



independent  
**Review**  
panel

## Independent Water Review Panel

# Strand Two Report Management, Governance and Delivery

## ANNEX: THE OPTIONS – FINANCIAL IMPACTS

This annex looks at some of the financial aspects of the potential models for Northern Ireland Water. The issues described are often complex, and can occasionally be counterintuitive, and indeed the perspective potentially also changes once one moves from options involving traditional equity to one involving customer equity. This annex, however, does not consider the administrative effort and cost of any change from the current model to an alternative Governance and Business model.

### THE DIFFERENT CONCEPTS OF EQUITY

The term equity is one whose meaning is determined, in part at least, on the context within which it is used. In order to distinguish between the different contexts in this annex the following terms will be used:

- Shareholder Equity
- Customer Equity

**Shareholder Equity** is used in the context of securing a defined ownership interest in a company – stocks and shares. So for example in the case of a GoCo option the Government owns 100% of the share capital within NIW. In this context equity is also a source of capital (finance) for a regulated utility business and in many ways, from the perspective of the customer, equity is simply a financing tool for investment which requires the customer to pay a return to the provider of the finance (the Shareholder) via an intermediary (the company).

In a debt based model, without formal shareholders, equity will often continue to exist – as it does in the case of Welsh Water and Scottish Water. In this context **Customer Equity** has similar features to that of the conventional perception of domestic property and mortgages – where the difference between the current market value of the property and the amount the owner still owes on the mortgage is considered, by implication, to be the level of equity they have in the property. So in a not for profit model context Customer Equity refers to the level of assets over and above the level of debt since, by implication, customers have funded and are due any capital created in the business net of liabilities.

In this different context the notion of equity generates some different issues. Water Customers are a very wide constituency, arguably tantamount to the entire population, and Water Customers are not just today's customers but also tomorrow's customers as well. So as Customer Equity provides capital in the business this raises issues of costs and benefits between this and future generations. For example, this generation could have unsustainably low bills by consuming its capital, taking on too much debt and

moving into negative equity – lowering bills now at the expense of higher bills later. Thus, any concept of savings for customers will need to account of costs and savings across generations as opposed to focusing on a customer bill in any one year.

In this annex **Debt**, or Debt Financing is used to describe borrowing via loans and financial obligations lasting over one year. From the customer's perspective loans might seem, in many ways, an alternative source of finance to Shareholder Equity whereas from company perspective loans typically involve an obligation to pay as opposed to the acquisition of an ownership interest. So for example stocks and shares are equity because they represent ownership of a company, whereas bonds are classified as debt because they represent an obligation to pay and not ownership of assets. Debt will typically involve the borrower agreeing to repay the borrowed money along with interest, at or by a predetermined date in the future. Debt interest can also typically benefit from being tax deductible and this is a further feature that differentiates it from equity.

Throughout this section of the report two different uses will be made of the term cost of capital. The term **Cost of Capital Charge** will be used in relation to Resource Accounting & Budgeting within Government. The term **Cost of Capital or WACC** will be used in relation to the cost of finance (the combined cost of equity and debt).

### **RISK ALLOCATION AND THE COST OF CAPITAL FOR NIW**

Debt represents an obligation to pay and Debt holders rank above Shareholders in terms of the creditors of the business and, in addition, dividends are much less certain as there is no obligation to distribute earnings to Shareholders through dividends. As a result, returns distributed to Shareholder Equity (in the form of dividends) are much less certain than returns to debt holders (in the form of interest) while in the event of insolvency Debt holder capital is prioritised over Shareholder capital (indeed as are other creditors). Thus Shareholders seek greater compensation for their capital since their investment is at greater risk than that of Debt holders and so the Cost of Equity is typically greater than the Cost of Debt. In effect Debt holders have significant insulation against downside risks but do not share in any upside – whereas Shareholders bear impacts of downside risk and reap the rewards from any upside gain.

The conventional regulatory approach is one where Regulators place limits on the revenue that can be recouped from (or alternatively prices charged to) customers for a defined period – with the revenue limits being based upon a company operating efficiently. During this defined period if the company outperforms the regulatory contract then the gains from the out performance are harvested by Shareholders in the first instance – although these gains are subsequently redirected to customers in the next price review period. However, where additional costs arise due to management

mistakes or a failure to match efficiency targets then customers are protected from price increases as Shareholders bear such downside impacts. Such costs can and do arise as illustrated by the experience of Yorkshire Water in the mid 1990s when their Shareholders suffered a loss of some £250m in connection with the drought.

This standard approach has been applied to Northern Ireland Water with Government's Shareholder Equity attracting equity levels of return if the business plan is met – and if the plan is bettered the equity returns are enhanced while they are reduced if NIW fall short against the business plan. Government's Debt capital attracts an obligation to return interest payments at an agreed rate. The allowed rate of return on the RCV is based upon a combined rate of return to provide the ability for NIW to compensate both its equity and debt capital.

