

**Southern Water Services Ltd**

Capital Maintenance Econometric Return

Reporter's Commentary

February 2008

**Halcrow Group Limited**

**Southern Water Services Ltd**  
Capital Maintenance Econometric Return  
Reporter's Commentary  
February 2008

**Halcrow Group Limited**

**Halcrow Management Sciences Limited**

Griffin House 135 High Street Crawley West Sussex RH10 1DQ  
Tel +44 (0)1293 434500 Fax +44 (0)1293 434599  
[www.halcrow.com](http://www.halcrow.com)

Halcrow Management Sciences Limited has prepared this report in accordance with the instructions of their client, Southern Water Services Ltd, for their sole and specific use. Any other persons who use any information contained herein do so at their own risk.

© **Halcrow Management Sciences Limited 2010**

**Halcrow Management Sciences Limited**  
Griffin House 135 High Street Crawley West Sussex RH10 1DQ  
Tel +44 (0)1293 434500 Fax +44 (0)1293 434599  
[www.halcrow.com](http://www.halcrow.com)

# **Southern Water Services Ltd**

## Capital Maintenance Econometric Return Reporter's Commentary

### Contents Amendment Record

This report has been issued and amended as follows:

Issue	Revision	Description	Date	Signed
1	0	Draft	22/02/2008	CAG
1	1	Draft	27/02/2008	PP
1	2	Revised Draft	28/02/2008	CAG
1	3	Final	29/02/2008	PP
2	3	Public Domain Version	19/10/2010	PP

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
	1.1 <i>Terms of Reference</i>	1
	1.2 <i>Audit Approach and Scope</i>	1
	1.3 <i>Company's Approach to Reporting the Data</i>	3

# 1 Introduction

## 1.1 *Terms of Reference*

Ofwat's Reporting Requirements were set out in its Capital Maintenance Econometric Return Reporting Requirements and Definitions Manual 2008. This document sets out the responsibilities of Company and Reporter/Auditor in connection with the 2008 Capital Maintenance Econometric Return to the Water Services Regulation Authority (Ofwat). Our ceiling costs for the work were confirmed in [REDACTED] letter of 19<sup>th</sup> December 2007.

The Terms of Reference require the Reporter to liaise with the Company's Financial Auditors if the Company has revised its sewerage expenditure data from previous June Returns or Regulatory Accounts. There is no expenditure data in this return and the MEA values are the same as those used for the 2004 Strategic Business Plan. Consequently, it has not been necessary to involve the Company's auditors.

As part of the CMER submission, we received a request on 19th December 2007 from Ofwat's Capital Efficiency Team for inclusion of colour coded summary tables following prescribed templates, to provide Ofwat's analysts with a ready means of assessing the acceptability of the Company's data. Although we appreciate the value of rapid assimilation of data, we consider that these templates risk oversimplifying the Reporter's opinion. The Company also has reservations regarding the use of the summary tables, which we were unable to satisfactorily resolve. As such, and in view of the non-mandatory nature placed on the submission of these summary tables, we have agreed with SRN that the summary table will not be submitted with this return. We have provided line-by-line commentaries for each table to provide Ofwat with the Reporter's opinion of data suitability.

## 1.2 *Audit Approach and Scope*

Most of the data used to compile the Company's submission have been previously reported to Ofwat in JR03 to JR07 or PR04 documentation. The data from PR04 and JR03 to 05 were not audited by us, as we were

only contracted by the Company to carry out this work from October 2005. We have therefore assumed that the actual reported data was correctly audited at the time of submission and have concentrated on changes to this reported data and areas where apportionment of reported data has been required to conform to the Reporting Requirements. We have been able to access the previous Reporter's submitted reports to identify whether there were any outstanding issues in relation to the Company's reported data.

We have followed the audit procedure set out in our '*Outline Audit Plan*', submitted to Ofwat in November 2007. We applied to our SRN audit work the same investigative process developed over the previous years of certification work with other companies and as described in previous submissions to Ofwat.

At SRN's offices, we reviewed the written documentation and data as it was made available and by staff interview we identified SRN's methodologies for compiling the Capital Maintenance Econometric Return.

We checked that the Company's reported data conforms to the Ofwat table and line definitions. Where differences have occurred we have notified Ofwat via our table commentaries in this report.

As described in our *Outline Audit Plan* we have:

- confirmed whether or not the submission has been prepared in accordance with the guidance issued by Ofwat;
- disclosed, (if not fully exposed in the Company submission) the material assumptions that underpin the explanatory factors and related expenditure for each Company or Company sub-area and the scope and extent to which these have been challenged by the Reporter (and /or the Auditor);
- given expert opinion on the material assumptions;
- noted significant areas where the Reporter's opinion is different from that of the Company;

- assessed the quality assurance procedures used in relation to the production of the submission;
- disclosed (if not fully exposed in the submission) and assessed the reasons for changes in information submitted previously, particularly:
  - *2004 Final Business Plan*
  - *June Returns 2002-03 to 2006-07*
- given an opinion of the Company's assessment of the accuracy and reliability of expenditure data and explanatory factors reported for the Company or each Company sub-area,
- reviewed and highlighted any modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

Where the Company has changed the number of sewerage reporting areas, we have

- confirmed or otherwise that the Company procedure for allocating expenditure is consistent with that used in the past;
- confirmed or otherwise that the Company's reasons for variations in overall totals of the sewerage areas compared to June Returns/ 2004 Final Business Plan (e.g. total length of sewers in **CM5**) are acceptable;
- confirmed or otherwise that the figures in **Table CM5 line 3** conform with section 24 of the **1935 Public Health Act**.

### 1.3

#### ***Company's Approach to Reporting the Data***

The Company has drawn the data in this return almost solely from the previous regulatory submissions and very little new data or analysis of prior data has been used. We observe that most of the SRN personnel compiling this data return were involved in the prior submissions and

that the analysis of data derived from interrogation of previously constructed databases (spreadsheets) was carried out with a full appreciation of the quality of the underlying data.

**Table CM1 – Water resources and treatment 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- SRN has changed the downloaded data for **Lines 1, 3, 18-21**, due to either better information or alignment to the Reporting Requirements.
- There are no other material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM1**, and where inaccuracies have been located SRN has looked to correct these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **table CM1** have been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

Guidance for SRN on the size bands of treatment works is included in Ofwat's general guidance for this return.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Total number of dams and impounding reservoirs

The table data is a copy of FBP04 **Table 11, line 1**. However, the Company has changed this number from the downloaded data as explained within SRN's commentary. For a reason which we have not been able to ascertain, although it is probably due to manual error, in FBP04 the Company omitted two reservoirs, in the form of bankside storage, from its data submission. We confirm that the first is at [REDACTED] which serves [REDACTED] WSW ([REDACTED]), the second is at [REDACTED] WSW (5MI).

