Water & Sewerage Services Price Control 2015-21

Final Determination – Annex A

Financing Investment

December 2014



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1.0 Introduction and Summary

1.1. Allowed revenue

1.1.1 Our revenue and price limits for NI Water cover the six-year period from 1st April 2015 to 31st March 2021. We have calculated an allowed revenue requirement of £2,341.8m. This provides for a saving of £89.3m, when compared to NI Water's business plan submission.

Table 1.1 – Final determination revenue proposal

	NI Water corrected business plan	Utility Regulator final determination	Saving over PC15
Overall revenue	£2,431.1m	£2,341.8m	£89.3m

2.0 Regulatory Capital Value (RCV)

2.1. Roll forward of the RCV from PC13

2.1.1 The RCV has been developed for regulatory purposes and represents the capital base established for the purposes of setting price limits.

2.1.2 The first stage in establishing an RCV for PC15 is to update the RCV published as part of the PC13 final determination. Table 2.1 shows our calculation of the roll forward using the actual Retail Price Index (RPI) and the actual Construction Output Price Index (COPI):

Table 2.1 – Roll forward of the RCV from PC13

Nominal Prices	2013-14	2014-15
	£m	£m
Closing RCV (previous year)	1,812.8	1,949.1
Indexation	52.3	48.7
Opening RCV	1,865.1	1,997.9
Capital expenditure (excluding IRE)	137.9	126.7
Infrastructure renewals expenditure	34.2	33.1
Infrastructure renewals charges	-34.2	-33.1
Grants and contributions	-5.8	-5.9
Depreciation charge (MNI)	-51.1	-45.6
Adjustment to MNI for depreciation of capital grants	4.1	4.3
Other adjustments (e.g. disposal of assets)	-1.1	-6.6
Closing RCV	1,949.1	2,070.6

2.1.3 The opening RCV at £1,812.8m is consistent with the closing RCV published in the 2012-13 Regulatory Accounts.

2.1.4 This is slightly higher than the closing RCV of £1,809.2m published in the PC13 final determination. The small difference reflects updates to replace forecast with actual inflation.

2.1.5 The second stage in establishing an RCV for PC15 is to apply a number of adjustments to the roll forward of PC13. This methodology was agreed during the PC13 final determination consultation.

2.2. Notified index

2.2.1 The RCV, which is determined at each price control, reflects the Utility Regulator's assumptions about the movements in construction price inflation for the price control period. The net capital expenditure which is added to the RCV reflects assumptions about the movement in COPI relative to the movement in RPI. This difference is known as the notified index. The adjustment we have included reflects the impact the change in notified index has had on the relevant charges of IRC and MNI.

2.2.2 We have calculated this figure to be a positive adjustment of £3.3m to the opening RCV for PC15.

2.3. Logging up and down

2.3.1 This deals with changes to the outputs associated with the investment programme since prices were last set at PC13.

2.3.2 Capital expenditure which is logged up is added to the opening RCV. These amounts are scrutinised and challenged by us to ensure the addition to the RCV reflects what would be expected from an efficient company.

2.3.3 The RCV is reduced by the amount of any logging down. Customers should not continue to finance services which they have not received.

2.3.4 We have calculated a net logging down of capital expenditure to be £22.7m.

2.4. Asset disposals

2.4.1 The RCV is also adjusted for any asset disposals. When we set prices we do not know the actual disposals and this gets corrected at the following price review. Assets disposals have been lower than forecast during PC13.

2.4.2 We have calculated this figure to be a positive adjustment of £3.6m to the opening RCV for PC15.

2.5. Opening RCV for PC15 summary

Table 2.2 – Opening RCV for PC15

	£m
Roll forward of the RCV from PC13	2,070.6
Notified index	3.3
Logging up / down	-22.7
Asset disposals	3.6
Opening RCV for PC15	2,054.8
Note: Figures may not add due to rounding.	

2.5.1 The third stage is establishing the RCV for PC15 is to establish the inputs for PC15. These are largely driven by the investment programme.

2.6. The investment programme

2.6.1 The investment programme that NI Water will have to deliver during this regulatory control period is shown in Table 2.3.

Table 2.3 - Required investment programme (nominal prices) (£m)

Investment category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Infrastructure renewals	25.3	26.0	26.7	27.5	28.2	29.0
Other investment	131.5	134.7	137.8	141.5	144.5	150.2
Total Investment	156.8	160.7	164.5	168.9	172.7	179.2
Note: Figures may not add due to rounding.						

