Annual Information Return 2014

Northern Ireland Water

Financial Measures, Capital Investment and Outputs Data

(Commentaries for Tables 30, 32 – 40a)

Public Domain Submission

Prepared for

Utility Regulator and NI Water

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Tables 30 (Capital Investment) & 40a (Outputs Data) – Financial Measures

1. Introduction

This chapter provides a consolidated report on capital investment which draws on Tables 32, 36, 36a, 40 and 40a, and associated tables of AIR14.

The tables included within Chapter 30 disaggregate expenditure between base, enhancements, grants and contributions and adopted assets. Enhancements are reported under quality, enhanced service levels, and supply/demand purpose categories.

2. Key findings

- NI Water's proportional allocation procedures are now well established and consistently applied and we are only finding a few instances where the allocation of expenditure between purpose categories requires review/adjustment. However, during the course of our AIR14 audits we did query the allocation of expenditure applied to KR310 - Newtownbreda WwTW, JG035 - Ballydougan to Newry Link and KS373 - Church Street SPS Upgrade
- Notwithstanding the above, we continue to see evidence that the CIDA allocation of schemes are regularly critiqued by the NI Water Finance and Regulation Team and that Project Managers liaise with the same team to ensure consistency of approach, as in the case of Aghagallon WwTW and new development schemes.
- In allocating total expenditure to the various sections of Table 32, an issue was identified with CPMR, whereby contract details for a number of different Operational Capital schemes were consolidated into a single project, with a single incorrect project allocation to service area in Table 32. We confirm that a manual review of all projects was completed and circa 4 projects were found to require correction.
- As part of our review, we sought to reconcile individual AIR14 line totals back to Oracle, to verify the reported data. We found that T36 L11a (£11.221m) did not reconcile with new development expenditure as recorded in the 3 CIDA worksheets (£11.579m). The Company advised that they completed a full reconciliation of Line 11a cost data in CIDA at year-end and found that L11a was intended to include expenditure relating to Sewage. The error was a mapping issue for the new Table 36, which when corrected reported the old Table 36 Lines 13 and 14 into Line 11a of the new Table 36.
- Overall, capital expenditure of £167.5m has been incurred in 2013/14 against a forecast £171.4m, with Water Service related expenditure circa 10% lower than budget and Sewerage Service circa 4% above budget. There are a number of significant variances in expenditure, with T36a L7 – Sewerage Non-Infra Maintenance circa 56% greater than the equivalent FD allowance for 2013/14.
- As a result of additional PE that was made available in the final year of PC10, NI Water allocated the money to sewerage base maintenance projects that were already in the process of being delivered, and extended the scope to include lower priority improvements (that had previously been identified) and thus enable timely utilisation of the additional PE.
- Reduced levels of sewerage enhancement expenditure reflect the deferral of a number of DAP schemes (each containing a significant number of UID outputs) and a number of WwTW outputs (including Kilmore WwTW).
- In terms of the delivery of the PC13 capital programme, NI Water is broadly on target to deliver the overall water programme, despite deferral of a number of Year 1 outputs to Year 2. The

wastewater programme however, is subject to significant change, with a number of Change Protocol submissions proposed to radically amend the overall UID programme and revise the WwTW programme.

- In terms of the UID Change Protocol, the Company are proposing to swap 34 nominated outputs with an equivalent number of relatively simple WwPS solutions, whereby screens are being installed on WwPS overflows in order to meet Quality objectives. On this basis, NI Water will not deliver a like for like UID programme for PC13. Whilst a similar number of outputs will be delivered the outputs will be lower priority, delivered at a significantly lower cost and may not provide equivalent environmental benefit.
- We audited the reported data and challenged the processes on a sample basis. Except where detailed below, we consider the data reported in the table is robustly prepared using systems and process that are appropriate and in line with the reporting requirements and that are properly implemented with effective quality control and governance arrangements.

3. Audit approach

As part of our review of NI Water's AIR14 submission, we completed a number of desktop 'Capex' audits, weighted towards those involving greater capital expenditure in the Report Year. For AIR14, the schemes reviewed included: 3 x strategic trunk main schemes; 2 x WTW schemes; 2 x service reservoirs and 1 x water main rehabilitation scheme; 1 x DG5 scheme; 4 x WwTW schemes and 2 x WwPS/UID schemes.

At year-end we undertook a review of the contents of the Capital Investment Driver Allocation (CIDA) spreadsheet systems and CIM template, which collates the expenditure information by project for the Report Year. During this review, we tested the collation systems to ensure that the proportional allocations exposed in the scheme specific audits are correctly stated at the summary level for entry into the AIR Tables.

We also met with the system holder to confirm the reported data for each line and review progress against the various programmes.

4. Company Methodology

NI Water's proportional allocation procedures are well established and consistently applied.

NI Water maintains a Capital Investment Driver Allocation (CIDA) Manual, which includes:

- An explanation of the need for proportionally allocating capital investment;
- the occasions (generally formal approval stages) in the life of a capital scheme when the analysis should be considered or re-appraised;
- the thresholds for which CIDA is required;
- the procedures for undertaking the allocation;
- a comprehensive series of worked examples;
- definitions of purpose categories and investment drivers;
- descriptions of purpose categories and investment drivers
- descriptions of asset types and examples of assets;
- non-infrastructure asset life categories, lists of typical asset types in each category and the range of asset lives covered; and
- NIW asset categories

The manual appears to fully conform to the UR Reporting Requirements and the Regulatory Accounting Guidelines and forms a sound basis for compliant reporting in Tables 32, 34, 35, 36 and 40.

In addition to the above, further clarification was sought during the year to establish additional rules for the allocation of expenditure associated with assets being delivered for the first time in PC15 which will be incorporated into their proportional allocation guidance, including:

- Renewable Energy Efficiency schemes
- Replacing inefficient assets prior to end of life
- ICATS related expenditure
- MBR replacement with MMBR wastewater treatment processes

As reported previously, the capital scheme approvals process is formalised, with all schemes >£25k, but <£500k, requiring formal approval by the BICC Panel and all schemes >£500k requiring CIP approval. The Strategic Investment team (within the Asset Management Directorate) review the CIDA on all projects as they seek approval and advise the above panels of any challenges.

As highlighted above, NI Water's proportional allocation procedures are now well established and consistently applied. This consistent performance is founded on the following governance processes:

- CIDA master classes have previously been rolled out to Engineering Consultants and Project Managers responsible for delivery of the Capital Works Programme, and refresher training provided as required.
- For all schemes with Report Year spend above the £100k threshold, approvals go through the Asset Management Approvals Panel where the CIDA allocation is checked and challenged.
- NI Water reviews all projects to confirm the appropriateness of the proportional allocation of expenditure for all projects that have had the CIDA allocation updated on CPMR/CAPTRAX.
- A procedure has been implemented to ensure CIDA is updated on CPMR/CAPTRAX prior to CIP approval.
- Operating Capital expenditure will be subject to the same governance and approvals processes as the Capital Works Programme expenditure.

NI Water reviews all projects that have had the CIDA allocation updated on CPMR/CAPTRAX during the year, to confirm the appropriateness of the proportional allocation of expenditure. We also continue to see evidence that the CIDA allocation of schemes are regularly critiqued by the NI Water Finance and Regulation Team and that Project Managers liaise with the same team to ensure consistency of approach. Following the review of CIDA for 2013/14, the Company advised that whilst very few expenditure allocation issues were identified, the following were identified:

- For Aghagallon WwTW, there should be an increased allocation to Q to reflect the increased storage provided on site for the new MMBR plant
- Whilst SDB related expenditure was being allocated to G, the Company found that new development expenditure was not consistently allocated to the new development sub element of Growth.

5. Audit findings

5.1 Table 40 project reviews

As part of our review of the capital expenditure reported during 2013/14 and overall delivery of the PC13 capital delivery programme, as summarised in Tables 32, 36, 36a and 40, we undertook a desktop review of a sample of schemes to test allocation methodologies for AIR14 and assess expenditure projections and progress to date on individual schemes.

As summarised below, the sample of schemes reviewed provided us with assurance that the CIDA allocations applied by the Company are broadly in line with the reporting requirements, with the exception of Newtownbreda WwTW, Ballydougan to Newry Link and Church St SPS, where we recommend the CIDA is reviewed in relation to our observations.

