B3 MAINTAINING SERVICE AND SERVICEABILITY TO CUSTOMERS

Outline

The company should summarise the year by year delivery of outputs over the period to maintain service and serviceability to current and future customers and the environment.

The company should identify the minimum levels of activity that it considers will be necessary to maintain delivery of the outputs.

The company should set out how it has arrived at its assessment of the operating expenditure and capital maintenance expenditure needs to deliver these services.

Some additional tables have been incorporated to allow separate identification of PPP activities – these requirements may be amended and/or extended around PC12.

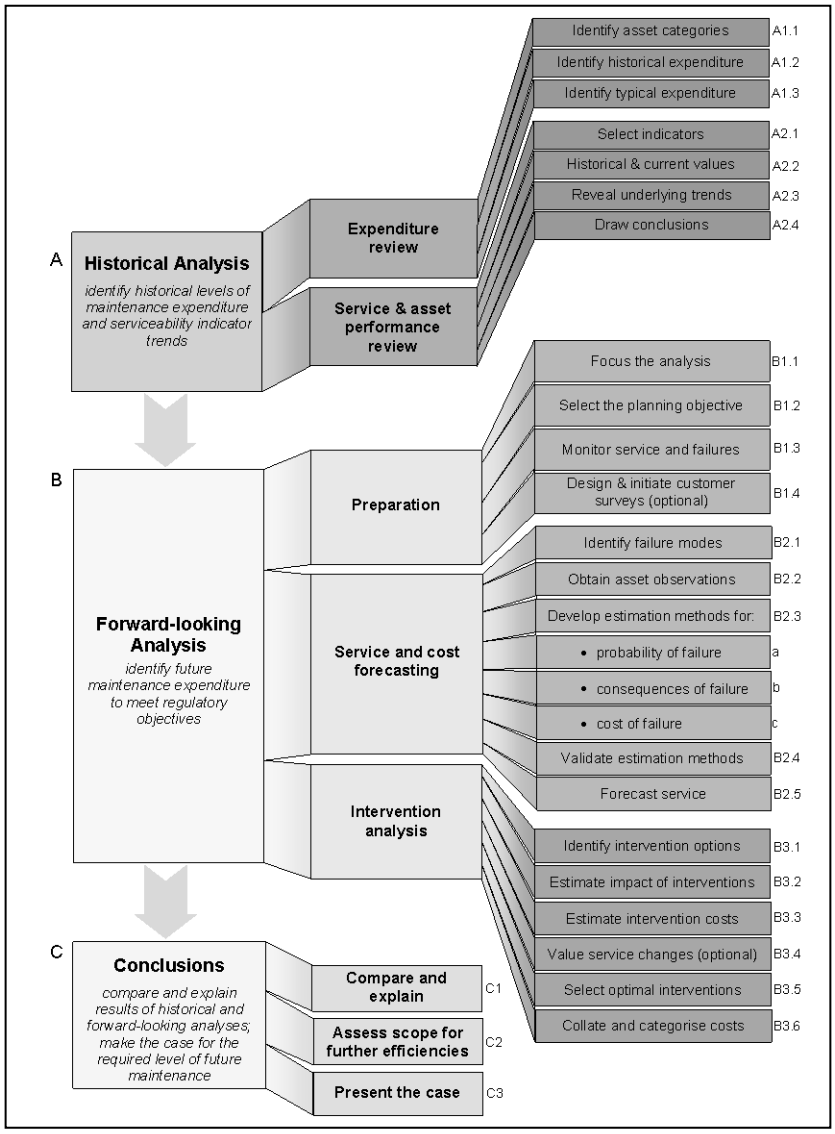
It is for the company to assess its capital maintenance needs so as to maintain stable trends in serviceability to customers, whilst delivering improving services or meeting higher quality standards.

The common framework provides a consistent basis for companies to estimate their future capital maintenance requirements to meet two possible objectives:

1) a cost effective objective, appropriate for providing steady or improving service, to be used to justify base service provision;
2) a cost benefit objective, appropriate for justifying an enhanced level of service.

The data tables B3-5 to B3-8 are to be completed in respect of base service provision only. Any proposal to enhance levels of service that require additional funding is to be provided in tables B6-3 and B6-4 under section B6 and detailed in the company commentary to section B6.

THE COMMON FRAMEWORK FOR CAPITAL MAINTENANCE PLANNING *Source: UKWIR Report Ref: No. 02/05/3*



We consider that the common framework offers a best practice approach to robustly estimate future capital maintenance requirements whilst recognising alternative analyses may prove preferable. At the present time the company may feel it is unable to achieve a fully developed common framework approach. Whatever alternative analysis is employed by the company, we expect to see a fully reasoned and rational methodology for estimating capital maintenance requirements for PC10.

As a minimum, the company's approach needs to incorporate a staged approach whose prime focus is the stage B assessment of the impact of future changes that might make it necessary to have a different level of activity to that which has been sufficient in the past.

We encourage its application for the PC10 business plan with the expectation that the company will use its expert judgements where information gaps exist and adhere, for the present, as closely as possible to the principles underlying the

common framework. We expect such company judgements to be clearly explained and exposed to scrutiny by the Reporter.

Where the company deviates from the common framework approach for PC10 they shall include details of arrangements, plans and attendant projected costs to enable a full common framework approach at PC12.

The four stages of our staged approach are outlined below.

Stage A – Maintaining serviceability to customers to date

Understanding past performance, serviceability and company actions necessary to deliver these outcomes**.**

Stage B – Is the future period different?

Understanding any underlying concerns in the asset systems to be maintained, particularly where these result in different challenges than had been met in the past. Essentially what would be different about the next period that would necessitate changes in the typical levels of activity that had been sufficient in the past?

Stage C – Scope for improvements in efficiency

Understanding the relative efficiency of each company, both in terms of its approach to capital maintenance and capital works, and the potential for even the best performing company to improve its efficiency over the next price limit period. Our established "triangulation" processes will inform this, including but not limited to the use of econometric modelling and capital works unit costs (the cost base).

Stage D – Impact of the enhancement programmes

Understanding the implications of each company's enhancement programmes for the base capital maintenance programme. This will be informed by information contained in the quality enhancement and other projects spreadsheet in part C5.

Commentary

We suggest that part B3 should be divided into six sections covering the water service and six sections covering the sewerage service.

Maintaining service and serviceability for customers	
Water service	
Section 1	Introduction • Process chart and explanatory statement • Planning objectives
Section 2	Stage A - **Maintaining serviceability to customers to date**
Section 3	Stage B - Is the future different? • Distribution zone studies • Forward looking analysis • Conclusions
Section 4	Stage C - Scope for improvements in efficiency
Section 5	Stage D - Impact of the enhancement programmes • Water quality improvements • Maintaining supply / demand balance • Enhanced service levels
Section 6	Further table commentaries
Sewerage service	
Section 7	Introduction • Process chart and explanatory statement • Planning objectives
Section 8	Stage A - **Maintaining serviceability to customers to date**
Section 9	Stage B - Is the future different? • Drainage area plans • Forward looking analysis • Conclusions
Section 10	Stage C - Scope for improvements in efficiency
Section 11	Stage D - Impact of the enhancement – programmes • Environmental quality improvements • Maintaining supply / demand balance • Enhanced service levels
Section 12	Further table commentaries

This structure should provide a framework for the company to explain its assessment of its strategy for maintaining service and serviceability for customers during the NIAMP3 period and beyond.

SECTION 1 and 7: Introduction

Process chart and explanatory statement

The company should provide a process chart and a statement to show and explain how the output of various studies and analyses feed into the company's economic assessment and optimisation of capital maintenance to maintain serviceability to customers and the environment, in line with Ofwat's MD161 and the common framework for capital maintenance planning (or other analysis if NIW is unable to achieve a fully developed CF approach).

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Planning objectives

The company is obliged to meet the cost effectiveness objective. The company should confirm their proposal does this. The company should also identify any enhanced levels of service, which meet the cost benefit objective. Where the cost benefit objective is being applied, the company should describe how it has taken account of the value of any resulting improvement in service to customers and the environment, which is expected to be quantified on the basis of customer surveys.

SECTION 2 and 8: Stage A - Maintaining serviceability to customers to date

The company should identify and review historical levels of maintenance expenditure and serviceability trends. The expenditure review should identify asset categories (infrastructure, non-infrastructure and subsets) to identify historical and typical expenditure by sub-category. This should include a review of cost allocation, particularly the capex / opex interface and make appropriate adjustments in the respective tables from 2010-11 to ensure alignment with current Regulatory Accounting Guidelines.

The company should review service and asset performance and selected indicators, including but not limited to, those used by NIAUR. The review should look at historical and current values, reveal underlying trends with explanations where this is not evident from the data alone, and draw conclusions as to whether serviceability to customers and the environment is stable.

The company should confirm that the information system which it uses indicates whether the serviceability of the water mains is either satisfactory or questionable in respect of compliance with water quality obligations.

SECTION 3 and 9: Stage B - Is the future different?

Understanding water distribution and sewerage systems

The guiding principles of distribution zone studies and drainage area plans are an important adjunct to the process, which should inform a company's assessment of investment needs at both area and company level. As well as asset information, the company should include an explanation of how customer information, such as complaints of low water pressure, interruptions to water supply and sewer flooding is

incorporated into the plans, and used to inform company strategy to maintain and improve serviceability to customers. The company should also explain the extent to which new technology (field and office) has been employed in informing an integrated approach to understanding their asset systems, to updating their underground asset management plans as required by their Licence and in anticipating and prioritising the need for investment.