This arrangement is backed up by a Public Expenditure arrangement where the aim is that the Cost of Capital Charge to the DRD Resource Budget reflects the allowed rate of return or WACC. So with interest payments being an obligation that NIW has to meet DRD needs to extract an equity return from the business to neutralise the Cost of Capital Charge on its Resource DEL. Any shortfall in returns extracted from the business, compared to the Cost of Capital Charge, would represent a shortfall in the Budget of DRD. Returns extracted in excess of the Cost of Capital Charge would provide DRD with additional Resource DEL.

## **COMPANY LIMITED BY SHARES – GOVERNMENT OWNED (GOCO)**

### **Features**

At April 2007 NIW commenced as a CLS with Government, through DRD, owning all of the £650m share capital in the business. The remaining capital of £150m was debt provided through DRD (ultimately sourced from HM Treasury) – giving an opening gearing ratio<sup>1</sup> of less than 19%.

### **Risk & Incentives**

The current GoCo is framed within a conventional regulatory approach. In this case the regulator would allow NIW to recoup, from customers, revenue that was sufficient to meet the costs of an efficient business including an allowed rate of return on its

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<sup>1</sup> Gearing is expressed as Debt / RCV.

investment (or on its RCV). Currently any inefficiency, for example, that lead to an increase in costs would not be provided for as part of allowed revenue and the return to the Government Shareholder would be reduced. A shortfall in returns extracted from the business, compared to the Cost of Capital Charge in the DRD Resource Budget, would represent a shortfall in the Budget of DRD which would have to be met by DRD or the wider NI DEL – either way it would cause a corresponding reduction in available funding for wider public services. In this case Water & Sewerage Customers are insulated against poor performance although that poorer performance could show up in the wider public sector – either as reduced funding for services or as a pressure to raise additional (tax) revenue from the population of Northern Ireland. However, the current allocation of risks does provide significant incentive for DRD as shareholder to push the company to perform (and over perform) since it is the DRD budget that bears the (initial at least) risk of underperformance and gains the rewards where NIW betters its financial targets. Under this model shareholder pressure to deliver over-performance combined with challenging regulatory contracts will be key to improving efficiency and services. The importance of this for customers cannot be understated since, as set out in the Strand 1 report, NIW have huge strides to make to if they are to even approach the levels of efficiency currently observed in GB.

### **Return on Capital**

The current SBP and allowed revenues for NIW are based upon returns around 6.8% pre tax real. It is important to note that, while the entire SBP duration is based upon returns at these sorts of level, this is not necessarily a static position. There will be a Price Control in 2009 to set new parameters for 2010-11 onwards and the regulator will take a view whether the Allowed Cost of Capital should be adjusted. In this respect it might be worth noting the Competition Commission's findings in relation to BAA which appear to signal a reduction in the Cost of Capital for utilities. This could well be reflected in the upcoming Ofwat Periodic Review.

In addition is also worth noting that the rate of return implied within the SBP period is not static from year to year. In fact the implied returns are lower at the early stages of the SBP and higher at the latter stages. In the period before the first price review by NIAUR (where the rate of return will be reviewed) the implied rate of return on the RCV is perhaps around half a percentage point below the 6.8% benchmark.

Finally it is also worth bearing in mind that the current plan does not involve extracting the full allowed return from the business – it involves extracting the full return on debt (i.e. interest) and part of the return on equity (i.e. the dividend). At around 5.1% the Dividend (to the DRD Resource Budget) is less than the full return on equity and so the Shareholding Department is reinvesting part of the equity return back into the business

and financing part of the capital programme from internal resources (as opposed to using debt). Compared to lending, currently at 5.25%, the current level of dividend combined with its lagged payment could offer a cash-flow advantage to company that operates in a cash-flow negative environment. The potential of various models to put a strain on cash-flows will be frequently revisited throughout this annex.

### **Financial Sustainability & Stability**

Business and commercial organisations prefer stable environments and they value actions that counteract or mitigate against uncertainty. The financial stability of a utility business, including a publicly owned business, is important from a number of respects.

- A financially stable business is more likely to deliver more predictable and less volatile prices to consumers – something particularly valued by the less well off and those who need to budget carefully.
- A financially stable business will allow management to better concentrate on improving the efficiency and service quality of the business as opposed to being constantly diverted into cash-flow management activities – such as chasing debtors, delaying payments to creditors and cutting back on investment.
- A financially stable business should allow the Public Sector, as shareholder and providers of capital, to better plan and prioritise public expenditure. Instability could, for example, lead to requirements for additional capital at short notice and potentially at the expense of other planned capital projects.
- Regulators have statutory duties to ensure that efficient utility companies are allowed to recoup sufficient revenues to finance their licensed activities.

Overall the NIW GoCo commenced life with little debt and with significant capacity in its balance sheet to absorb additional debt. In a relatively short period of time NIW is forecast to take on significant additional debt finance as part of funding the large capital programme it is faced with. After only 5 years the gearing of NIW is projected to jump from an opening position of less than 19% to in excess of 53% as measured by Debt / RCV. In addition Water & Sewerage companies tend to operate in a cash-flow negative position which, in itself, tends to put upward pressure on debt and debt coverage ratios.