Due to this corrected information SRN has updated the number of reservoirs from five to seven.

We note that reservoirs in relation to bulk imports are not included in the data.

We consider that the confidence grade of A1 is appropriate, although AX might also be appropriate on the basis of the small number reported.

## 6.2 Line 2 - Total capacity of dams and impounding reservoirs

**Line 2** originates from the data used for JR03. In order to align with the updated information for **line 1**, **line 2** has also been adjusted to allow for the two additional reservoirs, resulting in the addition of 550 MI to the capacity. The corrected figure has been input by the Company into **line 2**.

We consider that the confidence grade of A2 is appropriate on the basis that full records are used but note that '*as built*' capacities may not reflect true capacities accurately due to issues in construction, silt build up, etc.

## 6.3 Line 3 - Total length of raw water aqueducts

SRN has revised the data for **line 3**. The basis for the original data was the GIS database which was queried to calculate the length of raw water aqueducts. During preparation for CMER 2008, the Company has revisited the GIS data and found that a number of aqueducts had been misclassified as trunk mains on the database resulting in an incorrect assessment at FBP04.

The GIS data has now been manually reviewed by a senior member of staff and any known errors rectified. The updated database was then interrogated via a query to obtain the new figure. Thus although the reported figure has changed, the methodology behind the calculation has not altered.

We have noted that the [REDACTED] transfer aqueduct has been estimated using the GIS system to provide an approximate length to the nearest metre. This is due to no accurate data being available to the Company at the time of submission. We consider the estimation to be reasonable, if not a little over-specific given the scale of the measurement.

SRN has noted that some borehole mains may be missing from the count on GIS, however the Company considers this to be a small potential variation.

We consider that the confidence grade of B3 is appropriate due to the possibility of further unlocated errors in the GIS system and the estimate for the [REDACTED] transfer.

**6.4 Line 4 - Total number of intake and source pumping stations**

We can confirm that **Line 4** is the sum of FBP04 **Table C11, lines 13 & 14**. Given that both lines in FBP04 were assigned A1 confidence grades, we consider that the A1 grade assigned in this submission is appropriate.

**6.5 Line 5 - Total capacity of intake and source pumping stations**

**Line 5** has been derived from the FBP04 audit tables, with two corrections to the data, as detailed in SRN's commentary, resulting in an overall increase of 5,356 kW.

This process has been traced back to the audit table data and we can confirm that the data has been extracted to and calculated within a spreadsheet, the logic of which has been checked. We can therefore confirm that any resulting error would originate from the input data rather than from the calculations.

We consider that the confidence grade of B2 is appropriate.

**6.6 Line 6 - Total capacity of intake and source pumping stations**

We can confirm that **Line 6** has been directly copied from JR 2003 **Table 10, Line 33**. There is no confidence grade for this line.

**6.7 Line 7 - Water delivered: distribution input**

We can confirm that **Line 7** has been directly copied from JR 2003 **Table 10, Line 30**, including the confidence grade of B2.

**6.8 Line 8 - DG2 denominator: Total number of properties (domestic and non-domestic) connected for water supply at end of year.**

We can confirm that **Line 8** has been directly copied from JR 2003 **Table 2, Line 1**, including the confidence grade of A1.

**6.9 Line 9 - The gross MEA value of water resources and treatment assets as at 31 March 2003**

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Lines**

**1 to 10**, and **Lines 13 and 14**, **Table C11a, C3** of SRN's SBP 2004, with a confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)					

#### **6.10 Line 10 - The number of category 1 surface water works**

We can confirm that **Line 10** has been copied from FBP04 **Table C11, line 3**, including the confidence grade of A1. It is noted that any bulk imports received by SRN are not included in this line.

#### **6.11 Line 11 - The total number of category 2 surface water works**

We can confirm that **Line 11** has been copied from FBP04 **Table C11, line 4**, including the confidence grade of A1. It is noted that any bulk imports received by SRN are not included in this line.

#### **6.12 Line 12 - The total number of category 3 surface water works**

We can confirm that **Line 12** has been copied from FBP04 **Table C11, line 5**, including the confidence grade of A1. It is noted that any bulk imports received by SRN are not included in this line.

#### **6.13 Line 13 - The total number of category 4 surface water works**

We can confirm that **Line 13** has been copied from FBP04 **Table C11, line 6**, including the confidence grade of A1. It is noted that any bulk imports received by SRN are not included in this line.

#### **6.14 Lines 14-17: Water treated at all category 1/2/3/4 surface water works**

Due to a change in the treatment category definition and the inclusion of phosphate dosing within W4, SRN has reallocated the data, in accordance with the guidance for these lines. We note that this variation has not affected the data reported in **Lines 10-13**.

In auditing these lines we have traced the data back to the JR03 audit tables which show the source and output capacity and size category. The data presented by SRN also includes a "comments" column to explain why certain works are in certain categories. We did not locate any errors in the preparation of this data.

We note that bulk supplies are included within these lines.

We consider that the confidence grades of A2 are appropriate for these lines.

#### **6.15 Lines 18-21: The number of category 1/2/3/4 ground water works**

This data has been updated by SRN, from the downloaded data, in order to account for the inclusion of bulk supplies and changes to the treatment works categories.

In auditing these lines we have traced the data back to the JR03 audit tables which show the source and output capacity and size category. The data presented by SRN also includes a “comments” column to explain why certain works are in certain categories. We did not locate any errors in the preparation of this data. We note that SRN has provided a detailed explanation of the changes to **Lines 18-25** within the Company’s commentary.

We note that bulk supplies are now included within these lines.

We consider that the confidence grades of A1 are appropriate for these lines.

#### **6.16 Lines 22-25: Water treated at all category 1/2/3/4 ground water works**

This data has been calculated by SRN, from the updated data used for **lines 18-21**, thus taking account of bulk supplies and changes to the treatment works categories.

In auditing these lines we have traced the data back to the JR03 audit tables which show the source and output capacity and size category. The data presented by SRN also includes a “comments” column to explain why certain works are in certain categories. We did not locate any errors in the preparation of this data. We note that SRN has provided a detailed explanation of the changes to **Lines 18-25** within the Company’s commentary.

We note that bulk supplies are now included within these lines.

We consider that the confidence grades of A2 are appropriate for these lines.

## 7. Company Assumptions

The Company has revisited previous data in the preparation of this table and we consider that SRN has adequately allowed for potential inaccuracy within the reported confidence grades. We have found no material assumptions other than the estimation of the [REDACTED] transfer aqueduct, which is based on the GIS system and knowledge of the scheme.

## 8. Confidence Grades

We consider that all confidence grades assigned to **Table CM1** are appropriate.