The company is also required to provide:

- a clear statement of the coverage and format of company distribution zone and drainage area planning tools, indicating the population served in each zone/area, the degree of compliance of the studies and plans with the definitions set out in tables 11 and 16 of AIR08 Reporting Requirements Manual and the frequency and manner at which the studies and plans are updated.

- a schedule of all distribution zones and drainage areas, indicating those for which studies and planning have been carried out, those that are in progress, the date when initial studies were completed and the date of the last update of each study and plan. The company should also state the population served in each zone and area. This schedule should also show the links between these zones or areas and the divisions between different sections of the company asset network, in cases where the company operates its assets in different zones and areas to those covered by the studies and plans. Where the company takes a more dynamic approach to updating, the schedule should indicate particular aspects that are under continuous or routine review, and those that are static, together with an indication of how often each aspect is updated.

- a reconciliation between the number of studies and plans reported as complete by the company with the figures reported in AIR08, tables 11 and 16, identifying any studies and plans completed;

- a typical distribution zone study (water only undertakers) and a typical drainage area plan (water and sewerage undertakers), identifying aspects that are under continuous or routine review, and those that are static, together with an indication of how often each aspect is updated, and how. This supporting documentation should be provided separately as an annex to this part of the business plan. Due to the variety of electronic formats and systems that any company may use, we are only able to accept paper copy examples, as evidence of the studies, which should be sufficient to illustrate how it undertakes them.

Forward looking analysis

The company should identify future maintenance expenditure to meet regulatory objectives. The company should describe its preparation work, service and cost forecasting and intervention analysis. This should include a description of all the tools that it has used and critically, how it has validated its estimates with a statement of the robustness of its various forecasts of service and related costs. The company should also explain, at the appropriate points, how information from its distribution studies and drainage plans is used to inform the forward-looking analysis.

The company's preparation work should summarise, for each asset category (broadly: infrastructure, non-infrastructure, water and sewerage service) in free format or tabular form, how it has:

- focussed the analysis;
- selected the planning objective;
- monitored service and failures; and
- designed & initiated customer surveys (where applicable).

The focus of the analysis should be identified for or within each asset category and reasons given for the selection of the planning objectives.
The company should provide a clear statement describing any proposed enhanced service levels derived from the cost benefit objective approach under the common framework together with supporting information. The company should identify and describe its information and procedural systems for monitoring service and reporting failures, giving an indication of the degree of validation of the data so captured and its reliability for using in forecasting. Details of any customer surveys associated with cost benefit objectives should be set down, including alignment with best practice and advice obtained from NIAUR and CCNI.

The company should describe its service and cost forecasting, identifying asset failure modes and relevant asset observations, and report the extent to which the company has recorded such information, and its plans to develop a historical record for the future. This should explain how it has:

- identified failure modes and effects;
- obtained asset observations;
- developed estimation methods for:
  - probability of failure;
  - consequences of failure; and
  - cost of failure.
- validated estimation methods; and
- forecast service.

The failure mode and effect analysis (FMEA) and related studies should include an explanation of how asset deterioration is being monitored to inform future performance and timely intervention.

The company is advised that we consider validation is critical to the credibility of the process and robustness of the proposal.

The company should describe its intervention analysis, including:

- options identified;
- the impact of interventions;
- intervention costs; and
- for cost benefit objectives, how it has valued service,

The company should set down and explain how it has selected its optimal interventions and its reasoning. This should include reference to the tools it has used for:

- economic assessment and optimisation;
- cost benefit analyses, where relevant;
- customer information;
- compliance information;
- asset observations; and
- distribution and drainage area studies.

The company should describe the results of sensitivity analyses, how it has identified optimal interventions, together with the rationale behind any judgmental decisions.

The company should summarise its findings, having collated and categorised its cost forecasts, and where relevant, benefits to customers and/ or the environment.

The company should set down the justification for the operating expenditure projections that it has assumed as necessary for the NIAMP3 period, including sensitivity analyses.

The company must submit to the Reporter copies of any studies or plans that are requested by him. The company should also be prepared to provide NIAUR with copies of any studies mentioned in the plan on request.

Conclusions

The company should set down the basis for the company policies, operating practices and planned routine maintenance activities that it considers will be necessary and underpin its expenditure projections. It should identify any changes to or reinforcement of existing policy resulting from the application of the common framework to capital maintenance planning. The company will wish to refer to the activity projections set down in tables A4 and A5. These tables provide for reporting significant capital maintenance activity measures.

The company should compare and explain the results of the forward-looking analysis and make a robust case for the required level of capital maintenance. This should include an assessment for the scope for further efficiencies.

In making the case, the company should highlight perceived weaknesses in data or information, where it has made value judgements and whether and where shortfalls in desirable data or information have materially affected conclusions.

The company should identify the costs of gaining additional information that they would look to recover in future price limits, and the expected improvement this would bring to the robustness of the case, in broad statistical terms, at subsequent reviews.

SECTION 4 and 10: Stage C - Scope for improvements in efficiency

The company should explain the impact of its overall assumed efficiency improvement profile on capital maintenance, highlighting key areas.

SECTION 5 and 11: Stage D - Impact of the enhancement – programmes

The company should make the case and set down the impact on base service outputs resulting from a planned change in performance of assets, whether through capital or operational expenditure.

The company should explain its assumptions regarding any overlap with capital maintenance expenditure and how these assumptions are represented in its proposed interventions.

The company should show that they have considered and factored in the long-term implications to capital maintenance for each enhancement programme.

SECTION 6 and 12: Further table commentaries

Base Service outputs, expenditure and accounting charges

Having made its case, the company should set down the decisions it has made as to the base service performance it has assumed for NIAMP3 as set down in its company strategy and summarised in A2 and A3. The numerical base service outputs are to be set down in tables B3-1 and B3-2. However, these tables only represent some of the base service outputs and objectives that the company will want to maintain over the NIAMP3 period and the company may wish to add further details in the supporting text.

Operating expenditure necessary to deliver the base service outputs

The operating expenditure figures will have been summarised in tables A7 and A8 of the company strategy. A structured approach to the derivation of operational expenditure forecasts is called for in tables B3-3 and B3-4. The company may wish to add further details in the supporting text.

Capital maintenance expenditure and associated accounting charges necessary to deliver the base service levels

The capital maintenance expenditure and associated accounting charges necessary to deliver the base service levels will have been summarised in tables A7 and A8 of the company strategy. A structured approach to the derivation of these forecasts is called for in tables B3-5, B3-6, B3-7 and B3-8 with separate tables for the maintenance of infrastructure and non-infrastructure assets. The company may wish to add further details in the supporting text.

Guidance to Reporter

The Reporter should provide an overview of the company's approach in order to:

- confirm the suitability of the company's procedures and systems to provide data to inform analyses of risk to serviceability;

- comment on the extent to which best practice has been followed, identifying gaps in procedural steps and its effect on the quality of study outputs;

- comment on the implications of the company asset management information system for proportional allocation rules used by the company when assigning expenditure to either quality or capital maintenance and whether these rules have changed since the company SBP;

- comment on the linkage of the company's stated policies on maintenance and serviceability with the conclusions and proposals in the company's commentary; and

- comment on the extent to which the company has validated its assumptions and judgements, where it has made them, and their limitations or constraints this has on the company's proposals and conclusions.

The Reporter should confirm whether:

- the process chart and explanatory statement does fairly reflect how the output of various studies and analyses feed into the company's economic assessment and optimisation of capital maintenance to maintain serviceability to customers and the environment in line with or otherwise Ofwat's MD161 and the common framework for capital maintenance planning;

- the company's explanation of how customer information, such as complaints of low water pressure, interruptions to water supply and sewer flooding are incorporated into company asset management plans, and used to maintain and improve serviceability to customers fairly reflects actual practice by the company; and

- the distribution zone study and drainage area plan (as appropriate) appended to this submission are typical of the standard of studies and plans used by the company for the purposes of asset management planning.

The Reporter should review and comment on the company's chosen asset observations, and failure mode and effect analysis (FMEA) or other analyses and the adequacy of the process which incorporates them into company asset management plans, and used to maintain and improve serviceability. Factors which should be considered are:

  - relevance of the asset observations to the impact of failure;
  - reliability of the data;

- appropriateness of the analyses;
- degree of judgement exercised by the company, and limitations of the analyses;
- robustness of the company's approach, particularly in respect of deterioration analyses; and
- potential improvements in data reliability by the next review.

Where a company has made a proposal for an enhanced level of service, then the Reporter will comment on the factual content of the evidence presented in the report. The Reporter should comment on whether customer surveys were robust, including reporting on his challenges of the company's assumptions and survey conclusions and to report the findings of such challenges.

The Reporter should comment on the adequacy of company distribution zone studies and drainage area plans for the purposes of maintaining up to date underground asset management plans. He/she should audit a sample of the company's studies and plans and provide a statement as to whether in the Reporter's professional opinion, the scope and detail of the studies and plans is sufficiently comprehensive for the purposes of efficient management and operation of underground assets. In selecting the sample, the Reporter should take account of the population served in each zone/area and in other respects, shall ensure that the sample taken is representative of the asset networks.

Factors that should be considered are;

- the coverage of the entire distribution and drainage systems;
- the degree of compliance of the studies and plans with the definitions set out in tables 11 and 16 of AIR08 Reporting Requirements Manual;
- the frequency at which the studies and plans are updated; and
- the company understanding of the relationship of each zone/area with others, particularly in respect of water quality;

Tables

The Reporter should review the links between tables B3-5 to B3-8 and A2, to A5 and B3-1/B3-2 and confirm whether a consistent approach has been used between output delivery, activity and expenditure. Where the company has provided alternative tables to reflect proposed enhanced service levels, the Reporter should review these and confirm their accuracy.