2.7. Depreciation and infrastructure renewals charges

2.7.1 As well as being constituent parts of the buildings blocks approach to establishing allowed revenue, depreciation on non infrastructure assets and infrastructure renewals charges also form part of the RCV calculation. We must therefore consider them at this point in order to establish the RCV for PC15 on which a return is allowed.

2.7.2 NI Water has submitted detailed tables on asset lives, depreciation rates and depreciation calculations for PC15. However, in setting the allowance for depreciation within the RCV and building blocks, NI Water has used the lower maintenance non infrastructure figure. We refer to this as 'broad equivalence' and this is the same approach adopted by the Utility Regulator during PC13.

2.7.3 Infrastructure assets are generally underground assets with long useful lives. These lives, however, tend to be difficult to assess accurately. This makes it difficult to use conventional accounting methods to calculate depreciation for infrastructure assets, as these methods rely on the concept of establishing an average asset life for each component of the asset base. Instead, we treat the whole infrastructure network as a single system. The complete asset will never become obsolete or require replacement at any one time. It is replaced in parts as different elements come to the end of their useful lives. The Infrastructure Renewals Charge (IRC) is intended to allow for this gradual replacement of the infrastructure asset over time.

2.7.4 In any one year the actual level of investment expended on the infrastructure assets is classed as the Infrastructure Renewals Expenditure (IRE). As in PC13 we intend to set IRC equal to IRE.

2.7.5 The figures assumed for both depreciation and infrastructure renewals charges are summarised in table 2.4.

Table 2.4 - Depreciation and infrastructure renewals charges (Current Cost basis) (nominal prices) (£m)

Depreciation category	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Current Cost depreciation (after Broad Equivalence)	60.4	62.1	63.8	65.6	67.4	69.3
Infrastructure renewals charge	25.3	26.0	26.7	27.5	28.2	29.0
Total depreciation and infrastructure charges	**85.7**	**88.1**	**90.5**	**93.0**	**95.6**	**98.3**

2.7.6 NI Water has commented on the ongoing use of this cash based approach given the lack of a robust Modern Equivalent Asset Valuation in its business plan submission. We are aware of this issue and will continue to consider our approach in this area.

2.8. Asset disposals and cash proceeds

2.8.1 Cash proceeds from asset disposals are not expected to be very material. However, it is the Current Cost (CC) net book value which is adjusted within the RCV. Our assumption is based on the level of asset sales made by NI Water in its business plan submission and both figures are presented in Table 2.5.

Table 2.5 - Asset disposals and cash proceeds (nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Cash proceeds from asset disposals	0.5	0.5	0.5	0.5	0.5	0.5
CC net book value	1.3	1.3	1.3	1.4	1.4	1.5

2.9. RCV for PC15

2.9.1 Table 2.6 summarises the notional RCV in each year of this PC15 period.

Table 2.6 - Calculation of notional RCV in each year of this regulatory control period (nominal prices) (£m)

Nominal prices	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Closing RCV (previous year)	2,054.8	2,192.2	2,335.4	2,484.5	2,640.4	2,802.4
Indexation	69.9	74.5	79.4	84.5	89.8	95.3
Adjustments	0.0	0.0	0.0	0.0	0.0	0.0
Opening RCV	**2,124.6**	**2,266.7**	**2,414.8**	**2,569.0**	**2,730.2**	**2,897.7**
Capital expenditure (excluding IRE)	131.5	134.7	137.8	141.5	144.5	150.2
Infrastructure renewals expenditure	25.3	26.0	26.7	27.5	28.2	29.0
Infrastructure renewals charges	-25.3	-26.0	-26.7	-27.5	-28.2	-29.0
Grants and contributions	-6.3	-6.5	-6.7	-6.7	-7.0	-7.2
Depreciation charge (MNI)	-60.4	-62.1	-63.8	-65.6	-67.4	-69.3
Adjustment to MNI for depreciation of capital grants	4.0	3.9	3.8	3.6	3.5	3.3
Other adjustments (e.g. disposal of assets)	-1.3	-1.3	-1.3	-1.4	-1.4	-1.5
Closing RCV	**2,192.2**	**2,335.4**	**2,484.5**	**2,640.4**	**2,802.4**	**2,973.3**
Note: Figures may not add up due to rounding.						

3.0 The Allowed Rate of Return

3.1. Introduction

3.1.1 In setting price limits the Utility Regulator will consider the appropriate rate of return that NI Water should earn on its RCV. The rate of return is set with reference to the weighted average cost of capital (WACC). As prices and RCV are adjusted by outturn inflation we are interested in the real cost of capital.

