

Financing water in Northern Ireland

– a critique and an alternative (revised version)

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^a Revised text in section 4 and annexe is in bold

1. Introduction

The water service in Northern Ireland has been the subject of a series of initiatives in the last 5 years. Hitherto the water service in Northern Ireland has been provided as part of the services of the Department of Regional Development (DRD), which has been financed through property-based rates and support from general UK taxation, without any separate water charge (similar to the system used throughout the UK before 1974). In 2003 the UK government produced a consultation document on reforms, proposing the introduction of a new charge for water services, additional to the rates paid for local services in Northern Ireland, and presenting a range of options for restructuring the service, including privatisation on the model of the English companies. These proposals were the subject of a previous PSIRU report.¹

The responses to this consultation were overwhelmingly hostile, both to the proposed new charge and to the principle of privatisation. The UK government nevertheless decided to proceed with the introduction of the new charge and the creation of a government owned company (“GoCo”) structured like a private company but owned by the DRD, which is responsible for water services in Northern Ireland. The new charge and the new company – Northern Ireland Water – were both set up from April 2007.² A number of public private partnerships (PPPs) were also created as vehicles for capital investment under the private finance initiative, notably for new treatment works.

In parallel to this process, elections for the Northern Ireland assembly were held in 2007, in which the proposed new water charge was a prominent issue. Following these elections, a new Northern Ireland executive with devolved powers was set up in May 2007. At its first meeting the new executive decided to cancel water charges for 2007/08 and set up a comprehensive review of water services.³

This paper is divided into three sections.

- The first section analyses the impact on operating costs, capital costs and charges of the government plans as at April 2007 – the creation of the GoCo and the introduction of the new charge.
- The second section discusses some of the issues raised by the plans, including the burdens of the proposals for assigning equity and debt to the water service.
- The third section sets out an alternative approach.

The data is drawn from the main official documents, in particular:

- Financial Framework for Northern Ireland Water Ltd (referenced as FFNIW)
www.waterreformni.gov.uk/financial_framework-2.pdf
- Strategic Business Plan: Northern Ireland Water 3 May 2007 (referenced as SBP)
http://www.niwater.com/siteFiles/resources/word/03%2005%2007%20SBP%20_final.doc

2. Current plans for the water service

2.1. Operating expenditure

The SBP expects operating expenditure to rise sharply in the first year, from £159.4m. in 2006/07 to £190.1m. in 2007/08. This is an increase of £30.7m., or 19%. Operating expenditure is then expected to remain around £190m for the next six years.^b

2.1.1. Transformation costs

The SBP states that the details of operating costs are still being developed, and lists a number of elements including operational reviews, new human resource and financial systems, and development of the ‘organisational culture’.^c

^b SBP 5.11

^c SBP 5.23

However, it is clear that the immediate effect of the reforms themselves is to increase the costs of the water service. The SBP summary identifies the administrative costs of the reform process itself; the cost of administering the new water charge; and the employer's national insurance and pension costs which have been transferred by the UK government from general UK taxation to the revenue account of NIW. While the annual costs of creating the new GoCO are expected to fall after the first two years, the cost of the new billing system is projected to rise to £28.9m in 2013/14. The overall effect is that these costs of the new system add over £50m per year to operating costs for the next 7 years (see table 2).

They represent over 27% of all operating costs throughout the period, and are greater than or equal to the projected efficiency savings until the last year of the period.

2.1.2. Efficiency savings

The SBP intends to make efficiency savings which will reduce operating expenditure between 2006/07 and 2009/10 by £44m. below what it would otherwise have been. These efficiencies are very largely achieved through labour costs, principally by a 27% reduction in employees, from 1,926 in 2006/07 to 1,412 in 2009/10 – a cut of 514 jobs. These reductions are to be achieved through a combination of reorganization, new technology and working methods, together with some outsourcing of customer contact work and staff transfers to the PPP operators.^d

Table 1. Staffing reductions planned by NIW 2006/07-2009/10

(as at 31 March)	2006/7	2007/8	2008/9	2009/10
Total	1,926	1,881	1,716	1,412
Difference	-	(45.5)	(210.5)	(514.0)
Difference as %	-	(2)	(11)	(27)

Source: SBP 5.16 p. 26

2.1.3. Net effect on operating expenditure

The net effect is that all the savings achieved by the efficiency measures are more than consumed by the costs of reorganization until the final year of the plan, 2013/14, when the efficiency savings become equal to the additional costs of reorganization. The staffing cuts are paying for the costs of reorganization. Table 2 and Chart A present the figures.