Tables B3-1 and B3-2 - Maintaining service and serviceability - base service output projections.

Guidance for the company:

Tables 3-1 and B3-2 are for the company to set out its projected base service standard which it expects to maintain by the end of the period 2010-11 to 2011-12. This standard of outputs should be at least as good as that prevailing in 2007-08 and, where appropriate, also reflect stepped improvements in service standards that will have been achieved during the current price limit period. Base service standards for 2010-11 to 2011-12 should not exceed those expected in 2009-10, except where the company is in the process of restoring stable serviceability as a result of regulatory action.

The company's activity projections in table A4 and A5 and the expenditure projections for capital maintenance (tables B3-5, B3-6, B3-7, B3-8) and base operating expenditure (tables B3-3 and B3-4) should be the amount required to maintain this level of service.

Four blocks of information and data are required for table B3-1 and three blocks for B3-2. These are in addition to those reported in tables A2 and A3.

- Blocks A and B in both tables relate to service performance and quality/environmental compliance for the water service B3-1 and the sewerage service B3-2.
- Block C in table B3-1 concerns the key output projections for the customer service.
- Block D in table B3-1 and Block C in table B3-2 provide information for the outputs associated with the company's physical assets.

Blocks A, B and C for table B3-1 - service performance, quality and environmental compliance and customer service

For each measure of base service output projections the company is required to provide the following information**.**

- The company's annual performance in the period for the three years of its SBP. The last two years will be a projection.
- The base service level of performance that the company will deliver as a minimum by the end of the NIAMP3 and NIAMP4 periods. It is recognised that the standards and requirements for drinking water quality will change during the NIAMP3 period. These projections should be based on current Regulations.
- All customer service measures are included on table B3-1. There is no corresponding customer service block in table B3-2.

Block D and C (table B3-2)– Other measures of serviceability to customers

For each measure of performance or compliance, the company is required to set down:

- the actual performance and compliance in 2007-08;

- profiled performance and compliance for 2008-09 and 2009-10; and

- the base service level of performance and compliance by the end of the NIAMP3 and NIAMP4 that the company is committed to deliver as a minimum. This must be related to the previous best performance plus any improvements in performance expected in the final 2 years of the SBP period.

The company is asked to report and forecast the number of main bursts a year per 1,000km of water mains and the number of unplanned interruptions to supply exceeding 12 hours. If the company provides sewerage services then it is asked to report and forecast the rate of sewer collapses sewer blockages and equipment failures.

If the company uses other measures of serviceability to customers, the company is asked to explain these in its commentary and their relation to the company's planning.

TABLE B3-1

KEY COMPONENTS – Maintaining service and serviceability

Table B3-1 – WATER SERVICE - Base service & serviceability

It is recognised that standards and regulations may be subject to change. The company should fill in historical information on defined obligations and note assumptions made when dealing with future obligations.

Block A – Key output projections – reliability and continuity

1	DG2 Properties at risk of receiving low pressure	nr
Definition	The total number of properties in the undertakers' area of water supply which, at the end of the year, have received and are likely to continue to receive a pressure or flow below the reference level	
Processing rules	AIR T2 L3	
Responsibility	Comparative Efficiency & Performance Team	

2	DG3 Supply interruptions (overall performance score)	nr (2dp)
Definition	Reflects the percentage of properties in the company's area affected by unplanned and unwarned supply interruptions greater than 6 hours, 12 hours and 24 hours, as reported in Table 2 Annual Information Return lines 6, 7 and 8. The sum of (% greater than 6 hrs multiplied by 1) plus (% greater than 12 hrs multiplied by 1) plus (% greater than 24 hrs multiplied by 2).	
Processing rules	AIR T(A) L2	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Key output projections – water quality

3	Water treatment works coliform non-compliance	% (2dp)
Definition	The number of water treatment works with determinations containing coliforms as a percentage of the number of determinations of water leaving treatment works taken at frequencies required by the 'Water Supply (Water Quality) Regulations (Northern Ireland) 2007'. This information is given in the Drinking Water Inspectorate's Annual Report in the calendar year on drinking water quality in Northern Ireland. This information may need to be amended after the publication of the DWI Report.	
Processing rules	AIR T(A) L21	
Responsibility	Network Regulation Team	

4	% Bacteriological samples from SRs failing standard	%(2dp)
Definition	The percentage of planned samples taken in the calendar year at service reservoir outlets in which coliforms were detected. (Note: This is the number of samples taken that contain coliforms, expressed as a percentage. It is not the percentage of service reservoirs with coliforms detected in more than 5% of samples.)	
Processing rules	Input field	
Responsibility	Network Regulation Team	

5	% mean zonal non-compliance for faecal coliforms	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which one or more planned samples from consumers' taps contained faecal coliforms during the calendar year.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

6	% mean zonal non-compliance for pesticides	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which one or more planned samples from consumers' taps exceeded the maximum concentration for individual pesticides during the calendar year, that is 0.1µg/l.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

7	% mean zonal non-compliance for Trihalomethanes (THMs)	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which one or more planned samples from consumers' taps exceeded the prescribed concentration for THMs during the calendar year, that is 100µg/l	
Processing rules	Input field	
Responsibility	Network Regulation Team	

8	% mean zonal non-compliance for aluminium	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which one or more planned samples from consumers' taps exceeded the prescribed concentration for aluminium during the calendar year, that is 200µg/l.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

9	% mean zonal non-compliance for manganese	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which one or more planned samples from consumers' taps exceeded the prescribed concentration for manganese during the calendar year, that is 50µg/l.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

10	% mean zonal compliance with the PCV for lead.	% (2dp)
Definition	The percentage of water supply zones in the company supply area in which no planned samples from consumers' taps exceeded the prescribed concentration for lead during the calendar year. The prescribed concentration will vary with the calendar year 25µg/l until December 2013 and then 10µg/l.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

Block C – Key output projections – customer service

11	% mean zonal compliance with the PCV for iron at the tap	% (2dp)
Definition	The percentage mean zonal compliance with the iron parameter taken according to the current Drinking Water Quality Regulations during the calendar year. This is the same measure reported on a calendar year basis by DWI in the Report on Drinking Water Quality in Northern Ireland. (This information may need to be amended after the Chief Inspector's report is published)	
Processing rules	Input field. AIR T (A) L13	
Responsibility	Network Regulation Team	

12a	Number of WTW where turbidity 95%ile greater than or equal to 0.5NTU	nr (0dp)
Definition	The number of operational potable water treatment works and sources whose turbidity 95 percentile equals or exceeds a 0.5 NTU threshold. Calculate 95 percentile value using all data from regular routine sampling of final water from sources for the calendar year. Minimum of 30 water samples where the works is in production for more than 11 months of the year. Otherwise, a minimum of 30 samples, less one sample per unit of four weeks that the works is not in supply. The maximum time interval between data samples is 28 days where works is in production for more than 11 months of the year, otherwise 28 days less one per unit of four weeks not in supply.	
Processing rules	Input field. AIR T11a L1 C1	
Responsibility	Comparative Efficiency & Performance Team	

12	Statutory Mechanism Actions considered for microbiological standards	nr
Definition	The number of appropriate statutory mechanism actions (formal notices or enforcements) considered by the DWI for a breach of microbiological standards during the calendar year.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

13	DG6 % billing contacts dealt with within 5 days	% (1dp)
Definition	The percentage of billing contacts responded to within 5 working days.	
Processing rules	AIR T4 L4	
Responsibility	Comparative Efficiency & Performance Team	

14	DG7 % written complaints dealt with within 10 days	% (1dp)
Definition	The percentage of written complaints responded to within 10 working days.	
Processing rules	AIR T5 L3	
Responsibility	Comparative Efficiency & Performance Team	

15	DG8 % metered customers receiving bill based on a meter reading	% (1dp)
Definition	The percentage of metered customers receiving a bill during the year based on a meter reading taken by either the company or the customer.	
Processing rules	Input field: The denominator for this line is calculated by deducting metered accounts excluded from indicator (AIR T5 L7) from total metered accounts (AIR T5 L6). The numerator is company or customer reading (or both) (AIR T5 L9)	
Responsibility	Comparative Efficiency & Performance Team	

16	DG9 % calls abandoned	%(1dp)
Definition	The percentage of calls received which were abandoned before a company agent could substantively answer them, or where recorded messages (or answering machine or touch tone telephones or automatic transactions or interactive response systems) are used, before completion of the relevant message.	
Processing rules	Input field: The denominator is AIR T5 L13 and the numerator is AIR T5 L15	
Responsibility	Comparative Efficiency & Performance Team	

17	DG9 % calls receiving the engaged tone	% (1dp)
Definition	The percentage of all calls on customer contact lines receiving the engaged tone (or a message informing the caller that all lines into the company are busy and that the caller should try again later).	
Processing rules	Input field: The denominator is AIR T5 L13 plus L14 and the numerator is AIR T5 L14	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Other measures of serviceability to customers – water service

