

GDPCR Business Plan Questionnaire for the main control - Guidance and Narrative Questions

Document Type: Guidance document

Ref: 114/06

Date of Publication: 30 June 2006

Overview:

An important aspect of gas distribution price review will be to assess the historical and projected future costs of the gas distribution businesses. This requires the collection of a significant amount of data from the gas distribution networks through Business Plan Questionnaires.

The questionnaire for the main price control consists of two spreadsheets and some guidance and narrative questions. The guidance notes, which should be read alongside the spreadsheets, contain guidance on completing each table and a rationale for the request.

Contact name and details: Chris Watts, Team Head

Tel: 020 7901 7333

Email: chris.watts@ofgem.gov.uk

Team: Mike Begley, Senior Manager, Operating Expenditure mike.begley@ofgem.gov.uk

Paul Branston, Senior Manager, Capital Expenditure paul.branston@ofgem.gov.uk

Deadline for Response: 6 October 2006 by Gas Distribution Networks

Target Audience: Gas Distribution Networks and other interested parties

Ofgem, 9 Millbank, London SW1P 3GE
www.ofgem.gov.uk

Context

Ofgem is currently carrying out the gas distribution price control review to examine and set new limits on the revenue that may be recovered by gas distribution networks. As part of the price review, Ofgem proposes to:

- extend the gas distribution price control for one year;
- reset the gas distribution price control for the five year period commencing 1 April 2008; and
- develop the cost reporting framework to apply from 2008-09 onwards.

An important part of the review will be to assess the historical and projected future costs of the gas distribution businesses. This requires the collection of a significant amount of cost data and other related information through Business Plan Questionnaires (BPQs) which will be issued to each of the Gas Distribution Networks.

We have already requested and received information required for the one year price control. This BPQ requests additional information required for the main control, including:

- more detailed information in areas where high level information was considered sufficient for the one year control;
- more emphasis on forecasts costs for the period covered by the main control (2008-09 to 2012-13); and
- allowing companies to update their information for actual results of 2005-06 and any modifications to their plans for subsequent years.

Associated Documents

- Gas distribution price control review - Initial consultation, Ofgem document no. 259/05, December 2005
- Gas distribution price control review - Business Plan Questionnaire spreadsheets

Table of Contents

Summary	1
One year control and main price control.....	1
1. Introduction	2
Objectives	2
Information sources	2
Structure of the BPQ	2
Business Plan Questionnaire instructions for completion	3
Gas Distribution Business	3
Definitions and Accounting Principles.....	3
Reporting years.....	4
Units	4
Inflation	4
Data entry.....	4
Sign convention for capex and repex tables.....	4
Costs for affiliates and related parties.....	4
Analysis of expenditure or work volumes for affiliates and related parties	4
Use of estimates / allocations	5
Items classified as 'Other'	5
UK GAAP and IFRS.....	5
Timetable	5
2. Forecast base case assumptions.....	6
3. Financial and Opex Tables - Guidance Notes	8
Index of financial and opex tables	8
General guidance.....	8
Guidance for each table	9
Price base for financial tables A1 - A7.....	9
Table A1 - Profit & Loss/Income Statement	9
Table A2 - Balance Sheet.....	9
Table A3 - Cash flow Statement	9
Table A4 - Additional data on Net Debt and Borrowings	10
Table A5 - Corporation Tax Computation.....	10
Table A6 - Capital Allowances.....	10
Table A7 - RAV Roll-Forward Computation for 2002-03 to 2012-13 on a GDN basis	11
Price base for opex tables B1 - B6.2.....	11
Table B1 - Opex	11
De minimis and Excluded Services	13
Table B2 - Support services and indirect costs	14
Table B3 - Labour costs.....	15
Table B4 - Additional data on Pensions.....	17
Table B5 - Atypicals and Provisions.....	19
Table B6 Non-financial data and Shrinkage.....	20
4. Capex and Repex Tables - Guidance Notes	21
Index and Guidance	21
Five Year BPQ Workbook Guidance.....	21
General Guidance	22

Index of Capex and Repex BPQ Tables.....	24
BPQ Table	24
Content.....	24
Guidance Notes for each table	25
Table C1 LTS and Storage Capex	25
Table C2 Mains Reinforcement and other below 7 bar build.....	26
Table C3 Governors (Below 7 bar inlet pressure).....	28
Table C4 Connections.....	30
Table C5 Other Capex	31
Table C6 –Breakdown of Capitalised Overheads	35
Table C7 Capex Summary.....	35
Table C8 Repex Mains	36
Table C9 Repex Services	38
Table C9A Repex Summary.....	40
Table C10 LTS Pipelines and PRS Asset Data	40
Table C11 Capacity and Storage Asset Data	42
Table C12 Mains and Governor Asset Data	43
Table C13 Services Asset Data	43
Table C14 LTS age profile	44
Table C15 Storage age profile	44
Table C16 Mains and Governors Age Profile	45
Table C17 Services Age Profile	45
Table C18 Additional Data.....	45
Table C19 Contract Data.....	47
Definitions	50
Guidance regarding pipe size bands	50
Guidance regarding investment drivers	50
Mandatory –Safety.....	51
Mandatory – Security of Supply	51
Mandatory – Other Statutory.....	51
Non-Mandatory – Asset Condition.....	51
Non-Mandatory – Business Support.....	52
Non- Mandatory – Economic/Other	52
5. Operating expenditure - additional narrative questions	53
General questions	53
Work Management (including Asset Management).....	54
Emergency (first visit only)	54
Repairs	54
Maintenance - general.....	55
Maintenance - storage.....	55
Maintenance - LTS.....	55
Maintenance - other.....	55
Transport & Plant	56
Other (direct activities)	56
Shrinkage.....	56
Policies and Practices	56
Benchmarking.....	57
Work Management systems	57
Indirect and support costs	57
Legal	57
Procurement and logistics	57

HR and Scheme Trainees	57
Insurance	57
Property	58
Information Systems	58
Corporate centre.....	58
Documentation	59
Independent Undertakings (supplied by LNG/LPG).....	59
New legislation/regulations	59
6. Capex and Repex - additional narrative questions.....	60
General	60
Assumptions	61
Capitalisation policy	61
Overall comparison of allowed and actual capital and replacement expenditure.....	61
Forecasting.....	61
Policies	62
Specific Expenditure Areas	62
LTS and Storage Capex	62
Other Operational Capex	67
Non-Operational Capex	68
Repex	71
Other Supporting Information.....	78
Asset and Risk Management Processes for Investment.....	78
Procurement and Logistics	79
Safety.....	80
Environment.....	81
Total Life Cycle Cost Management.....	81
Network Design.....	82
Resource Planning	84
Research and Development.....	84
Benchmarking.....	84
Standards of Service.....	84
Volume Drivers	86
Appendices	87
Appendix 1 - The Authority's Powers and Duties	88
Appendix 2 - Cost categories	90
Appendix 3 - Glossary.....	93
Appendix 4 Next Steps	97
Provision of data to other GDNs.....	97
Publication.....	98

Summary

The Business Plan Questionnaire (BPQ) for the main control consists of two spreadsheets and some guidance narrative questions asking for supplementary written information. This document contains the guidance notes for the spreadsheets and narrative questions asking for supplementary written information. The guidance notes, which should be read alongside the spreadsheets, provide guidance on completing each table as well as the rationale for the request.

One year control and main price control

The BPQ for the one year control was issued on 17 February 2006 for completion by 7 April 2006. Its focus was primarily on historic information and forecasts up the period covered by the one year control. ie 31 March 2008. It focussed in more detail on capital expenditure, requested relatively high level information for operating expenditure.

This main control BPQ follows the format of the one year control BPQ as far as possible, but extends the required forecast information for opex to 31 March 2014 and for capex to 31 March 2018 as well as requiring more detail in areas where relatively high level information was considered sufficient for the one year control. Companies will be required to provide information on actual costs for 2005-06. We anticipate that GDNs will wish to revise some of their forecast data for the main price control where additional information necessitates a change, but they will need to provide an appropriate justification for such changes.