Project Ref	Project Name	PC13 Budget (£m)	Spend to date (£m)	Latest Best Estimate (£m)	QBEG Allocation on CIM				Reporter Agreement (✓/×)
					Q	B	E	G	
JR342	Castor Bay to Belfast	[x]	[x]	[x]	0	40	0	60	✓
KV154	Newry Road SPS	[x]	[x]	[x]	41	43	16	0	✓
KS355	Ballynahinch WwTW	[x]	[x]	[x]	29	38	0	33	✓
JR441	Ballysillan Zone Improvements	[x]	[x]	[x]	44	55	0	1	✓
KR460	Ballysillan Rd Flood Alleviation	[x]	[x]	[x]	0	42	58	0	✓
KL386	Gortnahey WwTW	[x]	[x]	[x]	45	39	0	16	✓
JN226	Strule Intake For Derg WTW	[x]	[x]	[x]	0	2	0	98	✓
KR310	Newtownbreda WwTW	[x]	[x]	[x]	73	12	0	15	× *
KA242	Ballyclare WWTW Upgrade	[x]	[x]	[x]	0	100	0	0	✓
JG035	Ballydougan to Newry Link	[x]	[x]	[x]	0	4	0	96	× *
JR467	Purdysburn SR Rehabilitation	[x]	[x]	[x]	0	100	0	0	× *
JN390	Lough Bradan WTWs Upgrade	[x]	[x]	[x]	51	49	0	0	✓
JV830	Crieve Service Reservoir	[x]	[x]	[x]	0	34	0	66	✓
KS373	Church Street SPS Upgrade	[x]	[x]	[x]	66	27	0	7	× *
JP667	Killyhevlin WTW s/by generator	[x]	[x]	[x]	0	100	0	0	✓

*See comments below

A summary of our findings is detailed below:

For **JR342 – Strategic Link - Castor Bay to Belfast,** the proposal is to construct a link main to address issues identified from a supply / demand analysis carried out for the Eastern General Zone current and future demands. The proposal is for several long lengths of 600 and 700mm diameter trunk main plus new water pumping stations and upgrades to existing pumping stations. The scheme has been developed and delayed from the original CIP report written in 2011. The current status is understood to be 20% complete, this compares with 32% spend to date, spend in an early phase of a project can be disproportional to progress but this is something for review as it would indicate the potential for the project to overspend. The QBEG of 0/40/0/60 would appear appropriate as the greater part of the driver for the scheme is supply / demand balance.

For **KV154 Newry Road Sewage Pumping Station, Warrenpoint Upgrade**, the scheme arises out of the Warrenpoint DAP and is the first phase implementation. The new WwPS is a replacement of an existing WwPS which will resolve performance issues of the old station and bring improvements of removing two UIDs from the system and removing 3 properties from the DG5 flooding register. The QBEG of

41/43/16/0 is appropriate given the split of benefits and upgrade. The original CIP document proposed an estimate of [x] and completion in 2013 when prepared in Nov 2012. The latest CIM data estimates the LBE at [x] with spend next year of [x]. This further spend is at odds with the understanding that the WwPS is operational and we queried the reason for the additional forecast spend. The Company advised that whilst the WwPS is operational, additional work is required in 2014/15 as part of the overall DAP scheme, including; site reinstatement and gravity sewers/ watermains which are not directly linked the to the UID deliverable. On this basis it is only the UID's that have been claimed as operational in 13/14 and not the entire Project which is still at 'Construction Status'.

For **KS355 Ballynahinch WwTW**, the proposal is a major refurbishment of an existing wastewater treatment works to address increased population in the catchment, predicted further future growth, a confirmed tightening of the discharge consent by NIEA and to resolve overloaded/poorly preforming existing assets. The increase in PE is predicted to reach 14,435 by 2035 compared to the design PE of 6,000 and the tightened consent includes a 2mg/l Total P consent. The QBEG allocation proposed at 29/38/0/33 would appear to be appropriate. It is noted that the original CIP report proposed a 29/37/0/34 allocation but the difference is insignificant. Spend to date is [x] which is also the LBE indicating the project is completed which aligns with the information given that the plant is in beneficial use. The total spend in 2013/2014 was [x].

For **JR441 Ballysillan Zone Watermain Improvements**, the proposal is for the rehabilitation of 31.1km of water mains in the Ballysillan DMZ. The QBEG allocation for the scheme is 44/55/0/1, and has been calculated on the basis of the type of work required in each street. The allocation of expenditure is typical for a water main refurbishment scheme instigated to address water quality issues but at the same time replacing aging assets. There has been no allocation to Enhancement, we assume this is because there were no service issues in the distribution zone that needed addressing. The spend to date and LBE are the same indicating that the project is complete and we understand this is the case with the assets being operational and the last contract to be signed off.

For **KR460 Ballysillan Road, Belfast Flood Alleviation Scheme** the proposal is to replace sections of existing sewer with new oversized pipe to act as tank sewers and alleviate flooding in the catchment. Out-of-manhole flooding occurs regularly and two properties are listed in the DG5 register following a history of internal and external flooding. Also, as part of the project, existing poor condition pipework is to be replaced or lined with cured in-situ structural liners. The CIPP report has a precise assessment of the QBEG allocation of 0/42.3/57.7/0 based upon the estimate of costs for the tank sewers allocated to E and replacement/relining of sewers allocated to B. Potentially the allocation of the tank sewers to E also includes an element of Base as it is replacing existing assets however the condition of these is not known and the extent to which base would apply. The 42Q/58E allocation would appear to be in the right order. The LBE and cost to date are the same indicating that the project is complete, this status has been confirmed by NI Water.

For **KL386 Gortnahey WwTW**, the proposal is to provide a replacement WwTW on the existing site, to treat flows for a projected population of 470 (2035) and to achieve the draft WOC Standard of 35:55:7.5 (BOD: SS: NH3). Although we have only reviewed outline details the QBEG allocation of 45/39/0/16 would appear to be in the right order given the drivers of tightened consent and increased population combined with the Base investment of replacing the existing works. Spend to date is 83% of the current LBE of [x], the project is reported to be in the construction phase at 80% complete, which aligns with the spend profile.

For **JN226 Strule Intake for Derg WTW**, the proposal is to increase the raw water supply to the existing Derg Water Treatment Works (WTW) by abstracting 26.6Ml/d from the River Strule and includes the acquisition of a new abstraction license. The QBEG allocation of 0/2/0/98 would suggest that almost the entire project is attributed to growth. This is an acceptable allocation if the sole purpose of the new abstraction point is to meet increased demands. The small 2% base allocation is expected to be appropriate and associated with tying-in the new raw water feed into the existing infrastructure. The spend to date and LBE is the same at [x] which would indicate the project is complete, this is confirmed by NI Water.

For **KR310 Newtownbreda WwTW**, the proposal is to undertake a major refurbishment of the works to enable it to comply with a tightened discharge consent as well as address the underperformance of the works which includes the inability to treat full flows. The project includes; addition of an anoxic zone; additional aeration capacity with diffused air; additional final tank; refurbish existing aeration tanks; aerators & controls; refurbish existing final tanks; enhance flow monitoring to meet 3 tier consent; replace RAS pump station; add sludge drum thickening & odour control; additional storm screening & improved screenings handling; final effluent for screen washing in place of potable water; installation of potable water storage tank and booster pumps for site hydrants; plus decommissioning of the microstrainers.

A large proportion of the works is base provision as well as upgrade to meet the new quality driver. The QBEG allocation is 73/12/0/15 and we would question if the small allocation to Base is correct given the large element of refurbishment. The additional FSTs and new aeration system and sludge facilities would be appropriately allocated to Q, but much is also refurbishment. The allocation to Growth of 15% is also questioned as it is not clear if the inability to treat full flows is a result of increased flows through growth in the catchment or underperforming base assets. In response to this, the Company advised that the work at Newtownbreda WwTW had two primary purposes; Base Maintenance – involving the replacement of mechanical kit on the existing WwTW (which is an existing aeration plant with surface aerators); and Quality – involving the provision of a new aeration stream and final tank in order to ensure compliance was met with the new discharge standard and provide for new population. The Company believes the CIDA allocation is representative of the actual work completed, but has committed to reassess the CIDA from first principles following the July holidays.

The LBE and spend to date for Newtownbreda are the same at [x] over [x] than the original A0 estimate of [x], NI Water has confirmed the works to be completed.

For **KA242 Ballyclare WwTW Upgrade**, the proposal is to improve the performance of an existing works. Although there is an expected increase in PE for the catchment, the design PE of the works is still well in excess of the expected peak value. The consent for the works is not understood to have changed or be affected by the increase in PE and there are no expected enhancements derived from the works. The resulting assessment would be that all the expenditure should be allocated to base which is what NI Water has done. The spend to date is 95% of the LBE which would align with the understanding that the works is operational, we assume the 5% spend estimated for next year is associated with closing out the project.

For **JG035 Ballydougan to Newry Main Link Reinforcement**, the proposal is to undertake two phases of pipework upgrades installation of reinforcement mains to improve connectivity of water sources and the distribution into supply. The LBE for the scheme is [x] which has a QBEG allocation of 0/4/0/96. We question the validity of this allocation where the majority 96% of spend is put to Growth. A principal driver for the scheme is increased growth in the distribution zones which are requiring increased flows from supply. However, the CIP report for the scheme also lists other benefits that the scheme will bring, these are; DG2 improvements to supplies from Knocknagore WPS, DG3 & DG4 improvements to several

areas and decommissioning of Camlough WTW which is compliant but will need significant investment to maintain standards of service in coming years. The costs of the scheme should be distributed in proportion to these additional benefits which would be classed as Enhancement for the DG2, DG3 & DG4 improvements and base provision for the reduction in maintenance liability. In response to this observation, the Company is seeking to establish whether any DG2 outputs have been claimed as a result of this scheme and will adjust the QBEG appropriately. They also confirmed that as the scheme currently stands Camlough WTW will not be decommissioned.