## 9. General Issues

There are no General issues with **Table CM1**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM1** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we have not located any material issues from the previous Reporter's comments.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data has been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

We have disclosed (if not fully exposed in the submission) and assessed the reasons for changes in information previously submitted in **section 6** above.

We consider that where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems, unless otherwise stated above.

As per Clarification CMER/003, we can confirm that SRN has assigned works that have more than one treatment process by the most complex treatment process.

As per Clarification CMER/013, capacities stated by SRN relate to the total physical volume of the asset.

As per Clarification CMER/015, we can confirm that, in the case of bulk supply imports, SRN has not included the impounding reservoirs and treatment works operated by the exporting company in the total number of dams and impounding reservoirs line (**Line 1**).

**Date:** 21/10/2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM2 – Water distribution infrastructure (WDI) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- Both **Lines 1 and 6** contain significant assumptions in calculating the relevant data, although we consider that these are appropriate.
- There are no other material issues.

**3. Audit Scope**

The opinions given in this commentary are based on one audit meeting undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to this audit, we checked Table entries for consistency against previous regulatory submissions at our Crawley office. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM2**, and where inaccuracies have been located SRN has corrected these.

Data reported in **Table CM2** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI) and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

### 6.1 Line 1 - Water mains asset balance - total length of unlined iron or steel mains

In the preparation of **Line 1** SRN has estimated the total length of unlined iron or steel mains based on in-house knowledge plus the information from the Company's relining programme. This has been accurately detailed in the Company's commentary.

We note that the Company has differentiated between lined pipes and coated pipes that may have been purchased from suppliers. SRN consider that coated pipes are unlined. This is due to the thickness and quality of coating on coated pipes. SRN has assumed that all steel pipe is lined.

We confirm that the confidence grade of B3 is appropriate as it reflects this estimation.

### 6.2 Line 2 - Mains bursts per 1,000km

We can confirm that **Line 2** has been directly copied from JR 2003 **Table 11, Line 11**, including the confidence grade of B2.

### 6.3 Line 3 - DG2 denominator: Total number of properties (domestic and non-domestic) connected for water supply at end of year

We can confirm that **Line 3** has been directly copied from JR 2003 **Table 2, Line 1**, including the confidence grade of A1.

**6.4 Line 4 - Potable water mains (nominal bore)**

We can confirm that **Line 4** has been copied from FBP04 **Table C11, line 16**, including the confidence grade of B3.

**6.5 Line 5 - Other water mains (nominal bore)**

We can confirm that **Line 5** has been copied from FBP04 **Table C11, line 17**, including the confidence grade of A1.

**6.6 Line 6 - Number of communication pipes**

We can confirm that **Line 6** has been copied from FBP04 **Table C11, line 18, columns 1, 2, and 3**. This includes the confidence grade of B3.

**Line 6** is based on postcode records with estimates made from surveys undertaken by SRN. This data has been compiled by assuming that properties, with known data, that are close together are similar to the surrounding properties.

For example, two properties in the same street have the same communication pipe material, thus SRN has assumed that the properties in between will also have the same communication pipe material. Should the second property be different, the Company has assumed a 50/50 split of the properties in between the two surveyed properties, therefore allocating half to each material.

We consider that the assumption made by SRN in calculating this line is reasonable.

Based on the above we consider that the confidence grade of B3 is appropriate.

**7. Company Assumptions**

The Company has assumed in the preparation of **Line 1** that the ductile iron pipes are 50% lined and 50% unlined. SRN has also assumed that all steel pipes are lined.

The Company has assumed in the preparation of **Line 6** that properties nearby to another property with a known communication pipe material are of the same material.

We consider that these assumptions are appropriate given the limited data possessed by the Company.

## 8. Confidence Grades

We consider that all confidence grades allocated by SRN in **Table CM2** are appropriate.

## 9. General Issues

There are no General issues with **Table CM2**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM2** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems, unless otherwise stated.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The Company has not made any amendments in the downloaded data with respect to this table.

In relation to Clarification CMER/012, we can confirm that the Company has differentiated between lined pipes and coated pipes. When challenged, SRN

stated that it has reported on the basis that coated pipes are not considered to be lined.

In relation to Clarification CMER/022, we can confirm that SRN has not included non-potable mains in the data reported.

**Date:** 21/10/2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM3 – Water distribution non-infrastructure (WDNI) 2002-03  
explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM3**, and where inaccuracies have been located SRN has corrected these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **Table CM3** have been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04

submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI) and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Water delivered: distribution input

We can confirm that **Line 1** has been directly copied from JR 2003 **Table 10, Line 30**, including the confidence grade of B2.

### 6.2 Line 2 - Source types and pumping, average pumping head - distribution

We can confirm that **Line 2** has been directly copied from JR 2003 **Table 12, Line 6**, including the confidence grade of B2.

### 6.3 Line 3 - Number of non-household meters

We can confirm that **Line 3** has been copied from FBP04 **Table C11, line 18, column 4**. There is no confidence grade for this line.

### 6.4 Line 4 - Number of household meters

We can confirm that **Line 4** has been copied from FBP04 **Table C11, line 18, column 5**. There is no confidence grade for this line.

**6.5 Line 5 - DG2 denominator: Total number of properties (domestic and non-domestic) connected for water supply at end of year**

We can confirm that **Line 5** is as per **Table CM1 Line 8**, including the confidence grade of A1.

**6.6 Line 6 - The gross MEA value of water distribution non-infrastructure assets as at 31 March 2003**

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Lines 11, 12, and 15, Table C11a, C3** of SRN's SBP 2004, with an overall confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)	■	■	■	■	■

**6.7 Line 7 - Storage - the number of service reservoirs**

We can confirm that **Line 7** has been copied from FBP04 **Table C11, line 11**, including the confidence grade of A1. We note from Clarification CMER/026 that the Average size column is calculated by Ofwat and that the cell calculations are to be reviewed post-submission.

**6.8 Line 8 - Capacity of service reservoirs**

SRN has calculated this line from the PR04 audit tables used originally to derive **Line 7**. We have traced the calculations back to the build-up data used, which has been taken from the PR04 data.

As the data was based on actual records, but allowing for manual error, we consider that the confidence grade of A2 is appropriate.

**6.9 Line 9 - Storage - the number of water towers**

We can confirm that **Line 9** has been copied from FBP04 **Table C11, line 11**, including the confidence grade of A1. We note from Clarification CMER/026 that the Average size column is calculated by Ofwat and that the cell calculations are to be reviewed post-submission.

**6.10 Line 10 - Capacity of water towers**

SRN has calculated this line from the PR04 audit tables used originally to derive **Line 9**. We have traced the calculations back to the build-up data used, which has been taken from the PR04 data.

As the data was based on actual records, but allowing for manual error, we consider that the confidence grade of A2 is appropriate.