Further questionnaires will be issued in early 2007 to ask for 2006-07 actual performance and updated forecasts.

1. Introduction

Chapter Summary

This chapter sets out the objectives of the Business Plan Questionnaire (BPQ) for the one year control, other information sources that will be used and the instructions and timetable for completing the information in the BPQ.

Objectives

1.1. The key objectives of the BPQ and other associated information requests are to inform the gas distribution price control review so that sufficient, appropriate and reliable information is available to facilitate:

- an understanding of the past investment expenditure, decisions and policies; including an understanding of efficiency to support decisions about necessary RAV adjustments; and
- an understanding of the investment management processes and forecast investment requirements to support the determination of appropriate allowances and incentives going forward.

Information sources

1.2. Ofgem intend to utilise a variety of methods to gather the information necessary to inform the gas distribution price control including:

- Regulatory Accounts – source of regular audited historical financial information on the performance of the GDNs;
- BPQ historical data for the period 1 January 2001 to 31 March 2006 and forecast data for the period 1 April 2006 to 31 March 2018 – source of financial and non-financial information, focusing on specific areas in greater detail;
- Long term development ten year statements – source of information on historic and forecast demand and supply data; and
- Quality of service outputs reports for 1 April 2002 to 31 March 2006.

1.3. It is envisaged that additional information requests will be made as and when required to ensure that informed discussions and decisions occur throughout the gas distribution price control process.

The GDNs should be aware that updated information will be requested in 2007, in particular actual performance for 2006-07 and updated forecasts, before final proposals are made.

Structure of the BPQ

1.4. The BPQ has been separated into the following sections:

- **Financial Tables:** - Tables A1 to A7 request financial information required to populate the financial model.
- **Operating Cost Tables:** – Tables B1 to B6 request operating expenditure (opex) information and other associated data to understand the performance and position of the GDNs.
- **Capital Expenditure:** - Tables C1 to C7 request capital expenditure (capex) information and other associated data to understand the performance and position of the GDNs.
- **Replacement Expenditure:** - Tables C8 to C20 request replacement expenditure (repex) information and other associated data to understand the performance and position of the GDNs.
- **Opex Narrative:** – Request written responses relating to opex in general
- **Capex and Repex Narrative:** – Request written responses relating to capex and repex in general.

Business Plan Questionnaire instructions for completion

1.5. The BPQ consists of Microsoft Excel 2003 spreadsheets provided by email and narrative questions given in this document. We strongly recommend that you perform appropriate virus scans prior to opening any Microsoft Excel files as Ofgem will not accept responsibility for virus contamination that may arise as a result of this action.

Gas Distribution Business

1.6. The overall objective of the BPQ is to develop an understanding of the financial performance of the licensed GDN. Accordingly the financial information presented in the BPQ should relate to licensed GDN activity only. De minimis businesses are to be included where such activities form part of the licensed entity (which has been consented to by Ofgem in accordance with standard special licence conditions in accordance with the Utilities Act 2000).

1.7. Where costs have been allocated or attributed to GDNs prior to GDN separation, GDNs should provide an explanation of how that allocation/attribution was made.

Definitions and Accounting Principles

1.8. The tables should be prepared using the same accounting policies as in the preparation of the Regulatory Financial Statements.

1.9. In the event that the accounting policies applied to prepare the BPQ differ from those used in the Regulatory Financial Statements (for some or all years) you are requested to include appropriate details including quantification of the variance.

Reporting years

1.10. Reporting periods will be financial years starting from 1 April 2002.

Units

1.11. Except where specifically instructed otherwise, all monetary values are to be rounded to the nearest £100k.

Inflation

1.12. All historical financial information included in the BPQ is to be expressed in nominal terms (actual costs). All forecast BPQ financial information is to be expressed in current costs (2005-06 prices). If it is necessary to assume a future rate for RPI inflation, a figure of 2.5% per annum should be used for the forecast period. Indexation factors are provided in the BPQ to allow conversion between historic nominal prices and 2005/06 prices where necessary.

Data entry

1.13. As the BPQ is a series of Excel spreadsheets, links and formulae have been included to limit, where possible, the amount of manual data entry required. To preserve the integrity of the data and format of the BPQ the majority of cells have been 'locked' in the capex and repex sections of the spreadsheets and cannot be changed. Should you identify link or formula cell errors please forward the relevant spreadsheet to Ofgem for correction. The colour scheme used in the spreadsheets is as follows:

- Yellow = cells requiring data entry
- Light Grey = cells summing rows and columns, or containing other calculations
- Dark Grey = cells where no data should be input

Sign convention for capex and repex tables

1.14. In the Capex and Repex tables, Capex and Repex should be presented as +ve numbers (ie. as additions to assets) and customer or other contributions should also be entered as +ve numbers. (The tables will deduct customer contributions from gross expenditure to calculate net expenditure).

Costs for affiliates and related parties

1.15. Costs should include the underlying costs of related parties in performing the licensee's activities, without any profit or margin for those related parties. For the purpose of this paragraph, this includes:

- any "related undertaking" as defined in the distribution licence, and
- Fulcrum Connections.

Analysis of expenditure or work volumes for affiliates and related parties

1.16. Where an analysis of expenditure or work volumes is required by direct labour and contract labour, direct labour should include direct labour within related parties. For the purpose of this paragraph, this includes:

- any "related undertaking" as defined in the distribution licence,

- any other party accounting for more than 20% of the GDN's costs, and
- Fulcrum Connections.

Use of estimates / allocations

1.17. In certain circumstances financial estimates or allocations may be necessary to complete the detailed information requested in the BPQ. In these circumstances, the GDN should exercise reasonable judgment to apply estimation/allocation techniques to present the information requested, provide an explanation of the methodology adopted and distinctly identify the input cells affected.

Items classified as 'Other'

1.18. Unless otherwise stated, individual items classified in the 'other' category that are greater than £500k are to be separately described in an attachment to the applicable table. This will ensure that the nature of the expense and the rationale for its presentation is clearly understood thereby facilitating the presentation of consistent and comparable financial information.

UK GAAP and IFRS

1.19. All analysis is to be produced under UK GAAP accounting principles for all licensees.

1.20. To the extent that it becomes necessary, due to changes in market perception, to model the financial ratios of the GDNs on an IFRS basis, then it may be necessary to review the allocation of the published IFRS adjustments within the licensee Group accounts and/or to prepare responses on an IFRS basis. Ofgem do not currently believe that it will be necessary to perform a reconciliation to IFRS accounting principles within the one year control, and therefore no specific additional information is requested within this BPQ. Any information relating to differences between IFRS and UK GAAP accounts which you believe would help comparison of the BPQ responses to your published Group accounts for 05/06 would be welcomed.

Timetable

1.21. The indicative timetable for the completion of the various questionnaires is as follows

Document	Date to be issued	Responses due
Main control BPQ	June 2006	6 October 2006
Main control update BPQ	February 2007	June 2007

1.22. Where considered necessary this timetable may be revised to reflect changes in the overall Price Control Review timetable. An additional BPQ will also be used to gather revised information and any updated assumptions for the NTS offtake arrangements and GDN interruption.

2. Forecast base case assumptions

Chapter Summary

This chapter sets out the financial, economic and output assumptions to be applied when completing the forecast sections of the BPQ for the financial years 2006-07 to 2017-18 (for capex and repex) and 2006-07 to 2013-14 for opex and financial information.

2.1. The forecast sections of the BPQ are to be completed on the basis of the minimum expenditure (operating, capital and replacement) necessary to run an efficient business consistent with your obligations under the licence, Gas Act and other legislation; and while maintaining existing performance standards as specified below. Ofgem will expect the projections to include future efficiency improvements.

2.2. It is important to note that the assumptions identified do not necessarily represent Ofgem's view of the policy or incentives that may be applied in determining allowed price controlled revenue for the GDPCR.