3.1.2 The weighted average cost of capital (WACC) is the weighted average of two components: the cost of equity (R_e); and the cost of debt (R_d), where the weightings represent the proportions of debt and equity in a firm's capital structure.

3.1.3 The WACC is calculated using the following formula:

$$WACC\ (Vanilla) = g \times R_d + R_e\ (1 - g)$$

g is gearing

R_d *is cost of debt*

R_e *is cost of equity*

3.1.4 In the remainder of this section we will examine proposals from NI Water for an appropriate WACC and then outline our own proposals.

3.2. Cost of debt

3.2.1 In assessing the real cost of debt over the PC15 period NI Water presented analysis to support the rates of the embedded debt and new debt. NI Water presented evidence supporting the weighted average nominal rate it incurs on its embedded debt to 31st March 2013 to be 4.93%. We have accepted this value.

3.2.2 In addition, NI Water presented analysis to support the forecast nominal rate of new debt finance which NI Water requires between 1st April 2013 and 31st March 2021. This is assumed to be 4.25% and is linked to the prevailing yield on a benchmark government bond (Treasury 4.25% maturing in 2027) plus 85 basis points. In order to forecast interest rates in new borrowing through the remainder of PC13 and through PC15, NI Water used market spot rates to project the forward yield curve for the reference gilt. They have estimated the weighted average cost of new debt to be 4.72%. We consider this value to be broadly representative.

3.2.3 A projection of RPI inflation is also required to establish a real cost of debt based on the nominal cost of debt established above. NI Water has sourced inflation forecasts from the Office of Budget Responsibility (OBR) in December 2013 and assumed an average of 3.6% for PC15. We have taken advantage of updated forecasts and used an average of 3.4%; this is lower than our DD forecast of 3.59%.

3.2.4 The real overall cost of debt NI Water therefore proposes for PC15 is 1.22% based on the relative weightings of embedded and new debt.

3.2.5 The Utility Regulator has considered NI Water's submission and the figures we are using in the WACC calculation are an overall real cost of debt of 1.41% based on acceptance of NI Water's assumptions on debt and our updated RPI assumption. This is higher than the real cost of debt at DD due to the lower inflation assumed at FD.

3.3. Cost of equity

3.3.1 In assessing the appropriate cost of equity for PC15, NI Water has drawn on evidence from the following:

- Regulatory decisions on the market cost of equity and on the cost of equity of regulated networks;
- Evidence on the cost of equity in England and Wales based on company business plan submissions for PR14, Ofwat's latest price control;
- Evidence from recent investment analysts.

3.3.2 NI Water believes that it would be appropriate to set the cost of equity lower than PC13 levels (7.1%), at a level of 5.7%.

3.3.3 The Utility Regulator has monitored regulatory decisions and has considered the cost of equity in greater detail. Overall, we have used the CAPM method to calculate the cost of equity. This method relates the cost of equity to the risk-free rate (R_f), the expected return on the market portfolio (R_m) and a business specific measure of investors' exposure to systematic risk (beta or β_e) using this formula:

$$R_e = R_f + \beta_e \,.\, (R_m - R_f)$$

Risk-free rate and equity risk premium

3.3.4 We have drawn on evidence from recent market rates for risk-free and market returns. We have referred to the risk-free rate assumptions made in recent determinations by Ofgem (gas and electricity), Ofwat (BT), CAA (airports), Utility Regulator (SONI) and the Competition Commission determinations of NIE and Bristol Water. The range of risk-free rates analysed ranged from 0.5% to 2%. We note particularly the CC range for the risk-free rate in the NIE determination to be 1-1.5%, with a point estimate of 1.5%. We consider that a risk-free rate (R_f) of 1.5% to be an appropriate benchmark for NI Water.

3.3.5 We have also considered recent regulatory precedents and analysis on market returns (R_m) which have ranged from 6.25-7.25%. We have considered in particular the recent CC determination of NIE and we consider that NI Water's market return rate should be set at 6.5%.

3.3.6 Arithmetic calculation of the assumed market return of 6.5% and a risk free rate of 1.5% equates to an overall equity risk premium for NI Water of 5%.

Equity beta and asset beta

3.3.7 A firm's equity beta, β_e is a measure of the riskiness of a firm and may be considered as a measure of the systematic risk that a company has – relative to the market portfolio. Typically company beta values would be obtained by measuring the correlation between movements in a company's share price and movements in the value of the stock market as a whole. As NI Water is not listed on the UK stock exchange, the next best alternative is to compare beta values for similar companies and make a judgement based on this comparison. This is an approach employed by other regulators also.