#### **6.11 Line 11 - Number of booster pumping stations**

We can confirm that **Line 11** has been copied from FBP04 **Table C11, line 11**, including the confidence grade of A1. We note from Clarification CMER/026 that the Average size column is calculated by Ofwat and that the cell calculations are to be reviewed post-submission.

#### **6.12 Line 12 - Capacity of booster pumping stations**

SRN has calculated this line from the PR04 audit tables used originally to derive **Line 11**. We have traced the calculations back to the build-up data used, which has been taken from the PR04 data.

As the data was based on actual records and surveys, some of which are not validated, we consider that the confidence grade of B3 is appropriate.

### **7. Company Assumptions**

To the best of our knowledge SRN has not made any material assumptions in completing this table.

### **8. Confidence Grades**

We consider that the confidence grades applied by the Company for this table are appropriate.

### **9. General Issues**

There are no General issues with **Table CM3**.

### **Ofwat Reporting Requirements**

We can confirm that the submission of **Table CM3** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The Company has not made any changes in information previously submitted.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM4 – Water management and general (WM&G) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- The Company has updated the **Line 1** information following a manual check on the GIS data.
- We have not located any other material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM4**, and where inaccuracies have been located SRN has looked to correct these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **Table CM4** have been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI) and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Potable water mains (nominal bore)

The data for **Line 1** is shown in the table as 13,395.00. This value has been copied from the FBP04 **Table C12, line 16**. As noted in SRN's commentary, this figure is incorrect. The error was revealed as a result of the Company revisiting the data.

As a result of this error in SRN's GIS data, as described in the Company commentary for **CM1 line 3**, 56.601 km of mains should not have been included in the Company's FBP04 figure. This figure has been derived by SRN, following changes to the designation of the appropriate GIS items in the system to calculate the corrected figure.

As a result of this improvement in data, the amended figure of 13,338.40 km as stated in the Company's commentary is considered a more accurate reflection of the data at the time.

We challenged SRN's assigned confidence grade of B3, asking the Company to justify it. The Company responded that due to the data being derived from the GIS SRN had to allow for the corrections to the data being manually made and that further errors may exist, but had not yet been located.

We consider that the confidence grade assigned of B3 is appropriate due to the quality of the GIS data.

#### 6.2 Line 2 - Number of households billed for water

We can confirm that **Line 2** has been directly copied from JR 2003 **Table 7, Line 14**. There is no confidence grade attached to this line.

#### 6.3 Line 3 - Non-households billed water

We can confirm that **Line 3** has been directly copied from JR 2003 **Table 7, Line 16**. There is no confidence grade attached to this line.

#### 6.4 Line 4 - The gross MEA value of water management and general assets as at 31 March 2003

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Lines 19 to 23, Table C11a, C3**, of SRN's SBP 2004, and with an overall confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)	■	■	■	■	■

#### 6.5 Line 5 - The gross MEA value at 31 March 2003 - Vehicles

SRN is reporting ■ for this item. We have checked this against the historic reported data and can confirm that it is consistent with **Line 21, Table C11a, C3** of SRN's SBP 2004. It has been noted that the original FBP04 submission had a confidence grade of B3 attached to it. We challenged the Company on the low level of confidence grade for a zero asset stock, which we would have expected to have an A1 confidence grade. The Company agreed with this assessment, although no confidence grade is attached to **line 5** for this submission.

#### 6.6 Line 6 - The gross MEA value at 31 March 2003 - Telemetry systems

SRN is reporting ■. We have checked this against the historic reported data and can confirm that it is consistent with **Line 22, Table C11a, C3** of SRN's SBP 2004. This is a downloaded data entry by Ofwat. No confidence grade is attached to this line.

**6.7 Line 7 - The gross MEA value at 31 March 2003 - Computers**

SRN is reporting [REDACTED]. We have checked this against the historic reported data and can confirm that it is consistent with **Line 23, Table 11a, C3**, of SRN's SBP 2004. This is a downloaded data entry by Ofwat. No confidence grade is attached to this line.

**6.8 Line 8 - % of system covered by telemetry systems**

We can confirm that **Line 8** has been copied from FBP04 **Table C11, line 22, column 1**. There is no confidence grade attached to this line.

**6.9 Line 9 - Telemetry outstations**

We can confirm that **Line 9** has been copied from FBP04 **Table C11, line 22, column 2**. There is no confidence grade attached to this line.

**7. Company Assumptions**

In reporting the new data the Company has assumed that the remaining GIS data, used in determining **line 1**, is accurate. We consider that this assumption is reasonable given the B3 confidence grade applied due to this.

**8. Confidence Grades**

The only confidence grades for this table are attached to **Lines 1 & 4**. We consider that these confidence grade are appropriate.

**9. General Issues**

There are no General issues with **Table CM4**.

**Ofwat Reporting Requirements**

We can confirm that the submission of **Table CM4** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous reporter's comments.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

As per Clarification CMER/019, we can confirm that meter chambers have been included in the non-infrastructure figures.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data has been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

We have disclosed (if not fully exposed in the submission) and assessed the reasons for changes in information previously submitted in **section 6** above.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM5 – Sewerage infrastructure (SI) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on one audit meeting undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to this audit, we checked Table entries for consistency against previous regulatory submissions at our Swindon office. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM5** and where inaccuracies have been located SRN has corrected these.

All data reported in **Table CM5** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Total length of sewers

The Company is reporting a total length of sewers of 21,171km and is reporting the length of sewers by area. We have reviewed the sewer lengths and confidence grades reported in **Table 17a, Line 9** of JR03 and confirm that they match the lengths and confidence grades reported in **Line 1**.

We consider that the confidence grade of B3 is appropriate.

### 6.2 Line 2 - Total length of critical sewers

The Company is reporting a total length of critical sewers of 6,554km and is reporting the length of sewers by area. We have reviewed the critical sewer lengths and confidence grades reported in **Table 17a, Line 14** of JR03 and confirm that they match the lengths and confidence grades reported in **Line 2**.

We consider that the confidence grade of B4 is appropriate.

### 6.3 Line 3 - Total length of section 24 sewers

The Company is reporting a total length of section 24 sewers of 1,932km and is reporting the length of sewers by area. We have reviewed the section 24 sewer lengths and confidence grades reported in **Table 17a, Line 10** of JR03 and confirm that they match the lengths and confidence grades reported in **Line 3**.

To the best of our knowledge, we confirm that the figures in **line 3** conform to section 24 of the 1935 Public Health Act.

We consider that the confidence grade of C4 is appropriate.