2.3. The written response section of the BPQ is designed to address specific financial and non-financial considerations that Ofgem think are important to inform discussions and decisions to be made in the GDPCR project.

2.4. If you think that any additional information beyond that requested is necessary to develop a complete understanding of the historical and forecast information presented in the Tables of the BPQ, please include such information in an appendix to your submission.

Network Performance	Assumption
Gas demand	As in the Long Term Development Ten-Year Statements but details to be described by GDN in BPQ response, including any variations to the plan
Gas supply	As in the Long Term Development Ten-Year Statements but details to be described by GDN in BPQ response, including any variations to the plan
Reliability	Maintain the existing level of system reliability and performance. Improve the level of distribution system reliability and performance through compliance with the HSE's "enforcement policy for the replacement of iron gas mains" (September 2005 Review) and the April 2005 plan therein.

Regulation	Assumption
Regulatory structure	Assume that the regulatory structure stays the same going forward
Structure of charges	Refer to final proposals document for the structure of charges due to be published by the end of February 2006
Legislative/Statutory obligations/Safety	Costs associated with new legislative, statutory or regulatory obligations forecast to take effect in the period the period 1 April 2005 - 31 March 2013 (including the Traffic Management Act and any changes to GSMR) <u>must</u> be separately identified rather than included in the main tables. The additional tables should clearly show the split of costs between particular activities for opex, capex and repex.

Regulation	Assumption
Arrangements for NTS offtake	<p>Forecast for capacity outputs and costs <u>must</u> be developed on the basis that the existing transitional arrangements for NTS offtake and associated GDN incentives to purchase NTS offtake capacity continue to apply for the full period covered by the BPQ. The GDN should state its assumptions regarding performance under the incentives.</p> <p>It must also be based on the existing GDN interruption arrangements.</p> <p>The GDNs can specify against alternative scenarios as sensitivities but these should be set out in separate tables and narrative to the main BPQ response.</p> <p>Ofgem will issue an update BPQ early next year asking for cost and capacity output information on the basis of the new enduring offtake arrangements and GDN interruption arrangements.</p>
Other incentive schemes	Assume no changes in other incentive schemes. Provide assumptions regarding performance against any incentive schemes available.

Financial/Corporate	Assumption
Base Rate/Margin	Each GDN has to make assumptions about the Bank of England Base Rate and associated margin for the forecast years. The assumptions made should be documented and numbered.
WACC/ Return on RAV - pre/post tax	Each GDN has to make assumptions in relation to the WACC / Return on RAV (pre/post tax). The assumptions made should be documented and numbered.
'K' Factor	Forecast over/under recovery for the financial year ended 31 March 2007 is to be rolled forward for the year ended 31 March 2008. For years ending after that no under/over recoveries are to be assumed.
Taxation	A Corporation tax rate of 30% is to be assumed. The tax legislation to be used is the current HMRC legislation. Any changes to these assumptions should be clearly stated.
Network Rates	Rates are to be based on current rateable values established by the Valuation Office.
Accruals and Provisions	All assumptions regarding accruals and provisions included as part of the costs presented in this BPQ should be clearly set out.
Salaries	Please clearly state the assumed forecast percentage growth for salary costs in this BPQ. If different assumptions are used for different sections of the workforce you should indicate where and what different assumptions have been made.

3. Financial and Opex Tables - Guidance Notes

Chapter Summary

This chapter sets out detailed guidance notes for completing each of the opex and financial tables, together with a rationale for the request. It should be read together with the relevant spreadsheets.

Index of financial and opex tables

BPQ Table	Content
A1 GDN P&L	Summary of Profit and Loss account of GDN for years 2005-06 to 2012-13
A2 GDN Balance Sheet	Summary of assets, liabilities and financing of GDN each year from March 2006 to March 2013
A3 GDN Cash flow Statement	GDN cash flow information for years 2005-06 to 2012-13
A4 Debt Analysis	Information on cash and debt for June 2005 and March 2006
A5 Tax Computations	Collects information on the corporation tax computation for June 2005 to March 2013.
A6 Capital Allowances	Collects information on capital allowances for June 2005 to March 2013.
A7 RAV	Collects information on the RAV roll-forward computations at GDN level for the period April 2002 to March 2013
B1 Operating Cost Summary	Collects information on operating costs for years 2002-03 to 2013-14
B2 Shared services opex	Collects information on indirectly incurred operating costs for years 2002-03 to 2013-14
B3 Labour Costs & FTE	Collects information on labour costs and FTE data for years 2002-03 to 2013-14 and FTE data for 2004-05 to 2013-14.
B4 Pension Data	Collects financial information for the years 2002-03 to 2013-14 on ongoing pension expenses, and an update of the balance sheet position
B5 Atypicals and Provisions	Collects information on costs that occurred in 2005-06 that are not expected to recur regularly.
B6 Non-financial data and Shrinkage	Collects non-financial data to give a better understanding of costs and information on shrinkage costs.

General guidance

3.1. All information presented for the years 2002-03 to 2005-06 is to be consistent with the information presented in the Regulatory Accounts.

3.2. National Grid to present information for each GDN (together with Transmission, Metering, LNG, Excluded Services and de minimis) for the years up to and including 2004-05 for reconciliation back to regulatory accounts.

3.3. Other network owners to present information for their own network(s) for all years which will have been obtained from National Grid for the years up to 2004-05 and be based on their own figures for subsequent years.

Guidance for each table

Price base for financial tables A1 - A7

3.4. The financial tables A1 - A6 should be completed in nominal (money of the day) prices for all years. Table A7 should be completed in nominal prices for years before 2005-06 and real (2005-06) prices for 2005-06 onwards.

Table A1 - Profit & Loss/Income Statement

3.5. This table collects profit and loss financial information for 2004-05 to 2013-14.

Table Reference	Instructions for completion	Purpose
A1 Licensee P&L split by GDN	<p>All profit and loss financial information is to be presented for each year from 2004-05 to 2012-13.</p> <p>For past years, it should be consistent with the information previously presented in the Regulatory Accounts.</p> <p>For the year 2004-05 and for April to May 2005, information is required on Profit Before Interest and Tax and on exceptional items only.</p>	The profit and loss account provides a summary of the historical information of each GDN and will be used for the financial modelling.

Table A2 - Balance Sheet

3.6. This table collects balance sheet information for 2004-05 to 2012-13.

Table Reference	Instructions for completion	Purpose
A2 Licensee Balance Sheet split by GDN	<p>All balance sheet information presented is to be presented for each year from 2005-06 to 2012-13. Historical information is to be consistent with that presented in the Regulatory Accounts</p>	<p>The balance sheet provides a summary of the financial position of the GDN.</p> <p>This information will be used as a consistency check within the BPQ and for financial modelling purposes.</p>

Table A3 – Cash flow Statement

3.7. This table collects cash flow information for 2004-05 to 2012-13.

Table Reference	Instructions for completion	Purpose
A3 Licensee cash flow information split by GDN	<p>Requires the presentation of the cash flow statement</p> <p>For the year ending 31 March 2005 and the two months ending 31 May</p>	<p>Understanding the ability of the GDN to generate funds from operations. This provides strong evidence to evaluate the</p>

Table Reference	Instructions for completion	Purpose
	2005, the only parts of this table required are the "Reconciliation of Operating Profit to cash inflow from continuing operating activities" and the "capital expenditure and financial investment" cash flows.	performance of the GDN during the current price control period.

Table A4 – Additional data on Net Debt and Borrowings

3.8. This table collects information on cash and debt for June 2005 and March 2006. If there are expected to be any major changes following March 2006, please provide detail in response to the separate narrative question.

Table Reference	Instructions for completion	Purpose
A4 Net Debt and Borrowing Analysis	<p>Detail is to be provided of main categories of cash and debt, with additional information on maturity and interest rates for borrowings.</p> <p><u>Additional Information</u></p> <p>Please give additional information about the use of derivatives where necessary to understand the ongoing cost of debt.</p> <p>Please give information about any proposed refinancings prior to March 2013.</p>	The table will provide an analysis of interest costs. This will be used within the analysis of the cost of capital, financeability and financial modelling.