3.3.8 An asset beta, β_a is a hypothetical measure of the beta that a firm would have if it had no debt and were financed entirely by equity. The asset beta is calculated using the following formula:

$$\beta_a = (1 - g) \cdot \beta_e + g \cdot \beta_d$$

β_a is a firm's asset beta,

g is gearing

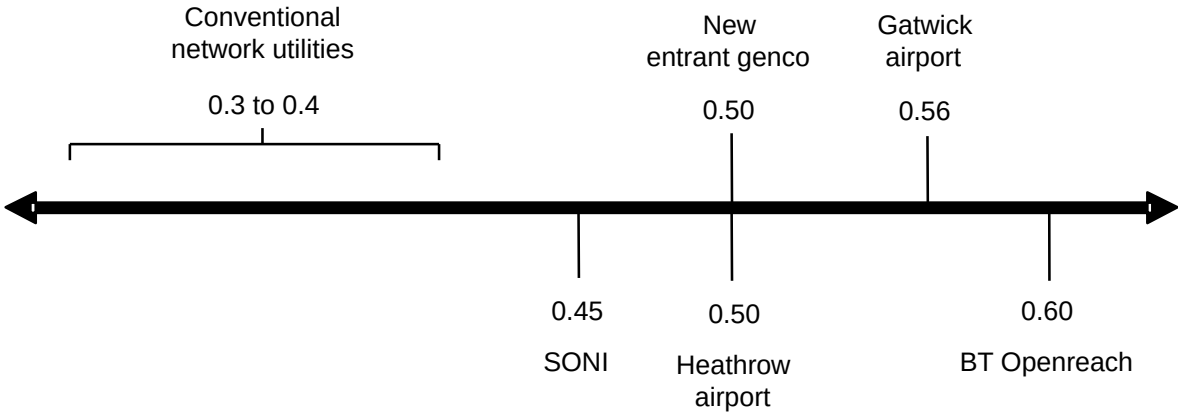
β_e is the equity beta

β_d is the firm's debt beta

3.3.9 We have employed comparator company analysis in order to determine an appropriate value for NI Water's asset beta.

3.3.10 We have considering recent beta estimates made by regulators in the UK (Utility Regulator, Ofwat, Ofgem, CAA and Ofcom) and also relevant Competition Commission estimates of asset beta.

3.3.11 Following our analysis we conclude that conventional network businesses all exhibit: negligible revenue risk, relatively low cost risk and have sizeable RABs. They therefore sit at the lower end of the beta spectrum. By contrast, all companies at the higher end of the beta spectrum have characteristics e.g. exposure to demand and revenue risks and RAB aspects, which make them riskier in the eyes of investors, explaining their higher costs of capital.



3.3.12 In order to position NI Water at an appropriate point on the spectrum the Utility Regulator has considered:

- NI Water's exposure to cost risk is low to moderate. Costs have a high labour content with some exposure to energy costs, commodity prices and the construction cycle. NI Water is exposed to changes in the cost of other inputs including power, materials and plant/equipment.
- NI Water also has a sizeable RCV and high RCV-to-revenue ratio which implies that profits are fairly resilient in the face of cost and revenue shocks.
- The NI Water price control is based on a price cap. As such the company's allowed revenues are exposed to demand variability. Indeed the company has experienced a fall in demand during PC13 and this is not compensated for by any correction mechanism.

3.3.13 In our view and for the reasons described above we propose an asset beta, β_a of 0.44 for NI Water. This is the same level assumed during PC13.

3.3.14 We have assumed a debt beta, β_d of 0.05 which aligns with that applied in the CC NIE price control inquiry.

3.3.15 Insertion of the relevant components into the above formula using equates to an equity beta, β_e of 0.83.

3.3.16 Overall, application of our equity assumptions equates to an overall cost of equity of 5.65%, which is marginally lower than NI Water's business plan submission of 5.7%.

3.4. Gearing

3.4.1 As a matter of principle, a regulator's estimate of gearing should reflect the efficient mix of equity and debt financing for the company. NI Water proposed a gearing level of 50% in its business plan. This is very close to the Competition Commission's estimate of NIE's efficient gearing (45%) and also sits within the range of other recent regulatory determinations (40% to 65%).