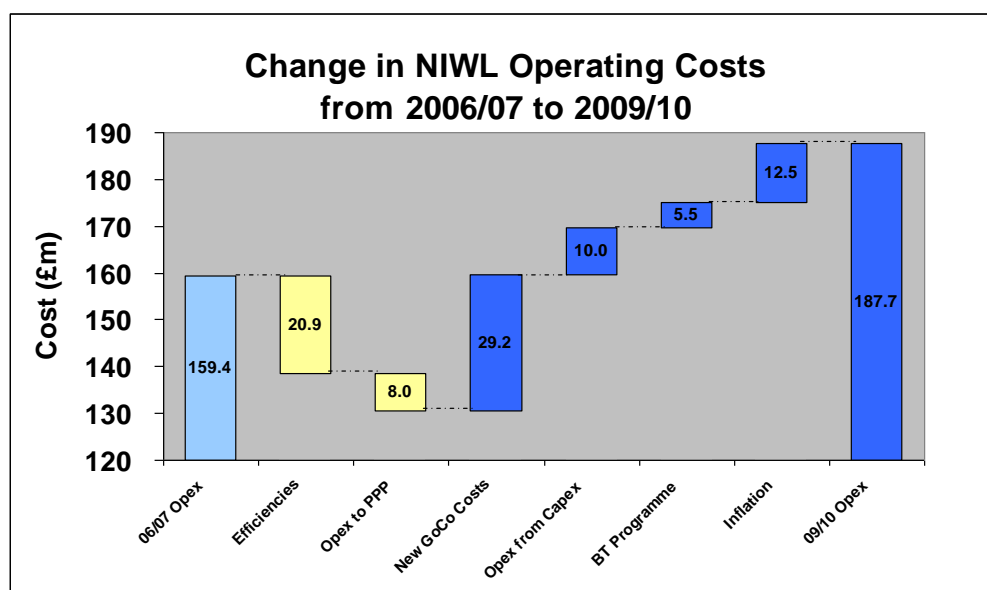
Table 2. Impact on operating costs of reforms and efficiency savings

	2006/07	2007/08	2009/10	2013/14
Business transformation and VER		20.0	12.7	11.4
Customer billing		18.4	26.3	28.9
Regulatory payments		3.5	4.0	4.5
Pensions and national insurance		12.0	10.5	9.4
TOTAL extra costs of reforms		53.9	53.5	54.2
Efficiency savings		-29.8	-44.0	-55.6
<i>Out of:</i>				
Total operating costs:	159	190	188	196

Source: calculated from SBP 6.11 p.33; Appendix A, p.41

^d SBP 5.13-5.16

Chart A. Changes in NIW operating costs



Source: SBP section 6.1.1, p. 35

2.2. PPPs/PFI: operating and capital expenditure

The expenditure on the PFI schemes represents a significant growth item, rising from around £2m. in 2007/08 to £38m. by 2009/20, and remaining at roughly the same level for the rest of the period.^e Of this £38m., about £30m. represents capital costs, and £8m. operating expenses. This capital cost of £30m per year PPPs is equal to between a third and a quarter of the costs of capital investment.

Because of the contractual obligations built into PFI schemes, PPPs represent costs which are almost unalterable for their lifetime of 25 years or more.

Although most of the cost of PPPs is due to the cost of capital, the PPP schemes will be treated by the regulator as operating costs. NIAUR will scrutinise any changes in costs and “if found unacceptably inefficient will be borne by the company and not adjusted in tariffs”^f. This means that the penalty for inefficiencies in the PPPs will be applied by cutting resources available for the rest of the water service, not by increasing charges, which has been the general practice with PFI schemes in the UK – even where the inefficiencies result from the original terms of the contract as approved by the UK government.⁴

2.3. Capital expenditure

Capital expenditure plans are now higher than previous plans. Up to 2003 all plans indicated capital expenditure of about £150m. per year. The new plans show a significant increase to levels over £250m. until a decline from 2010 onwards. As a result, the costs associated with this capital expenditure programme – depreciation and the infrastructure charge – rise steadily from £48m. in 2007/08 to £66m. in 2009/10 and to £92m. in 2013/14 (as do interest payments on the debt that grows to finance this investment – see below).

Table 3. Capital expenditure in NIW plans

Capital works programme	230	211	226	212	202	184	171	1436
Adjustments	43	45	27	14	14	15	16	172
Capital expenditure	273	256	253	226	216	199	187	1608

Source: SBP 4.12 p.17

^e SBP Appendix A p.41

^f FFNIW p.9

The increase in capital expenditure for 2007/08 is explained in very general terms as: “reflecting a more detailed assessment and audit of the costs of delivering the necessary improvements in infrastructure to meet performance criteria confirmed as appropriate by the Environmental and Water Quality Regulators”^g. The reference to the water quality regulator is odd, as the government states that “75% of the capital programme is devoted to sewerage assets in the first 3 years”. The justification of the capital spending programme and its profile over time is obscure, as ERINI observed of an earlier version: “It is very difficult to say whether an investment programme of this scale and complexity is optimal or not”^h. The criteria, the assessments of the regulators, and the audit should all be published to enable public debate on this judgment.

The programme beyond 2010 is even less certain, as it “**assumes** that major investment will be required” [emphasis added], and will be reviewed in 2009 as part of the regulatory process for setting prices thereafter.

The planned level is significantly higher than in England and Wales: £375 per household per year, more than double the £165 per household per year in England and Wales.^h In reality the increase and the difference with England and Wales is even higher, because the bulk of the expenditure on PPPs is in effect payment for capital investment: if the cost of PPPs was added to the capital expenditure programme, then it would be about 50% higher again.ⁱ

2.4. Cost of capital: interest, dividends and capital gains

NIW has been assigned a regulatory capital value (RCV) of £800m., comprising £150m. debt and £650m. shareholder capital (equity).

The £150m of debt is in the form of loans from the DRD, at 5.25% annual interest, which implies an annual interest cost of £7.9m. This interest rate is much higher than the actual cost of borrowing to the government: a recent study for OFWAT estimated the real ‘risk-free’ rate of government bonds as about 2.5%, and the real cost of UK government index-linked bonds is around 2%.⁶

The capital expenditure planned in the coming years will also be financed by extra debt, in the form of revolving loans from DRD. The total debt will thus increase from £150m to £1,066m. in 2013/14 – a rise of £916m. The interest bill will rise to £31m. in 2009/2010, and to £55.0m in 2013/14.