#### **6.4 Line 4 - Total length of brick and masonry sewers**

This figure was not reported in JR03. SRN has obtained the length of brick and masonry sewers from the Company's GIS database. The query run retrieved data on individual conduit lengths by material by area. We reviewed this data and confirm that the figures reported equate to the data on brick and masonry sewers extracted from the Company's sewer records. We consider this to be a reasonable approach as we have been advised that no new brick or masonry sewers have been constructed since JR03, and any abandonment of these sewers would not have a material effect on the final figure given a confidence grade of B4.

We consider that this confidence grade is appropriate.

#### **6.5 Line 5 - Number of combined sewer overflows**

The Company is reporting a total of 872 combined sewer overflows (CSOs) and is reporting the number of CSOs by area. We reviewed CSO numbers and confidence grades reported in **Table 17a, Line 23** of JR03 and identified some discrepancies in the figures, which the Company subsequently corrected.

#### **6.6 Line 6 - Number of sewer collapses per 1,000 km**

The Company is reporting the number of collapses per area in its commentary. These figures match the number of collapses reported in **Table 17a, Line 15** by area. We have confirmed the calculation of the collapse rate by area as stated in the Company's commentary and reported in **Line 6**.

We consider that the confidence grade of B4 is appropriate.

#### **6.7 Line 7 - Total connected properties**

The Company is reporting a total of 1,768,880 connected properties and is reporting the number of connected properties by area. We have reviewed the number of connected properties and confidence grades reported in **Table 17a, Line 4** of JR03 and confirm that they match the numbers and confidence grades reported in **Line 7**.

**7. Company Assumptions**

There are no material assumptions related to this table.

**8. Confidence Grades**

We consider that all confidence grades assigned to **Table CM5** are appropriate.

**9. General Issues**

There are no General issues with **Table CM5**.

**Ofwat Reporting Requirements**

We can confirm that the submission of **Table CM5** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous reporter's comments.

We note that there are no material assumptions related to this table.

We note that there are no significant areas, in relation to this table, where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The Company has not made any amendments in the downloaded data with respect to this table.

We consider that the confidence grades allocated by the Company to the lines in **Table CM5** are appropriate.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

Date: 21<sup>st</sup> October 2010  
Prepared By: HMS  
Version: Public Domain

**Table CM6 – Sewerage non-infrastructure (SNI) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM6**, and where inaccuracies have been located SRN has corrected these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **Table CM6** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the

time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Total number of domestic properties connected to the sewerage system

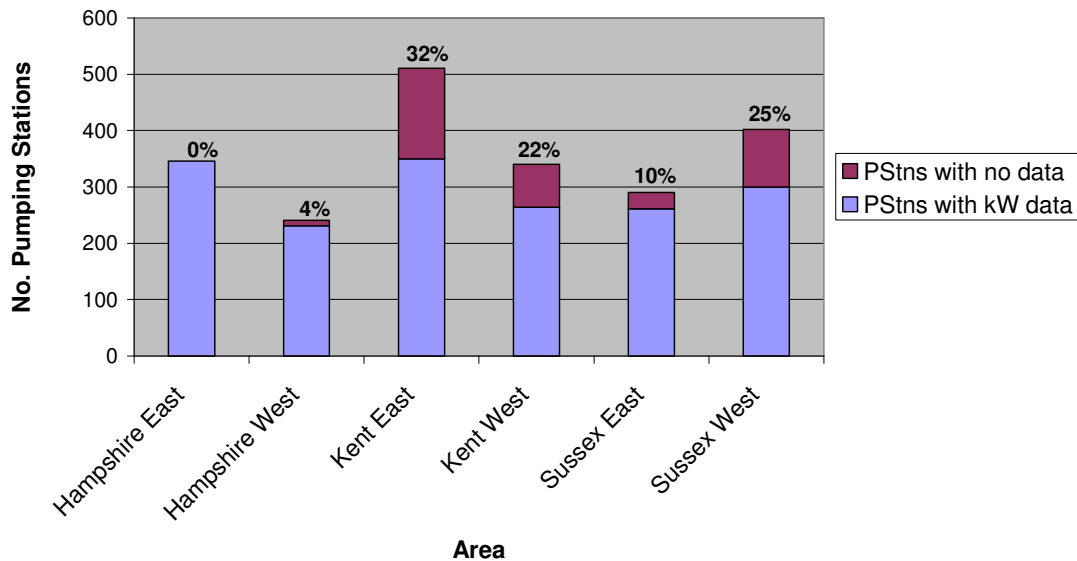
The Company is reporting a total of 1,768,880 connected properties, and is reporting the number of connected properties by area. We have reviewed the number of connected properties and confidence grades by area reported in **Table 17a, Line 4** of JR03 and confirm that they match the numbers and confidence grades reported in **Line 1**.

### 6.2 Line 2 - Total number of pumping stations

The Company is reporting a total of 2,130 sewerage pumping stations and is reporting the number by area and size band. We have reviewed the number of pumping stations and confidence grades by area reported in **Table 17a, Line 17** of JR03 and confirm that they match the numbers and confidence grades reported in **Line 2**.

Where there is no kW installed capacity data for a pumping station, the Company has assigned it to a size band pro-rata by the profile of the known sizes. The graph below illustrates the kW capacity data coverage by area and shows the percentage of pumping stations with no capacity data.

Pumping Station kW data



We have checked the calculation spreadsheet used to produce the figures reported in **Line 2** and confirm that the calculations are correct. As a result of the pro-rata methodology, of the “large” (>500 kW) pumping stations reported by the Company, for Kent East five of the reported seven pumping stations have kW capacity data, and for Kent West three of the reported four pumping stations have kW capacity data.

### 6.3 Line 3 - Total capacity of pumping stations

The Company is reporting a total installed capacity for its sewerage pumping stations of 76,952 kW, and is reporting capacity by area and size band. Where there is no kW installed capacity data for a pumping station, the Company has calculated an average capacity per pumping station for each size band by area based on the known capacities and used this to calculate the capacity of these pumping stations.

We have checked the calculation spreadsheet used to produce the figures reported in **Line 2** and confirm that the calculations are correct.

It could be suggested that the Company should have capacity data for all of its large pumping stations (>500 kW) as these are significant assets and therefore this size band should not be included in the pro-rata calculation. We re-calculated the number of pumping stations and capacities with no allocation to the >500 kW band for each area. We found that the most significant differences for total capacity were Kent

West (5%) and Kent East (10%). These variances are within the stated confidence grade of B3 and therefore we consider the pro-rata calculation methodology used by the Company to be acceptable.

#### 6.4 Line 4 - The gross MEA value of sewerage non-infrastructure assets

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Line 6, Table C13a, C3** of SRN's SBP 2004 and with a confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)	■	■	■	■	■

### 7. Company Assumptions

The Company has disclosed its assumptions relating to those pumping stations for which power rating is "unknown" (referred to by the Company as "unknowns"). We have tested these assumptions.

