-committee and (where the sub-committee agrees it is necessary) to the Executive.

The Regional Development Committee is a key stakeholder in this process and will be consulted and updated as the review progresses by the Minister for Regional Development.

The review will be serviced by an independent secretariat.

The review panel will have full access to all relevant documentation in support of its work. It will also invite expertise, evidence and analysis from others as required including the statutory partners, namely the shareholder (DRD), the undertaker (NIW), the regulator (NIAUR) and the consumer representative body (CCNI), the Regional Development Committee, DFP, HMT, advisors, analysts and consultants involved to date, as well as other interested parties as identified by the review panel.

Implementation

The review panel will make any recommendations arising in Strand 1 of the review by the autumn. Any recommendations arising from Strand 2 of the review will be made within the context of a 2-3 year implementation period to allow for changes which would take longer to implement. The output from Strand 2 will be subject to a 12 week consultation period from January to March 2008.

Cost

Resources must be identified to conduct this review as decided by the Executive on 10 May 2007 in order to deliver this review in the timescale outlined above.

STRAND 1: COST OF WATER AND SEWERAGE SERVICES AND HOW THESE WILL BE FUNDED

Scope

There is a need to address the funding of water and sewerage services in the shorter term and therefore this strand of the review must report by Autumn 2007 to advise the funding decisions by the Assembly and the Executive.

The review will address the following questions;

- What the real cost of providing water and sewerage services is; and
- How these costs should be met.

In particular, two key aspects of public concern and interest must be considered;

Paying twice: - the review needs to ascertain how much people already contribute through the regional rate as a starting point as the public should not be expected to pay twice for this service.

Under-investment: - the review must establish the costs of rectifying the legacy of under investment that has occurred and to make the case for securing a contribution towards past underinvestment.

(The review will take into consideration the DFP Rating Review)

STRAND 2: MANAGEMENT, GOVERNANCE AND DELIVERY OF HIGH QUALITY WATER AND SEWERAGE SERVICES WITHIN A PUBLIC-OWNERSHIP MODEL.

Scope

This review will be conducted by the fully independent review panel and serviced by an independent secretariat. The review panel will be tasked with identifying the level of funding needed and set out options to examine the most appropriate way of managing, governing and delivering our water and sewerage services within full public-ownership. It will make recommendations on the way forward.

This review will examine the following:

1. Legislation, license, articles of association and governance letter

Do these arrangements sufficiently support and meet the needs of a publicly owned business model? What amendments or additions would be recommended?

2. Governance

Are the governance arrangements suitable and appropriate? Do the arrangements sufficiently take account of and support the restoration of the new Assembly and the decision to keep in public ownership?

3. Investment Programme

The Panel will review the scale, structure and phasing of investment planned to meet requirements. The Panel will also assess whether current arrangements are sufficient for identifying the appropriate level of funding needed over the next 20 years to meet our requirements and that of EU legislation. The Panel will also identify what element of funding need relates to legacy costs due to past underinvestment or maintenance needs, and what element are future development costs.

4. Business Model

Is the Go-Co, including arrangements with third parties, the best and most appropriate model to meet the purposes as defined above and within public ownership? What option or options would be best to consider and/or implement e.g. Scottish and Welsh business models?

5. Strategic Business Plan and Financial Model

Is the business and financial model appropriate for a public ownership water and sewerage service? Is the policy for example on dividend, cost of capital, etc appropriate and in the best interest of the public as the main shareholder? Does the efficiency model ensure value for money at minimum cost?

Membership

It is essential that the review panel is independent to reflect the open and transparent approach to establish the best way forward. The review panel will consist of a chairperson and two members and should as far as possible collectively reflect the following elements:

- Independence
- Expertise and knowledge drawn locally and further afield
- Public administration
- Regulatory and operational/management experience in water and other utilities
- Economic and academic experience and expertise
- Public and consumer interest

Process

The Independent Review Panel will provide advice and identify options for consideration by the Minister for Regional Development. The Minister will present monthly updates and the Panel's advice to the Executive sub-committee with recommendations where this is appropriate. The Minister for Regional Development will put firm proposals for future action to the Executive once these have been agreed by the Executive sub-committee.

APPENDIX 2: ORGANIZATIONS WHICH GAVE EVIDENCE

Communities against the Water Charge

Confederation of British Industry

Consumer Council for Northern Ireland

DFP

DRD

Economic Research Institute for NI

Environment and Heritage Service

Environmental Link

Help the Aged

HM Treasury

NIC / ICTU

NICVA Seminar: Ashton Centre (New Lodge), Community Network
Craigavon, East Belfast Community Development
Agency, NI Anti Poverty Network, Age Concern, Help the
Aged, NIACAB, Advice NI, Friends of the Earth, NI
Environmental Link, Rural Community Network, Disability
Action, Women's Support Network.

NIPSA

NI Statistics and Research Agency

NI Utility Regulator

NI Water

Northwest Seminar for local community representatives

SDLP

Strategic Investment Board

The Coalition against Water Charges

The Shareholder Executive

The Water Industry Commission for Scotland