3.4.2 After consideration we are content to use 50% in our weighted average cost of capital calculation.

3.5. Summary of WACC for PC15

3.5.1 To calculate the overall WACC we have applied the following formula in 3.1.3 which equates to a WACC of 3.53% which is marginally higher than the DD value of 3.44% due to lower inflation forecasts at the FD. NI Water had assumed a WACC of 3.46% in its BP. In addition, it is lower than the WACC assumed at PC13 of 4.09% due to the following factors:

- A reduction in NI Water's actual cost of debt, driven by falling interest rates; and
- A reduction in NI Water's estimated cost of equity, attributable to the selection of a lower risk-free rate and a lower R_m.

Table 3.1 – WACC summary

Components of the allowed rate of return	Assumed PC15 value
Cost of debt	1.41%
Cost of equity	5.65%
Gearing	50%
WACC (Pre tax cost of debt, post tax cost of equity)	3.53%
Components of the cost of equity	
Risk-free rate	1.50%
Asset beta	0.44
Equity beta	0.83
Equity risk premium	5.00%
Cost of equity	5.65%
Components of the cost of debt	
Cost of debt (nominal)	4.86%
Inflation	3.40%
Cost of debt (real)	1.41%

3.6. Return on RCV for PC15

3.6.1 Using our estimated cost of capital of 3.53% on a real vanilla basis we have made a slight adjustment to transform this into a return on the RCV using the formula:

$$\textit{Return in £m} = \textit{average RCV} \times \textit{WACC} / (1 + \textit{WACC})^{1/2} = \textit{average RCV} \times \textit{return on RCV}$$

3.6.2 This above formula has been applied in the financial model to result in a slight reduction to the return on RCV as part of the revenue building blocks calculation. This adjustment to return on RCV takes account of the fact that the rate of return is being applied to a mid-year RCV in a financial model comprising of mid-year cashflows. The small mark-down ensures that the investors earn exactly their required cost of capital at year end, recognising that money received earlier is more valuable than money received later.

4.0 Total Allowed for Operating Costs

4.1.1 Total operating costs include the following:

- Base operating costs, including any adjustments;
- Our estimate of the scope for efficiency;
- Our estimate of Retail Price Inflation; and,
- New operating costs.

4.1.2 Total allowed for operating costs are set out in Table 4.1.

Table 4.1 - Total allowed for operating costs (nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total allowed for operating costs	158.0	160.9	161.2	161.5	163.7	166.0
Note: includes atypical costs						

4.1.3 For additional detail on opex assumption, costs and efficiencies please refer to Section 6.

5.0 Allowed Costs of Public Private Partnerships

5.1.1 Table 5.1 shows the allowed for PPP costs.

Table 5.1 - Allowed for PPP costs (nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Allowed for PPP costs	47.3	48.4	49.4	50.4	51.6	52.7

5.1.2 For additional detail on PPP costs, assumptions and considerations please refer to Section 6.

6.0 Taxation

6.1.1 NI Water has identified a risk in the PC15 business plan relating to cash tax becoming payable during the PC15 period, but did not include it in revenue requirement calculations. Tax computations relating to all years dating back to 2007-08 were to be resubmitted to HMRC in September 2014, due to an ongoing debate between the UK water industry and HMRC. However, NI Water has received an extension to this timeframe and has only recently resubmitted tax computations to HMRC.

6.1.2 We agree with NI Water that the magnitude, liability and timing of any cash tax becoming payable are too uncertain at the time of writing and we have therefore excluded it from revenue considerations. NI Water have committed to providing updates on the current taxation status and any changes which may have an impact on the taxation status of NI Water.

6.1.3 We will continue to monitor NI Water's taxation profile, particularly in the event of any cash tax becoming payable. In addition, we will consider this aspect at the mid-term review.

6.1.4 For PC15 the tax computations within the financial model have been updated. NI Water's tax computations are now based on IFRS rather than UK GAAP accounts. We may make further modifications to the tax modelling at the mid-term review.

7.0 Calculation of Allowed Revenue

7.1.1 This section summarises the building blocks discussed above and calculates the allowed revenue to be used in setting price limits for PC15.