We consider that the assumptions used by the Company in its allocation of "unknowns" to be reasonable, given the stated confidence grade. However, we consider that the assumption that "Unknowns" can be allocated on a pro-rata basis to the large pumping stations (>500 kW band) can give a distorted picture of the number of pumping stations and capacity attributable to that band.

### 8. Confidence Grades

We consider that all confidence grades assigned to **Table CM6** are appropriate.

### 9. General Issues

There are no General issues with **Table CM6**.

### Ofwat Reporting Requirements

We can confirm that the submission of **Table CM6** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that the material assumptions related to this table are detailed in **Section 7**.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The company has not made any amendments in the downloaded data with respect to this table.

We consider that the confidence grades allocated by the Company to the lines in **Table CM6** are appropriate.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM7 – Sewage treatment (ST) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM7**, and where inaccuracies have been located SRN has corrected these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **table CM7** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the

time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Equivalent population served (resident)

The Company is reporting a total equivalent population served of 4,180,220 and states in the commentary that there was a typographical error in the number reported in JR03. We have reviewed the Company's JR03 sewage treatment works database ("*JR03 Database*") and the query used to obtain this figure and confirm that the query produces the figure reported in **Line 1**. The Company is reporting a confidence grade of B3, which matches the confidence grade reported in JR03 (and subsequent June Returns).

We consider that this confidence grade is appropriate.

### 6.2 Line 2 - Trade effluent load received at STW

The Company is reporting a total trade effluent load received as 40,318kg COD/day. Originally the Company was reporting the total of the trade effluent loads received at the large sewage treatment works as reported in **Table 17b** of JR03. However, the Company subsequently changed this following the issue of Ofwat Clarification CMER/025, which stated: "*Lines 2 and 3 of this table should include loads to all size works. The numbers should be greater than or equal to the relevant lines reported in table 17b.*" Prior to this clarification we

had carried out an analysis to identify any significant trade and tanker loads at the small sewage treatment works.

The trade loads are held in the Company's JR03 Database, by sewage treatment works and by area.

We challenged the Company to explain how trade load is determined for each works. SRN explained that: "*The volumes and strengths of the trade discharges are downloaded from the trade effluent database "TEDDI", by trader, for the prior year. The COD load downloaded is the settled COD strength and is converted to shaken by a factor of 1.4*".

We analysed the JR03 Database to determine the trade loads received at the small works. The results of this analysis are shown in the table below:

Area	Trade load large STWs Kg COD/d	Trade load small STWs Kg COD/d	Trade load all STWs Kg COD/d	% load at large works of total
HE	5,957	372	6,329	94%
HW	6,896	319	7,215	96%
KE	13,838	547	14,386	96%
KW	6,723	205	6,927	97%
SE	1,536	1,669	3,206	48%
SW	2,118	137	2,255	94%
<b>Total</b>	<b>37,068</b>	<b>3,249</b>	<b>40,317</b>	<b>92%</b>

The area where the load at small works is most significant is Sussex East (SE). This is mainly due to loads received at three works: [REDACTED] (556 kg COD/d), [REDACTED] (523 kg COD/d) and [REDACTED] (373 kg COD/d).

The figures reported by the Company are consistent with the figures held in the JR03 Database. The confidence grade of B3 allocated by the Company is consistent with the confidence grade reported in **Table 17b** of JR03. However a confidence grade of D6 was applied to **Table 15, Line 1** trade effluent load receiving secondary treatment in JR03, but this was seen to be unduly pessimistic. The calculation methodology used for JR07 is the same as that used for JR03 and a confidence grade of B4 was applied in JR07. We therefore consider that a confidence grade of B4 would be more appropriate.

### 6.3 Line 3 - Tanker load received at STW

The Company is reporting a total tanker load received at STWs of 20,034kg COD/d. Originally the Company was reporting the total tanker load received at the large sewage treatment works as reported in **Table 17b** of JR03. However, the Company subsequently changed this following the issue of Ofwat Clarification CMER/025. Prior to this clarification we had carried out an analysis to identify any significant trade and tanker loads at the small sewage treatment works.

There was an error in the data input for [REDACTED] in JR03 **Table 17b**, which reads 245 and should be 1,367. The total for **Table 17b, Line 5** in JR03 therefore reads 13,267 whereas in fact it should be 14,388kg COD/d.

Tanker volumes are measured at the receiving works. The Company assumes an average BOD concentration of 3,802 mg/l to calculate the BOD load. This is consistent with other June Returns. A conversion factor of 3.14 BOD to COD is used based on historic sampling.

The Company stated that no trade effluent load is received by tanker.

We analysed the JR03 Database to determine the tanker loads received at the small and large works. The results of this analysis are shown in the table below:

Area	Tanker load large STWs Kg COD/d	Tanker load small STWs Kg COD/d	Tanker load all STWs Kg COD/d	% load at large works of total
HE	1,630	0	1,630	100%
HW	4,415	120	4,535	97%
KE	3,697	1,745	5,442	68%
KW	1,618	1,142	2,760	59%
SE	743	1,273	2,016	37%
SW	2,283	1,367	3,650	63%
<b>Total</b>	<b>14,387</b>	<b>5,647</b>	<b>20,034</b>	<b>72%</b>

There are significant tanker loads received at the small works in Kent East, Kent West, Sussex East and Sussex West.

The figures reported by the Company are consistent with the figures held in the JR03 Database. The confidence grade of C3 allocated by the Company is consistent with the confidence grade reported in **Table 17b** of JR03.

We consider that this confidence grade is appropriate.

#### **6.4 Line 4 - Volume of waste water returned**

The Company is reporting a total of 803.1 Ml/d waste water returned. This figure and confidence grade matches the volume of waste water returned and confidence grade of B4 as reported in **Table 14, Line 4** of JR03.

We reviewed the Company's calculations to allocate volume to area pro rata by resident population taking into account trade volume by area, and confirm that the calculations are correct. We consider that this is an appropriate methodology.

#### **6.5 Line 5 - Volume of trade effluent**

The Company is reporting a total of 34.5 Ml/d trade effluent. This figure and confidence grade matches the volume of trade effluent and confidence grade of B4 as reported in **Table 14, Line 5** of JR03.

We reviewed the spreadsheet used to allocate measured annual trader volumes to daily volumes by area. The Company has assumed that there are trade discharges for only 250 days in the year. We consider that this is a reasonable assumption.

#### **6.6 Line 6 - Average domestic properties connected to the sewerage system receiving treatment**

The Company is reporting a total of 1,608,269 connected properties, and is reporting the number of connected properties by area. We have reviewed the JR03 Database and the query used to obtain the number of domestic properties connected, and confirm that it excludes properties connected to outfalls.

We have also checked the properties connected by area and confirm that the figures reported match the data held in the JR03 Database. However, the number of properties connected as recorded in the JR03 Database and reported in **Line 6** includes commercial properties.