The current spend is 77% of the LBE which is [x] and similar to the original CIP budget for phase 1 &2 of [x]. It is not clear what the further spend of [x] is for over the next two years. The Company advised that the forecast spend in 2014/15 is for the final phase of pipelaying from Newry to the new Crieve SR (which is in the process of being delivered under a separate code).

For **J467 Purdysburn SR Rehabilitation,** the scheme is to undertake remedial repairs to an existing reinforced concrete service reservoir. We agree with the proposed 100% allocation to base. As the spend to date is almost the same as the LBE would expect the project to be complete, however we understand that the project is still in construction and hence we would be concerned that the LBE figure is not a true reflection of what the total scheme cost will be.

For **JN390 Lough Bradan WTWs Upgrade**, the proposals for the scheme are to refurbish elements of plant and construct new process units to work in parallel and in addition to the existing works. The drivers for the scheme are to address regular failings on turbidity and occasionally manganese plus an upgrading to produce a greater through-put than is currently achieved. The reason for the failings and constricted flow is the deterioration of the raw water quality since the works was commissioned. The QBEG allocation for the scheme is 51/49/0/0, this would appear an appropriate split given the quality driver to improve the process to address raw water deterioration and the elements of the refurbishment proposed. It is noted that the original CIP report proposed a 100% quality allocation which has now been changed to the 51/49 Q/B allocation which is more appropriate.

Spend to date is currently reported as 40% greater than the LBE, the project is assumed to be complete but it is noted that the scheme is in contractual dispute at present and may go to court for settlement.

For **JV830 Crieve Service Reservoir**, the scheme involves the construction of a new 4.5Ml reinforced concrete reservoir and demolition of the existing SR, with the driver being the requirement for additional storage in the network. The QBEG allocation for the reservoir is 0/34/0/66 this would appear to be in the right order, as the new build addresses growth but the replacement of the existing reservoir is accounted for by apportioning some spend to base. Spend to date is 13% which seems reasonable as the construction contract has not yet been let.

For **KS373 Church Street SPS Upgrade, Downpatrick**, the proposed scheme is to relocate the existing pump station and replace it with a new combined pump station and storage facility along with pipe work upgrades and new foul pumping station. The QBEG allocation is 66/27/0/7 on the CIM system however this is an incorrect transposition from the CIP document which proposes 66/27/7/0. The latter is a better allocation although we consider that the allocation to Enhancement should be even greater; the scheme has a large quality driver as it removes 4 CSOs and a UID which discharges frequently into the river, it also alleviates flooding at 31 locations and will remove 2 properties from the DG5 register that are susceptible to internal flooding. The base element of the allocation addresses the abandonment of the existing pump station and construction of new. Overall the QBEG allocation may be better represented as 34/33/33/0 to allow for the flooding improvements on equal footing with the quality and

base. The Company confirmed that the scheme did not deliver any DG5 outputs (external only), and as such the current QBEG (subject to correction of transcription error) is appropriate.

Spend to date is close to the LBE for the scheme indicating that it should be nearly complete, this is confirmed by the status for the pump station which we understand is operational but not yet handed over.

For **JP667 Killyhevlin water treatment works standby generator replacement,** the proposal is to replace an old life expired generator, fuel store and bund with a new installation, the QBEG allocation is 0/100/0/0 which we agree with as this is a like for like base maintenance investment. The spend to date and LBE are the same indicating the scheme is complete which NI Water has confirmed.

5.2 Table 40 programme review

In accordance with the Utility Regulator's Reporter Guidance for Chapter 30, we have provided specific comment on the proportional allocation of expenditure applied to the following programme areas:

5.2.1 Leakage Programme

We found that proportional allocation of the leakage reduction programme is consistent with the principles set out in Table 3.25 of Annex N of the PC10 FD, whereby capex is primarily allocated to Base (B) with the exception of the following growth related elements – Trunk Main Studies; DMA Optimisation and Pressure Management that are allocated to Supply Demand (G).

For AIR14, NI Water has identified expenditure on leakage in their commentary as follows:

Leakage	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Capex	[x]	[x]	[x]	[x]	[x]	[x]	[x]
Opex	[x]	[x]	[x]	[x]	[x]	[x]	[x]
Total	[x]	[x]	[x]	[x]	[x]	[x]	[x]

Of the [x] capex, expenditure has been allocated 76% to Base and 24% to Growth. We note that overall report year spend is similar to that reported in previous years, and consistent with PC13 forecasts.

5.2.2 Watermains Rehabilitation Programme

Proportional allocation of the water mains rehabilitation programme is determined for each zone separately. Extensive spreadsheets are produced which provide details of: the works required in each street; the principal reason why the work is necessary; lengths; diameters; and materials of existing and proposed assets; and the technique for rehabilitation/replacement. The principal reason (justification) for the work in each street is taken to indicate the (prime) purpose category as follows:

- structural = base
- hydraulic = supply/demand balance (new development)
- operational = base
- water quality = quality

We have previously reviewed the analysis undertaken by NI Water to assess QBEG and found the systematic approach adopted to be both robust and appropriate and in contrast to the high level assessments that were undertaken by E&W companies. For 2013/14, the QBEG for the overall mains rehabilitation programme (inclusive of trunk main projects) averaged out as follows:

Q	B	E	G
28%	44%	8%	20%

5.2.3 Treatment Works Programme

Proportional allocation of expenditure relating to the Water and Wastewater Treatment Works Programmes is assessed by the Project Manager on a project by project basis.

We have previously challenged the allocation of expenditure for a number of the treatment works schemes, typically finding there to be an under allocation to Base. However, in order to improve the consistency of assessment, the Company has held a series of CIDA master classes and refresher courses for Project Managers to reinforce the approach to proportional allocation and this has resulted in a significant improvement in performance, as demonstrated in Section 5.1 above, where (with a few exceptions) we found the QBEG to be broadly appropriate for all schemes reviewed.

During our review of the specific schemes identified in Section 5.1 above, we found that the Company proportionally allocates expenditure for treatment works on the following basis:

- Like for like asset replacement – Base
- New assets/processes to meet a changing standard – Quality
- Increases in treatment capacity - Growth

Furthermore, as summarised above, NI Water reviewed all projects that have had the CIDA allocation updated on CAPTRAX during the year, to confirm the appropriateness of the proportional allocation of expenditure. We also continue to see evidence that the CIDA allocation of schemes are regularly critiqued by the NI Water Finance and Regulation Team and that Project Managers liaise with the same team to ensure consistency of approach.

For 2013/14, the QBEG for the overall treatment works programme (inclusive of the small wastewater treatment works programme) averaged out as follows:

Q	B	E	G
42%	30%	0%	28%

5.2.4 UID Programme

For UIDs, an identical approach to proportional allocation has been adopted to that described for the treatment work programme above, whereby, QBEG is assessed by the responsible PM on a project by project basis.

As above, we found the QBEG to be appropriate for all UID schemes reviewed as part of our AIR14 audits.

For 2013/14, the QBEG for the UID programme (inclusive of network related DG5 issues) averaged out as follows:

Q	B	E	G
31.5%	45%	17%	6.5%

5.2.5 Operational Capital

For all Operational Capital schemes, expenditure is allocated by prime purpose, as expenditure is drawn from the base maintenance allocation.

In summary, expenditure is allocated for the various PC13 capital sub-programmes on the following basis, although the Company encourage assessment of QBEG for all schemes, to check for secondary drivers, which we consider to be appropriate:

Code	Title	Allocation of Expenditure
1	Base maintenance (Water)	Prime Purpose
2	Base maintenance (Sewerage)	Prime Purpose
3	Water resources	Proportional Allocation
4	Water treatment works	Proportional Allocation
5	Water trunk mains	Proportional Allocation
6	Service reservoirs and clear water tanks	Proportional Allocation
7	Service reservoir rehab	Prime Purpose
8	Water mains rehabilitation	Proportional Allocation
9	Leakage	Prime Purpose
10	Ops capital Water (Base)	Prime Purpose
12	Sewerage Maintenance, Flooding and DG5	Proportional Allocation
15	Wastewater treatment (carry over projects)	Proportional Allocation
16	Wastewater treatment (new starts)	Proportional Allocation
17	Small wastewater treatment works	Proportional Allocation
18	Ops Capital Sewerage (base)	Prime Purpose
19	Miscellaneous	Prime Purpose
20	M&G	Proportional Allocation
23	Minor Water mains repairs, and requisition	Prime Purpose
24	Minor Sewer repairs and requisitions	Prime Purpose

As part of our audit we trailed expenditure for three separate projects back to CPMR to ensure expenditure had been allocated in accordance with the QBEG allocation. The projects tested included; KS355 – Ballynahinch WwTW; JV830 – Crieve Service Reservoir and KR310 – Newtonbreda WwTW, and found expenditure had been appropriately allocated to the appropriate purpose category, although the QBEG for Newtonbreda WwTW should be amended in CIM to correct the transcription error.