Table 7.1 - Revenue caps 2015-21 (nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Operating costs	158.0	160.9	161.2	161.5	163.7	166.0
PPP costs	47.3	48.4	49.4	50.4	51.6	52.7
Current Cost depreciation (after Broad Equivalence)	60.4	62.1	63.8	65.6	67.4	69.3
Infrastructure renewals charge	25.3	26.0	26.7	27.5	28.2	29.0
Return on the RCV	74.1	78.9	83.8	89.0	94.5	100.1
Tax	0.0	0.0	0.0	0.0	0.0	0.0
Calculated revenue	**365.0**	**376.3**	**384.9**	**393.9**	**405.4**	**417.1**
Smoothing adjustment	3.6	1.2	0.9	0.1	-2.2	-4.4
Total revenue (smoothed)	**368.6**	**377.4**	**385.8**	**394.0**	**403.2**	**412.7**
Note: Figures may not add up due to rounding.						

7.1.2 The draft determination only included a smoothing adjustment for the unmeasured non domestic customer water and sewerage customer groups to prevent a large increase in the first year of PC15. Both NI Water and CCNI suggested we make further smoothing adjustments within the final determination.

7.1.3 We have included a smoothing adjustment within all K factors and therefore revenue. This avoids step changes in tariffs in any single year and ensures a gradual movement in prices.

8.0 Monitoring Financial Performance

8.1.1 One of our primary duties is to ensure that NI Water is able to finance its functions and we believe that NI Water's financial strength should be appropriate to the governance framework within which it operates.

8.1.2 As a yardstick for financial sustainability we have adopted a series of ratios, an approach used by other regulators, the investment community and rating agencies. The requirement for NI Water to obtain a credit rating has been set aside in light of the absence of a secure revenue source, a consequence of the decision to defer domestic water charges. However, we still see merit in assessing NI Water's financial strength.

8.1.3 In Table 8.1 we set out the targeted value of each ratio and our calculation of the NI Water position based on this final determination.

Table 8.1 - Financial performance 2015-21

Financial Ratio	Targeted Value	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Cash interest cover	Around 3 times	3.1	3.1	3.1	3.1	3.0	3.0
Adjusted cash interest cover	Around 2 times	1.6	1.6	1.6	1.6	1.6	1.6
Funds from operations: debt	Greater than 13%	10.7%	10.6%	10.5%	10.4%	10.2%	10.0%
Retained cashflow: debt	Greater than 8%	8.7%	8.7%	8.5%	8.4%	8.1%	7.9%
Gearing (adjusted for PPP asset / liability)	Less than 55%	48.7%	48.1%	47.5%	47.0%	46.5%	46.0%

8.1.4 While observing that NI Water may fail some of the targeted values, we consider the values achieved to be appropriate for the governance framework within which NI Water is currently operating. As at PC13, we remain of the view that under the current governance framework, achieving financial ratios around a 25% to 30% margin of the target set by Ofwat for private companies is adequate.

8.1.5 While raising some concern around the approach to the funding of capital maintenance if the governance model was to change, NI Water have told us as part of the business plan submission that achieving financial ratios around 25% to 30% margin to the target is adequate.

8.1.6 We will continue to monitor any changes to the governance framework and associated implications for financeability in advance of PC21.

9.0 Other Financial Assumptions and Considerations

9.1. Inflation

9.1.1 We have updated NI Water's business plan inflation assumptions. After considering the latest forecasts published by HM Treasury we have decided to use 3.4% for the PC15 period.

Table 9.1 - Retail Price Index (RPI)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
FY Average	244.68	251.73	258.03	266.80	275.87	285.25	294.95	304.98	315.35
% increase		2.88%	2.50%	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%

9.1.2 Capital inflation is discussed in further detail within Annex K. For this final determination we have used RPI as being representative of capital inflation over the PC15 period.

Table 9.2 - Capital Inflation

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
FY Average	244.68	251.73	258.03	266.80	275.87	285.25	294.95	304.98	315.35
% increase		2.88%	2.50%	3.40%	3.40%	3.40%	3.40%	3.40%	3.40%

9.2. Borrowing

9.2.1 NI Water has identified a risk in its PC15 business plan relating to existing loan note facility which is due to expire in March 2016. The business plan assumes that a loan note facility, similar to the current arrangement on the current terms, will be put in place by DRD and DFP, to ensure stability of funding.

9.2.2 The Utility Regulator has also assumed that a similar arrangement will be put in place. Cost of debt calculations within the overall cost of capital have been based on this assumption.

9.3. Dividends

9.3.1 The Utility Regulator has adjusted NI Water forecast dividend assumptions for the cost of capital of 3.53% to maintain consistency of assumptions in the financial model. However, the correction to the RCV values in NI Water's financial model has resulted in a slightly higher dividend to that submitted by NI Water in its original business plan submission but is similar to those presented in the corrected financial model.

9.3.2 This equates to the dividend profile shown in the table below. In line with current practice dividends are assumed to be paid one year in arrears.