The equity capital consists of shares, also held by DRD. The value of these shares has been set at £650m., plus £21.1m. from windfall sale of assets (see below). NIW is expected to pay dividends worth 5.1% each year, which implies dividends of £34m. in 2007/08; by 2009/10 this will have increased to £36m., and by 2013/14 to £48m. per year.

These dividend payments are the result of the government’s decision: “that the new company should deliver sustained positive returns to the taxpayer (as shareholder)” This “represents the opportunity cost that the government faces when investing taxpayers funds in one particular business activity rather than another”.^j

The business plan provides for the growth in RCV from £650m. to over £2billion in 2013/14. This is treated as capital gains to a quasi-private investor, and, combined with dividends, provides total shareholder returns of over 10%.^k

Table 4. Cost of capital 2006/07 - 2013/14

	2006/07	2009/10	2013/14
Annual dividends	0	36	48
Annual interest	6	31	55

Source: SBP 6.5 p.31, 6.12 p.35

^g FFNIW p.11

^h FFNIW p.11

ⁱ SBP Appendix A p.41, and p.35, chart. The SBP shows PPP costs of £38m. by 2009/10, of which £8m. are said to be operating costs, so £30m. represent costs of capital investment.

^j FFNIW p.17

^k SBP 6.5 p.31

The government is allowing NIW to inherit assets from the water service which are deemed surplus to requirements. NIW is permitted to sell these and retain the proceeds as a one-off windfall. This is in line with what the English and Welsh companies were allowed to do after privatisation. It is an arbitrary way of providing an unsustainable windfall income. The uncertainty is highlighted by the fact that the text of the SBP claims that the sales will yield £21.1m.¹, but the cash flow projections only show a total of £11m. expected from these sales – barely half the figure claimed in the text.^m

2.5. Overall effect: higher costs

The chart and tables below summarise the impact of different decisions on costs.

Table 2 shows that the increase in costs is spread roughly equally between the rising cost of interests, dividends, PPPs, depreciation, and operating costs. Of these, the cost of dividends is a simple consequence of a government decision; the cost of interest on debt is also in part the result of a government decision; and the cost of the PPPs is enshrined in contracts which were As shown above, the increase in operating costs is also entirely due to the costs of creating NIW itself.

The table also shows that the increases in all factors are most heavily loaded into the next three years. By 2010, the costs of the service increase by £144m, a rise of about 65% in just 3 years. Over the 4 years from 2010, the increase is less sharp: a rise of £72m., a rise of 20% over 4 years.

Table 5. Principal costs borne by water service 2006/07-2013/14

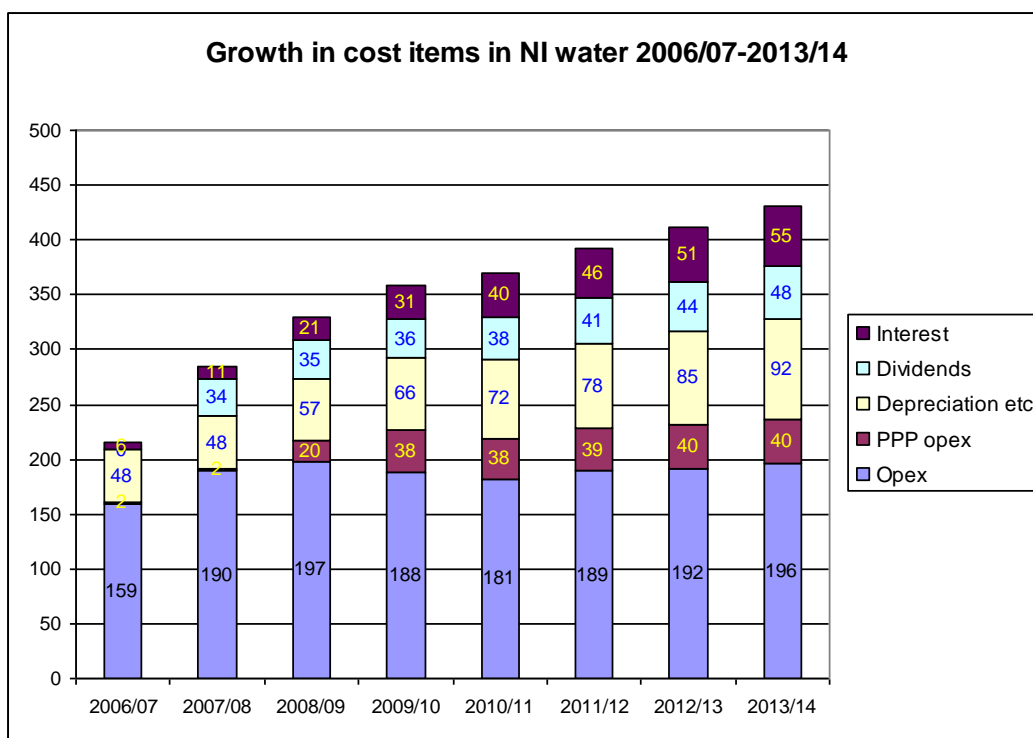
	2006/07	2007/08	2009/10	2013/14	<i>Increase 2006/07- 2009/10</i>	<i>Increase 2006/07- 2013/14</i>
Operating expenditure	159	190	188	196	29	37
Expenditure on PPPs	2	2	38	40	36	38
Depreciation/infrastructure renewal charge	48	48	66	92	18	44
Dividends	0	34	36	48	36	48
Interest	6	11	31	55	25	49
TOTAL	215	285	359	431	144	216