With NIW commencing life largely unburdened with debt, combined with revenue being based upon standard levels of returns, the business is projected to have the capacity to comfortably take on these levels of debt and fund the interest payments – while still leaving sufficient scope and capacity to take on additional debt finance to fund future investment. Within the water industry this is termed “financeability” and is viewed as integral to a regulator’s statutory duty to ensure that an efficient water undertaking has the ability the finance its licensed activities. Financeability is typically gauged by reference to a suite of financial ratios used by Ofwat because of the importance that

tends to be attached to them by the credit rating agencies – and the fact that Ofwat has tended to impose requirements, within licences, that Water and Sewerage companies maintain an investment grade credit rating. Throughout the current SBP period it is projected that NIW will meet all of the Ofwat ratios should they match or better the performance set out within the SBP. As a result it is projected that NIW will be financially stable should management meet the challenges as set out in the current SBP.

### **PE Dimension**

Under this model NIW would be classed as a public corporation and subject to the Resource Budgeting requirements of a public corporation. This would involve there being a Cost of Capital Charge scored against the Department's Resource DEL and offset by dividend and interest payments drawn from NIW. Any shortfall in these receipts will manifest as a cost to the Department's Resource DEL, while returns in excess of the Cost of Capital Charge in the Department's Resource DEL will generate increased spending power. Subsidies to the public corporation will also score as Resource DEL. Finally net lending to NIW will score against the Department's Capital DEL and so that portion of the capital programme not funded internally by NIW will continue to “compete” for capital funding alongside the 11 Northern Ireland Executive Departments.

### **COMPANY LIMITED BY SHARES – “THIN EQUITY” GOCO**

#### **Features**

A **Thin Equity** company is one whose capital is predominately funded by debt but where some Shareholder Equity remains. In the wider economy such structures are often seen as higher risk higher return models for shareholders – often resulting from highly leveraged acquisitions (typically a feature of so called “Private Equity” deals). Highly leverage structures can also be a common feature of Special Purpose Vehicles or Companies constructed as part of PFI projects where the proportion of debt can be around 90%. A few Water Companies in England have also moved to thin equity structures – for example Anglia now has a debt to RCV of around 85%. NIW, in its existing form, could move to a thin equity structure relatively easily as DRD could simply “swap” a portion of its equity capital for a corresponding increase in debt capital. In this section we consider the issues around a thin equity GoCo based upon gearing of around 80% - virtually a reverse of the gearing ratio the company commenced with at April 2007.

#### **Risk & Incentives**

Water is generally considered a low risk investment sector and, generally speaking, the overall risks inherent in a thin equity version of business ought to be the same as that in an equity dominated GoCo. Thus there is a potential change in the risk profile within the business and with debt being higher up the pecking order, and assuming that there is no risk transfer to customers or contractors, then the full level of equity risk would now be concentrated on a smaller equity stake – with each of the shares now carrying more risk. However, as outlined in the Strand 2 report, the Panel is unconvinced that the current equity stake is bearing equity style risks and potentially fails to recognise the apparent transfer of risks back to customers through the PE regime.

This leads to the question as to whether or not the equity return on each share, in a generally low risk business, would require a corresponding uplift to compensate it for the risks being concentrated on fewer shares. In the absence of traded shares and with the Cost of Capital for the business being framed as a result of the HM Treasury agreed Cost of Capital Charge to the DRD budget it is difficult to speculate on the outcome of what would a negotiation process. In effect if a lower Cost of Capital Charge to the DRD budget were not agreed with HM treasury then, broadly speaking, the overall WACC would remain static and by implication the return on equity would be increased to compensate the reduced equity stake for the increased prevalence of debt.

The regulatory and incentives pressures on the business would be very similar as to that described in the section on the equity dominated GoCo. However, if the overall Cost of Capital Charge to the DRD budget remained unaltered then company underperformance or outperformance would have a more pronounced impact on the DRD resource budget. In this situation potentially greater volatility in DRD negative DEL could add an additional variable to public expenditure planning within the Shareholding Department – this might necessitate the shareholder expanding or intensifying the performance monitoring and management of the company.

### **Return on Capital**

The current SBP and allowed revenues for NIW were based upon returns around the level of 6.8% pre tax real. If one were to maintain the current level of equity returns, and as described earlier this is a big if, combined with using the current Cost of Debt faced by NIW and then alter the capital structure to a thin equity model the implied impact on the cost of capital could be in the region of a reduction of around 2 percentage points.