Table 9.3 – Dividends over PC15

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
PC15 final determination (£m)	23.9	25.6	27.4	29.3	31.4	33.4

9.3.3 The actual level of dividend that NI Water pays in any one year is a matter for NI Water. Condition F 6.12 of the licence states that:

- The dividends declared or paid will not impair the ability of the Appointee to finance the Appointed Business; and,
- Under a system of incentive regulation, dividends would be expected to reward efficiency and the management of economic risk.

9.4. Public Expenditure reconciliation

9.4.1 NI Water is required to operate within Public Expenditure (PE) limits set by the NI Executive for the PC15 period due to its NDPB status.

9.4.2 Table 9.4 sets out the reconciliation of the final determination to Public Expenditure limits alongside the figures submitted by NI Water within its PC15 business plan.

9.4.3 This reconciliation has been established through discussion with NI Water and DRD during the PC13 and PC15 processes. It recognises the differences between the regulator's approach to funding, which is UK GAAP based for the appointed business only, compared to the IFRS approach for PE purposes which also includes unappointed activities.

Table 9.4 – PE reconciliation (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Operating costs (including PPP)	198.3	202.1	203.0	204.0	207.1	210.1
Unappointed costs	4.1	4.3	4.5	4.8	5.0	5.3
Non-domestic income	-66.2	-68.3	-70.4	-72.6	-74.9	-77.3
Unappointed Income	-3.0	-3.1	-3.1	-3.2	-3.2	-3.3
IFRS (capex to opex)	1.0	1.1	1.1	1.1	1.1	1.1
Non infrastructure depreciation	48.9	50.0	52.7	55.4	59.3	63.7
PPP depreciation (Alpha only)	3.2	3.2	3.2	3.2	3.2	3.2
Release of grants and contributions	-0.9	-0.9	-0.9	-0.9	-1.0	-1.0
Infrastructure depreciation	17.4	18.7	19.8	20.8	21.9	23.0
Utilisation of provisions	2.4	-	-	-	-	-
PE Allowance excl VER/VS and BI	**205.2**	**207.1**	**209.8**	**212.6**	**218.6**	**224.8**
PE Allowance - VER/VS	0.3	0.6	2.2	2.3	2.4	0.0
PE Allowance - BI	0.3	0.3	0.3	0.4	0.4	0.4
PE incl VER/VS and BI	**205.8**	**208.0**	**212.4**	**215.2**	**221.3**	**225.2**

9.4.4 The final determination has a lower PE requirement than submitted in NI Water's business plan. This is mainly due to reduced operating costs. We have also removed any allowance to cover general business risks included in the NI Water business plan which will need to be bid for in line with procedures set out in the Consequent Written Agreement.

9.4.5 Customers also benefit from the determination process through reduced charges. This is reflected in the non domestic income line above. Unfortunately this also has the effect of reducing the saving in PE terms.

9.4.6 We have excluded additional funding for Voluntary Early Retirement/ Voluntary Severance (VER/VS) and Business Improvement (BI) in PC15 revenues to avoid customers being charged twice. However we are supporting funding for VER/VS and BI through the PE allowance. This is described in further detail within Section 6 of the main document.

10.0 Summary Financial Statements

10.1. Summary Income and Expenditure Accounts 2015-21

Table 10.1 - Summary Income and Expenditure Accounts 2015-21 (Current Cost basis, nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Turnover	368.6	377.4	385.8	394.0	403.2	412.7
Operating costs	-158.0	-160.9	-161.2	-161.5	-163.7	-166.0
PPP	-33.7	-34.7	-35.5	-36.4	-37.5	-38.4
Infrastructure renewals charge	-25.3	-26.0	-26.7	-27.5	-28.2	-29.0
Current Cost depreciation (before application of broad equivalence)	-124.7	-119.9	-124.1	-128.6	-134.7	-141.6
Amortisation of PPP	-3.5	-3.6	-3.7	-3.9	-4.0	-4.1
Amortisation of deferred Income	4.0	3.9	3.8	3.6	3.5	3.3
Current Cost profit / loss on disposal of fixed assets	-0.8	-0.8	-0.8	-0.9	-0.9	-1.0
Operating surplus before working capital adjustments	**26.7**	**35.4**	**37.5**	**39.0**	**37.8**	**35.9**
Working capital adjustments	2.8	2.8	2.9	2.9	3.0	3.0
Operating surplus before interest	**29.5**	**38.2**	**40.4**	**41.9**	**40.7**	**39.0**
Net interest payable	-55.9	-58.6	-61.3	-64.0	-66.9	-69.9
Current Cost financing adjustment	42.8	44.9	47.0	49.2	51.4	53.8
Surplus before taxation	**16.5**	**24.5**	**26.1**	**27.1**	**25.3**	**22.9**
Deferred taxation	-7.7	-7.9	-8.3	-8.7	-8.5	-8.3
Dividends	-23.1	-23.9	-25.6	-27.4	-29.3	-31.4
Current Cost surplus (loss) for financial year	**-14.4**	**-7.3**	**-7.8**	**-9.0**	**-12.6**	**-16.8**
Note: Figures may not add due to rounding						