18	Number of burst mains per 1,000km	nr
Definition	Mains bursts include all physical repair work to mains from which water is lost which is attributable to pipes, fittings, or joint material failures or movement, or caused or deemed to be caused by conditions or original pipe laying or subsequent changes in ground conditions (such as changes to road formation, loading, etc where the costs of repair cannot be recovered from a third party). Include ferrule failures that are attributable to mains material condition or local ground movements, but not incidents of ferrule failure due to ferrule materials or poor workmanship, or associated with the communication pipe connection. Exclude maintenance work on valve packings, hydrant seals, air valves etc. For the avoidance of doubt, all leakage occurring at locations or through joint or material failures which should have been designed for the life of the main (irrespective of whether earlier failure occurs) should be regarded as mains bursts. Failure of consumable or maintainable items (valve packings etc) should be classified as leakage. Also include incidents of over-pressure or pressure cycling, and surge failures etc. which reflect the system operation conditions even where these failures are accidental rather than associated with weaknesses in pipe condition. All third party damage should be excluded where costs are potentially (rather than actually) recovered from a third party. If these incidents are significant they should be reported in the commentaries.	
Processing rules	AIR T11 L11	
Responsibility	Network Regulation Team	

19	DG3 unplanned interruption to supply exceeding 12 hours	nr
Definition	The number of properties affected by interruptions of more than 12 hours duration to supply which are unplanned except for those caused directly by third parties. It includes interruptions for which customers are notified less than 48 hours in advance.	
Processing rules	AIR T2 L7	
Responsibility	Comparative Efficiency & Performance Team	

TABLE B3-2

Table B3-2 – Sewerage service – Base service output projections

Block A – Key output projections – sewerage system performance

1	DG5 Properties at risk of flooding (2 in 10 years)	nr
Definition	The total number of properties at risk of flooding more than twice in ten years – at end of year	
Processing rules	AIR T3 L12	
Responsibility	Comparative Efficiency & Performance Team	

3	DG5 Properties at risk of internal flooding (1 in 20 years)	nr
Definition	The total number of properties at risk of internal flooding more than once in twenty (but less than 1 in 10) years – at end of year.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

2	DG5 Properties at risk of flooding (1 in 10 years)	nr
Definition	The total number of properties at risk of flooding more than once in ten (but less than 2 in 10) years – at end of year.	
Processing rules	AIR T3 L13	
Responsibility	Comparative Efficiency & Performance Team	

7	DG5 Properties internally flooded in year due to overloaded sewers excluding severe weather	nr
Definition	Number of properties affected by internal flooding due to overloaded sewers – at end of year.	
Processing rules	AIR T3 L2	
Responsibility	Comparative Efficiency & Performance Team	

8	DG5 Properties internally flooded in year due to other causes	nr
Definition	The number of properties affected by flooding incidents from equipment failures, blockages or collapses (collectively grouped as other causes) – at end of year. A property affected by more than one incident under this definition is reported as one property in this line.	
Processing rules	AIR T3 L6	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Key output projections – environmental compliance

9	Areas flooded externally due to overloaded sewers, excluding severe weather	nr
Definition	Number of areas affected by external flooding in year due to overloaded sewers, excluding severe weather- at end of year.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

10	Areas externally flooded in year due to other causes	nr
Definition	The number of areas in year affected by flooding incidents from equipment failures, blockages or collapses (collectively grouped as other causes) - at end of year.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

11	% non-compliance against UV disinfection	% (2dp)
Definition	The percentage of works consented to apply UV disinfection, which do not meet the requirements of their UV consent. Works should be included if the effluent discharge fails to meet the microbiological requirements of the consent.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

12	Number of pollution incidents (High or Medium category)	nr
Definition	The total number of High and Medium category pollution incidents reported by the NIEA for waterways in the company's licensed area. This is the total number of pollution incidents relating to water and sewerage as reported by NIEA to NIAUR each year.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

13	Number of pollution incidents (Low category)	nr
Definition	The total number of Low category pollution incidents reported by the NIEA for waterways in the company's licensed area. This is the total number of pollution incidents relating to water and sewerage as reported by NIEA to NIAUR each year.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

14	% of sewage sludge disposed of unsatisfactorily	% (1dp)
Definition	The percentage of the total sewage sludge, calculated on a dry solids basis, which was not disposed of in a manner which conformed with the appropriate statutory requirements.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

13a	Number of pollution incidents (High, Medium or Low category) from infrastructure assets	nr
Definition	The total number of High, Medium or Low category pollution incidents reported by the NIEA for waterways in the company's licensed area. This is the total number of pollution incidents relating to water and sewerage as reported by NIEA to NIAUR each year. This includes pollution incidents from foul sewers, CSOs and rising mains.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

15	% of consented flow not monitored	% (1dp)
Definition	The percentage of the sewage treated at works with a flow consent which was not subject to flow monitoring.	
Processing rules	Input field	
Responsibility	Network Regulation Team	

16	% of WwTWs non compliant (Water (NI) Order numeric consents)	% (1dp)
Definition	Percentage of wastewater treatment works with Water Order numerical discharge consents which were sampled by the NIEA in the calendar year and found not to be compliant with either or both the sanitary and non-sanitary consent conditions.	
Processing rules	AIR T(B) L8	
Responsibility	Network Regulation Team	

16b	% of wastewater treatment works discharges failing numeric consents	% (1dp)
Definition	The percentage of wastewater treatment works discharges with numerical discharge consents found to be non-compliant with sanitary or non-sanitary consent conditions in the calendar year The total number of works should include both those failing Water Order consents and UWWTD self-monitored consents.	
Processing rules	AIR T(B) L22	
Responsibility	Network Regulation Team	

16a	% of WwTWs non compliant (UWWTD Consents)	% (1dp)
Definition	Percentage of Wastewater treatment works with Urban Waste Water Treatment Directive consents, which were sampled by the company in the calendar year, and found to be non-compliant with any of the consent conditions.	
Processing rules	AIR T(B) L9	
Responsibility	Network Regulation Team	

16c	% of total pe served by WwTWs in breach of Water Order consent (LUT)	% (1dp)
Definition	Percentage of the total population equivalent served by wastewater treatment works, (sampled by the company on behalf of NIEA) during the calendar year , which were non-compliant with their Water Order look-up table consent conditions. Equivalent population should be calculated on the basis of 60g BOD_5 per capita per day. No account should be taken of holiday population.	
Processing rules	AIR T(B) L10	
Responsibility	Network Regulation Team	

16d	% of total pe served by WwTWs in breach of UWWTD consent (LUT)	% (1dp)
Definition	Percentage of population equivalent served by wastewater treatment works with Urban Waste Water Treatment Directive consents, which were sampled by the company in the calendar year, and found to be non-compliant with look-up table consents for biochemical oxygen demand (BOD) and/or chemical oxygen demand (COD) and/or phosphorus (P) and also nitrogen where appropriate.	
Processing rules	AIR(B) L11	
Responsibility	Network Regulation Team	

Block C – Other output & serviceability projections – sewerage service

17	Number of sewer collapses	nr (0dp)
Definition	Total number of sewer collapses Include collapses of gravity sewers and repairs to rising mains, even where failures are accidental rather than weakness in pipe condition. This should not include third party damage where costs may be recovered from a third party.	
Processing rules	AIR T16a L1 plus L2	
Responsibility	Network Regulation Team	

19	Number of equipment failures	nr (0dp)
Definition	The total number of sewerage equipment failures which are likely to have a detrimental impact on service to customers or the environment. 'Equipment' includes • Pumping stations (foul, surface water or combined) • Overflows (CSO and emergency) • Penstocks • Anti-flood valves • Vacuum sewerage systems • Storage tanks • Flow control devices (e.g. Hydrobrakes) • Real-time telemetry control systems • Oil interceptors • Chemical dosing.	
Processing rules	AIR T16a L4	
Responsibility	Network Regulation Team	

18	Number of sewer blockages	nr (0dp)
Definition	Number of sewage blockages that require cleaning. Exclude blockages cleared as good will on private sewers and private drains. A blockage is an obstruction in a sewer which causes a reportable problem (not caused by hydraulic overload), such as flooding or discharge to a watercourse, unusable sanitation, surcharged sewers or odour.	
Processing rules	AIR T16a L3	
Responsibility	Network Regulation Team	

Base service operating expenditure
Guidance to company: Tables B3-3 and B3-4.

In Block A the company is required to input the operating expenditure for 2007-08. This should be consistent with the data reported in the Annual Information Return 2007-08.

In Block B the company should report the net adjustments to the Block A number that it regards as being above or below normal continuing expenditure for the base service. Full explanations of these adjustments should be included in the text. Unusually low expenditure, for example arising from a temporary reduction in pension contributions, should also be quantified and explained.

Block C provides for the company adjustments (up or down) to the adjusted base year to reflect its assessment of its **base service needs** for the NIAMP3 period. These are divided into two adjustments:

- associated with the quality enhancement programmes (but not any additional opex included in tables B4-3 and B4-4);
- associated with capital maintenance (but not any additional opex included in tables B5-5, B6-3 and B6-4); and
- other adjustments (but not those included in other expenditure tables).

Company should quantify and explain the components of these adjustments in the supporting text, providing supporting information where appropriate.

Blocks D brings forward the company assumptions on efficiency improvements from tables B2-2 and B2-3 to calculate a forecast of base service operating expenditure.