Source: SBP

Chart B. Growth in cost factors 2006-2007-2013/14

¹ NIW 6.13

^m NIW p.43



Source: Table 5

2.6. Charges

The financial statements in the SBP show the projected revenue and expenditure of NIW compared with the past figures for the water service. A new water charge is introduced, reflecting “the plans of the Direct Rule Government to introduce from 1 April 2007 charges for domestic customers”^m. The target figure of £334 in 2009/10 is “the average level of charges that will apply in England and Wales in the three year period to 2009/10”^o.

Table 6. New water charges: £ per household per year

New water charges	2007/08	2008/09	2009/10
Water	£49	£102	£159
Sewerage	£51	£112	£175
Combined Water & Sewerage	£100	£214	£334

Source: SBP 6.7 p.32

The figures given by NIW for past years set out the government’s retrospective view of the financing of water services in the past. This shows income from user charges of only £37m. in 2006/07 and earlier (which represents the charges paid by non-domestic users). This reflects the government’s insistence that households in Northern Ireland have made no contribution to the cost of the water service in the past. This claim is strongly rejected by many (see below for further discussion), and also conflicts with the 1999 government consultation paper, which stated that over three-quarters of the total expenditure of £195m was financed by the rates, which provided £150m.⁷

A large part of the new charge proposed for domestic households represents a transfer of costs from general government to households in Northern Ireland. These include the shift in the burden of financing staff insurance and pensions, the introduction of dividend and interest income to government, and the shift of the cost of PPPs onto NIW. Collectively these represent an extra £145m. per year by 2013/14, one-third of the total costs of £431m.

ⁿ SBP 6.6 p.31

^o FFNIW p.13

Table 7. Costs transferred from government to N Ireland users

	2009/10	2013/14
Transfer of staff NI and pensions	10	9
Dividends	36	48
Interest	31	56
PPPs (-opex element of £8m)	30	32
Total	107	145
<i>Government subsidy in NIW plans</i>	-62	-54
Net government gain from changes	45	91

Source: SBP, various

Overall, the proposed charges as set out in the government and NIW papers can be seen as the net result of two sets of changes: the increased operating and capital costs associated with the GoCo, and the transfer of the burden of financing from tax revenue to the new water charge to domestic users.

3. Discussion

Some major issues arising from the plans concern:

- The impact of restructuring on operating costs
- the impact of the equity and debt loaded onto NIW
- the dividends required from NIW
- the lack of an equivalent of the ‘green dowry’
- the use of privatisation as a model for the Northern Ireland water service
- the rationale for a new water charge

3.1. Restructuring increasing costs

The entire restructuring of the water service should be reconsidered. The additional costs are substantial, and absorb the entire planned efficiency savings, yet neither the government’s financial paper nor the strategic plan make any attempt to quantify any benefits of the GoCo structure.

3.2. Level of equity and debt: no green dowry

The issue of shareholder equity in NIW only came into existence in 2007 as an accounting item when NIW was created. The proposed figure of £650m. is an arbitrary political choice, again based on treating the company as if it was privatised. The original estimate of the total value of all the assets of the water service was about £6 billion. This was slashed by a simple political decision: “Government had decided that the opening asset value of NIW...should be £1 billion and that all of this should be reflected in the opening balance sheet of the company as equity”.^p The arbitrariness of these figures was re-emphasised when the opening value was revised to £800m. (of which £650 m is equity and £150m. is debt) accompanied by a claim of magnanimity that s £800m “represents some £5.2 billion write-down of the value of the assets in water Services accounts”.^q The equity value could equally well be reduced to a token amount of just £1, which is an option used by some countries.⁸

The impact of assigning capital is equivalent to retrospective charging for the existing assets of the water system. Any capital assigned to a new water company in Northern Ireland can only represent assets created by past investments. All past expenditure on the water service, both capital and operating, has been financed in accordance with the law and practices prevailing at various stages over the last 150 years. Assigning any of this as equity or debt on which NIW must pay dividends and interest is in effect forcing the people of Northern Ireland to pay again for something which has already been paid for.

^p FF p.18-19

^q FF p.19

3.3. Dividends and equity

The level of dividends expected of NIW also reflects the government use of a private model. The government argues that investors would want an extra high return on their investment because NIW is more risky than the English and Welsh water companies, for example. The government has therefore set the overall cost of capital at 6.4%, compared with the target level of England and Wales of 5.8%.^r

There are three flaws in this approach. Firstly, the government is not a private profit-maximising investor – it may choose to make investments for other, social and economic, reasons, and investment in water services is one such purpose. Unlike private companies, public authorities are not obliged to maximise profits or distribute them, so they can decide as a matter of policy that their water undertakings should pay no dividends, so that surpluses can only be reinvested into the water system itself, and not used for example to reduce taxes for other services. This is done by a number of Dutch municipalities, for example, and by the New Zealand public authorities which own the water supply undertaking Watercare: this undertaking nevertheless has an excellent international credit rating of A+.⁹

Secondly, this treats the company as if it was a private investor which might decide to sell up and abandon the investment in water altogether if there were too many political uncertainties, for example. But governments cannot do this with essential public services. The only way in which this ‘equity’ could be invested elsewhere would be by selling NIW to a private investor, so the approach only makes sense if privatisation is the ultimate objective.