<b>Thin Equity GoCo: Possible Cost of Capital?</b>	
g	80.00%
1-g	20.00%
Rd (Real)	3.19%

Re (Real Pre Tax)	10.93%
Re (Real Post Tax)	7.65%
t	30.00%
Real Post Tax WACC (Vanilla)	4.1%
Real Post Tax WACC	3.3%
Real Pre Tax WACC	4.7%
WACC = $g \times Rd + (1-g) \times Re$ (Post Tax)	
WACC = $g \times Rd(1-t) + (1-g) \times Re$	
WACC = $g \times Rd + (1-g) \times Re$ (Pre Tax)	
g = gearing ( $d / (d + e)$ )	
Rd = Return on Debt	
Re = Return on Equity (Either Pre or Post Tax)	
t = Tax Rate	

As the above illustrates if there were no requirement to compensate equity for the increased concentration of risk on fewer shares then a significant reduction could be achieved in the Cost of Capital. If achievable the savings from such a move could in theory be equivalent to something in the region of 6% to 7% or so of allowed revenue (i.e. Bills) although the recent Competition Commission decision would appear to signal a reduction in Utility Allowed Rates of Return and so the theoretical 6% to 7% reduction could be eroded significantly. However, it is important to note that the annual cash-flow requirements of the company would not change all that much and the reductions in the equity returns would undoubtedly reduce the ability to fund investment from internal sources which would in itself generate upwards pressure on indebtedness and cash-flows. This is something that will be touched on later. The tax advantages of re-orientating the capital structure towards debt is not envisaged to have significant tax advantages due to the prevalence of capital allowances within such a capital intensive industry mitigating against the actual payment of corporation tax.

### **Financial Sustainability & Stability**

Unlike the current situation a thin equity GoCo would commence with a relatively small proportion of its RCV funded by share capital. As noted earlier even the current SBP envisages a step change in gearing over a relatively short period of time due to the large capital spend, and high levels of net lending, projected over that period. An early switch in capital structure (to say an 80% gearing ratio) during this expansionary period could quickly push debt (including PPP commitments) to potentially around 90% of the RCV – a very high level of indebtedness. Even assuming a reduction in the Cost of Capital the annual cash requirements of the business would be little different – broadly speaking the reduced level of dividend would be replaced with similar levels of additional interest while the reduced level of retained earnings would mean that additional external finance (i.e. debt) would be needed to fund the investment

programme. This would appear to put considerable pressures on some key financial ratios – in particular FFO / Debt, interest coverage and of course gearing itself. This could generate a potential requirement for a further injection of Shareholder equity and / or regulatory sanctioned financeability uplifts – more so in the event that the capex programme beyond 2010 turned out to be larger than forecast within the current SBP. Within the GoCo model regulatory sanctioned financeability uplifts bring with them the added complexity of how to return this value to customers in the future on a NPV neutral basis – otherwise if it were not returned to customers such an uplift could potentially represent a transfer from Water & Sewerage customer to wider public services (via the dividend as negative DRD Resource DEL). In effect the impact of financeability uplifts could be to largely negate the potentially positive impact on bills at the outset with the prospect that the savings would be rolled forwards and released to customers at a later date (on a NPV neutral basis) as and when the financial ratios improved.

Overall an early move to a thin equity NIW would appear to generate the potential for significant financial strain on the company due the capex programme driving up the need for additional debt. From a financial stability perspective it would appear more prudent to delay any move to a thin equity model until after the projected surge in net lending to NIW – on current plans at least 4 or 5 years from now. Alternatively any early step change in gearing would need to be tempered to take account of the significant increases in gearing already expected in the coming years due to the capex programme driving up the need for additional debt.

### **PE Dimension**

Under this model NIW would continue to be classed as a public corporation and subject to the Resource Budgeting requirements of a public corporation. The PE situation would largely be as described earlier for the current equity orientated GoCo. Any swap of equity for a corresponding amount of additional debt should be neutral for Department's capital DEL. However, any financial pressures that lead to a requirement for an additional equity injection would also impact on Capital DEL and any additional capital injection would compete directly with the 11 Departments for Capital funding.

## **COMPANY LIMITED BY GUARANTEE – WITHIN GOVERNMENT PE REGIME**

### **Features**

At April 2007 NIW commenced as a CLS with Government (via DRD) owning all of the £650m share capital in the business. The remaining capital of £150m was debt provided through DRD. A Company Limited by Guarantee within the PE Regime option (hereafter referred to as a CLG GoCo), in effect, would involve the company substituting all of its

share capital for a corresponding amount of additional public debt. However it is likely, as is the case in Scotland and Wales, the company's capital would not continue in perpetuity at 100% debt but that through retained surpluses, out-performance and so forth Customer Equity would begin to establish itself within the business.