Guidance to Reporter

The Reporter shall confirm or otherwise that the unadjusted operating expenditure for the base service in 2007-08 agrees with total operating expenditure (excluding exceptional items) reported in tables 21 and 22 of the 2007-08 Annual Information Returns

TABLE B3-3

Table B3-3 - Water service - Base service operating expenditure projections

Block A – Base year (2007-08) actual

1	Operating expenditure in 2007-08	£m (3dp)
Definition	The company's actual total water service operating expenditure for the regulated business in 2007-08	
Processing rules	AIR T21 L22	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted base year	£m (3dp)
Definition	Normal ongoing operating expenditure for 2007-08, after adjusting for atypical and exceptional items	
Processing rules	Calculated field - sum of lines 1 and 2	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Adjustments to the base year

2	Net adjustments to actuals	£m (3dp)
Definition	Company's assessment of the net adjustment to actual operating expenditure that is needed to reflect normal ongoing expenditure for the water service, for example a positive adjustment for a short term pension holiday and a negative adjustment for millennium bug costs, restructuring provisions, etc. The adjustment removes exceptional and atypical expenditure in 2007-08.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block C - Adjustments to post SBP projections

4	Special operating expenditure adjustments	£m (3dp)
Definition	Company's assessment of adjustments to normal ongoing base service provision operating expenditure to cater for changed situations (for example a known future charge from N Ireland Environment Agency). Exclude adjustments for improving efficiency.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

5	Adjustments associated with “Q” programmes	£m (3dp)
Definition	Projected downward adjustments to base operating expenditure where “Q” programmes generate savings on base service maintenance and running costs.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

6	Adjustments associated with capital maintenance programmes	£m (3dp)
Definition	Projected adjustments (+/-) to base operating expenditure where alignment of expenditure to Regulatory Accounting Guidelines and/or optimal interventions, generate changes to base service maintenance and running costs. These changes align with adjustments to capital maintenance expenditure identified in tables B3-5 and B3-6.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted operating expenditure projections	£m (3dp)
Definition	Projected total operating expenditure after adjustment for exceptional and atypical items in the base year 2007-08 and for changes in circumstances affecting base service expenditure, and including adjustments for expenditure associated with “Q” and capital maintenance programmes. This projection excludes any efficiency adjustment.	
Processing rules	For 2007-08 copied field from line 3. For 2008 – 09 onwards calculated field: the sum of lines 3 (column 1) plus lines 4, 5 and 6.	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Efficiency improvements

8	Overall compounded assumed efficiency improvement profile (base)	% (1dp)
Definition	The overall cumulative improvement in water service base operating efficiency resulting from catch-up in relative efficiency plus ”frontier” shift.	
Processing rules	Values copied from table B2-2 line 4 for 2007-08 to 2012-13. Calculated field for NIAMP4 Average next 4 years: Table B2-2 (Line 4 2013-14 times Line 4 2014-15 times Line 4 2015-16 times Line 4 2016-17) to the power of 0.25	
Responsibility	Comparative Efficiency & Performance Team	

9	Operating expenditure projection	£m (3dp)
Definition	Projected total operating expenditure for the water service, including all efficiency improvements, adjustments for changed circumstances and for "Q" and capital maintenance programmes.	
Processing rules	Calculated field: line 7 multiplied by (1 – line 8/100)	
Responsibility	Comparative Efficiency & Performance Team	

TABLE B3-4

Table B3-4 - Sewerage Service – base service operating expenditure projections

Block A – Base year (2007-08) actuals

1	Operating expenditure in 2007-08	£m (3dp)
Definition	The company's actual total sewerage service operating expenditure for the regulated business in 2007-08	
Processing rules	AIR T22 L23	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted base year	£m (3dp)
Definition	Normal ongoing operating expenditure for 2007-08, after adjusting for atypical and exceptional items	
Processing rules	Calculated field: sum of line 1 plus line 2	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Adjustments to the base year

2	Net adjustments to actuals	£m (3dp)
Definition	Company's assessment of the net adjustment to actual operating expenditure that is needed to reflect normal ongoing expenditure for the sewerage service, for example a positive adjustment for a short term pension holiday and a negative adjustment for millennium bug costs, restructuring provisions, etc. The adjustment removes exceptional and atypical expenditure in 2007-08.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block C – Adjustments to post SBP projections

4	Special operating expenditure adjustments	£m (3dp)
Definition	Company's assessment of adjustments to normal ongoing base service provision operating expenditure to cater for changed situations (for example a known future charge from N Ireland Environment Agency). Exclude adjustments for improving efficiency.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

5	Adjustments associated with “Q” programmes	£m (3dp)
Definition	Projected downward adjustments to base operating expenditure where “Q” programmes generate savings on base service maintenance and running costs.	
Processing rules	Input field.	
Responsibility	Comparative Efficiency & Performance Team	

6	Adjustments associated with capital maintenance programmes	£m (3dp)
Definition	Projected adjustments (+/-) to base operating expenditure where alignment of expenditure to Regulatory Accounting Guidelines and/or optimal interventions, generate changes to base service maintenance and running costs. These changes align with adjustments to capital maintenance expenditure identified in tables B3-7 and B3-8.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted operating expenditure projections	£m (3dp)
Definition	Total projected operating expenditure after adjustment for exceptional and atypical items in the base year 2007-08 and for changes in circumstances affecting base service expenditure, and including expenditure associated with "Q" programmes. This projection excludes any efficiency adjustment	
Processing rules	For 2007-08 copied field from line 3. For 2008 –09 onwards calculated field: the sum of lines 3 (column 1) plus lines 4, 5 and 6.	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Efficiency improvements

8	Overall compounded assumed improvement profile (base)	% (1dp)
Definition	The overall cumulative improvement in water service base operating efficiency resulting from catch-up in relative efficiency plus ”frontier” shift.	
Processing rules	Values copied from table B2-3 line 4 for 2007-08 to 2012-13. Calculated field for NIAMP4 Average next 4 years: Table B3 (Line 4 2013-14 times Line 4 2014-15 times Line 4 2015-16 times Line 4 2016-17) to the power of 0.25	
Responsibility	Comparative Efficiency & Performance Team	

9	Operating expenditure projection	£m (3dp)
Definition	Projected total operating expenditure for the sewerage service, including all efficiency improvements, adjustments for changed circumstances and for "Q" and capital maintenance programmes.	
Processing rules	Calculated field: line 7 multiplied by (1 – (Line 8/100))	
Responsibility	Comparative Efficiency & Performance Team	

Tables B3-5 to B3-8 – Maintaining service and serviceability to customers – base service output projections.

Guidance for company

The four tables B3-5, B3-6, B3-7 and B3-8 provide for a more detailed assessment of the company's forecast capital maintenance expenditure, split between the infrastructure networks and surface assets, for both the water and sewerage services.

The key forecasts relate to the NIAMP3 period 20010-11 to 2011-12, but these are supplemented by the three years of the SBP for the historical trend projections.

The tables also include the company forecast for 2012-13 and then the average annual forecast of expenditure for the balance of the NIAMP4 period. Forecasts for the NIAMP5 period are provided for if the company considers there is likely to be material changes that influence its assessment of the infrastructure renewals charge or to demonstrate comparability between maintenance non-infrastructure expenditure and current cost depreciation.

All expenditure numbers should be presented in 2007-08 prices.

For infrastructure asset tables B3-5 and B3-7, six blocks of information are required. For non-infrastructure asset tables B3-6 and B3-8, only five blocks of information are required. The block breakdown follows Ofwat's published framework for assessing water company capital maintenance needs. The adjustments in the table are cumulative.

Block A – Historical expenditure and serviceability assessment.

Average level of actual capital maintenance expenditure taken from data as far back as appropriate rolled forward into the NIAMP3, NIAMP4 and NIAMP5 periods will require to be input to the tables. Capital maintenance expenditure is that which the company has reported as associated with the preservation of assets to maintain serviceability to customers. If the company is forecasting material changes in capital maintenance expenditure for 2008-09 and 2009-10 it should explain why this is the case.

Block A, line 2, provides for the first possible adjustment to the average actual expenditure. The company should make this adjustment for variance with or changes in accounting practices in the period, and in particular ensure alignment of capex and opex expenditures with the latest Regulatory Accounting Guidelines (Jan 03) under WR3, in particular RAG 2.03 and RAG 4.02. These adjustments should be explained in the text. Line 3 calculates the revised line 1 taking account of the line 2 adjustment. Operational expenditure removed by this adjustment should be taken into account in adjustments to base operating expenditure in block C of tables B3-3 and B3-4.

Block A, line 4, provides for the company to review line 3 to identify the *typical* level of *current* capital maintenance expenditure. The results should be 'typical' in the sense that variations due to weather effects or one-off significant expenditures should be reduced by averaging over the period. The results derived should be 'current' in the sense that they take account of any trends observed across the period. These adjustments and key steps of calculations should be set down and explained in the text. Line 5 calculates the revised line 3 taking account of the line 4 adjustment.

Block A, line 6, provides for the company to adjust the typical level of current maintenance expenditure. This is a correction to reveal underlying trends. The aim is to identify where changes other than maintenance have affected the observed indicator trends and make adjustments and to draw conclusions as to whether historical capital maintenance would have been adequate to maintain or improve service if all other factors had remained constant. The company should make this adjustment where it considers it necessary to increase or decrease its level of capital maintenance expenditure in the light of its most recent assessment of its performance in delivering serviceability to customers, as reported in tables A2, A3, B3-1 and B3-2 and through the recent Annual Information Returns. A judgement should be reached as to whether the typical current expenditure identified in line 5 should be increased or decreased, or whether no judgement can be made. In isolated cases it may be possible to estimate in this step the likely change that would be required to correct for any underlying deterioration. In all but a few cases the quantification of any required change will require a forward looking analysis and adjustment in block B. These adjustments, or the absence (in part or in full) in favour of a forward look, should be explained in the text. Line 7 calculates the revised line 5 taking account of the line 6 adjustment.

Block B – Is the future period different?