5.3 AIR14 Expenditure observations

5.3.1 Table 32

Total net expenditure (inclusive of capital contributions) is downloaded from Oracle through Business Objects to CPMR for the population of the CIDA worksheets. Enhancement expenditure reported in Table 32 is then derived from CPMR for Capital Works Programme expenditure and the Oracle AICC database for Operating Capital and M & G.

For the purposes of AIR14, gross expenditure (exclusive of contributions) needs to be reported, so income associated with water and sewer main diversions is manually adjusted.

In allocating total expenditure to the various sections of Table 32, an issue was identified with CPMR, whereby contract details for a number of different Operational Capital schemes were consolidated into a single project, with a single project allocation to service area in Table 32.

We reviewed Project WS106 that contained 19 separate operational capital contracts, and found that whilst circa 25% of the expenditure was associated with Water Resource related work, there was no

allocation to Water Resources initially included in Table 32. The Company advised that a manual review of all projects was completed and circa 4 projects were found to require manual adjustment.

For the purposes of AIR14 reporting, salaries and overheads are manually allocated to Engineering Procurement, Operational Capital and M&G projects on the following basis:

- Capitalised salaries are apportioned each month to capital projects which had spent in the month, on the basis of the proportion of the projects spend in the month over the total spend on all capital projects in the month.
- Capitalised overheads are apportioned to EP projects on the same basis
- We found that NI Water has continued to report a large number of assets adopted at nil cost (column 4 line 7) as:
- Developers try and reduce bonds and liability on completed developments, resulting in increased levels of notional expenditure;
- NI Water Developer Services team has pro-actively dealt with an increased number of backlog/mature developments in response to increased interest from DRD, and
- A number of private developments with sustainable drainage solutions, developed to meet Rivers Agency requirements have also been adopted.

5.3.2 Table 36

As described above, Total net expenditure (inclusive of capital contributions) is downloaded from Oracle, through Business Objects, as a cross check to the download from CPMR that is used for the population of the CIDA worksheets. All expenditure reported in Table 36 is then derived from CPMR for Capital Works Programme expenditure and M&G and the Oracle AICC database for Operating Capital. For the purposes of AIR14, 3 separate CIDA worksheets are retained – E&P, Ops Cap and M&G.

As part of our review, we sought to reconcile individual AIR14 line totals back to Oracle, in order to verify the reported data. For the purposes of AIR14 reporting we confirmed consistency of T36 Lines 3 and 8 with the 3 CIDA spreadsheets. We then trailed costs for individual projects back to Oracle and confirm that the totals reconcile.

We also similarly sought to reconcile T36 L11a (Capex S&D – New Development), but found the total reported in T36 L11a (£11.221m) did not reconcile with new development expenditure as recorded in the 3 CIDA worksheets (£11.579m). The Company advised that they completed a full reconciliation of Line 11a cost data in CIDA at year-end and found that L11a was intended to include expenditure relating to Sewage. The error was a mapping issue for the new Table 36, which when corrected reported the old Table 36 Line 13 and 14 in the new Table 36 Line 11a.

In order to provide additional clarity to the water S&D capital expenditure incurred during the year, NI Water has added an additional line to T36 Line 5d to capture expenditure associated with compulsory free meter installations at unmeasured non household properties, as part of their ongoing UNHH Project.

5.3.3 Table 36a

We note that the PC13 Baseline expenditure as reported in Table 36a Column 4 is consistent with the UR's Final Determination for PC13 (as confirmed in UR response to AIR14 Query 01), but adjusted to allow for the recently accepted Change Protocol submission for Dorisland GAC Plant.

Overall, capital expenditure of [x] has been incurred in 2013/14 against a forecast [x], with Water Service related expenditure circa [x] budget and Sewerage Service circa [x] budget.

Expenditure for the year against each purpose type is broadly in line with the PC13 Baseline, with reported variance often relating to differences in the actual COPI adjustment applied to the 2013/14 PC13 Baseline expenditure when compared to the assumed COPI adjustment the PE budget was based on. The Company advised that the actual difference in COPI accounted for [x] variance, which if applied to the actual expenditure incurred would have resulted in the Company meeting the baseline levels of expenditure.

However, when each line is looked at in isolation, there are a number of significant variances in expenditure. For T36a L7 – Sewerage Non-Infra Maintenance, actual expenditure was circa [x] the equivalent FD allowance for 2013/14. We queried the basis of this significant variance and the Company advised additional PE was made available in the final year of PC10. In the absence of PC13 Framework contracts (that were still being procured), NI Water allocated the additional budget to sewerage base maintenance projects that were already in the process of being delivered, and extended the scope to include lower priority improvements (that had previously been identified) and thus enable timely utilisation of the additional PE. An example of this relates to KN631 - Strabane WwTW where the initial PC10 scheme provided an upgrade to the WwTW process at a cost of [x]. The scope was then extended to include; replacement of faulty decant valves; refurbishment of blowers; provision of additional sludge dewatering facilities; and a new odour sampler, at an additional cost of [x]. Due to the lead in time required to initiate new schemes and the fact the Contractor was already on site, extensions to existing projects were seen to be the most cost effective means of spending the additional PE.

Whilst not as significant a variance as Line 7, as described above, the variance in the reported enhancement related sewerage expenditure, Lines 9 to 11 is also notable, [x]. We understand that the reduced levels of sewerage enhancement expenditure reflects the deferral of a number of DAP schemes (each containing a significant number of UID outputs) and a number of WwTW outputs (including Kilmore WwTW). As a result of this, a number of Change Protocol submissions have been proposed, to radically amend the overall UID programme and revise the WwTW programme. At the time of review the 2 sewerage related change protocols and an additional water change protocol (Rathlin Island WTW improvements) are yet to be agreed with the UR.

5.4 Table 40a - Delivery of PC13 outputs

5.4.1 Water outputs

NI Water is delivering a relatively small water service capex programme in PC13, comprising:

- Sub Programme 5 3 x Trunk Main schemes
- Sub Programme 1 & 4 2 x WTW schemes (1xQuality & 1xBase Maintenance)
- Sub Programme 6 1 x Service Reservoir scheme
- Sub Programme 8 5 x Major Incident Mitigation Mains projects

As part of AIR14 we reviewed progress of the nominated outputs, summarised as follows:

- Delivery of the trunk main programme is ongoing. The 3 outputs, comprising Castor Bay to Belfast; Ballydougan to Newry; and Gravity II McVeighs Well to Oldpark, were initially Year 1 (2013/14) outputs but have been delayed until Year 2 (2014/15), with circa [x] to PC15, suggesting further deferral of these outputs. However, we were advised that all 3 projects are currently under construction with a forecast completion date of February 2015.
- There are 2 WTW outputs forecast for delivery in PC13. Killylane WTW, a base maintenance scheme, is currently under construction with a forecast delivery date of February 2015. This represents a slight delay in completion date, but will be delivered circa [x] initially

forecast. Killyhevlin WTW, an enhancement scheme, is forecast to carry over into PC15, with [x] expenditure forecast for Year 1 of PC15. However, at the time of review, we found that work was currently ongoing at Killyhevlin, and the Company was hopeful the forecast 2013/14 beneficial use target date would be achieved. In addition to the 2 nominated outputs, further work is also proposed on the Dorisland WTW GAC Plant, as agreed in the recent Change Protocol submission. Work is currently forecast for completion in Year 2 of PC13.

- Crieve Service Reservoir is the only SR scheme forecast for completion in PC13 and has been deferred from Year 1 to Year 2 (2014/15). We found that the scheme is currently at tender stage, but the Company believe the completion date is at risk of further slippage.
- There are 5 Major Incident Mitigation projects nominated for PC13 to mitigate against freeze/thaw. Three outputs were delivered in Year 1 with the remaining 2 forecast for delivery in Year 2. NI Water forecasted all outputs will be delivered on time with a saving of [x] in 2010/11 prices.

5.4.2 Sewerage outputs

NI Water is delivering a large PC13 sewerage service capex programme, comprising:

- Sub Programme 2 3 x WwTW Base Maintenance schemes
- Sub Programme 12 84 UID schemes - although the majority are subject to change protocol submission. 18 UIDs now nominated as PC13 outputs
- Sub Programme 15 1 x WwTW PC10 carry over scheme
- Sub Programme 16 31 x WwTW schemes
- Sub Programme 17 25 x small WwTW schemes

Progress against the above programme of work is summarised as follows:

- The 3 base maintenance schemes, comprising Carrickfergus, Belfast and Strabane WwTWs were delivered during the year with a forecast saving of [x] in 2010/11 prices.
- During the year, the Company delivered 18 UID outputs with a further 28 of the original 84 nominated outputs forecast for delivery in Year 2 of PC13. The balance of outputs is currently subject to a significant change protocol submission, see below, with the exception of Winters Lane that was delivered prior to PC13 and New Holland WwTW and Duncans Road that were found, following investigation, to not be UIDs.
- Ardglass WwTW – the single carry over WwTW scheme is forecast for delivery in Year 2 of PC13. The Company advised that progress is advanced from that initially profiled, but is estimated to cost circa [x] forecast.
- We found that 14 WwTW outputs were delivered in Year 1 of PC13, with Hillsborough WwTW, Belfast WwTW, Maghera WwTW and Dunmurry Sludge brought forward and delivered early. Four of the 31 outputs (Ballycastle WwTW, Ballygowan WwTW, Clabby WwTW and Robinsontown WwTW) have been deferred to PC15 due to land acquisition issues, although land has recently been vested for Ballycastle. Ballintoy WwTW is also likely to slip into PC15 despite the fact land was recently purchased, as the Company is currently awaiting planning permission prior to commencing work on site. We understand that the balance of the programme (16 outputs) are forecast for delivery in Year 2 of PC13. We understand that [x] from Sub Programme 16 has been deferred to PC15.
- Due to Framework procurement issues, there has been a delay in the small wastewater

treatment works programme. Notwithstanding this, the Company forecast that they will still deliver the nominated PC13 outputs.