### **Risk & Incentives**

If framed within a conventional regulatory approach, as per Welsh Water for example, the regulator would continue to allow NIW to recoup, from customers, revenue that was sufficient to meet the costs of an efficient business including an allowed rate of return on its investment (its RCV). Moving to a 100% debt structure is a significant step and in principle it would require an increase in interest rates to compensate lenders for risk previously carried by shareholders – or else it requires that risks be reduced or transferred to other parties. Effectively the latter would almost certainly be the case and the allocation of risk will alter and those risks previously carried by the Shareholding Department would, by default, be directly carried by customers as the only remaining equity holders in the business. So under this model, for example, a failure to achieve efficiency targets would result in either bills increasing or customer equity being consumed (which in itself probably results in bills going up in the future to replenish customer equity / reserves). Government could of course decide to carry such risk and subsidise the company if and when the risks materialise – although that might beg the question as to why, in the absence of an equity stake, Government should carry equity risks. It is also possible that the predominance of debt and absence of Shareholder Equity can lead to management's prime focus being on ensuring that debt interest is repaid, while activities that consume significant cash-flow, like the investment programme, are possibly at more at risk under this type of business model.

As noted earlier the importance for customers of making sustained efficiency improvements cannot be understated since NIW have huge strides to make in this area. However, in terms of incentives the absence of Shareholder Equity, and the pressure it exerts on management to outperform the regulatory contract, leaves a significant void in the incentive regime. A necessary step towards filling this void is likely to involve directly linking management, and indeed all staff, remuneration and performance against the regulatory contract and customer service standards. In conjunction with regulatory challenge and targets, this should help ensure that the incentives of management and staff are better aligned to the interests of customers. However, while such a pay system is likely to be a necessary feature as part of the drive to improve efficiency and customer service it needs to be recognised that such a system might not sit easily within an environment of public pay restraint. For example, company out-performance and the resultant feed through to remuneration in any one year could lead to opportunistic

headlines and inappropriate comparisons of pay between different groups of public sector workers.

### **Return on Capital**

Under its loan note facility NIW can currently borrow at 5.25% (fixed nominal) for all borrowing up to 31 March 2010. This rate was equivalent to an A-rated corporate bond market price at the date the framework was agreed. From 2010 the interest rate will be set at the prevailing rate at the time for the equivalent 2027 government gilt-edged bond plus a margin of 85bps, (equivalent today to an A rated corporate bond).

At first glance one might imagine that estimating the Cost of Capital for a CLG GoGo would simply involve looking at the rate at which the company could borrow – currently 5.25% nominal. However, establishing a true Cost of Capital it is likely to be more complex than that since it is likely that the company, as is the case in Scotland and Wales, will accumulate (at least some) Customer Equity within the business over time. For a point estimate of a Cost of Capital this raises two questions:

1. What, if any, proportion of Customer Equity does one assume or forecast for the business.
2. What, if any, Cost of Capital does one apply to Customer Equity.

In relation to the first question this is difficult to answer since this depends on such things as the extent to which the company can, or needs to, establish sufficient Customer Equity as part of a financial buffer and judgements the appropriate balance between customers today and customers in the future. One might look to the experience of Welsh Water with gearing of about 73% and falling, while Scottish Water is around the Ofwat guideline rate of gearing of 65% of RCV. Alternatively, for a CLG GoCo run on a commercial basis, one might look at the debt covenant requirements of the 3 major water securitisations in England and Wales. The distribution lock up<sup>2</sup> provisions of those bonds might imply that a minimum level of Customer Equity of somewhere in the region of 15% of the RCV.

In relation to the second question this is equally difficult to conclusively answer and judgement once again plays a major role. Alternatives for a Cost of Capital for Customer Equity might include some of the following:

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<sup>2</sup> "Distribution lock up" provisions prevent dividend (or customer dividend) payments where certain financial ratios are not yet met.

1. A Cost of Capital of 0% for Customer Equity as is effectively the case in Welsh Water.
2. In Scotland, as part of striking a balance between current and future customers (and to make Scottish Water indifferent towards changing its capital structure) the regulator has set the pre tax allowed rate of return on Customer Equity at the post tax allowed rate of return for debt.
3. Given that water consumers are arguably tantamount to society then a further option is to use a Social Time Preference Rate (STPR) – the rate at which society is indifferent between present and future consumption. The current Green Book<sup>3</sup> STPR is 3.5% real.

The overall the trust of the outcome could be something in the region of a reduction in the Cost of Capital of about half compared to existing benchmark. Indeed depending on which approach is taken to assigning a Cost of Capital to Customer Equity the WACC could indeed fall if gearing reduced – as is implicitly the case with Welsh Water. However, it is important to note that the overall risk of the business will probably be the same and it would be the case that under this model the equity risks are borne by the equity providers who, in this instance, would be customers.

This magnitude of reduction in the Cost of Capital could in theory be equivalent to something in the region of 10% or so of allowed revenue. However, despite such a reduction in the Cost of Capital the annual cash requirements of the business would not actually be much different – broadly speaking the dividend would be replaced with similar levels of additional interest while that part of the previous equity return that was retained within the business would have to be replaced with a corresponding amount of additional debt. Taking this into account, and recalling the potential for reductions in the Utility returns, the longer run impact on bills is probably more like 6% to 10% and this would be in line with the estimate of around 8.5% calculated by Stones<sup>4</sup> - **although any tangible reductions in bills will be unlikely in the early years** as any savings would probably go toward building up Customer Equity and reducing the indebtedness on the business. Once again the re-orientation the capital structure towards debt is not thought to have major tax advantages due to the prevalence of capital allowances within such a capital intensive industry mitigating against the actual payment of corporation tax.