This is the key area of focus for the common framework (or other analysis where NIW is unable to achieve a fully developed common framework approach). It takes into account the historical analysis (Block A) and adds a focused, forward looking analysis, taking into account probability, consequences and cost of asset failure. Intervention options are considered and conclusions drawn as to which is optimal, thus explaining whether capital maintenance expenditure in the future period might be different.

The company should review its asset stock and consider the extent to which associated service risks and maintenance costs in the future will be different from the past. Where, in judging the assets, it concludes that there is a need to increase or decrease the amount of capital maintenance it set down in line 7 to sustain stable serviceability to customers, this should be set down in line 8. This adjustment might, for example, be associated with a change in the rate of deterioration of its assets, or the ageing of its asset base that is not reflected in levels of capital maintenance activity derived in line 7. The adjustment may also include optimisation of interventions and/or related re-balancing of operational costs. Adjustments to operating costs relating to base service are to be included in block C of tables B3-3 and B3-4. In all instances adjustments for these reasons should be explained fully in the text.

Block C – Scope for improvements in efficiency

Block C carries forward the company assumptions on efficiency improvements from tables B2-2 and B2-3 to calculate the forecast of the capital maintenance expenditure.

Block D – Impact of the enhancement programmes

The proportionally allocated costs for the enhancements are captured for quality enhancements in tables B4-3 and B4-4, for maintaining the supply / demand balance in table B5-5 and service enhancements in tables B6-3 and B6-4.

Block D of tables B3-5 to B3-8 allows adjustments to the planned capital maintenance to account for the impact of enhancement programmes on base maintenance needed to maintain the current base service levels. Because base maintenance expenditure is a projection (albeit modified by line 11) from past expenditure, it carries forward elements of capital maintenance allocation from past enhancement programmes.

Where the company considers that the recent or projected quality enhancement, supply/ demand and service enhancement programmes affects its view of the right level of capital maintenance activity then adjustments should be set down in lines 12, 13 and 14 respectively. In all instances adjustments for these reasons will need to be explained fully in the text.

We would expect these arguments to be along the lines of identifying where there is a material change in the scale or scope of future enhancement programmes compared to the past, resulting in different levels of benefit to capital maintenance in maintaining serviceability. For example, if there is a programme to alleviate sewer flooding which is significantly larger than in the past, replacing and/or upsizing sewers may have collateral benefits for several serviceability and asset performance indicators. This would result in a reduction in the amount of net capital maintenance expenditure required going forward.

Block E – Capital maintenance expenditure

Line 16 contains the overall capital maintenance expenditure including future scope for improvements in efficiency. Line 17 (and line 19 in tables B3-6 and B3-8) provides for the company's forecasts relating to grants and contributions received for capital maintenance. The resulting net capital maintenance expenditure after deducting grants and capital contributions is calculated in line 18.

Block F – Accounting charges (tables B3-5 and B3-7 only)

These three lines link the infrastructure renewals expenditure with the infrastructure renewals charge and the resulting accrual or prepayment. The expenditure is required in 2007-08 cost terms (ie taking account of the company's assessment of Relative Price Effect).

The closing balance sheet accrual and prepayment reported in 2007-08 should be the same as that reported in AIR08.

The commentary should explain the linkages between the IRE and IRC and should set out the basis of the IRC projections. Where a calculation for the IRC other than a 15 year charge is used, the commentary should clearly explain how the IRC has been calculated and the rationale for the basis of calculation selected. Where the IRC specifically takes account of the windout of any accrual or prepayment the impact of this on the IRC and the period over which any windout had been considered should also be explained.

Where at the end of 2011-12 a company projects accrual or prepayment, the commentary should explain the period over which the company expects this to reverse in future and whether this is expected to be through a change in the level of future IRE or IRC.

Guidance to Reporter

The Reporter should challenge the company and comment on the reasons provided by them for each stepped change to the historical level of expenditure in Block A. The Reporter should also comment on whether, in his opinion, the company has failed to carry out adequate capital maintenance to maintain stable serviceability to customers during the SBP period. Reporter should also ensure that any adjustments made up to line 11 reflect the company's opinion of expenditure required to allow the continuation of current levels of base service and not be expenditure aimed at delivering improved service. Reporter should check that such expenditure has been included in tables B6-3 and B6-4. Reporter should also check that the adjustments due to re-allocation of operating expenditure are appropriately reflected in tables B3-3 and B3-4.

In Block B the Reporter should comment on the size of any adjustment made to reflect the results of the asset inventory and the reasons given for any changes to the historical level of asset maintenance.

In Block D, the Reporter should comment on the robustness of the company's explanation of expenditure on enhancements set down in sections B4, B5 and B6 of the adjustments made in lines 12, 13 and 14.

In Block E, the Reporter should comment on company projections for grants and contributions for capital maintenance (non-infra only), particularly where a company is projecting significant changes in the level of grants and contributions during NIAMP3. For infrastructure, Block E should reflect changes in grants relative to the level current recorded in net IRE during the SBP. Where the level of grants is expected to continue at the current level, zero should be entered.

In Block F, the Reporter should comment on whether the basis of calculation for the infrastructure renewal charge is reasonable and consistent with the method of calculation used in the regulatory accounts. Where line 20 does not equal the difference between line 19 and line 18, the Reporter should note this in his commentary, and include an explanation of why this is the case.

The Auditor should confirm that the accrual and prepayments reported in line 21 for 2007-08 agree to the value recorded in the 2007-08 regulatory accounts.

The investment activity assumptions underlying this table should be the same as those reported in tables A4 and A5 and also refer to the base service standards projected in tables B3-1 and B3-2. Reporter should verify that this is the case.

Reporter should also confirm that the unit costs used to generate investment projections from these activity assumptions are consistent with the information supplied in the cost base.

TABLE B3-5

Table B3-5 – Water service – Base service capital maintenance expenditure projections line definitions

Infrastructure assets

Block A – Historical expenditure and serviceability assessments

1	Projection of average trend	£m (3dp)
Definition	Company should enter projected expenditure for the preservation and (where necessary) the replacement of water service assets defined as infrastructure in RAG2.03 under WR3, to maintain serviceability. Expenditure is to be reported net of (i.e. after deducting) grants and capital contributions. Expenditure projection for subsequent periods is provided from existing returns.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

2	Adjustment to align with latest RAG (Jan 2003) (+/-)	% (1dp)
Definition	Adjustment to the average actual expenditure for variance with or changes in accounting practices in the period, and ensure alignment with latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets).	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted projection to align with latest RAG (Jan 2003)	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the adjustment to align with latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets).	
Processing rules	Calculated field: line 1 multiplied by (1 plus (line 2 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

4	Adjustment for typical level of current capital maintenance expenditure (+/-)	% (1dp)
Definition	Adjustment to derive the typical level of current capital maintenance expenditure. The results should be 'current' in the sense that they take account of any trends observed across the period.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

5	Typical level of current capital maintenance expenditure	£m (3dp)
Definition	Effect of applying the adjustment in line 4 to line 3.	
Processing rules	Calculated field: line 3 multiplied by (1 plus (line 4 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted projection to reflect serviceability judgement	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the stepped adjustment to the historical trend level to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Calculated field: line 5 multiplied by (1 plus (line 6 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Is the future period different?

6	Serviceability assessment – underlying trend adjustment to line 5 projections (+/-)	% (1dp)
Definition	Projected stepped change in infrastructure renewals expenditure required to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

8	Adjustment to line 7 to reflect outcome of applying the Common Framework or other analysis (+/-)	% (1dp)
Definition	Having reviewed its asset stock and how associated service risks and maintenance costs in the future compare with the past, projected stepped change in infrastructure renewals expenditure required to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

9	Adjusted projection to reflect asset judgement	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the stepped adjustments to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Calculated field: line 7 multiplied by (1 plus (line 8 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block C – Scope for improvements in efficiency

10	Overall compounded assumed efficiency improvement profile	% (2dp)
Definition	The overall year on year improvement in water service capital maintenance (infrastructure) efficiency from both catch-up in relative efficiency and minimum improvements achievable by the most efficient firms, relative to recent historical levels of expenditure.	
Processing rules	For 2007-08 to 2012-13 copied from table B2-2 line 14. Average NIAMP4 next four years calculated field: Table B2-2 (Line 14 2013-14 times line 14 2014-15 times line 14 2015-16 times line 14 2016-17) to the power of 0.25	
Responsibility	Comparative Efficiency & Performance Team	

11	Adjusted projection to reflect scope for efficiency	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the overall year on year improvements in water service capital maintenance (infrastructure) efficiency.	
Processing rules	Calculated field: line 9 multiplied by (1(minus line – 10 divided by 100))	
Responsibility	Comparative Efficiency & Performance Team	

13	Adjustment to line 11 to reflect supply/demand programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned supply/demand improvements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Impact of the – enhancement programmes on base service provision

12	Adjustment to line 11 to reflect "Q" programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned quality enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

14	Adjustment to line 11 to reflect service enhancements programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned service enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

15	Adjusted projection to reflect enhancement programmes	£m (3dp)
Definition	Effect on infrastructure renewals expenditure (net of efficiencies) of the stepped adjustments to the historical trend level in line 2, 4, 6, 8, and 10 above.	
Processing rules	Calculated field: line 11 plus lines 12, 13 and 14	
Responsibility	Comparative Efficiency & Performance Team	

17	Changes in grants and capital contributions for maintenance	£m (3dp)
Definition	Effect on net water IRE of projected changes in the level of grants and capital contributions expected by the company relating to water infrastructure renewals expenditure.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block E – Capital maintenance expenditure