Table A5 - Corporation Tax Computation

3.9. This table collects information on the corporation tax computation for 2004-05 to 2012-13.

Table Reference	Instructions for completion	Purpose
A5 Licensee corporation tax computation split by GDN	Requires the preparation of tax computations, consistent with the profit and loss and capital allowances schedules for 2004-05 to 2012-13 the years ended 31 March 2005 to 31 March 2013.	The provision information relating to tax charge liabilities will assist in: assessment of historic allowances against actual charges incurred; monitoring and comparing tax charges across time; and determining an appropriate tax allowance for the financial model.

Table A6 - Capital Allowances

3.10. This table collects information on capital allowances for 2004-05 to 2012-13.

Table Reference	Instructions for completion	Purpose
A6 Licensee capital allowances split by GDN	Requires the allocation of assets between the pools with differing capital allowances for 2004-05 to 2012-13.	The identification of capital allowances will assist in: determining the allocation of capital allowances between pools for financial modelling purposes; and monitoring and comparing allocations across time.

Table A7 – RAV Roll-Forward Computation for 2002-03 to 2012-13 on a GDN basis

3.11. These tables collect information on the RAV roll-forward computation for 2002-03 to 2012-13.

Table Reference	Instructions for completion	Purpose
A7 GDN RAV Roll-Forward Computation	<p>Requires the preparation of RAV computations for each DN for the period 2002-03 to 2012-13, consistent with the CAPEX and REPEX investment schedules.</p> <p>This table should be completed in nominal prices for years before 2005-06 and real (2005-06) prices for 2005-06 onwards.</p>	The table combines the inputs to the RAV roll-forward calculations.

Price base for opex tables B1 - B6.2

3.12. Information for years 2005-06 to 2012-13 should be in real 2005-06 prices. Information for years prior to this should be in nominal (money of the day) prices.

Table B1 - Opex

3.13. This table collects opex information for each year from year 2002-03 to 2013-14.

Table Reference	Instructions for completion	Purpose
B1 Operating Cost Matrix	<p>General</p> <p>These tables request details of the operating expenses incurred by the main activities within GDNs. The activities used are:</p> <ul style="list-style-type: none"> ▪ Work management ▪ Emergency ▪ Repairs ▪ Maintenance - storage ▪ Maintenance - LTS ▪ Maintenance - other ▪ Transport & plant ▪ Other direct activities. 	<p>The presentation of a summary of the operating expenses incurred for each year will allow a comparison to the allowance for each GDN given in the last price control review and the separation process.</p> <p>The detailed cost data by activity will allow comparisons of costs across the GDNs and</p>

Table Reference	Instructions for completion	Purpose
	<p>These activities are defined in appendix 2.</p> <p>The table also requests details of the following costs of the DN:</p> <ul style="list-style-type: none"> ▪ Main categories of support services or indirect activities and other charges in (also defined in appendix 2) ▪ De minimis ▪ Excluded services <p>For the extension review costs were only required for the total of all direct activities and support services (or indirect activities). For this main review, costs are now required for each individual activity set out in the table.</p> <p>The only exceptions are for 2002-03 and 2003-04. For these two years completion is similar to the extension review. This information is requested again for the purpose of completeness and to allow any necessary changes that the GDN wishes to make. If the information differs from the information already supplied in the extension review please identify those differences and state reason(s) for them.</p> <p>Data is to be input under the Gas Distribution Business heading and against each row description only where the cell is highlighted yellow.</p> <p>Nominal prices should be used for 2002-03 to 2005-06. 2005-06 prices should be used for 2006-07 to 2013-14.</p> <p>Support services (or indirect activities) and other charges in; These are costs that do not relate directly to the main activities above, but are incurred to support all activities. They may be incurred within the licensee, or within a related (or third) party and charged to the licensee.</p>	<p>detailed assessment of the efficiency of the GDNs' costs.</p>

Table Reference	Instructions for completion	Purpose
	<p>De minimis and Excluded Services</p> <p>Have the same meaning as given in the gas distribution licence.</p> <p>Costs above £500k should be separately identified.</p> <p>For all operating units, excluded services and de minimis activities costs should be entered by the specified cost types.</p> <p>Costs are to be reported gross; no offsetting is permitted.</p> <p>Cost Recoveries</p> <p>This is the recovery of cash costs for overpayments made in a different financial year from which the costs were originally recorded. This includes insurance receipts or refunds under alternative risk transfer arrangements, release of amounts or excess amounts set aside for legal claims and any other recoveries of costs that are not categorised or required to be disclosed under de minimis activities.</p> <p>Any cost recoveries should be recorded only on the Cost Recoveries line.</p> <p>Cost Recoveries should be recorded as negative amount (-ve).</p> <p>Required Commentary</p> <p><u>General</u></p> <p>For each activity within the Distribution Network please explain the reasons for gross cost movements by cost line in consecutive years above £1m, such movements include those due to:</p> <ul style="list-style-type: none"> ▪ changes in input prices; ▪ changes in activity level or volume; ▪ new or modified regulatory or statutory requirements <p>▪ <u>Corporate/management</u></p>	

Table Reference	Instructions for completion	Purpose
	<p><u>initiatives</u></p> <p>Where changes are due to corporate or management initiatives the following should be identified at a gross cost level:</p> <ul style="list-style-type: none"> the estimated impact on the operating and capital expenditure requirements; define the objectives of the initiatives; the planned efficiency savings initially identified (including any cost v benefit analysis); and the actual expenditure savings or costs (including an indication of when this were realised) of implementing initiative. 	

Table B2 - Support services and indirect costs

3.14. This table collects information on support services and other costs not directly attributable to the main activities for 2002-03 to 2013-14.

Table Reference	Instructions for completion	Purpose
B2 Shared Service Cost	<p>Instructions</p> <p>This table is similar to the operating cost matrix schedule and requires an operating cost breakdown of overhead and support service units ("shared services") in total before allocation of costs to the activities of each GDNs.</p> <p>The amount allocated to each GDN should be shown at the bottom of each column split between controllable costs and non-controllable costs. This is then automatically linked to the shared service cost section of the main operating cost matrix table (B1) of the relevant year.</p> <p>For the purpose of the extension review, only the total column was required for completion. However analysis is now required by each of the indirect cost categories given.</p> <p>The only exceptions are for 2002/03 and 2003/04. For these two years completion is similar to the extension review. This information is requested again for the purpose of completeness and to allow any necessary changes that the GDN wishes to make. If the information differs from the</p>	<p>The presentation of a summary of the operating expenditure incurred for each year will:</p> <ul style="list-style-type: none"> facilitate an understanding of the performance of the GDN compared to the allowances set at the last price review review and analyse the historical trend to inform about the base year and future costs establish efficient costs in the base year, and project future efficient expenditure requirements.