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<sup>3</sup> The Green Book: Appraisal and Evaluation in Central Government.

<sup>4</sup> Clive Stones – “Changes in the pipeline? Economic and public policy implications of water industry restructuring”.

## **Financial Sustainability & Stability**

As indicated earlier while such models do not involve any shareholder interest they do, however, typically require capital that fulfils some of the function of equity. For example Welsh Water, does not distribute (to customers through bills) all the savings made on its financing costs (or out-performance) since they need to have build up sufficient Customer Equity;

- To improve their indebtedness (reduce their gearing)
- To have sufficient liquidity – partly through cash balances although primarily through the ability to access debt not yet drawn down.
- To act as a financial buffer against cost shocks
- To have the headroom in debt to have sufficient capacity to finance (in the case of water) continual and large capital investment programmes.

It is important to note that this approach does not “cost the customer” as this has the effect of building up Customer Equity and provides additional capacity to have sustained reductions in bills for the future. In effect Customer Equity, through retained surpluses, is reinvested in business and means that less debt is need and so less interest payments will be required due to the lower debt balance of the company. However, it does raise issues about judgements on the target level of customer equity and the balance between customers now and customers in the future. The less Customer Equity there is the more current customers are being prioritised while the more Customers Equity there is the more future customers benefit. In addition the less Customer Equity is maintained the greater the long term cash requirement of the business (due to greater levels of debt and the resultant higher overall interest payments) while the reverse is true and the higher the sustained level of Customer Equity the lower are the long term cash requirement of the business (due to relatively more investment being paid for on an upfront basis)

A CLG GoCo, without financial intervention, would be likely to start off life with debt to RCV of around 100%. While this would undoubtedly be a challenging starting point for the business it would have the prospect to reduce its indebtedness, and improve its overall financial stability over a period of time – reinvesting savings in the Cost of Capital and out-performance as Customer Equity in the RCV. However, our modelling would suggest that an early move to a debt model could put excessive strain on the finances of the business and prevent any early build up of Customer Equity. As noted earlier the large capex programme over the next 3 or 4 years is to be financed with high levels of net lending. An early switch to a debt based model during this expansionary period could even push debt to beyond 100% of the RCV – in effect negative Customer Equity – with little prospect of generating much in the way of positive Customer Equity until the surge in net lending recedes. – perhaps beyond 2011 or 2012 around. A move

in say 5 years or more, based upon the current projections, could offer a better prospect for;

- The build up of Customer Equity to move away from 100% debt.
- The ability to meet, for example, the Qfwat Cash-flow / Debt target of 7%
- The ability to get close to some of the Ofwat debt coverage ratios

Overall an early move to a CLG GoCo could appear to generate the potential for significant financial strain on the company due the capex programme driving up the need for additional debt. From a financial stability perspective it would appear more prudent to delay any move to CLG GoCo until after the projected surge in net lending to NIW – on current plans at least 4 or 5 years from now. At that stage, under current projections the prospects for financial stability and the build up of customer equity would appear to be more promising.

### **PE Dimension**

Under this model NIW would be classed as a public corporation and subject to the Resource Budgeting requirements of public corporation. Subsidies to the public corporation would score as Resource DEL while net lending to NIW will score against the Department's Capital DEL and so that portion of the capital programme not funded internally by NIW will continue to "compete" for capital funding alongside the 11 Northern Ireland Executive Departments. There would need to be a switch of the current equity funding for a corresponding amount of additional debt funding – this should be neutral on a Capital DEL basis. However this might involve revisiting the current maximum level of debt agreed to be made available to NIW.

### **STATUTORY CORPORATION**

The financial considerations around a move to a Statutory Corporation are considered to be fairly similar to those set out in the previous section in relation to a CLG that was subject to the Public Expenditure regime. To avoid repetition one should refer back to the previous section for an indication of the financial considerations around any move to a Statutory Corporation.

### **COMPANY LIMITED BY GUARANTEE – OUTSIDE GOVERNMENT PE REGIME**

#### **Features**

At April 2007 NIW commenced as a CLS with Government, through DRD, owning all of the £650m share capital in the business. The remaining capital of £150m was public debt. The option of a Company Limited by Guarantee outside the PE Regime (hereafter

referred to as a CLG), in effect, would involve the company moving beyond the public spending controls. The company would no longer have share capital and its requirements for debt finance would come from borrowing on the markets. Although devoid of Shareholder Equity it is likely that through retained surpluses, out-performance and so forth Customer Equity would begin to establish itself within the business. This would very much be a company along the lines of Welsh Water.