Thirdly, shareholders in a private company normally expect to carry some risk when they invest. The UK government however appears to be insisting that there will always be a positive return on equity – “It is also the Government’s intention that the new company should deliver sustained positive returns to the taxpayer (as shareholder)”^s - and that this return on equity will be fixed at 5.1%. Not only is this return fixed, it is a condition of the UK government’s financial support for the DRD, which requires: “that the capital charge in the DRD Departmental Expenditure Limit (DEL) budget would be set at the same level as the return that NIW should earn. This would therefore require DRD to extract NIW’s return to cover its cost of capital charge.”^t In effect, the government’s funding to DRD’s other services will be cut pound for pound if DRD does not extract the dividend payment from NIW.

3.4. Debt and the missing dowry

NIW has been assigned £150m. of debt from its first year. This is the exact opposite of what was done for the private companies in England and Wales when they were privatised in 1989: the UK government gave them a ‘green dowry’ capital injection of £6.6 billion by writing off all the existing debts of the water companies - worth over £5 billion pounds - plus a further donation of £1.6 billion pounds to help finance investment to higher standards. This dowry was paid for out of general taxation, and so Northern Ireland taxpayers made a contribution to it without, so far, receiving any benefit. The equivalent for Northern Ireland today would need to be adjusted in line with the population difference, officially reckoned as 3.4%¹⁰ – and increased to account for inflation since 1989, which rose by 72.0% between 1989 and 2006.¹¹ This calculation gives a figure of. £386m.

Table 8. A proportionate dowry for Northern Ireland

Dowry for England and Wales 1989	£6600m.
Inflation 1989-2006	+72.0%
Population adjustment	3.4%
Proportionate dowry for Northern Ireland	£386m.

Source: see text

This could be spread over any reasonable period. If it was spread over the next 10 years, it could reduce costs by £39m per year compared with the NIW plans; spread over the 7 years of the SBP, it could reduce annual costs by £55m; if assigned to the first 5 years, when capital spending is at its peak, it would provide an annual reduction of £77m.

^r FF p.18

^s FF p. 17

^t FF p.18

The interest rate of 5.25% should also be reviewed.

3.5. Abnormality and problems of privatisation models

Much of restructuring attempts to create NIW as an asset that private investors would want to buy. Although it is a GoCO, the NIW is structured to allow it to operate as a private company. The financial plans are constructed to satisfy shareholders for whom the investment is purely financial, and so the concerns are to emphasise the returns achieved and the growth in market value of the company as a saleable entity. The SBP and the regulatory model assume that the key incentives for owners and managers are to increase the financial value of the owners' investment. The capital structure is designed to provide a reflection of the market value of the company.

However there is no compelling reason to do this for a public service company. There has been a considerable debate in the accountancy journals on the problems of introducing such an approach, typified by the following quote:

“standards, which aim to improve the financial reporting of large enterprises that are quoted on the stock exchange. Such a framework serves the user who is interested in the profitability and in the economic results of the organization. However, governments are not driven by profitability or by economic results: they have to perform social services with the least effort and do so in an accountable way. Therefore, one could seriously question the appropriateness of a conceptual framework derived from a specific group of enterprises.”¹²

The proposals are excessively influenced by the privatised structure of water in England. However, this is an abnormal model for water services. There are very few places in the world where water services have been privatised. The form of privatisation in England and Wales, whereby the entire system is owned by the private companies, has not been adopted by any other country or city in the world. In all other countries, water services remain overwhelmingly provided by public authorities or companies wholly owned by public authorities: in the USA for example about 85% of water remains in the public sector. In the Netherlands, private ownership of a water service company is actually illegal; Italy is in the process of passing similar legislation.¹³

This general reluctance to privatise water reflects a number of well-known problems with private provision of monopoly services, including high prices. A recent study in France showed that the average price of water for households provided by private companies is 16% higher than water provided by the public sector. (€176 per year compared with €151 per year).¹⁴ In England and Wales, the leakage rates of the private companies are at high levels more typical of eastern Europe than other western European countries; the companies consistently invest less than they predict in their plans; and productivity has grown less rapidly than under previous public ownership.¹⁵ Water privatisation remains deeply unpopular in Britain, 17 years after the water companies of England and Wales were privatised. In June 2006, 56% of people in an opinion poll agreed that the country “would have fewer problems with water supplies if the industry was renationalised and the private companies replaced with a government-owned water board”, while 38% disagreed.¹⁶

The problems of faith in the unusual English system are also apparent in the regulatory structure proposed. NIAUR is modelled on OFWAT in England and Wales, which operates by comparing the efficiency of the different companies; and setting price caps on the basis of assumed efficiency gains, allowing the company to keep the surplus revenue if it outperforms the assumptions.^u

Neither of these functions seems relevant to the situation in Northern Ireland. Firstly, NIAUR only covers a single water company, NIW, and so cannot carry out comparisons in the manner of OFWAT. Secondly, the incentive of retaining surplus efficiency gains only works for a profit-maximising entity, such as a privately owned company; otherwise, the company has no incentive to seek such a surplus. The private companies in England fulfil this criterion, but that is not the case for NIW, even though it is constituted as a plc.¹⁷ There is of course an incentive to reduce costs in order to keep prices down, but this is a political incentive for any government service organisation, not an economic incentive that can be manipulated by regulation. Finally,

^u FF pp 4-5.

the initial price levels for 2007/08-2009/2010 are fixed entirely by the government (“the department will set the revenue requirement and charges that will apply for the first three years”^v) – so until 2010/11 NIAUR can only rubber stamp the prices set by government.