10.2. Summary Balance Sheets 2015-21

Table 10.2 - Summary Balance Sheets 2015-21 (Current Cost basis, nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Tangible assets	9,069.6	9,391.5	9,723.1	10,065.2	10,415.8	10,777.0
PPP assets	119.5	119.9	120.3	120.5	120.6	120.6
Third party contributions	-348.2	-362.7	-377.9	-393.9	-410.7	-428.6
Working capital	-83.7	-85.3	-86.4	-87.9	-89.6	-92.2
Cash (net of overdrafts)	2.0	2.0	2.0	2.0	2.0	2.0
Infrastructure prepayment (accrual)	3.9	3.9	3.9	3.9	3.9	3.9
Net operating assets	**8,763.0**	**9,069.3**	**9,384.9**	**9,709.8**	**10,042.0**	**10,382.7**
PPP assets	15.2	15.2	15.2	15.2	15.2	15.2
Investments	0.1	0.1	0.1	0.1	0.1	0.1
Short term liabilities	-2.9	-2.9	-2.9	-2.9	-2.9	-2.9
Government loans	-1,035.0	-1,095.0	-1,156.5	-1,219.8	-1,285.8	-1,356.2
PPP creditor	-75.2	-68.0	-60.4	-52.6	-44.3	-35.7
Other creditors	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Total provisions	-161.0	-169.0	-177.3	-185.9	-194.4	-202.8
Net assets employed	**7,503.8**	**7,749.4**	**8,002.7**	**8,263.5**	**8,529.4**	**8,800.0**
Income and expenditure account	-348.0	-355.4	-363.1	-372.1	-384.7	-401.5
Current cost reserves	7,180.2	7,433.0	7,694.2	7,963.9	8,242.4	8,529.8
Other reserves and share capital	671.7	671.7	671.7	671.7	671.7	671.7
Total capital and reserves	**7,503.8**	**7,749.4**	**8,002.7**	**8,263.5**	**8,529.4**	**8,800.0**
Note: Figures may not add due to rounding						

10.3. **Summary Cashflow Statements 2015-21**

Table 10.3 - Summary Cashflow Statements 2015-21 (Current Cost basis, nominal prices) (£m)

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Current cost operating profit	29.5	38.2	40.4	41.9	40.7	39.0
Total depreciation, amortisation and infrastructure charges	149.4	145.6	150.7	156.3	163.4	171.4
Change in working capital and working capital adjustment	-1.7	-1.3	-1.8	-1.5	-1.3	-0.4
Other non cash profit and loss items	-2.4	0.0	0.0	0.0	0.0	0.0
Current cost profit / loss on sale of assets	0.8	0.8	0.8	0.9	0.9	1.0
Net cash flow from operations	**175.7**	**183.4**	**190.2**	**197.7**	**203.7**	**211.0**
Cash changes in non operating debtors / creditors	0.0	0.0	0.0	0.0	0.0	0.0
Net cashflow from returns on investment and servicing of finance	-55.9	-58.6	-61.3	-64.0	-66.9	-69.9
Net cash outflow from investing activities (including IRE)	-150.0	-153.6	-157.3	-161.7	-165.3	-171.5
Retained earnings paid	-23.1	-23.9	-25.6	-27.4	-29.3	-31.4
Net cash flow before financing	**-53.4**	**-52.8**	**-54.0**	**-55.5**	**-57.8**	**-61.8**
New government loans	61.6	60.0	61.5	63.3	66.0	70.4
PPP capital repayments	-6.9	-7.2	-7.5	-7.9	-8.2	-8.7
Net cash inflow from financing	**54.6**	**52.8**	**54.0**	**55.5**	**57.8**	**61.8**
Increase (decrease) in cash and cash equivalents	**1.3**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Note: Figures may not add due to rounding						