### **Risk & Incentives**

As per Welsh Water the regulator would continue to allow NIW to recoup, from customers, revenue that was sufficient to meet the costs of an efficient business including an allowed rate of return on its investment (its RCV). Moving to a 100% debt structure is a significant step and in principle it would require an increase in interest rates to compensate lenders for risk previously carried by shareholders – or else it requires that risks be reduced or transferred to other parties. Effectively the latter would almost certainly occur and the allocation of risk will alter with those risks previously carried by the Shareholding Department being directly be carried by customers as the only remaining equity holders in the business. So as with the case for other debt models, for example, a failure to achieve efficiency targets would result in either bills increasing or customer equity being consumed (which in itself probably results in bills going up in the future to replenish customer equity / reserves).

It is also possible that the predominance of private debt and absence of Shareholder Equity can lead to management's prime focus being on ensuring debt service and activities that consume significant cash-flow, like the investment programme, are more at risk under this type of business model. These sorts of issues are potentially more pronounced under this model where debt covenants will impose binding requirements in relation to maintaining adequate liquidity, debt service coverage and headroom in relation to the company's level of indebtedness.

Again it is worth reiterating the importance for customers of making sustained efficiency improvements in a context where NIW have huge strides to make in this area. The absence of Shareholder Equity, and the pressure it exerts on management to outperform the regulatory contract, leaves a significant void in the incentive regime and, as noted earlier, a necessary response to filling this void will undoubtedly involve directly linking management and staff remuneration and performance against the regulatory contract and customer service standards. With this model being beyond the scope of the PE Regime an effective performance pay regime is more likely to be delivered and sustained under this particular approach.

### **Return on Capital**

Once again at first glance one might imagine that estimating the Cost of Capital for a CLG version of NIW would simply involve looking at the rate at which the company could borrow from the markets. As with the CLG GoCo this raises the two issues of:

1. What, if any, proportion of Customer Equity does one assume or forecast for the business.
2. What, if any, Cost of Capital does one apply to Customer Equity.

While the above issues have all been raised and discussed in earlier sections a CLG borrowing from the market, however, also raises additional variables around:

1. The company's credit rating since this will be fundamental to achieving the best terms from borrowing.
2. The debt structure since there is likely to be, at least for a considerable period of time, a need for some forms of subordinate debt.
3. The credit rating and borrowing terms for that subordinate debt.

While its current licence conditions envisage NIW achieving an investment grade credit rating in 2009 it could plausibly be some time before NIW could feasibly achieve an investment grade credit rating. There are a number of factors that an achievement of an investment grade credit rating might be influenced by, for example:

- The need for a track record of management performance – bearing in mind that it will be well into 2008 before NIW will report on its **first** year performance.
- The now extended period of tariff subsidisation and the need for the company to demonstrate the ability to perform in the absence of widespread public funding to support tariffs.
- The need to fully reveal risks around bill payment and the security and predictability of revenue streams.
- The profile of the investment programme and any forecast financial impact on the business – combined of course with the regulatory environment.

All of this might well suggest that it could be perhaps as much as 5 years or so before the conditions might be sufficient to achieve a sound investment grade rating. Indeed when Welsh Water changed to a CLG it had a long history of performance to fall back on, the ability to purchase the business at a discount to the RCV and even then a portion of its debt was rated at below investment grade (commonly termed “Junk Bonds”).

At the outset of the company, unless there is some sort of one off Government subsidy support<sup>5</sup>, there could be debt to RCV of around 100% and it would probably be the case that little more than 80% of this could be senior debt attracting the best interest rates (consistent with any credit rating). The remainder would probably have to be some sort of subordinate debt and in reality it might well actually require Government to advance the subordinated loans at the outset – although in the future, with the build up of customer equity, the public loans could plausibly be bought out or refinanced by additional lending provided by the market. The rate of interest on the senior debt could be around 6% nominal (the current long term gilt rate of about around 4.5%<sup>6</sup> plus a spread<sup>7</sup> for investment grade bonds of around a further 100 to 150bps. Given the experience of Welsh Water the remaining debt (or at least part of the debt) might well not attract an investment grade rating and could required a spread<sup>8</sup> of around 400-450bps over and above the gilt rate. Over time this more costly subordinate debt might be bought out using (or refinanced due to the existence of) Customer Equity which would, once again, introduce the estimation issues around a true rate of return described earlier.

Overall the trust of the outcome could be something a reduction Cost of Capital, in the longer term, of something perhaps akin to half the current 6.8% pre tax real. Initially the reduction would probably be less due to the lack of Customer Equity and the likely existence of considerable subordinate debt – potentially requiring a premium based upon a below investment grade rating (even if sourced from Government who would undoubtedly be required to lend at commercial rates). This magnitude of reduction in the Cost of Capital could in theory be equivalent to perhaps something in the region of 10% or so of allowed revenue. However, as illustrated earlier the annual cash requirements of the business might not actually be much different – broadly speaking the dividend would appear to be replaced with similar levels of additional interest while that part of the previous equity return that was retained within the business would have to be replaced with a corresponding amount of additional debt. Taking this into account, and recalling the potential for reductions in wider utility rates of return, the longer run impact on bills is might be more like 6% to 10%. **Once again any tangible reductions in bills will be unlikely in the early years** as any savings would probably go toward

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<sup>5</sup> Support, for example, in the form of perhaps a financial injection into the company or a sale of the RCV at a discount.