3.6. The new water charge and ‘full cost recovery’

The proposed water charge has three remarkable features.

Firstly, it is a new charge on top of the existing system of payment for water services. The system of financing water in Northern Ireland has been the same as the historic system in the UK, namely payments as part of the local rates. This was recognised by the 1999 consultation paper which acknowledged that “*the contribution this year by the average domestic ratepayer in Northern Ireland for water and sewerage services is £127*”.¹⁸ Those payments, according to the paper, had “been rising in recent years to reflect increasing levels of investment” and further increases were expected. The paper then estimated that “*increasing the Water Services annual income by an additional amount of £50million would represent an increase of approximately 10% in the average domestic rates bill (roughly £35 per annum...)*”¹⁹. The 1999 consultation paper gave clear information on all sources of funding. Over three-quarters of the total expenditure of £195m was financed by the rates, which provided £150m; charges for commercial water use, trade effluent charges and connection charges, provided £36m; and the balance of £9m came from central government.²⁰

Secondly, the level of the charge has not been set by the costs of the service, but as a political decision by reference to the average level of payments in England and Wales. This is made clear in the government’s paper on finance which states that:

“Shaun Woodward (who was then the Minister for Regional Development) announced on 8 December 2005 the Government’s intention to set the new household charges in line with the average level of charges that will apply in England and Wales in the three year period to 2009/10. Thus, the Government is setting the new domestic charges in line with the average level of charges that will apply in England & Wales in the three years to 2009/10, and these will be phased in over that period.”^w

The clear implication is that the entire strategic business plan of NIW has been constructed in order to come up with the pre-determined level of charges. Instead of the real costs of the water service determining the charges, the political target for charges has determined the spending and financial plans of NIW. Against this background, the strategic business plan has little credibility as an independent management assessment.

Thirdly, the new charge is not a charge based on water consumption, but a tax based on exactly the same property rates, using the same new capital values, as the domestic rates. It is identical in effect to a further increase in the rates. The main impact of creating it as a separate charge is to require an additional bureaucracy to administer it, which is one source of the additional costs of the GoCo restructuring. It would clearly be more efficient not to create such a separate element but to continue to raise revenue for DRD services through a single rates bill.

Part of the justification used for the new charge is the suggestion that ‘full cost recovery’ is compulsory under European law, and that this means that users have to pay the full costs. This is not true: the EU Water Framework Directive (WFD) does not require the introduction of specific user charges. The WFD says (Art 9 para 1) that member states must “take account of the principle of recovery of costs of water services”, and ensure “that water-pricing policies provide adequate incentives for users to use water resources efficiently” and “an adequate contribution”. But the definition of an adequate contribution is left wide open, and “member states shall not be in breach if they decide in accordance with established practice not to apply” these requirements (Art 9 para 4). Moreover, in most countries there are significant contributions from general taxation. In Germany, a third of all capital expenditure is financed out of government tax revenues. The Republic of Ireland continues to use a system of financing water entirely through tax revenues. In

^v FF p.7

^w FF p.13

Hungary, all investment is financed by central government out of tax revenues. France uses a special regional tax to finance investment. The same is true elsewhere: in the USA, revolving funds for investment in water and other infrastructure are heavily subsidised by central government.

The new business plans note that commercial and industrial users pay £40m in charges at present, but say little about the future plans for these charges. The paper implies that all increases in capital investment must be financed solely by charges to domestic users. This is either an oversight, or needs justification.

4. An alternative path

It is possible to use this critique to construct the outlines of an alternative basis for planning water services in Northern Ireland. An alternative approach would abandon a number of political objectives embedded in the current plans, including:

- the introduction of a new water charge
- the objective of setting the charge at the average level for England and Wales
- the restructuring of the water service as a GoCo (which increases operating expenditure by 27%)
- the use of privatisation as a model for the water service company
- the requirement for £54m. annual dividends

This could produce a different set of projections for future years. The costs associated with restructuring would be eliminated; the burden of dividends would be removed; and a dowry of £386m., equivalent to the England and Wales dowry (see above) could be spread over 10 years. This would sharply reduce the costs to be financed, although depreciation and interest costs are still borne by the water service.

This is illustrative. Other elements could also be critically examined, including possible exaggerations of the necessary capital programme, possible exaggerations of the desirable level of job cuts, and whether it would be more appropriate for the UK government to be responsible for financing the PPP schemes.

Table 9. An alternative budget for the NI water service: expenditure

	2009/10	2013/14
Opex	188	196
- restructuring costs	-54	-54
PPPs	38	40
Depreciation/infra charge	66	92
Interest ^x	23	47
- dowry	-39	-39
Total to be financed	222	282

Source: calculated from SBP: for assumptions see text. For more detail see annex

The calculation of the financial implications of these plans is based on the distribution of the burden of financing as implied in the NIW strategic plan, which assigns 67.8% of the burden of financing the service to the household sector, with 32.2% financed by commercial users. The result is that the 2009/10 budget could be financed by a contribution through the rates rising to £221 per household per annum - £113 per year less than the projected NIW water charge of £334 in that year.