5.4.3 UID Change Protocol Submission

The Company have identified a number of issues impacting on the timely delivery of the nominated PC13 UID outputs. As summarised below, circa 34 nominated UID outputs, will not be delivered in PC13 and are currently subject of a change protocol submission to defer the nominated outputs to PC15.

- Annesborough DAP – 1 output
- Armagh DAP – 5 outputs
- Bangor DAP – 5 outputs
- Ormaeu DAP – 5 outputs
- Hollywood DAP – 2 outputs
- Lisburn DAP – 7 outputs
- Millisle DAP – 1 output
- Portadown DAP – 6 outputs
- Dundrum DAP – 3 outputs

We understand the deferred outputs relate to sites that were either subject to prolonged land purchase issues or in busy town centre locations, where local government bodies have requested deferral.

As detailed in the Change Protocol Submission, the Company are proposing to swap the above mentioned outputs with relatively simple WwPS solutions, whereby screens are being installed on WwPS overflows in order to meet Quality objectives. On this basis, NI Water will not deliver a like for like UID programme for PC13. Whilst a similar number of outputs will be delivered the outputs will be lower priority, delivered at a significantly lower cost and may not provide equivalent environmental benefit.

Table 33 – Depreciation Charge by Asset Type

1. Introduction

Information in this table assists with the understanding of the accounting charges applied by the Company. Current Cost Depreciation (CCD) charges are split by service and by period of commissioning and further by whether the related capital expenditure was on the provision of enhancement assets or on maintaining existing 'base' assets.

The table also reports on Infrastructure Renewals Charges (IRC) for Water and for Sewerage services separately. It compares IRC against IR Expenditure (IRE) and tracks the prepayment/accrual position.

The table has changed significantly since AIR13. For AIR13 presented data from price controls to enable a comparison between actual depreciation and forecast depreciation. For AIR14 the table simply reports the recent historic depreciation values (for the previous 2 years plus the report year).

2. Key findings

- We have commented on proportional allocation between base and enhancements and by asset lives in our commentaries to Tables 32, 35-36.
- We note significant accelerated depreciation in the year, which follows similar levels of acceleration reported in AIR13, AIR12 and AIR11. We suggest that NI Water should get to a stable accelerated depreciation position.
- NI Water seem to make a one way downward adjustment for impaired assets which could impact on the value of the GMEAV. NI Water advised that they have taken advice from their external financial auditors and this approach is consistent with UKGAAP.
- NI Water has been applying what could be considered abnormal levels of accelerated depreciation for the last five years. This has related to both infrastructure and non-infrastructure assets. This suggests that the underlying data may need improvement;
- The last MEAV was done nearly 15 years ago. Given the amount of accelerated depreciation being applied, asset impairments and the fact that asset values will have moved somewhat in 15 years it is now critical that NI Water undertake a revised MEAV exercise;
- Overall the Company has a relatively small prepayment balance. For Water NI Water has a prepayment of £12.1 million, whilst for Sewerage, they have an accrual of £12.1 million. This suggests that planning could be improved to avoid such significant variances;
- Noting the above comments, based on the sample data audited, we believe that the data reported in this table is consistent with the reporting requirements.

3. Audit approach

The audit consisted of an interview with the table owner to discuss the method and review the source data extracted from the financial system.

As part of our audits of financial data we liaised with KPMG to share key findings. This was done at a tripartite meeting between the Reporter, KPMG and NI Water.

4. Audit findings

4.1 Depreciation

The total depreciation charge for the year is reported in line 5 of table 33. The Company approach remains unchanged from previous years.

4.1.1 Confirm whether the systems and processes described in the company's methodology statement are those currently in operation. Where this is not the case identify and explain areas where the methodology statement is incorrect or incomplete.

During our audit we were provided with the company commentary and their process notes that relate to the company approach.

There has been no fundamental shift in the way that the Company reports data in this table. The data for this table has been populated using the same method as that used to populate Table 25. Table 25 is based on actual asset lives and not simplified assets as those used historically in Table 34.

The company advised that it is not able to automatically assign depreciation to either base or enhancement expenditure. It uses a split based on CIDA analysis which identifies whether an asset relates to Quality, Base, Enhancement or Growth. We have commented on the correctness of the CIDA approach in our audits of the capital expenditure tables.

Data from Table 25 is already split between water and sewerage services. Many management and general assets are assigned to either water or sewerage or a mixture based on the CIDA assessment by the project manager.

Depreciation Policy

Depreciation is unchanged from previous years. Assets are depreciated on a monthly basis from the date they are commissioned for beneficial use. The company has a de-minimus figure for capitalisation.

Revised MEAV valuation

The previous asset revaluation was undertaken in 2001-02 by [x]. The Company is still undertake a revaluation. We are concerned that there is a significant period between the asset valuations. As a result NI Water may have significant assets that no longer exist. This seems to be one of the key drivers of the recent spate of accelerated depreciation charges being reported. We are also concerned that the values in the asset register may be materially different to a modern equivalent asset value for the respective assets.

Depreciation Calculations

As data already exists related to water and sewerage the Company has used splits derived from Table 34 in order to report depreciation for the current year between base and enhancement. Requiring the company to report data in Table 34 on asset live splits would be useful to maintain in order to sense check that the average financial asset life is consistent with the average engineering asset life.

The Company advised that it is depreciating assets for the Kinnegar PFI as this is an 'on-balance sheet' transaction although it is being built and operated by the private sector. Further questions in relation to how Kinnegar is being depreciated should be referred to the financial auditors.

4.1.2 **Perform tests of the company's systems and processes described by the company's method statement to ensure that it has been followed by the company in the calculation of the CCD and population of Table 33.**

Correctness of split of assets between water and sewerage and base and enhancement

We have commented on the robustness of expenditure allocation to asset lives in our commentaries to Tables 32, 34 and 35-36. For further information see out commentary to these tables. We undertake sample checks of this data routinely as part of our proportional allocation audits. Based on these audits we believe the approach is appropriate for splitting assets between base and enhancement expenditure.

Correctness of information entered into Investment system

NI Water is required to complete a template for new investments including a split by asset life of the scheme. Last year we noted that based on our sample audit this information was currently not being completed consistently across different investment proposals. For this year we note that NI Water has made no material change to its process that would strengthen the approach to populating the new investment template.

4.1.3 ***Review the company's assessment of a confidence grade by line to assess the robustness of how this table has been completed. Comment on whether you agree with the confidence grade assigned.***

For AI14 NI Water reported confidence grades as B3, consistent with previous years and is appropriate. This reflects the confidence in data contained in the capital expenditure tables.

4.1.4 ***Consider and comment on any changes that the company could make to its analysis, which would give a more robust answer. You should consider feasibility and costs associated with making suggested changes, and explain whether you have brought your suggested improvements to the company's attention and whether it is considering implementing them.***

We have made some comments below under Company's explanation of movements.

4.1.5 ***Compare the company's rules on proportional allocation between services (specifically between base and all enhancements) and allocation of expenditure to depreciable life categories given in Table 33. Confirm whether the charge stated has been calculated in accordance with the company's rules. Comment on any exceptions.***

As part of our previous audits we reviewed the average asset lives contained in the company asset register for the various asset lives. We used the following categories of assets in our assessment, informed by discussions with NI Water:

Asset type	Associated Asset Life
BUILDING	Long
CAPITAL STUDIES	Medium
CGR CIVILS	Long
CIVILS	Long
COMPUTERS	very short
COMPUTERS LLA	Short
DIGITISATION	Medium
FIXED PLANT	Medium
FURN&OFFICE	Short

Asset type	Associated Asset Life
ICA	Medium
INF ACC DEPN	Infra
INFRASTRUCT	Infra
LAB EQUIP	Short
LAND	Land
LAND MGMT	Medium
LL Computers	Short
LL MOB PLANT	Short
LORRIES	very short
RADIO &MONIT	Medium
SL MOB PLANT	very short
TELEMETRY	Short
VANS	very short

The table below shows the results of our analysis:

Asset category	Asset life
Very Short	6.1
Short	10.5
Medium	25.2
Long	58.4

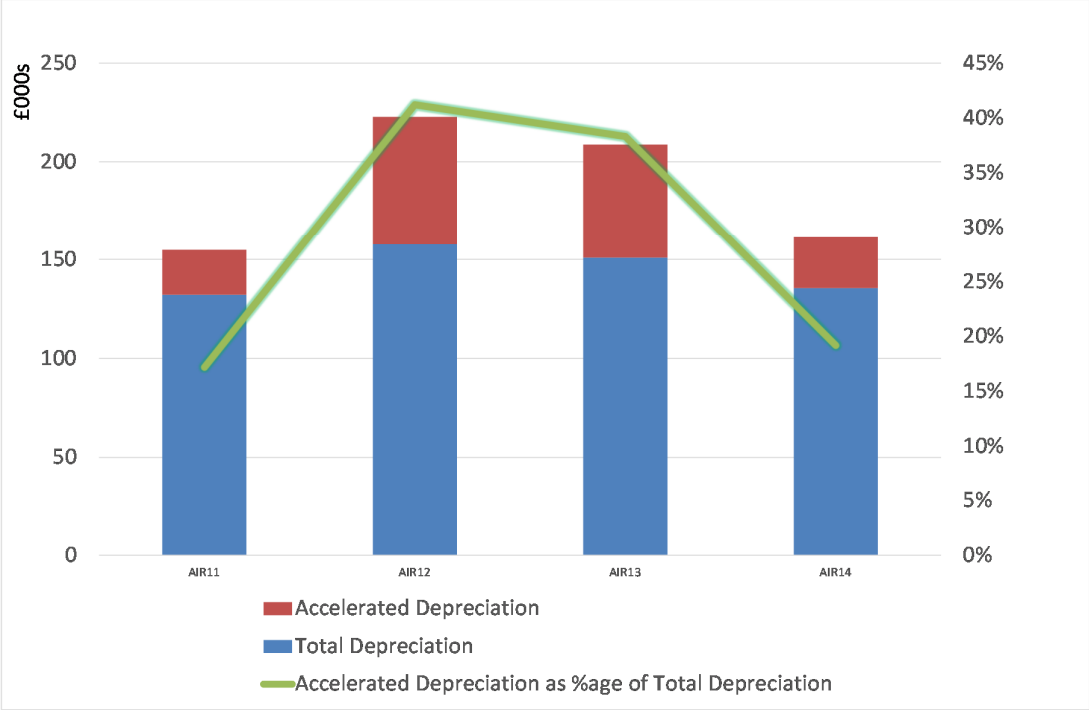
We believe that as PC15 develops it would be useful to consider the variance between data submitted in the PC process and the outturn average asset life data. We will update this analysis for AIR15.

4.1.6 Review and comment on the company's explanation of the movement in the total CCD between the current year and prior year.

Approach to Accelerated Depreciation

For the current year the Company has applied accelerated depreciation of £26 million. This reflects assets contained in the fixed asset register that are no longer in use. Although we believe the explanation for the accelerated depreciation charge is sensible we note that there has been a disproportionate depreciation charge for a number of years applied by NI Water. We believe that a significant depreciation charge of a number of years is abnormal.

This analysis is set out below:



The reasons for the accelerated depreciation charges since 2011/12 are as follows:

Year	Value (£m)	Reason
2009/10	19	Review of the asset register.
2010/11	22.73	Review of the asset register showed some assets have now been decommissioned but still exist in the asset register.
2011/12	65	Incorrect data on assets for PPP asset transfer on Company systems and reduction in the MEAV of infrastructure assets.
2012/13	57.8	Review of data consistency between the Fixed Asset Register and the Current Cost Asset Register meant an accelerated depreciation for infrastructure assets.
2013/14	26	Review of the asset register showed some assets have now been decommissioned but still exist in the asset register.

The consistent reporting of significant accelerated depreciation is both abnormal and a concern. It may suggest that the underlying data being held by NI Water requires improvement. It could also potentially have impacts on the speed of the drawdown of the RAB.

NI Water should seek to address the issues that have resulted in significant accelerated depreciation over the duration of the last four years to normalise the total depreciation charge in future years.

Impairment of Assets

NI Water continues to impair assets. For 2013/14 the Company has impaired assets to the value of less than £100k. This is based on advice from independent consultants [x]. We have previously challenged NI Water on the basis of this adjustment. NI Water has advised that it only makes a downward adjustment as required by UKGAAP and not an upward adjustment where the consultants advise that there has been an increase in an asset's values particularly over the long term. This also reinforces the need for a revised GMEAV exercise to be undertaken.

4.1.7 Review and confirm whether NI Water's explanation of the impact of an MEA revaluation on its CCD charge is adequate and reasonable.

There has been no MEA revaluation for the current year. As noted above we believe that a revised MEAV exercise is now critical in order to improve the underlying data being used to manage operations of the NI Water.

4.1.8 Review and confirm whether NI Water's explanation of the link between HCA and CCA depreciation, including what systems are used to derive both depreciation charges, is adequate and reasonable.

The Company's fixed asset register holds details related to both HCA and CCA. Asset values reflect those of the previous revaluation in 2001, plus new assets that have been commissioned and continue to have useful life. HCA data is indexed on an annual basis to present it as CCA data. Since the incorporation of the Company, NI Water has used RPI to index data.

The Company has on-balance sheet additions to the Alpha PPP assets. This also incurs depreciation.

4.2 Infrastructure Renewals Charge

4.2.1 Consider whether NI Water's policy for infrastructure renewals charge is consistent with the calculation of the infrastructure renewals charge.

Historically the IRC was based on a 10 year average. However since PC10 the IRC calculation is based on the final determination for PC10.

Reporter has previously audited the IRE and commented on this as part of the Business Plan audits for PC13. The difference between the actual out-turn IRE and the IRC is treated as an accrual or prepayment. For AIR14 although there is no significant accrual or prepayment present. We note that there is a mismatch between the two services however. For water there is a significant prepayment, whilst for sewerage there is a significant accrual. The reason for this was not well described by NI Water in its commentary. NI Water has advised that this is an issue that it will review for AIR15.

We also note that there is a small prepayment for PPP [x]. This has been present for a number of years. It is not clear what plan NI Water has to address this prepayment over coming years.

4.2.2 Consider whether NI Water's policy is reflective of NI Water's medium to long-term view of infrastructure renewals expenditure. The reporter should consider what IRE projections are available to NI Water and if these projections are medium to long term.

The IRE projections used by NI Water are based on the IRE allowed for in the final determination post PC13. In as much as the allowed IRE is reflective of a long term view of infrastructure renewals expenditure the IRC will also be reflective of the long term view.

4.2.3 Review and comment on NI Water's explanation of the period over which it expects any infrastructure renewals accrual/prepayment to be wound out and whether this is reasonable.

The Company has a relatively small prepayment/accrual (£0.05m). For Water NI Water has a prepayment of [x], whilst for Sewerage, NI Water has an accrual of [x]. NI Water should understand the reasons for these variances and how it plans to remove this for future years. We will review the basis of any plan in AIR15.

5. Assumptions

Where assumptions have been made these are set out in the above text.

6. Confidence grades

No confidence grades are required for financial data.

Table 34 – Analysis of Non-Infrastructure Fixed Asset Additions by Life

1. Introduction

This table provides a breakdown of the non-infrastructure fixed asset additions in each Report Year, split by:

- Service area (water or sewerage service)
- Purpose category (Enhancement or Base Maintenance) and
- Asset life category

2. Key findings

- NI Water is required to spend money within the year that it is allocated, resulting in potential inefficient expenditure.
- The appropriateness of the average asset lives was reviewed in our audits of the PC15 submissions. In general, these were deemed to be satisfactory and in line with assumptions employed elsewhere.
- The audit trail for the basis of the split of assets is not transparent.
- We have previously reviewed the allocation of expenditure contained in business cases submitted to the investment board. We noted that in some cases the asset allocation section of that document was not populated, whilst in other cases incorrect asset lives where being assigned. NI Water has advised that there has been no fundamental change to process since our review last year.
- Noting the above limitations, based on our audit of sample data, we believe that the data reported in this table is consistent with the reporting requirements.

3. Audit approach

We undertook an audit of the systems and data generated by those systems for the purposes of reporting data within this table. We interviewed the table owner to understand the processes used to populate this table.

As part of our audits of financial data we liaised with KPMG to share key findings. This was done at a tripartite meeting between the Reporter, KPMG and NI Water.

4. Audit findings

4.1 Confirm whether the systems and processes described in NI Water's methodology statement are those currently in operation. Where this is not the case the Reporter should identify and explain where the methodology statement is incorrect or incomplete.

The Company methodology is contained in the commentary submitted. The Company installed the capital investment driver allocation (CIDA) approach in 2007/08 in order to improve the allocation of costs primarily between base and the various enhancement categories. The CIDA manual was updated in November 2009. It was further improved in 2010/11 and is now quite comprehensive. Nevertheless we could not find a robust chapter on the allocation of expenditure by asset lives. The Company advises that it has a robust checking process in relation to the allocation of the assets as well. However, we believe that the process should be more

completely documented, particularly on areas related to allocation of expenditure between asset types and asset lives.

The Company used the project control system (Captrax) and Oracle in order to report data in this table. The Company advises that the CAPTRAX system is reconciled on a monthly basis with the general ledger. The CAPTRAX system allows the generation of reports that can be used directly for the population of data in Table 34.