The confidence grade of A2 is consistent with the confidence grades reported for **Table 13** of JR07, which we consider to be appropriate. For the JR03 return a confidence grade of A1 was applied, but we consider that this is not appropriate in view of the methodology applied.

### 6.7 Line 7 - The gross MEA value of sewage treatment assets

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Lines 7 to 10, Table C13a, C3**, of SRN's SBP 2004, and with a confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)	■	■	■	■	■

### 6.8 Line 8 to 13 – Total number of sewage treatment works

We confirm that the number of works by treatment category and size band is consistent with the figures reported in **Table 17c** of JR03. We confirm that the three Band 6 preliminary sewage works are all outfalls.

We reviewed the data in the JR03 database and the query used to abstract works data by area. We confirm that the **CM7** tables are correctly populated.

We consider that the confidence grade of A1 is appropriate.

### 6.9 Lines 14 to 19 – Loads received by sewage treatment works

We confirm that the loads received by works by treatment category and size band are consistent with the figures reported in **Table 17d** of JR03.

We reviewed the data in the JR03 database and the query used to abstract works data by area. We confirm that the **CM7** tables are correctly populated.

We consider that the confidence grade of B3 is appropriate and consistent with JR03.

### 6.10 Lines 20 to 25 – Total number of works with ammonia consents

We have reviewed the JR03 database and the query used to abstract works data by area for works with ammonia consents of less than or equal to 5mg/l. We confirm that the **CM7** tables are correctly populated.

We consider that the confidence grade of A1 is appropriate.

## 7. Company Assumptions

The assumptions relating to calculation of trade and tankered loads are reported in the commentary.

We consider that the Company's assumptions are reasonable.

## 8. Confidence Grades

We consider that all confidence grades assigned to **Table CM7** are appropriate.

## 9. General Issues

There are no General issues with **Table CM7**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM7** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

We have disclosed (if not fully exposed in the submission) and assessed the reasons for changes in information previously submitted in **section 6** above.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data

systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems.

We note that the Company has explained in its commentary the reasons for changes in information previously submitted in JR03.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM8 – Sludge treatment and disposal (ST&D) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on one audit meeting undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Swindon office. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM8**, and where inaccuracies have been located SRN has corrected these.

All data reported in **Table CM8** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 to 3 – Sludge Treatment

We have reviewed the JR03 Database and queries used to populate **Lines 1 to 3**, and confirm that the figures reported are consistent with the information held in the database and the totals match the figures reported in **Table 17c** of JR03.

The only sewage works that treats its own sludge is [REDACTED].

### 6.4 Line 4 to 5 – Amount of sewage sludge treated by process and disposed by route

The amount of raw sludge entering the drying process has been calculated based on the number of bags of granules produced assuming 90% dry solids and allowing for the destruction of solids in the digestion process. The percentage destruction during digestion is based on measured data.

The amount of raw sludge entering the digestion process has been calculated based on the population equivalent of each sewage treatment works. This has then been apportioned to each area pro-rata based on the sludge digestion records at treatment centres in each area. This methodology was used in JR03 because the instrumentation measuring digested sludge data was considered not to be reliable. This methodology produces sludge figures which are consistent with post JR03 figures. Figures reported since JR05 use measured digested sludge figures as the instrumentation is now reliable. We consider that

the methodology used for JR03 is reasonable for a confidence grade of B4. The amount of dewatered sludge that is digested reported in **Line 4** is the amount of raw sludge entering the digestion process less the limed sludge that is digested.

The amount of sludge that is treated by lime stabilization is calculated back from the records of lorry movements disposing limed sludge to landfill. The tonnes dry solids is calculated from the volume using 25% dry solid cake quality, which is based on measured data. We consider that this figure is reasonable. The amount of raw sludge digested that is then limed is calculated using a figure of 40% solids destroyed in digestion. This figure is reasonable when compared to the measured destruction rate.

The amount of sludge that is dewatered only and sent to landfill as raw sludge is calculated back from the records of lorry movements disposing raw sludge to landfill. The tonnes dry solids is calculated from the volume using 25% dry solid cake quality, which is based on measured data. We consider that this figure is reasonable.

All sludge is dewatered prior to treatment or disposal.

We checked the calculation spreadsheets used by the Company to populate **Table CM8** and identified some discrepancies. The Company subsequently corrected the reported figures.

Having reviewed the calculation methodology, sludge data and calculation spreadsheets, we consider that the sludge figures reported by area in **Table CM8** are representative of the Company's sludge production by area. The total sludge treated is consistent with the figure of 108.3 ttds reported in JR03. The total amount reported in **Line 5** of 108.5 ttds is different due to rounding error.

We consider that the confidence grades of B4 are appropriate and consistent with JR03.

## 7. **Company Assumptions**

Figures relating to dry solids content and digestion destruction rate used in the sludge calculation are based on measured data.

We consider that the figures relating to dry solids content and digestion destruction rate are reasonable.

## 8. Confidence Grades

We consider that all confidence grades assigned to **Table CM8** are appropriate.

## 9. General Issues

There are no General issues with **Table CM8**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM8** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that there are no material assumptions related to this table.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures. We consider that the checks and review of the sludge data and calculations by the Company are appropriate.

The Company has not made any amendments in the downloaded data with respect to this table.

We consider that the confidence grades allocated by the Company to the lines in **Table CM8** are appropriate.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM9 – Sewerage management and general (SM&G) 2002-03 explanatory factors****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on two audit meetings undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to these audits, we checked Table entries for consistency against previous regulatory submissions at our Crawley and Swindon offices. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM9**, and where inaccuracies have been located SRN has corrected these.

The information and values reported within the MEA values have been compiled from the Company's financial accounts and asset inventory returns. SRN compiles data from existing databases.

All other data reported in **table CM9** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04

submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI), asset inventory database and the GIS database.

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 - Total length of sewers

The Company is reporting a total length of sewers of 21,171km, which is consistent with **Table 16 Line 14** of JR03 for 2003 and the length reported in **Table CM5 Line 1**. The confidence grade of B3 is also consistent and we consider that it is appropriate.

### 6.2 Line 2 - Total number of households billed for sewerage

The Company is reporting a total number of 1,643,444 households billed for sewerage with a confidence grade of A1. This matches the figure and confidence grade reported in **Table 13 Line 3** of JR03.

We consider that the confidence grade is appropriate.

### 6.3 Line 3 - Total number of non-households billed for sewerage

The Company is reporting a total number of 96,738 non-households billed for sewerage with a confidence grade of A1. This matches the figure and confidence grade reported in **Table 13 Line 6** of JR03.

We consider that the confidence grade is appropriate.