NIW do not make explicit their expected charge for 2013/14, but if the same domestic/commercial ratio is applied in 2013/14, then 67.8% of the NIW projection of £424.8m. 'revenue from customers'^y would be paid by households, a figure of £288.0m. Divided between 650,000 households, this implies a water charge of £443 per household. The PSIRU illustrative alternative for 2013/14, recalculated on the same basis, implies a figure of £281, £162 per year less than the NIW implied charge of £443.

The calculation assumes that this distribution continues into the future: one consequence is that the government contribution remains small, much lower than the subsidy of £54m. set out in the strategic

^x Excluding £7.9m. interest attributable to opening debt of £150m. assigned to NIW

^y Strategic Plan Appendix A p.41: profit and loss projections

business plan. Another is that the contribution from commercial users remains much smaller than that of households. Both these distributional issues could be reconsidered.

Table 10. An alternative budget for the NI water service: revenue (revised version)

		1999	2009/10	2013/14	2013/14 increase over 1999
	£m.	195	222	282	
Govt	£m.	9	10	13	
Commercial users	£m	36	68	87	
Households	£m.	150	144	182	
Average annual rates payment per household	£	127	221	281	+\$154
<i>Water charge per household in NIW plans</i>	£	127	334	443	+\$316

Source: calculated from table 9, and NIW projections

Other policy issues should be considered, for example by clarifying that privatisation is neither a short-term nor a long-term objective. This could be done by following the example of the Netherlands (and the plan of Italy) and making water privatisation illegal in Northern Ireland, as it is in the Netherlands. It is clear from the consultation exercise that the prospect of privatisation is unpopular in Northern Ireland, and should be clear from the earlier analysis that the use of privatisation as a model is at the root of many of the problems with the government proposals.

Annexe: Comparative presentation of table 9 and 10

Table 9 above is calculated by using the profit and loss account projections in the Strategic Business Plan at Appendix A (p.41), adjusted by excluding (a) transformation costs of the GoCo (b) dividend payments. In 2013/14, these two elements are £54m. and £48m. respectively, and so their exclusion reduces the burden of financing by £102m.

In the expenditure section, the figure for operating expenditure is reduced by the amount attributable to the transformation costs. The figures for PPPs, depreciation, infrastructure renewals charge remain unchanged from the SBP – although the depreciation and renewal charges would both be reduced if the capital expenditure programme itself was revised downwards as a result of a public review.

In the section on net surplus, the figure for interest payable is reduced only by £8m., which represents the interest payments due to the opening burden of £150m. debt loaded onto the GoCo. The figure for dividends is set at zero, because that is assumed to be a policy objective of the alternative option.

Other elements of the SBP profit and loss table are adjusted as a consequence of the proposed alternative.

The figure for net surplus/deficit is assumed to be zero, because that is assumed to be a policy objective of the alternative option; and the figure for deferred tax is set at zero, as a consequence of the fact that the net surplus and dividends are both set to zero.

In the calculation of revenue in Table 10, the figures for government subsidy and rechargeables are both replaced by the calculation of the government contribution according to the distribution of the 1999 financing. Finally, the assumed dowry payment is added back, representing a further government contribution.

It should be noted that this does not result in an increased gross government contribution to revenue: the alternative proposal requires government funding of £49m. in 2009/10 (made up of £10m. from the 1999 formula, plus £39m. dowry) compared with SBP provision for government subsidy of £62.1m. ; in 2013/14 the alternative provides for government contribution of £13m. + £39m. = £52m, compared to the SBP subsidy of £54m.

Table 11 on the next page sets out a full reconciliation between the profit and loss account of the SBP and the basis for the calculations in Tables 9 and 10.

Table 11. Comparison of GoCo SBP and PSIRU options for 2009/10 and 2013/14

	2009/10				2013/14			
	SBP App A	PSIRU	Difference	Difference %	SBP App A	PSIRU	Difference	Difference %
Opex (excluding transformation)	134.2	134.2	0.0	0%	141.7	141.7	0.0	0%
Transformation costs	53.5	0.0	-53.5	-100%	54.2	0.0	-54.2	-100%
Total opex	187.7	134.2	-53.5	-29%	195.9	141.7	-54.2	-28%
PPP	37.7	37.7	0.0	0%	39.5	39.5	0.0	0%
Depreciation	25.0	25.0	0.0	0%	38.0	38.0	0.0	0%
Infrastructure renewal	40.8	40.8	0.0	0%	53.8	53.8	0.0	0%
TOTAL EXPENDITURE	291.2	237.7	-53.5	-18%	327.2	273.0	-54.2	-17%
Interest payable	30.7	22.8	-7.9	-26%	54.8	46.9	-7.9	-14%
Dividend	36.0	0.0	-36.0	-100%	48.1	0.0	-48.1	-100%
Deferred tax	19.0	0.0	-19.0	-100%	30.3	0.0	-30.3	-100%
COSTS OF CAPITAL	85.7	22.8	-62.9	-73%	133.2	46.9	-86.3	-65%
TOTAL COSTS	376.9	260.5	-116.4	-31%	460.4	319.9	-140.5	-31%
REVENUE								
Non-domestic		68.0				87.0		
Domestic		144.0				182.0		
Total income from customers	319.8	212.0	-107.8	-34%	424.8	269.0	-155.8	-37%
Government subsidy	62.1	10.0	-52.1	-84%	54.2	13.0	-41.2	-76%
Rechargeables	3.5	0.0	-3.5	-100%	3.8	0.0	-3.8	-100%
Dowry	0	39.0	39.0		0.0	39.0	39.0	
Total income from government/others	65.6	49.0	-16.6	-25%	58.0	52.0	-6.0	-10%
TOTAL REVENUE	385.4	261.0	-124.4	-32%	482.8	321.0	-161.8	-34%
SURPLUS	8.4	0.5	-7.9	-94%	22.5	1.1	-21.4	-95%
Implied average domestic payment	334	221			443	281		

Source: calculated from SBP Appendix A and PSIRU calculations (for assumptions see text). Slight variations in figures are due to roundings in calculations.