We have undertaken a broad consistency check of the data between the different capital expenditure tables for AIR14. Our analysis and tests of the data sources and the NI Water systems show no material concerns.

In allocating their fixed assets to life categories within their various systems, NI Water uses a simplistic view of assets and asset lives. In recent years NI Water has added further assets to the list of assets it has on its system, further to advice from Reporter.

The current list of asset lives is shown below:

Fixed Asset Register and CIDA	Asset Life	Table 34	Statutory/Regulatory Accounting Reporting (ORACLE coding)
Infrastructure	n/a	-	0113
Buildings	60	long	0111
Civils	60	long	0112
Fences - All fences around sites	40		
Steel Tanks - All Steel tanks for storage and processes	40		
Filter Media - Media in Biological filters, Sand filters etc.	20		
Rotating Biological Filters - RBC package plants	20		
Kiosks - All kiosk type structures including small control kiosks and prefabricated control buildings	20		
Fixed plant	20	medium	0115
Digitisation	20	medium	0115
Capital studies	20	medium	0115
Land management	20	medium	0115
Radio and monitoring	20	medium	0115
Long life mobile plant	10	short	0114
Short life mobile plant	5	short	0114
Lorries	10	short	0114
Computer Hardware	3-5	short	0116
Computer Software	7		
Meters Domestic Water Meters	8		
ICA	7	short	0115
Telemetry	7	short	0115
Furniture and office	10	short	0116
Batteries - Batteries for loggers, toughbooks etc.	4		
MBR Membranes	5		
Lab equipment	5	short	0115
Vans	5	v. short	0114
Computers (stand alone)	3	v. short	0116

The only variance from AIR13 is the splitting out of computing equipment between computer software and computer hardware. We support this further split of data.

Further comments are provided in relation to the systems and processes used by NI Water in our commentaries on Tables 35 to 36.

4.2 Perform tests of NI Water's systems and processes described by NI Water's methodology statement to confirm that it has been followed by NI Water in the calculation of the CCD and population of Table 34.

During our sample audits of capital schemes across purpose categories and asset types, we reviewed the CIDA data, inter alia, to test the allocation of values to assets and the allocation of these values to asset lives for depreciation purposes. This was done as part of the capital expenditure audits.

The Company has provided flowcharts related to completion of the data within CAPTRAX, through to reporting data in the Annual Information Return. The processes depicted in these flowcharts are consistent with the methodologies in use and we observed.

4.3 Review and comment on reasonableness and consistency of the rules adopted by NI Water for allocation of expenditure to life categories.

We undertook a review of the allocation of expenditure across life categories on a sample basis for the SBP submission. We did not find any material areas of concern during this audit. We also checked the allocation between CIDA categories as part of the PC13 process.

During our review of AIR13 we did review the allocation of expenditure contained in business cases submitted to the investment board. We noted that in some cases the asset allocation section of that document was not populated. In some instance an average asset life of 15 years was used which is not an option for the allocation of average asset lives. This does suggest that there is a lack of understanding at project management level in relation to the allocation of assets to average asset lives. We challenged NI Water in relation to whether they had made any changes during AIR14 to address this. NI Water advised that asset allocations are checked. However they have not updated written processes or guidance.

4.4 Review NI Water's procedures and consider whether or not they are reasonable, and whether they are followed by staff involved in allocation decisions.

The large part of the data reported in this table is based on the CIDA analysis. NI Water themselves perform a series of checks on CIDA data as each project passes through its life. The Project Managers (most of whom have now received CIDA training) enter the data, initially based upon their knowledge of the purpose(s) and scope of the work involved. At 'A1' stage, this allocation is checked by Asset Management and approved prior to uploading to CIDA. The project data is similarly reviewed and approved at 'A3' stage, then again at 'A4', when the CIDA information is once again updated. All new updates to CIDA are again specifically checked as responsibility is passed to the Finance and Regulation directorate.

This level of training, approvals and checks appears to have generated a sound data set based on the tests we have performed.

We note however that there is an absence of an audit trail in the CIDA system in relation to the basis of allocated assets between life categories. We would expect this to be resolved in the future. We have previously reviewed executive approvals for capital expenditure and found little justification for the split of asset lives used, and concluded that the split used for a scheme by asset life is not subject to the same scrutiny by the investment board as the investment business cases are.

4.5 Review and comment upon any differences from rules and procedures adopted in previous years, and consistency of asset lives with those used for depreciation of assets.

There has been no significant change in the methods used for reporting this data for the last few years, going back to AIR12. The Company had sought to implement some changes in related to how information in business cases is presented for approval by being more explicit about CIDA splits during AIR13. However, we noted some inconsistency and varying quality of this information. We believed that a further push was required for improvement of this data. This would ideally involve NI Water providing a justification of the split of asset lives in the business cases it presents for approval and be transparent about the methods used to assign asset lives. This has not been implemented during AIR14.

The Company advises in its commentary that the last comprehensive review of asset lives was completed as part of the NIAMP in 2001 although as noted above it has added some additional asset lives to the analysis. As noted in our commentary to Table 33 we believe a MEAV revaluation is now critical.

4.6 Consider the appropriateness of the current cost depreciation charge in the year and in particular:

- ***Confirm when NI Water last reviewed or amended its asset life and apportionment policy; when?***
- ***Comment on whether, in the Reporter's view, the financial asset lives reflect the operational lives of the assets and the reason for that opinion; when?***
- ***Comment on the appropriateness of both asset lives and the apportionment of expenditure across asset lives used by NI Water – Done by the capital expenditure team I would hope but need to check this off***

As noted in the sections above, NI Water has split out asset lives for computers, now splitting this between hardware and software. In previous years NI Water added several new asset life categories to their standard list. Overall this will improve the apportionment of CCD as there is greater granularity and clarity for allocation.

The Company's approach to apportionment is being improved continually. The apportionment and asset life policy remains broadly as previous years. We have made some recommendations about audit trails related to apportionments between asset lives and opening these judgements up to scrutiny by the investment board. These have been taken up to some extent but more work is required in order to further improve the allocation of costs.

It should be noted that the total current cost depreciation charge has been reviewed by the financial auditors. We have commented on this in our commentary to table 33. We do note however that as so much accelerated depreciation is occurring it is necessary to be certain that assets are not being replaced within their financial asset life and that a clear case exists that replacement rather than some refurbishment is not the optimal solution.

The apportionment across average asset lives has been done on the basis of the CIDA allocations. The CIDA split had an average asset life for medium life assets at 15 years. This is consistent with some of the Executive Approval reports we reviewed for individual schemes but not all.

Our previous audits of capital schemes have confirmed that the Company's approach to allocation of expenditure in CIDA is improving.

4.7 Review and comment on inconsistencies between engineering and financial judgements on asset lives and investment allocation

Our reviews of asset lives remain as reported on the SBP document. We have not revisited this analysis for the AIR as the SBP document has only recently been submitted

4.8 Review and comment, on an exception basis, where NI Water has not provided commentary on inconsistencies in asset lives and investment allocation between those used in previous years.

We have commented on investment allocations in more detail in our audits to Tables 35-36 and 40. In general the approach to allocating expenditure to asset lives remains the same as that used in the previous year.

5. Assumptions

Where assumptions have been made these are set out in the above text.

6. Confidence grades

No confidence grades are required for financial data.

Table 35 – Capital Investment – Public Expenditure Reconciliation

1. Introduction

This table provides a statement of the capital budget available and capital budget utilised in Public Expenditure terms and the gross capital expenditure by NI Water, all expressed in nominal terms. The table follows the content and structure of Table 3.2 of the PC13 information requirements to facilitate comparison between the Business Plan submission and actual expenditure.

2. Key findings

- The data in this table is materially consistent with that provided in other tables.
- Only minor adjustments have been made to the capital allowance. The Company report that these have had no material impact on their ability to deliver the capital programmes.
- There has been a change in accounting methodology of the Alpha PPP Maintenance charge. This is now calculated as a flat annual charge rather than one which varies according to assumed asset investment.
- In order to reconcile the Available PE to Table 3.2 of PC15, Line 1 should be as assumed for the Determination. However, the PE budget has been shown to be subject to movement in the past and it may be worth an additional line in block A which captures (and requires explanation of) such changes. An explanation of >2% variance between the adjusted PE capital budget and the NI Water gross capital budget would then be what is required.
- We audited the reported data and challenged the processes on a sample basis. Except where detailed below, we consider the data reported in the table is robustly prepared using systems and process that are appropriate and in line with the reporting requirements and that are properly implemented with effective quality control and governance arrangements.

3. Audit approach

The audit included reviews of the current Company methodology for data collation, reviews of the data supplied, cross checks between the commentary and the data in the table. We also met the Company's representative from the Finance & Regulation team.

4. Audit findings

4.1 Block A

Line 1 – Public Expenditure – capital budget available (£166.300m)

In their commentary, NI Water has provided the assumed build-up to the available PE capital budget. This now represents the position at the end of the year as required, and incorporates the assumptions agreed with the DRD for the specific year.