16	Net CM expenditure (infrastructure)	£m (3dp)
Definition	Projected total net water capital maintenance infrastructure expenditure (i.e. after deducting grants and capital contributions), taking account of recent expenditure levels and adjustments in lines 2, 4, 6, 8, 10, 12, 13 and 14.	
Processing rules	Copied / calculated field: 2007-08 to 2009-10copied from line 1and 2010-11 onwards copied from line 15	
Responsibility	Comparative Efficiency & Performance Team	

18	Net CM expenditure (including effect of changes in grants and capital contributions)	£m (3dp)
Definition	Projected total net water capital maintenance infrastructure expenditure (i.e. after deducting grants and capital contributions)taking account of projected changes in the level of grants and contributions	
Processing rules	Calculated field: line 16 minus line 17.	
Responsibility	Comparative Efficiency & Performance Team	

19	Grants and capital contributions for infrastructure maintenance	£m (3dp)
Definition	Grants and capital contributions expected by the company relating to water infrastructure renewals expenditure as used to project the change in the level of expected grants and contributions as set down in line 18.	
Processing rules	Input (positive)	
Responsibility	Comparative Efficiency & Performance Team	

21	Infrastructure renewals charge	£m (3dp)
Definition	The annual provision for expenditure on the renewal of infrastructure assets charged to the profit and loss account. The infrastructure renewals charge should reflect the company's views on the windout of any accrual or prepayment over the period 2010-12. Details of both the basis of calculation of the charge and any windout included should be given in the text.	
Processing rules	Input field (positive number)	
Responsibility	Comparative Efficiency & Performance Team	

Block F – Accounting charges

20	Infrastructure renewals expenditure (2007-08 cost terms)	£m (3dp)
Definition	Company forecast of infrastructure renewals in 2007-08 cost terms, after updating by the company forecast of the Relative Price Effect.	
Processing rules	Calculated field line 18 x (1 + (table A7 line 15 divided by 100)	
Responsibility	Comparative Efficiency & Performance Team	

22	Closing balance sheet accrual or prepayment	£m (3dp)
Definition	The provision of the closing balance sheet for the date accumulated shortfall (excess) between infrastructure renewals expenditure and the infrastructure renewals charge.	
Processing rules	Input field. An accrual should be input as negative, a prepayment as positive.	
Responsibility	Comparative Efficiency & Performance Team.	

TABLE B3-6

Table B3-6 – Water service – Base service capital maintenance expenditure projections line definitions

Non-infrastructure assets

Block A – Historical expenditure and serviceability assessments

1	Projection of average trend	£m (3dp)
Definition	Company should enter projected expenditure for the preservation and (where necessary) the replacement of water service assets defined as non-infrastructure in RAG2.03 under WR3, to maintain serviceability. Expenditure projection for subsequent periods is provided from existing returns. Expenditure is to be reported gross of (i.e. before deducting) grants and capital contributions.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

2	Adjustment to align with latest RAG (Jan 2003) (+/-)	% (1dp)
Definition	Adjustment to the average actual expenditure for variance with or changes in accounting practices in the period, and ensure alignment with the latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets).	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted projection to align with latest RAG (Jan 2003)	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the adjustment to align with latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets)	
Processing rules	Calculated field: line 1 multiplied by (1 plus (line 2 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

4	Adjustment for typical level of current capital maintenance expenditure (+/-)	% (1dp)
Definition	Adjustment to derive the typical level of current capital maintenance expenditure. The results should be 'current' in the sense that they take account of any trends observed across the period.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

5	Typical level of current capital maintenance expenditure	£m (3dp)
Definition	Effect of applying the adjustment in line 4 to line 3	
Processing rules	Calculated field: line 3 multiplied by (1 plus (line 4 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

6	Serviceability assessment - underlying trend adjustment to line 5 projections (+/-)	% (1dp)
Definition	Projected stepped change in non-infrastructure maintenance expenditure required to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted projection to reflect serviceability judgement	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the stepped adjustment to the historical trend level to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Calculated field: line 5 multiplied by (1 plus (line 6 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Is the future period different?

8	Adjustment to line 7 to reflect outcome of applying the Common Framework or other analysis (+/-)	% (1dp)
Definition	Having reviewed its asset stock and how associated service risks and maintenance costs in the future compare with the past, projected stepped change in non-infrastructure renewals expenditure required to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

9	Adjusted projection to reflect asset judgement	£m (3dp)
Definition	Effect on non-infrastructure maintenance – expenditure of the stepped adjustments to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Calculated field: line 7 multiplied by (1 plus (line 8 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block C – Scope for improvements in efficiency

10	Overall compounded assumed improvement profile	% (2dp)
Definition	The overall year on year improvement in water service capital maintenance (non-infrastructure) efficiency from both catch-up in relative efficiency and minimum improvements achievable by the most efficient firms, relative to recent historical levels of expenditure.	
Processing rules	Copied field for 2007-08 to 2012-13 from table B2-2 line 19. NIAMP4 average next 4 years calculated field: Table B2-2 (Line 19 2013-14 times Line 19 2014-15 times Line 19 2015-16 times Line 19 2016-17) to the power of 0.25.	
Responsibility	Comparative Efficiency & Performance Team	

11	Adjusted projection to reflect scope for efficiency	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the overall year on year improvements in water service capital maintenance (non-infrastructure) efficiency.	
Processing rules	Calculated field: line 9 multiplied by (1 minus (line 10 divided by 100))	
Responsibility	Comparative Efficiency & Performance Team	

13	Adjustment to line 11 to reflect supply/demand programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned supply / demand improvements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Impact of the enhancement programmes on base service provision

12	Adjustment to line 11 to reflect "Q" programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned quality enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

14	Adjustment to line 11 to reflect service enhancements programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected water non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned service enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

15	Adjusted projection to reflect enhancement programmes	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure (net of efficiencies) of the stepped adjustments to the historical trend level in line 2, 4, 6, 8, and 10 above.	
Processing rules	Calculated field: line 11 plus line 12, 13 and 14	
Responsibility	Comparative Efficiency & Performance Team	

17	Grants and capital contributions for maintenance	£m (3dp)
Definition	Grants and capital contributions expected by the company relating to water maintenance non-infrastructure expenditure.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block E – Capital maintenance expenditure

16	Gross CM expenditure (non-infrastructure)	£m (3dp)
Definition	Projected total gross water capital maintenance non-infrastructure expenditure (i.e. before deducting grants and capital contributions), taking account of recent expenditure levels and adjustments in lines 2, 4, 6, 8, 10, 12, 13 and 14.	
Processing rules	Copied / calculated field: 2007-08 to 2009-10 copied from line 1 and 2010-11 onwards copied from line 15.	
Responsibility	Comparative Efficiency & Performance Team	

18	Net CM expenditure (non-infrastructure)	£m (3dp)
Definition	Projected total net water capital maintenance non-infrastructure expenditure (i.e. after deducting grants and capital contributions expected by the company in line 17).	
Processing rules	Calculated field: line 16 minus line 17.	
Responsibility	Comparative Efficiency & Performance Team	

TABLE B3-7

Table B3-7 – Sewerage service – Base service capital maintenance expenditure projections line definitions

Infrastructure assets

Block A – Historical expenditure and serviceability assessments

1	Projection of average trend	£m (3dp)
Definition	Company should enter projected expenditure for the preservation and (where necessary) the replacement of sewerage service assets defined as infrastructure in RAG2.03 under WR3, to maintain serviceability. Expenditure is to be reported net of (i.e. after deducting) grants and capital contributions. Expenditure projection for subsequent periods is provided from existing returns.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

2	Adjustment to align with latest RAG (Jan 2003) (+/-)	% (1dp)
Definition	Adjustment to the average actual expenditure for variance with or changes in accounting practices in the period, and ensure alignment with the latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets).	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted projection to align with latest RAG (Jan 2003)	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the adjustment to align with latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG 4.02 (operating costs and assets)	
Processing rules	Calculated field: line 1 multiplied by (1 plus (line 2 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

4	Adjustment for typical level of current capital maintenance expenditure (+/-)	% (1dp)
Definition	Adjustment to derive the typical level of current capital maintenance expenditure. The results should be 'current' in the sense that they take account of any trends observed across the period.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

5	Typical level of current capital maintenance expenditure	£m (3dp)
Definition	Effect of applying the adjustment in line 4 to line 3	
Processing rules	Calculated field: line 3 multiplied by (1 plus (line 4 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

6	Serviceability assessment – underlying trend adjustment to line 5 projections (+/-)	% (1dp)
Definition	Projected stepped change in infrastructure renewals expenditure required to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted projection to reflect serviceability judgement	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the stepped adjustment to the historical trend level to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Calculated field: line 5 multiplied by (1 plus (line 6 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Is the future period different?