5. Notes

¹ “Response to the consultation document ‘Reform of Water and sewerage services in Northern Ireland’ March 2003” July 2003: <http://www.psiru.org/reports/2003-07-W-NI.doc>

² http://www.drdni.gov.uk/index/water_policy.htm

³ <http://www.northernireland.gov.uk/executive-statements-index/executive-statement-100507.htm> ; <file:///P:/Working/Projects/NI-IrelandWater/NIPSA2007/news-drd-110607-review-of-water.htm>

⁴ For example the QE II Health Trust at Greenwich was required to cut expenditure on health services by £10million per year, although two independent financial reviews found that the problem arose from the terms of the original contract not from any inefficiency by the authority.

⁵ ERINI “A response to the Integrated Impact Assessment (IIA) of the Government’s Proposals for the Reform of Water and Sewerage Services in Northern Ireland.” April 2005. p.6

<http://www.erini.ac.uk/Publications/PDF/ACWaterReformFinal.pdf>

⁶ A Study into Certain Aspects of the Cost of Capital for Regulated Utilities in the U.K. Stephen Wright, Robin Mason, David Miles. Feb 2003. Section 6.7 p.48-49

[http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/cost_of_capital130203.pdf/\\$FILE/cost_of_capital130203.pdf](http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/cost_of_capital130203.pdf/$FILE/cost_of_capital130203.pdf) ; EMU and the cost of Capital 2003 section 3.9-3.10 http://www.hm-treasury.gov.uk/media/D/0/adlei03_1234_496.pdf

⁷ Water and Sewerage Services in Northern Ireland – a consultation document. DoE 1999; p.9, para 3.2

⁸ “A fifth possibility presented by the same Study 5, referring to the situation in France and New South Wales (Australia), is the disclosure of such capital assets at a symbolic value of \$1 or E1.” J. Christiaens, Capital Assets in Governmental Accounting Reforms: Comparing Flemish Technical Issues with International Standards European Accounting Review, Vol. 13, No. 4, 743–770, 2004

⁹ Standard and Poor’s Infrastructure Finance, Water Companies, September 1999, p. 250

¹⁰ See NI Economic Council Report on Funding page 8, note 13

¹¹ From an index of 115.2 to 198.1: see RPI02 at http://www.statistics.gov.uk/downloads/theme_economy/RP02.pdf

¹² J. Christiaens Capital Assets in Governmental Accounting Reforms: Comparing Flemish Technical Issues with International Standards European Accounting Review, Vol. 13, No. 4, 743–770, 2004

¹³ See <http://www.psiru.org/reports/2004-11-W-crim.doc>

¹⁴ Public-Private Partnerships and Prices: Evidence from Water Distribution in France. Eshien Chong, Freddy Huet, Stephane Saussier and Faye Steiner. Review of Industrial Organization (2006) 29:149–169. Available at SSRN: <http://ssrn.com/abstract=828928>

¹⁵ PSIRU 2007 Water in England and Wales (unpublished); OFWAT 2006. Financial performance and expenditure of the water companies in England and Wales 2005-06 report; Saal D. and Parker D. (2001) Productivity and Price performance in the privatised water and sewage companies of England and Wales. Journal of Regulatory Economics 2001, 61-90 <http://www.springerlink.com/content/m3j6018112134q78/> ; Stone and Webster 2004. An investigation into opex productivity trends and causes in the water industry in England & Wales - 1992-93 to 2002-03. Main Report – Final May 2004.

[http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/stone_webster_100604.pdf/\\$FILE/stone_webster_100604.pdf#search=%22site%3Awww.ofwat.gov.uk%20productivity%22](http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/stone_webster_100604.pdf/$FILE/stone_webster_100604.pdf#search=%22site%3Awww.ofwat.gov.uk%20productivity%22)September 2006 www.ofwat.gov.uk

¹⁶ BBC/Populus poll on public ownership of water June 2006

¹⁷ OFWAT has recognised this limitation of the theoretical incentive in the case of Dwr Cymru, a not for profit company which took over responsibility for water in Wales. OFWAT insists on competitive tendering for virtually all functions, as otherwise the incentive regulation system makes no impact on a not for profit company.

¹⁸ Water and Sewerage Services in Northern Ireland – a consultation document. DoEe 1999; p.2

¹⁹ Ibid, p.16, para 6.2 . This estimate seems reasonable: the annual expenditure on water was then £195m, so an extra £50m spending is an increase of just over 25%: applied to the rate contribution of £127 gives a figure of just over £32.

²⁰ Water and Sewerage Services in Northern Ireland – a consultation document. DoEe 1999; p.9, para 3.2