Table Reference	Instructions for completion	Purpose
	<p>information already supplied in the extension review please identify those differences and state reason(s) for them</p> <p>Required Commentary</p> <p>For each activity within distribution please explain the reasons for gross cost movements by cost line in consecutive years above £1m, such movements include those due to:</p> <ul style="list-style-type: none"> ▪ changes in input prices; ▪ changes in activity level or volume; ▪ new or modified regulatory or statutory requirements. <p><u>Corporate/management initiatives</u></p> <p>Where changes are due to corporate or management initiatives the following should be identified:</p> <ul style="list-style-type: none"> ▪ the estimated impact on the operating and capital expenditure requirements; ▪ define the objectives of the initiatives; ▪ the planned efficiency savings initially identified (including any cost/benefit analysis); and ▪ the actual expenditure savings or costs (including an indication of when this were realised) of implementing initiative <p>Explanation of any central adjustments over £500k</p> <p>Where support costs or indirect costs (shared services) are allocated to the GDN by some form of apportionment, please explain the methods of apportioning those costs. Include explanation of any changes in apportionment from one year to another.</p>	

Table B3 - Labour costs

3.15. This table collects information on labour costs for 2002-03 to March 2013-14.

Table Reference	Instructions for completion	Purpose
Table B3 Labour Costs	<p>This table requires salary and FTE information for the total of the direct activities of each GDN and for the total of shared/support services units.</p> <p>Tables B3 A breakdown of the total labour costs before capitalisation is required into the</p>	<p>This worksheet is to aid in the calculation of pensionable salaries, enable an understanding of the resourcing mix of Opex and Capex work and provide a cost per FTE for comparison and to</p>

Table Reference	Instructions for completion	Purpose
	<p>various elements of employee costs provided in the table for each GDN and for support services units. This includes all employee related overhead (ERO). If ERO cannot be allocated accurately into activities, please allocate in proportion to salaries and wages. Please state clearly if this method of ERO allocation is being used.</p> <p>Temporary, agency and contract staff costs are also to be recorded on this worksheet.</p> <p>The total of cost elements less amounts capitalised or treated as repex should agree to the net labour costs per the Operating Cost Table B1.</p> <p>Labour cost incurred exclusively for repex and capex should be included in the other column.</p> <p>For the extension review costs were only required for the total of all direct activities and support services (or indirect activities). For this main review, costs are now required for each individual activity set out in the table.</p> <p>The only exceptions are for 2002-03 and 2003/04. For these two years completion is similar to the extension review. This information is requested again for the purpose of completeness and to allow any necessary changes that the GDN wishes to make. If the information differs from the information already supplied in the extension review please identify those differences and state reason(s) for them</p> <p>Agency Staff Persons who are not under direct contract of employment with the licensee or an affiliate of the licensee but are hired through a third party or employment agency. Excludes professional services.</p> <p>Standby Costs incurred when employees are on standby to be called upon if required in the event of a specified occurrence in accordance with their terms of employment.</p>	<p>identify the attribution of pension deficit payments between Opex and Capex.</p>

Table Reference	Instructions for completion	Purpose
	<p>Table B3.1 Full time equivalents (FTEs)</p> <p>Completion is required for 2004-05 to 2013-14.</p> <p>The staff number tables for each year should show the average number of FTEs employed for the year.</p> <p>FTEs need to be split into the following types:</p> <ul style="list-style-type: none"> ▪ GDN own employees ▪ Related party FTE ▪ Apprentices/ trainees <p>The activities required are the same as the opex tables. If FTEs are not recorded against these activities or cannot be allocated into these activities on a more appropriate basis, please allocate in proportion to salaries and wages. Please state clearly what method has been adopted to allocate FTEs to activities.</p> <p>FTEs who work exclusively for capex & repex should be classified under other direct activities and then reclassified between capex & repex FTEs and other direct FTEs at the bottom of each table.</p> <p>Full-time equivalent (FTE) The number of normal hours worked by an employee divided by the normal hours of a full-time member of staff in an equivalent role according to his or her contract of employment.</p> <p>Required Commentary</p> <p>Please provide a detailed explanation of changes in staff numbers and costs between each year. Please support the changes in costs with details of all changes in organisation structures since April 2002 and any proposed changes through to March 2014.</p>	

Table B4 – Additional data on Pensions

3.16. This table collects financial information for 2002-03 to 2013-14 on ongoing pension expenses, and an update of the balance sheet position.

Table Reference	Instructions for completion	Purpose
B4 Pensions data	<p>The pension data requested all relates to cash costs of funding pension or P&L costs of meeting current service obligations. Please provide background information in narrative or spreadsheet form of the assumptions underlying any actuarial income and expense under FRS 17 which you have included in the actual or forecast profit and loss account, and the background thereto.</p> <p>Detail is to be provided for current and forecast pension contributions, split: by employer and employee; and between current funding and funding of a deficit.</p> <p>Detail is also requested on the size and funding position of the pension scheme, to the extent available.</p> <p>National Grid will provide information for financial years 2002-03 to 2004-05 and for the 2 month period April and May 2005.</p> <p>Each GDN will then complete the 10 month period June 2005 to March 2006 and remaining financial years 2006-07 to 2013-14.</p> <p>If the most recent pension scheme details does not represent current membership due to changes following the GDN sales completion, please provide a forecast in addition, or a date when a forecast will be available.</p> <p>Please provide any additional details that you think would be useful as a narrative response.</p> <p><u>Additional Information</u></p> <p>Please give the following details of the pension schemes for gas distribution staff (including staff whose costs are allocated to gas distribution):</p> <ul style="list-style-type: none"> ▪ Are any of these closed schemes, if so when were they closed and what has happened to existing members? ▪ Which pension scheme(s) do new starters join? <p>Please also provide details of any proposed or expected changes to pension arrangements included in the forecast figures.</p>	<p>The table will assist in the calculation of appropriate levels of allowances for pension funding and also for financial modelling.</p>

Table B5 – Atypicals and Provisions

3.17. This sheet collects information on atypicals and provisions for 2005-06.

Table Reference	Instructions for completion	Purpose
B5 Atypicals and provisions	<p>Details to be provided of atypical events and movements on provisions or accruals for 2004-05 and 2005-06.</p> <p>An atypical event is one that is not expected to recur regularly under normal circumstances due either to its size or nature. Atypical items of more than £500k each should be disclosed separately.</p> <p>Where a provision is part of a centrally held provision that has been allocated to a GDN, please provide details of the full amount of the provision and explain how the allocation to that GDN has been determined.</p> <p><u>Additional Information</u></p> <p>Please provide an explanation of any items on this sheet exceeding £500k.</p>	<p>The table identifies those costs that occurred in 2004-05 and 2005-06 that are not expected to recur regularly.</p> <p>It also identifies movements in provisions to allow us to differentiate between costs arising due to those movements and the underlying cash costs.</p>

Table B5.1 Forecast cost of complying with new legislation from 2006-07 to 2013-14

Table Reference	Instruction for completion	Purpose
B5.1 Anticipated uncertain costs of complying with new legislation/regulations	<p>Completion is required for 2006-07 to 2013-14 for each GDN, with each item of new legislation/regulations recorded on a separate line.</p> <p>The costs shown in this table should <u>not</u> be included in the main operating cost tables so that the uncertainty associated with these costs does not distort comparisons made between those operating costs.</p> <p>The costs shown in this table should only be the estimated <u>additional</u> costs beyond those currently being incurred. Where costs are currently incurred in these or similar areas (eg current level of streetworks costs) then the current level of costs should be recorded in the opex tables.</p>	<p>This table is intended to allow for forecasts of the costs of anticipated new legislation/regulations where either the scope or timing of its impact remains uncertain (eg Traffic Management Act).</p>

Table B6 Non-financial data and Shrinkage

Table Reference	Instructions for completion	Purpose
B6 Non-financial, Shrinkage	<p>Details to be provided on a LDZ basis for the components of shrinkage in terms of volume and factors. The price of gas and the associated cost of shrinkage gas for each year are requested as are details on cost drivers.</p> <p>Theft refers to that which the GDN is responsible for.</p> <p>Projections for throughput should assume the base case scenario for demand.</p> <p>Pressure and temperature correction information is only relevant for years 2002-03 and 2003-04 since this adjustment has not been applied since.</p> <p>For shrinkage gas cost forecasts beyond the period for which market data is available, please state the basis of the assumptions used. This should be consistent with other long term planning assumptions used such as levels of demand growth, etc.</p>	The table will assist in the calculation of appropriate levels of allowances for shrinkage funding.

4. Capex and Repex Tables - Guidance Notes

→ **Chapter Summary:** This chapter sets out detailed guidance notes for completing each of the Capex and Repex tables, together with a rationale for the request. It should be read together with the relevant spreadsheets. To aid readers, the changes that have been made since the issue of the One Year BPQ are highlighted by ~~striketrough~~ for deletions and yellow for insertions. Some questions are greyed out as they do not require further answers in this review. For these questions data provided in the one year review will be used as appropriate. Comments to explain the changes are highlighted in green.