#### 6.4 Line 4 - The gross MEA value of water management and general assets

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with the summation of gross MEA values on **Lines 18 to 22, Table C13a, C3**, of SRN's SBP 2004, and with a confidence grade of B3.

MEAV	Asset Life				Total
	Short	Medium	Long	Infra	
Gross MEA value (£m)	██████	██████	██████	██████	██████

#### 6.5 Line 5 - The gross MEA value - Vehicles

SRN is reporting ██████. We have checked this against the historic reported data and can confirm that it is consistent with **Line 20, Table C13a, C3**, of SRN's SBP 2004. It has been noted that the original FBP04 submission had a confidence grade of B3 attached to it. We challenged the Company on the low level of confidence grade for a zero asset stock, which we would have expected to have an A1 confidence grade. The Company agreed with this assessment, although no confidence grade is attached to **line 5** for this submission.

#### 6.6 Line 6 - The gross MEA value – Telemetry

SRN is reporting ██████. We have checked this against the historic reported data and can confirm that it is consistent with **Line 21, Table C13a, C3** of SRN's SBP 2004. There is no confidence grade assigned to this line. This is a downloaded data entry by Ofwat.

#### 6.7 Line 7 - The gross MEA value – Computers

SRN is reporting ██████. We have checked this against the historic reported data and can confirm that it is consistent with **Line 22, Table C13a, C3** of SRN's SBP 2004. There is no confidence grade assigned to this line. This is a downloaded data entry by Ofwat.

#### 6.8 Line 8 - % of system covered by telemetry systems

We can confirm that **Line 8** has been copied from FBP04 **Table 13, line 22, column 1**. No confidence grade is attached to this line.

**6.9 Line 9 - Number of telemetry outstations**

We can confirm that **Line 9** has been copied from FBP04 **Table 13, line 22, column 2**. No confidence grade is attached to this line.

**7. Company Assumptions**

There are no material assumptions related to this table.

**8. Confidence Grades**

We consider that all confidence grades assigned to **Table CM9** are appropriate.

**9. General Issues**

There are no General issues with **Table CM9**.

**Ofwat Reporting Requirements**

We can confirm that the submission of **Table CM9** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The Company has not made any changes to information previously submitted in **Table CM9**.

Where SRN has estimated data the Company has assigned an appropriate confidence grade to reflect the certainty of the estimation. We have reviewed all confidence grades with our findings stated above.

SRN has carried out calculations using basic mathematical processes and no special software has been used. Where information has been taken from data systems, for example the GIS database, no complex manipulation has been undertaken once the data is extracted from the systems.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM10 – Capital maintenance expenditure - Water (outturn prices)****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31<sup>st</sup> March 1998 to 31<sup>st</sup> March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on one audit meeting undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to this audit, we checked Table entries for consistency against previous regulatory submissions at our Swindon office. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM10**, and where inaccuracies have been located SRN has corrected these.

All data reported in **Table CM10** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI).

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Line 1 to 7

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with JR04, 05, 06 and 07. **Lines 2 to 6** are downloaded data entries by Ofwat, **Lines 1 and 7** have been input by SRN.

## 7. Company Assumptions

There are no material assumptions related to this table.

## 8. Confidence Grades

There are no confidence grades assigned to **Table CM10**.

## 9. General Issues

There are no General issues with **Table CM10**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM10** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we confirm that SRN has used appropriate quality assurance procedures.

The Company has not made any changes to information previously submitted in **Table CM10**.

SRN has carried out calculations using basic mathematical processes and no special software has been used.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain

**Table CM11 – Capital maintenance expenditure - Sewerage (outturn prices)****Commentary by REPORTER****1. Background**

The purpose of the Capital Maintenance Econometric Return is to collect explanatory data necessary to review, update and run the existing econometric models used for assessing companies' relative capital maintenance efficiency. The information collected within this submission will update the Company's asset position from 31 March 1998 to 31 March 2003. This is vital to maintain the robustness of the Ofwat models.

**2. Summary of Audit Findings**

- There are no material issues.

**3. Audit Scope**

The opinions given in this commentary are based on one audit meeting undertaken at the Company's Head Office at Southern House, Worthing in February 2008. In addition to this audit, we checked Table entries for consistency against previous regulatory submissions at our Swindon office. Our objectives, which were common to all of the tables forming SRN's Capital Maintenance Econometric Return, were to establish the source of the data and the reporting methodology, to expose and test any assumptions made by the Company and to determine the likely accuracy of the reported numbers.

**4. Company's Methodology**

The Company has revisited the data submitted originally for the data included in **Table CM11**, and where inaccuracies have been located SRN has corrected these.

All data reported in **Table CM11** has been sourced from actual datasets utilised by SRN when compiling the JR03 or FBP04 submissions. These datasets are based on actual data extracted at the time from the Company's billing system (TPMI).

There was no specific Company guidance issued for this table.

## 5. Reporter's Methodology

We have systematically checked all lines of the table. Where lines have been copied from previous submissions, we have endeavoured to trace the data back to the specified line from previous submissions. Where the Company has introduced corrections to this data we have checked the methodology and reasoning behind the changes to satisfy ourselves that they are reasonable and beneficial to the submission. Where the Company has input data to the table, we have checked the source of this and the methodology behind any calculations and reporting of the data.

## 6. Audit Findings

To the best of our knowledge SRN has used actual data and has used the entirety of the Company's datasets, thus no sampling has been used.

### 6.1 Lines 1 to 5

SRN is reporting values as shown in the table below. We have checked these against the historic reported data and can confirm that they are consistent with JR04, 05, 06 and 07. **Lines 1 to 4** are downloaded data entries by Ofwat, and **Line 5** has been input by SRN.

## 7. Company Assumptions

There are no material assumptions related to this table.

## 8. Confidence Grades

There are no confidence grades assigned to **Table CM11**.

## 9. General Issues

There are no General issues with **Table CM11**.

## Ofwat Reporting Requirements

We can confirm that the submission of **Table CM11** has been prepared in accordance with the guidance. The reference documentation used in the review has included:

- *June Annual Returns JR03 to 07*
- *2004 Strategic Business Plan*

Having reviewed the previous commentary for CMER 2002, we located no material issues from the previous Reporter's comments.

We note that, in relation to this table, there are no significant areas where the Reporter's opinion is different from that of the Company.

The quality assurance procedures used by the Company are in essence the same as the JR03 and FBP04 submission. Where new data have been reported from the original datasets, we consider that SRN has used appropriate quality assurance procedures.

The Company has not made any changes to information previously submitted in **Table CM11**.

SRN has carried out calculations using basic mathematical processes and no special software has been used.

There are no modifications to or omissions from these requirements in respect of the Reporter's role and responsibilities.

**Date:** 21<sup>st</sup> October 2010  
**Prepared By:** HMS  
**Version:** Public Domain