NI Water has provided evidence of:

- The assumed PE capital budget of £166.3m from the PC15 business plan or FD documents (UR PC10 FD, Annex N, Table 4.2).
- DRD agreement to the start of year position of £166.3m (May 2013 Profiling Return to DRD), and
- DRD correspondence confirming the end of Report Year PE Budget of £165.8m (noting this is still currently provisional). This reflects a £0.5m 'borehole' adjustment (reduction) (October 2013 Profiling Return to DRD).

As the stated intention of table 35 is to facilitate comparison between the Business Plan submission and actual expenditure, it would seem useful to commence the table with the FD assumptions (i.e. a restatement of the FD assumptions (PC10, Annex N, Table 4.2)) and to show relevant changes to those assumptions, particularly if the funding made available is amended. This would pick up, for example, the £0.5m reduction made in the October Monitoring round and, potentially, other adjustments made/requested by DRD later in the year. [The Company has however confirmed that this £0.5m reduction has had no material impact on their ability to deliver their capital programmes efficiently nor has it materially affected the delivery of outputs.]

We therefore suggest that Block A would be enhanced if broken down as follows:

1a PE capital budget, as assumed in the FD

1b PE budget allocated by DRD at the beginning of the reporting year

1c PE capital budget available at Report Year end (which should align closely with that reported in current line 2, PE capital budget used)

This should help to differentiate between, and to generate comment on, externally imposed amendments to funding, and changes in expenditure caused by capital programme management.

We also note some potential differences between the make-up of the PE budget as assumed in PC13 and how the PE budget made available is calculated. In particular, there has been a recent change in the way in which PPP Capital Maintenance has been calculated, from the annually varying figure charged by the PPP concessionaire [x] to a straight-line figure [x]. Whilst both sum to the same figure over the remaining period of the PPP, there can be considerable differences in particular years. This change was recommended by the financial auditors in 2013/14 and we understand is consistent with the principle used for the PC15 business plan submission. NI Water clearly notes this in their commentary and they also detail how the accrual/pre-payment will be treated.

4.2 Block B

Line 2 – PE capital budget used (£165.540m)

This has been correctly calculated from the numbers which follow in the table.

The Company commentary notes the [x] against the PE budget and a further year-end adjustment to the budget has been provisionally agreed with DRD. Following this adjustment, there is a remaining [x] (<0.01%).

The Company has provided a copy of their provisional outturn return of 28th April 2014.

Line 3 – Alpha PPP Maintenance [x]

As noted above, there has been a change in accounting procedure for this component of the budget.

We have also seen evidence of:

- 2012/13 Final Report from KPMG advising of risks of incorrect accounting for the unitary charge associated with the previous model.
- Confirmation in KPMG's 2013/14 report that the issue has been addressed: a constant circa [x] per annum is to be charged to the P&L account, rather than the widely varying amount paid to the PPP.
- [NB - The figure in the table is defined in NI Water's commentary as the 'accrued' amount, we note that this is the amount 'charged' and the accrual/prepayment would be the difference between the [x] and the actual expenditure.]

- PC15, Appendix 5.3, Table 4.5b which shows that a smoothed profile has been assumed for PC15.

The small discrepancy between the line 3 entry (of [x]) and Table 42 Line 14 (of [x]) is as a result of the above accounting procedure.

Line 4 - Residual interest off balance sheet PPP [x]

The guidance indicates that the entry on this line should be consistent with Table 42 Line 15. The Company commentary, identifies the same figures as in Table 42 Line 15 and correctly sums them for the purposes of this line.

Line 5 – IFRS infrastructure renewals charge adjustment (£0.988m)

We understand that there were detailed discussions with the financial auditors in 2010 when the accounting policy to deal with the differences between IFRS Repairs and UKGAAP IRE were being established. This concluded that any leakage detection & repair costs (which were classed as IRE under UK GAAP) would require adjustment for IFRS. The basis for this was capital allocations set by the UR with the PC10 FD (annex N table 3.25 on p55) which reallocated c.90% of leakage detection & repair costs from capex to opex but left [x] within Base.

We queried where the equivalent, but opposite (receipt) is made to operational budgets. The Company confirmed this by reference to PC13 FD, Annex F, where table 9.4 shows the UR's forecast of Resource (opex) DEL, which includes the c. £1m allowance for IFRS capex transferred in to opex.

Lines 6 & 6a (£zero) – no comment

Line 6b – Further adjustments – Rounding (£0.013m)

- Immaterial - No concerns

Line 7 – Capital grants and contributions (£6.586m)

- As required, the number stated is fully consistent with that in Table 37 Line 17. No further comment.

Line 8 – Capital G&C transferred to deferred credits (-£0.693m)

- As required, the number stated is fully consistent with that in Table 37 Line 18. No further comment.

Line 9 – NI Water Gross Capital Budget (£167.566m)

As stated, the number is fully consistent with that in Table 36 Line 13. No further comment.

5. Assumptions

Except where noted above we do not believe there are any material assumptions to report.

6. Confidence grades

Not applicable.

7. Consistency checks

We can confirm that:

- Line 4 = Table 42 Line 15
- Line 7 = Table 37 Line 17
- Line 8 = Table 37 Line 18
- Line 9 = Table 36 Line 13

For Line 3, please see our commentary above for details.

Table 37 – Capital Investment - Capital Grants and Contributions

1. Introduction

The purpose of this table is to set out the source of the grants and capital contributions received by NI Water.

2. Key findings

- The data presented in this table can be traced back to the working papers supporting the audited statutory accounts.
- Based on our audit of sample data we believe that the data reported in this table is consistent with the reporting requirements.

3. Audit approach

We have reviewed supporting information provided by NI Water that was used to complete the statutory accounts.

As part of our audits of financial data we liaised with KPMG to share key findings. This was done at a tripartite meeting between the Reporter, KPMG and NI Water.

4. Audit findings

Line 2: Infrastructure renewals grants and contribution

Data reported of £114k. This data relates to cost code 8739, Diversion of Watermains.

Line 4: Infrastructure charge receipts - new connections

The Gross value of £1.27m can be traced back to the Company working papers used to compile the statutory accounts. The value relates to receipts received from developers for water infrastructure charges. The charge here relates to water.

Line 5: Enhancement requisitions, grants and contributions

The value here relates to new water connections and water requisitions. The reported figure can be traced back to Company working papers used to compile the statutory accounts.

Line 6.1: Other categories of capital grants and contributions to be added by NI Water

NI Water has entered Nil in this line.

Line 8: Capital grants and contributions transferred to deferred credits

This is the element of line 4 that relates to receipts from developers for water infrastructure that are deemed by NI Water and its accountants to relate to non-infrastructure expenditure.

Line 10: Infrastructure renewals grants and contributions

This relates to the realignment of sewers, cost centre 8738. The data can be traced back to Company working papers used to compile the statutory accounts.

Line 12: Infrastructure charge receipts - new connections

The Gross value of £1.04m can be traced back to the Company working papers used to compile the statutory accounts. The value relates to receipts received from developers for water infrastructure charges. This is the sewerage equivalent of line 4.

Line 13: Enhancement requisitions, grants and contributions

The value of £2.02m relates to new sewerage connections, sewer requisitions and sewer adoptions. The reported figure can be traced back to Company working papers used to compile the statutory accounts.

Line 14.1: Other categories of capital grants and contributions to be added by NI Water

NI Water has entered Nil in this line.

Line 16: Capital grants and contributions transferred to deferred credits

This is the element of line 12 that relates to receipts from developers for water infrastructure that are deemed by NI Water and its accountants to relate to non-infrastructure expenditure.

Table 38 – Capital Investment - Capital Grants and Contributions

1. Introduction

The purpose of this table is to set out identify the operating cost impact of capital expenditure.

2. Key findings

- The information is extracted from various reports before being consolidated and aggregated to report data in this table. We have reviewed the aggregated spreadsheet and calculations on a sample basis and found no shortcomings.
- Based on our audit of sample data we believe that the data reported in this table is consistent with the reporting requirements. There may be some scope for improving allocations which we will explore in AIR15.

3. Audit approach

We have reviewed the supporting information provided to us by NI Water. This is in the form of summary data extracted from various reports from NI Water's corporate systems.

As part of our audits of financial data we liaised with KPMG to share key findings. This was done at a tripartite meeting between the Reporter, KPMG and NI Water.

4. Audit findings

NI Water now records costs at works by CAR ID using the cost to serve project. We note that the cost to serve project does not in itself record all costs by works. The Company method compares opex costs by CAR ID in 2012/13 with the costs by CAR ID in 2013/14. The Asset Type is used to split costs between water and sewerage. Assets identified as Waste Water Treatment Works and Sewerage Pumping Stations are reported as sewerage costs. Water Pumping Stations, Water Treatment Works, Service Reservoirs and Depots are reported as water costs.

Lines 1 and 2: Additional OPEX arising from Water and Sewerage Services projects

The analysis is based on various reports compiled into a single spreadsheet. We have reviewed the aggregation of the data and the entries on a sample basis. We found no shortcomings in this analysis. We did not review the detail underlying the spreadsheet during AIR14. We will review this in our audits for AIR15.

Line 3: Total additional OPEX

This is simply a calculated line.