Index and Guidance

Five Year BPQ Workbook Guidance

4.1. Figure 1 below gives a timeline indication of the analysis to be carried out in this 5 year review and gives an indication of the work which will be carried forward from the one year review.

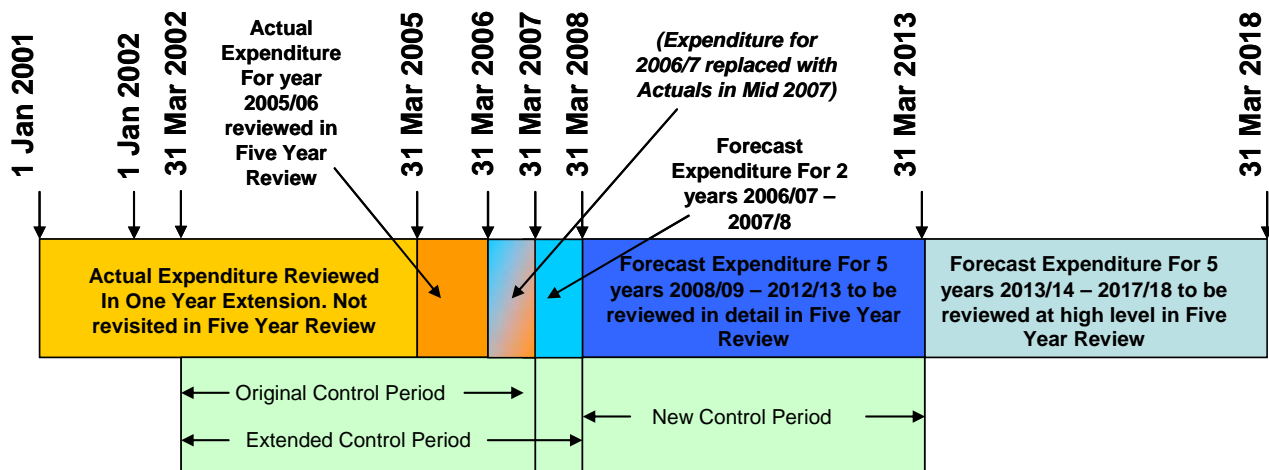


Figure 1

4.2. To avoid duplicated effort the workbook has been developed from that used for the one year review.

1. Expenditure and Workload worksheets C1 to C6A and C8 & C9 have been revised to:
 - 1.1 Freeze GDN entries for 2001 – 04/05 (entries will be visible)
 - 1.2 Enable actual data to be entered for 05/06
 - 1.3 Enable detailed forecasts to be entered from 06/07 to 12/13 (and to 17/18 in some instances)
 - 1.4 Enable summary forecasts to be entered from 13/14 to 17/18

Note that worksheet C7 (Capex Summary) requires no entry by GDNs

Worksheet 5 has changed from Other Operational Capex to Other Capex. The previous other operational and non-operational capex worksheets have been combined into the one sheet.

Worksheet 6 has changed from non-operational (direct) capex to Breakdown of capitalised overheads.

Worksheet 9a Repex Summary has been added and requires no entry by GDNs.

Worksheet 20 Capacity Outputs has been added.

Asset Data worksheets C10 – C13 have been revised to:

- 1.5 Freeze GDN entries for 2001 – 04/05 (entries will be visible)
- 1.6 Enable actual data to be entered for 05/06
- 1.7 Enable forecasts to be entered from 06/07 to 17/18

2. Age Profile worksheets C14 – C17 have been revised to:

- 2.1 Require completion in response to the five year BPQ
- 2.2 Enable actual data to be entered for the years to 05/06
- 2.3 Enable forecasts to be entered from 06/07 to 17/18

3. Additional Data worksheet C18 has been revised to:

- 3.1 Freeze GDN entries for 2001 – 04/05 (entries will be visible)
- 3.2 Enable actual data to be entered for 05/06
- 3.3 Enable forecasts to be entered from 06/07 to 17/18

Contract Data worksheet C19 is unchanged.

GDNs are required to complete the worksheets in accordance with the detailed instructions which have been updated from the one year BPQ. Where changes to the detailed instructions have been made, these are **highlighted** for clarity.

The notes above provide previous readers of the one year BPQ with an overview of the changes required for this five year BPQ and how the changes are highlighted in this version

General Guidance

4.3. Data is collected in 20 tables. These cover Capex and Repex expenditure and workloads, both historic and forecast, as well as historic and forecast data on assets. The following sections contain guidance notes on the completion of each table.

Guidance is unchanged with the exception that years to 2004/5 do not require population as these will be pre-populated with the responses from the one year review.

4.4. Each table has a free narrative section for comments relating to data entered: such comments must be referenced to a cell, line or column for clarity. In particular this facility should be used to qualify data quality using the banding given below:

Reliability Band	Description
A	Data from established systems and procedures, properly documented and auditable
B	As A but with minor shortcomings
C	Based on sound statistical extrapolation from data recorded to A standard; for example sourced from different systems, old assessments, some missing documentation, some extrapolation
D	Extrapolation from limited data for which grade A or B data is available
E	Less reliable than above; state the source and why less reliable. Give an estimate of the accuracy.

4.5. In addition, there are further definitions below, following the table-specific guidance, of pipe size bands and investment driver definitions. These definitions are applicable to many of the tables.

4.6. In some sections GDNs are asked to list all projects over a certain value or the 'n' highest spend projects. There are varying numbers of lines on the spreadsheets for these to match the likely number of entries required. If there are more than this number of projects to list in any one section, please generate and complete a supplementary table in the same format.

National Grid will provide the January 2001 to March 2002 cost and workload data to the GDNs for inclusion in the GDNs' workbooks, as well as submitting to Ofgem the data for their own GDNs and a total UK Distribution workbook for the same period. The narrative explanations of variances to the allowances for this period are to be provided at a total UK Distribution level by National Grid. This commentary is to be shared with all the GDN owners.

4.7. National Grid will provide a UK distribution total for Other Capex (sheet C5) for the period **from April 2005** up to Network sales. ~~This should be provided in the same workbook as the totals for the period January 2001 to March 2002.~~

4.8. For the avoidance of doubt, all narrative answers from April 2002 onwards are to be provided independently by GDN owners on an individual GDN basis.

4.9. In all sections, where there are contributions from third parties, these are to be entered as POSITIVE figures.

Index of Capex and Repex BPQ Tables

BPQ Table	Content
C1 LTS and Storage Capex	Costs and key data for all LTS projects: pipelines, off-takes, PRSs and storage
C2 Mains Capex	Mains cost and length data for major projects and general reinforcement mains by pipe size
C3 Governor Capex	Governor expenditure for both reinforcement and renewal
C4 Connections Capex	Mains and services expenditure by size and type for new connections activities
C5 Other Operational Capex	Expenditure on operational plant, equipment, land and buildings and Non Operational Capex
C6 Non Operational Capex – Direct Breakdown of Capitalised Overheads	Other direct non operational Capex. A summary of Capitalised Overheads from other worksheets
C6A Non Operational Capex – Allocated	Other allocated non operational Capex
C7 Capex Summary	Summary of Capex spend
C8 Repex Mains	Mains Repex, installed and decommissioned, by size and type
C9A Repex Summary	Summary of Repex.
C9 Repex Services	Services Repex by service type
C10 LTS Asset Data	LTS pipeline lengths by diameter band and pressure tier: numbers of NTS and PRS installations
C11 Capacity and Storage Asset data	Storage volumes by type and NTS offtake capacities
C12 Mains and Governor Asset Data	Mains by material, mains programmed for replacement by type and size and governors by type
C13 Services Asset Data	Domestic and non-domestic services by material
C14 LTS age profile	Pipelines by diameter band and operating pressure and numbers of installations, all by decade built
C15 Storage age profile	Physical and contracted storage assets by type, by decade built or contract termination date.
C16 Mains and Governor age profile	Mains age by material size and age and governor age by size and type
C17 Services age profile	Domestic and non-domestic services age by material
C18 Additional Data	Various
C19 Contract Data	Contract and direct resources
C20 Capacity Outputs	Capacity and demand requirements

Note: Tables C14 to C18 do not need to be completed for the purposes of the one year control.