<sup>6</sup> Source: Financial Times.

<sup>7</sup> Using data sourced from Lloyds TSB Credit Market Analysis.

<sup>8</sup> Using data sourced from Lloyds TSB Credit Market Analysis.

building up Customer Equity and reducing the indebtedness on the business. Again it is not thought that there would be major tax advantages due to the prevalence of capital allowances.

### **Financial Sustainability & Stability**

As described earlier not for profit models, while devoid of any shareholder interest, do typically require capital that fulfils some of the functions of equity. As was the case for Welsh Water, a CLG in the early years would probably not distribute (to customers through bills) all the savings made on its financing costs (or out-performance) since it would need to build up sufficient Customer Equity for a variety of reasons;

- To meet the terms of its debt covenants.
- To improve its indebtedness (reduce its gearing).
- To have sufficient liquidity – partly through cash balances although primarily through the ability to access debt not yet drawn down.
- To act as a financial buffer against cost shocks.
- To have the headroom in debt to have sufficient capacity to finance (in the case of water) continual and large capital investment programmes.
- To generate sufficient Customer Equity to facilitate the buy out or refinancing of any interim subordinated Government loans.

In fact distribution lock up provisions and the need to meet a range of debt covenants might well negate any possibility of any customer dividend in the early years. Though it is important to note, as described earlier, that this does not “cost the customer” since this has the effect of investing in future reductions in bills – since Customer Equity, through retained surpluses, is reinvested in the business and means that less debt is need and so less interest payments will be required in subsequent years due to the lower debt balance of the company. As noted earlier this will, however, raise issues around intergenerational equity and the balance between customers now and customers in the future.

A CLG, without financial intervention in the form some sort of subsidy, would be likely to start off life with debt to RCV of around 100%. While this would undoubtedly be a challenging starting point for the business it would have the prospect to reduce its indebtedness, and improve its overall financial stability over time – reinvesting savings in the Cost of Capital and out-performance as Customer Equity in the RCV. However, as noted earlier, our modelling would suggest that an early move to a debt model could put excessive strain on the finances of the business and prevent any early build up of Customer Equity. An early switch to a debt based model during this expansionary period in net lending could even push debt to beyond 100% of the RCV with little prospect of generating much in the way of positive Customer Equity until the surge in

net lending recedes – perhaps beyond 2011 or 2012. This would be particularly unwelcome with the existence of subordinate debt requiring additional returns and putting additional strains on the cash-flow of the business and, as a result, strain on key financial ratios.

An early move to a CLG is not likely to be feasible. For starters it might well take a number of years before conditions would be sufficient for NIW to achieve an investment grade credit rating. In any event an early move would appear to generate the potential for significant financial strain on the company due the capex programme driving up the need for additional debt – more so with a potentially significant premium on (interim) subordinated debt putting added strain on cash-flows. Once again, from a financial stability perspective, it would appear more prudent to delay any move to CLG for around 5 years or more from now. At that stage, under current projections, the prospects for financial stability and the build up of customer equity would appear to be more promising while the conditions are more likely to be in place for a CLG NIW to achieve an investment grade credit rating on the debt it would require.

### **PE Dimension**

Under this model a CLG NIW would now be beyond the scope of the Public Expenditure regime and, in the longer run, the key remaining issue for PE would be in relation to subsidy for what current affordability tariff. However, at the time of the changeover (from NIW as a GoCo to NIW as a CLG) there would be PE implications. At the time of the changeover the assets on the DRD Balance Sheet (the share and loan capital) would require a capital receipt. If redeemed in full there would no charge to the DRD Resource DEL. It should not be assumed that any capital receipt would necessarily be retained by the Northern Ireland (Capital) DEL as negotiation would be required with HM Treasury to achieve any such outcome (even partially). Setting aside any interim subordinated debt provided by Government, once the share capital and existing loans were redeemed there would be no ongoing asset balance to attract Cost of Capital Charges to the DRD resource DEL budget.

If Government provided interim subordinated debt to the CLG NIW then this would require Capital DEL provision – although plausibly this might also be rolled into any negotiation with HM Treasury in relation to Northern Ireland accessing any capital receipts. This debt would be a new asset on the DRD balance sheet and would attract a Cost of Capital Charge to the DRD Resource Budget – which should in turn be “neutralised” by the interest payments on the debt received from the CLG NIW which would be negative Resource DEL. Any borrowing from the markets by CLG NIW would not score against the PE regime and so would not compete at all for Capital DEL with

the 11 Departments. In due course there would presumably be a capital receipt required to redeem the subordinated Government loan.