8	Adjustment to line 7 to reflect outcome of applying the Common Framework or other analysis (+/-)	% (1dp)
Definition	Having reviewed its asset stock and how associated service risks and maintenance costs in the future compare with the past, projected stepped change in infrastructure renewals expenditure required to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

9	Adjusted projection to reflect asset judgement	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the stepped adjustments to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Calculated field: line 7 multiplied by (1 plus (line 8 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block C – Scope for improvements in efficiency

10	Overall compounded assumed efficiency improvement profile	% (2dp)
Definition	The overall year on year improvement in sewerage service capital maintenance (infrastructure) efficiency from both catch-up in relative efficiency and minimum improvements achievable by the most efficient firms, relative to recent historical levels of expenditure.	
Processing rules	Copied field for 2007-08 to 2012-13 from table B2-3 line 14. NIAMP4average next four years calculated field: Table B2-3 (Line 14 2013-14 times Line 14 2014-15 times Line 14 2015-16 times Line 14 2016-17) to the power of 0.25.	
Responsibility	Comparative Efficiency & Performance Team	

11	Adjusted projection to reflect scope for efficiency	£m (3dp)
Definition	Effect on infrastructure renewals expenditure of the overall year on year improvements in sewerage service capital maintenance (infrastructure) efficiency.	
Processing rules	Calculated field: line 9 multiplied by (1(minus line – 10 divided by 100))	
Responsibility	Comparative Efficiency & Performance Team	

13	Adjustment to line 11 to reflect supply/demand programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned supply / demand improvements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Impact of the enhancement programmes on base service provision

12	Adjustment to line 11 to reflect "Q" programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned quality enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

14	Adjustment to line 11 to reflect service enhancements programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage infrastructure renewals expenditure in line 11 needs to be adjusted in order to take account of the planned service enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

15	Adjusted projection to reflect enhancement programmes	£m (3dp)
Definition	Effect on infrastructure renewals expenditure (net of efficiencies) of the stepped adjustments to the historical trend level in line 2, 4, 6, 8 and 10 above.	
Processing rules	Calculated field: line 11 plus line 12, 13 and 14	
Responsibility	Comparative Efficiency & Performance Team	

17	Changes in grants and capital contributions for maintenance	£m (3dp)
Definition	Effect on net IRE of projected changes in the level of grants and capital contributions expected by the company relating to sewerage infrastructure renewals expenditure.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block E – Capital maintenance expenditure

16	Net CM expenditure (infrastructure)	£m (3dp)
Definition	Projected total net sewerage capital maintenance infrastructure expenditure (i.e. after deducting grants and capital contributions), taking account of recent expenditure levels and adjustments in lines 2, 4, 6, 8, 10,12, 13 and 14.	
Processing rules	Copied / calculated field: 2007-08 to 2009-10 copied from line 1and 2010-11 onwards copied from line 15.	
Responsibility	Comparative Efficiency & Performance Team	

18	Net CM expenditure (including effect of changes in grants and capital contributions)	£m (3dp)
Definition	Projected total net sewerage capital maintenance infrastructure expenditure (i.e. after deducting grants and capital contributions), but taking account of projected changes in the level of grants and contributions	
Processing rules	Calculated field: line 16 minus line 17.	
Responsibility	Comparative Efficiency & Performance Team	

19	Grants and capital contributions for infrastructure maintenance	£m (3dp)
Definition	Grants and capital contributions expected by the company relating to sewerage infrastructure renewals expenditure as used to project the change in the level of expected grants and contributions as set down in line 18.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

21	Infrastructure renewals charge	£m (3dp)
Definition	The annual provision for expenditure on the renewal of infrastructure assets charged to the profit and loss account. The infrastructure renewals charge should reflect the company's views on the windout of any accrual or prepayment over the period 2010-12. Details of both the basis of calculation of the charge and any windout included should be given in the text.	
Processing rules	Input field (positive number)	
Responsibility	Comparative Efficiency & Performance Team	

Block F – Accounting charges

20	Infrastructure renewals expenditure (2007-08 cost terms)	£m (3dp)
Definition	Company forecast of infrastructure renewals in 2007-08 cost terms, after updating by the company forecast of the Relative Price Effect.	
Processing rules	Calculated field: line 18 multiplied by (1 plus (table A7 line 15 divided by 100))	
Responsibility	Comparative Efficiency & Performance Team	

22	Closing balance sheet accrual or prepayment	£m (3dp)
Definition	The provision of the closing balance sheet for the date accumulated shortfall (excess) between infrastructure renewals expenditure and the infrastructure renewals charge.	
Processing rules	Input field. An accrual should be input as negative, a prepayment as positive.	
Responsibility	Comparative Efficiency & Performance Team	

TABLE B3-8

Table B3-8 – Sewerage service – Base service capital maintenance expenditure projections line definitions

Non-infrastructure assets

Block A – Historical expenditure and serviceability assessments

1	Projection of average trend	£m (3dp)
Definition	Company should enter projected expenditure for the preservation and (where necessary) the replacement of sewerage service assets defined as non-infrastructure in RAG2.03 under WR3, to maintain serviceability. Expenditure projection for subsequent periods is provided from existing returns. Expenditure is to be reported gross of (i.e. before deducting) grants and capital contributions.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

2	Adjustment to align with latest RAG (Jan 2003) (+/-)	% (1dp)
Definition	Adjustment to the average actual expenditure for variance with or changes in accounting practices in the period, and ensure alignment with the latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets).	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

3	Adjusted projection to align with latest RAG (Jan 2003)	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the adjustment to align with latest Regulatory Accounting Guidelines (issued Jan 2003) under WR3, in particular RAG2.03 (classification of expenditure) and RAG4.02 (operating costs and assets)	
Processing rules	Calculated field: line 1 multiplied by (1 plus (line 2 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

4	Adjustment for typical level of current capital maintenance expenditure (+/-)	% (1dp)
Definition	Adjustment to derive the typical level of current capital maintenance expenditure. The results should be 'current' in the sense that they take account of any trends observed across the period.	
Processing rules	Input	
Responsibility	Comparative Efficiency & Performance Team	

5	Typical level of current capital maintenance expenditure	£m (3dp)
Definition	Effect of applying the adjustment of line 4 to line 3.	
Processing rules	Calculated field: line 3 multiplied by (1 plus (line 4 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

6	Serviceability assessment - underlying trend adjustment to line 5 projections (+/-)	% (1dp)
Definition	Projected stepped change in non-infrastructure maintenance expenditure required to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

7	Adjusted projection to reflect serviceability judgement	£m (3dp)
Definition	Effect on non-infrastructure renewals expenditure of the stepped adjustment to the historical trend level to prevent a continued deteriorating or improving trend in serviceability to customers.	
Processing rules	Calculated field: line 5 multiplied by (1 plus (line 6 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block B – Is the future period different?

8	Adjustment to line 7 to reflect outcome of applying the Common Framework or other analysis (+/-)	% (1dp)
Definition	Having reviewed its asset stock and how associated service risks and maintenance costs in the future compare with the past, projected stepped change in non-infrastructure renewals expenditure required to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

9	Adjusted projection to reflect asset judgement	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the stepped adjustments to 1. Sustain a stable trend in serviceability to customers, and /or 2. Optimise interventions whilst maintaining a stable trend in serviceability to customers.	
Processing rules	Calculated field: line 7 multiplied by (1 plus (line 8 divided by 100)).	
Responsibility	Comparative Efficiency & Performance Team	

Block C – Scope for improvements in efficiency

10	Overall assumed efficiency improvement profile	% (1dp)
Definition	The overall year on year improvement in sewerage service capital maintenance (non-infrastructure) efficiency from both catch-up in relative efficiency and minimum improvements achievable by the most efficient firms, relative to recent historical levels of expenditure.	
Processing rules	For 2007-08 to 2012-13 copied from table B2-3 line 19. NIAMP3 average next four years calculated field: Table B2-3 (Line 19 2013-14 times Line 19 2014-15 times Line 19 2015-16 times Line 19 2016-17) to the power of 0.25.	
Responsibility	Comparative Efficiency & Performance Team	

11	Adjusted projection to reflect scope for efficiency	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure of the overall year on year improvements in sewerage service capital maintenance (non-infrastructure) efficiency.	
Processing rules	Calculated field: line 9 multiplied by (1 minus (line 10 divided by 100))	
Responsibility	Comparative Efficiency & Performance Team	

13	Adjustment to line 11 to reflect supply/demand programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned supply / demand improvements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block D – Impact of the enhancement programmes on base service provision

12	Adjustment to line 11 to reflect "Q" programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned quality enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

14	Adjustment to line 11 to reflect service enhancements programme	£m (3dp)
Definition	The amount (net of efficiencies) by which the projected sewerage non-infrastructure maintenance expenditure in line 11 needs to be adjusted in order to take account of the planned service enhancements expenditure (net of efficiency) proportionally allocated to capital maintenance.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

15	Adjusted projection to reflect enhancement programmes	£m (3dp)
Definition	Effect on non-infrastructure maintenance expenditure (net of efficiencies) of the stepped adjustments to the historical trend level in line 2, 4, 6, 8and 10 above.	
Processing rules	Calculated field: line 11 plus line 12, 13 and 14.	
Responsibility	Comparative Efficiency & Performance Team	

16	Gross CM expenditure (non-infrastructure)	£m (3dp)
Definition	Projected total gross sewerage capital maintenance non-infrastructure expenditure (i.e. before deducting grants and capital contributions), taking account of recent expenditure levels and adjustments in lines 2, 4, 6, 8, 10, 12, 13 and 14.	
Processing rules	Copied / calculated field: 2007-08 to 2009-10 copied from line 2010-11 onwards copied from line 15.	
Responsibility	Comparative Efficiency & Performance Team	

17	Grants and capital contributions for maintenance	£m (3dp)
Definition	Grants and capital contributions expected by the company relating to sewerage maintenance non-infrastructure expenditure.	
Processing rules	Input field	
Responsibility	Comparative Efficiency & Performance Team	

Block E – Capital maintenance expenditure

18	Net CM expenditure (non-infrastructure	£m (3dp)
Definition	Projected total net sewerage capital maintenance non-infrastructure expenditure (i.e. after deducting grants and capital contributions).	
Processing rules	Calculated field: line 16 minus line 17.	
Responsibility	Comparative Efficiency & Performance Team	