All Tables to be completed for the five year review.

Guidance Notes for each table

Table C1 LTS and Storage Capex

4.10. This table collects data for LTS and storage projects. Additional information required on projects is specified in the narrative questions.

Table Reference	Instructions for Completion	Purpose
C1.1 Projects	List all projects (from Jan 2001 to 2012-13 from Year 2005-06 to 2017-18) where the total project expenditure is or will be £0.5m or more in the categories listed: Above Ground Installations other than Pressure Reduction Stations (PRSs) are included with the pipeline. Where a pipeline project has storage benefit, include the project under either storage or pipelines (only once) dependent on which is the main driver for the investment. For pipeline projects state the start and finish points of the pipeline in the project name. Data for projects less than £0.5m is collected on an aggregate basis, but if there are fewer than 5 projects in any category above £0.5m (completed or substantially completed), list the 5 highest spend projects per GDN. Where the total value of a multi-installation project (e.g. offtake + pipeline + 2PRSs) exceeds £0.5m, list all elements, regardless of individual values. For projects in the time period 2012-13 to 2017-18, a generic title will suffice: e.g. 'North Wales reinforcement'. Only high level planning and costing data will be expected.	To identify major projects for review and analysis.
C1.2 Key size data	Provide key size data for each project.	To identify projects with similar characteristics for comparative analysis and to ensure that a cross section is selected for review.
C1.3 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	To facilitate analysis of a range of projects with different business drivers.
C1.4 Gross Expenditure (excluding capitalised overheads)	Enter the expenditure in each year in £m for each project (and aggregate of projects below £0.5m) in each investment category. Costs should be entered to the nearest £100k.	To understand the expenditure for each project and the split across activities and years.
C1.5 Contribution	Enter the annual contribution, if any, in £m	To understand where

Table Reference	Instructions for Completion	Purpose
	received for each project (and aggregate of projects below £0.5m) in each investment category for each year. Contributions should be entered as a positive number.	contributions are received.
C1.6 Net Expenditure	No entry is required. The net expenditure is calculated by subtracting the contribution from gross expenditure.	To understand the net expenditure for each project and the split across activities and years.
C1.7 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (e.g. central labour and services) for each project (and aggregate of projects below £0.5m) in each investment category for each year.	To understand the allocation of capitalised overheads.
C1.8 Cost analysis	Enter in % the cost split for each project between direct labour, contract labour, materials and other. The values should be provided for total actual project expenditure to the 31st March 2005 2006 and forecast for the remaining period from 1st April 2005 2006 to project completion. In each case the values should add to 100%.	To understand how the project cost splits vary between activities.
C1.9 Investment drivers	No entry required. This section summarises overall split of mains Capex drivers using the data entered in C1.3.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C1.10 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure, actual or estimated, (excluding overheads) for each of the time periods indicated on the table. In each case the values should add to 100%.	To understand how the project cost splits vary between activities.
C1.11 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	To understand activity cost splits.

Table C2 Mains Reinforcement and other below 7 bar build

4.11. This table collects expenditure and activity data for mains general reinforcement investment (i.e. reinforcement investment that is not customer funded as part of a specific connection request). This table includes investment on the network below 7 bar. Reinforcement above 7 bar should be included in Table C1. It collects sufficient data to support a meaningful comparison of unit costs between activities and companies.

It is expected that unit costs will be assessed inclusive of overheads. Capitalised overheads from all sources should be entered in Table 2.8, including overheads incurred by Asset Services Providers, and not included in gross expenditure. General reinforcement excludes contiguous specific reinforcement which is captured under C4 – Connections.

Table Reference	Instructions for Completion	Purpose
C2.1 Activities and Projects	<p>For the period 2004/5 to 2007/8 inclusive, data is Primarily, data is collected by installed pipe size in 8 ranges (from less than 75mm to greater than 630mm). Guidance regarding the pipe size band ranges is given under section 4.33 For the periods pre 2004/5 and post 2007/8 period post 2012/13, the data is collected in two aggregate ranges only; above and below 180mm.</p> <p>All investments must be entered in the specified pipe band categories. However, where there are identified reinforcement projects with a total value of £0.5m or more, these should also be identified separately. All data for projects < £0.5m is collected on an aggregate basis. However, if there are fewer than 5 projects >£0.5m that are completed (or substantially completed), list the 5 highest spend such projects. Data for these major reinforcement projects will thus be entered in two formats (by pipe size and by project).</p>	Disaggregate activities to an appropriate level to be able to analyse unit costs. Identify major projects.
C2.2 Investment Driver	<p>Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance):</p> <p>Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other.</p>	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C2.3 Gross Expenditure	Enter the annual expenditure in £m for each activity category and for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	Understand the expenditure for each activity and project and the split across activities and years.
C2.4 Contribution	Enter the annual contribution, if any, in £m received in each investment area for each year.	Understand where contributions are received.
C2.5 Installed pipe length	Enter the length in km of the pipe installed for each activity area and each project.	Enable calculation of unit costs.
C2.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and length.	Enable comparison of unit costs.
C2.7 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	Understand the net expenditure for each project and the split across activities and years.
C2.8 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each activity category, each project and the aggregate of projects below £0.5m for each year.	Understand the allocation of capitalised overheads.
C2.9 Cost analysis	Enter in % the cost split for each major project (over £0.5m) between direct labour, contract labour, materials and other. The	Understanding how the project cost splits vary between

Table Reference	Instructions for Completion	Purpose
	values should be provided for total actual activity expenditure to the 31st March 2005 and forecast for the remaining period from 1st April 2005 to 31st March 2008. In each case the values should add to 100%.	activities.
C2.10 Investment drivers	No entry required. This section summarises overall split of mains Capex drivers using the data entered in C2.2.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C2.11 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure excluding overheads for each of the time periods indicated on the table. In each case the values should add to 100%.	Understanding the how the expenditure splits vary between activities.
C2.12 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
C2.13 Workload analysis	For each activity enter the percentage of the workload volume undertaken by direct labour.	Understanding how the workload splits between direct & contract labour.

Table C3 Governors (Below 7 bar inlet pressure)

4.12. This table collects expenditure and activity data for district governor investment. Data is collected for growth driven general reinforcement as well as for any other renewal of district governors. The table collects sufficient data to support a meaningful comparison of unit costs between activities and companies.

It is expected that unit costs will be assessed inclusive of overheads. Capitalised overheads from all sources should be entered in Table 3.8, including overheads incurred by Asset Services Providers, and not included in gross expenditure.

Table Reference	Instructions for Completion	Purpose
C3.1 Activities	<p>For the period 2004-05 to 2007-08 inclusive, data is Primarily, data is collected for five categories of expenditure on governors:</p> <ul style="list-style-type: none"> IP/LP Renewal MP/LP Renewal IP/LP Growth MP/LP Growth Domestic Service Governor Non-domestic Service Governor <p>For the periods pre 2004-05 and post 2007-08 period post 2012/13, data is collected split by total renewal, growth and service governors only.</p>	Disaggregate activities to an appropriate level to be able to analyse unit costs.

Table Reference	Instructions for Completion	Purpose
C3.2 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions paragraphs 4.34 to 4.45 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment
C3.3 Gross Expenditure	Enter the annual expenditure in £m for each activity category for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	Understand the expenditure for each activity and the split across activities and years.
C3.4 Contribution	Enter the annual contribution, in £m received for each activity for each year.	Understand where contributions are received
C3.5 Volume	Enter the number of governors installed for each activity area	Enable calculation of unit costs
C3.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and number of governors.	Enable comparison of unit costs
C3.7 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	Understand the net expenditure for each activity and the split across activities and years.
C3.8 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each activity category and for each year.	Understand the allocation of capitalised overheads.
C3.9 Investment drivers	No entry required. This section summarises overall split of Capex drivers using the data entered in C3.2	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C3.10 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure excluding overheads for each of the time periods indicated on the table. In each case the values should add to 100%.	Understanding the how the activity cost splits vary between activities.
C3.11 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
C3.12 Workload analysis	For each category enter the percentage of the workload volume undertaken by direct labour.	Understanding how the workload splits between direct & contract labour.

Table C4 Connections

4.13. This table collects expenditure and activity data for mains, **governors** and services connections activities that are directly customer driven. ~~This excludes general reinforcement spend (which is included in tables C2 and C3).~~ The table collects sufficient data to support a meaningful comparison of unit costs between activities and companies.

It is expected that unit costs and net capex will be assessed inclusive of overheads. Capitalised overheads from all sources should be entered in Table 4.8, including overheads incurred by Connections Services Providers, and not included in gross expenditure.

4.14. Disaggregation of mains data is required in order to separately identify the unit costs for each mains pipe size for existing housing, new housing, non-domestic, off-site (feeder) and specific reinforcement mains activities. This is necessary to understand the efficiency of historic spend and the robustness of forecast spend.

Specific reinforcement comprises contiguous specific reinforcement mains only. All other reinforcement is captured under C2 – General Reinforcement and C3 – Governors.

4.15. Additional narrative information will be required in order to assess the **cost** effects of the Domestic Load Connection Allowance ('10m rule'), specific reinforcement that meets the economic test and any other allowances on the levels of contribution received **components of total net capex**.

Table Reference	Instructions for Completion	Purpose
C4.1 Activities	<p>For the period 2004-05 to 2007-08 inclusive, data is Primarily, data is collected for:</p> <ul style="list-style-type: none"> ▪ Mains for 8 pipe size ranges (from less than 75mm to more than 630mm). Guidance regarding the pipe size band ranges is given in paragraph 4.33. If disaggregation of pipe sizes is not possible in the range 180mm & below then include all sizes in the >125mm – 180mm range and indicate in the spreadsheet narrative box that you have done this. ▪ Mains for 5 activity categories ▪ Each of district and service IP and MP governors ▪ Each of new housing services, existing housing services and non-domestic services <p>For the periods pre 2004-05 and post 2007-08, period post 2012/13 data is collected for:</p> <ul style="list-style-type: none"> ▪ Mains up to 180mm and above 180mm, only, in 5 activity categories <p>Mains for 5 activity categories:</p> <ul style="list-style-type: none"> ▪ Total district and total service governors ▪ Each of new housing services, existing housing services and non-domestic services: Total Services 	Disaggregate activities to an appropriate level to be able to analyse unit costs.
C4.2 Investment Driver	<p>Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance):</p> <p>Mandatory - Safety</p>	Facilitate high level analysis of different business drivers across the entire range of Capex and

Table Reference	Instructions for Completion	Purpose
	Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	Repex investment.
C4.3 Gross Expenditure	Enter the annual expenditure in £m for each activity category for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	Understand the expenditure for each activity and the split across activities and years.
C4.4 Contribution	Enter the annual contribution, in £m received for each activity for each year.	Understand where contributions are received.
C4.5 Workload	Enter the length of mains installed in km or the number of governors or services installed for each activity area.	Enable calculation of unit costs.
C4.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and length.	Enable comparison of unit costs.
C4.7 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	Understand the net expenditure for each activity and the split across activities and years.
C4.8 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each activity category in each investment area and for each year.	Understand the allocation of capitalised overheads.
C4.9 Investment drivers	No entry required. This section summarises overall split of connections Capex drivers using the data entered in C4.2.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment
C4.10 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure excluding overheads for each of the time periods indicated on the table. In each case the values should add to 100%.	Understanding the how the activity cost splits vary between activities.
C4.11 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
C4.12 Workload analysis	For each activity enter the percentage of the workload volume undertaken by direct labour.	Understanding how the workload splits between direct & contract labour.

Table C5 Other Capex

4.16. This table collects high level data for other operational plant, equipment land & buildings and Non-Operational Capex. The worksheet makes provision to capture both named projects over £0.5m, aggregated smaller projects and non-project related

expenditure. For named projects detailed project descriptions to allow a full, project by project, evaluation are requested in the narrative part of the BPQ. In addition Opex expenditure associated with these projects is also required to be populated to the extreme right of the worksheet against each named project. Certain Projects have been pre-populated in the worksheets. projects and detailed project descriptions to allow a full, project by project, evaluation are requested in the narrative part of the BPQ. Non-operational investments in these areas are included in Table C6.

Table Reference	Instructions for Completion	Purpose
C5.1 Categories of Expenditure	No entry required.	To list the main Categories of Expenditure of Other Capex
C5.2 Operational/Non Operational	No entry required.	To designate the category Operational or Non-Operational
C5.3 Summary of Gross Expenditure	No entry required.	To summarise the Gross expenditure for each category of Expenditure.
C5.4 Summary of contributions.	No entry required.	To summarise any contributions in each category of Expenditure.
C5.5 Summary of Net Expenditure	No entry required.	To summarise the Net expenditure for each category of Expenditure.
C5.6 Summary of Capitalised Overheads	No entry required.	To summarise the Capitalised Overheads for each category of Expenditure.
C5.7 Aggregated Expenditure Categories	A list of aggregated expenditure categories has been provided based on the returns for the one year control. Where sums are returned against categories marked "*" an additional note should be provided at the bottom of the worksheet to explain the nature of the expenditure in the comments fields. For the period post 2012/13 only one entry per category of expenditure is required. The IS category has been split between Infrastructure (PCs, email, servers, LANs etc) and Systems (Work Management systems, Asset Management, Financial etc)	Understand the expenditure for each category and the split across activities and years.
C5.8 Expenditure Category/Capex Category Linkage	No entry required.	To show the Capex Category each Expenditure category will be summarised against.

Table Reference	Instructions for Completion	Purpose
C5.9 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C5.10 Gross Expenditure	Enter the annual expenditure in £m for each aggregate category of expenditure (including projects below £0.5m) for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	Understand the expenditure for each category and the split across activities and years.
C5.11 Contribution	Enter the annual contribution, if any, in £m received for each aggregate category of expenditure (including projects below £0.5m) for each year.	Understand where contributions are received.
C5.12 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	Understand the net expenditure for each project and the split across activities and years.
C5.13 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each aggregate category of expenditure (including projects below £0.5m) for each year.	Understand the allocation of capitalised overheads.
C5.14 Projects	For the period 2005/6 to 2012/13, list all projects where the total project expenditure will be £0.5m or more. All data for projects less than £0.5m is to be collected on an aggregate basis for each category of expenditure (see C5.7 above), but if there are fewer than three projects in any category above £0.5m, list the 3 highest spend projects. Ensure items of expenditure is only entered once either in the project line or the aggregated line. Ensure a name is added for each project. For the period post 2012/13 data is collected for total expenditure only.	Identify the major projects.
C5.15 Project/Capex Category Linkage	Select a Capex Category for each Project. This field must not be left blank for any Project.	To show the Capex Category each Project will be summarised against.
C5.16 Investment Driver	Enter the principal driver for undertaking the Project from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance): Mandatory - Safety	Facilitate high level analysis of different business drivers across the entire range of Capex and

Table Reference	Instructions for Completion	Purpose
	Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	Repex investment.
C5.17 Gross Expenditure	Enter the annual expenditure in £m for each Project for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	Understand the expenditure for each Project and the split across activities and years.
C5.18 Contribution	Enter the annual contribution, if any, in £m received for each Project for each year.	Understand where contributions are received.
C5.19 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	Understand the net expenditure for each project and the split across activities and years.
C5.20 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for Project for each year.	Understand the allocation of capitalised overheads.
C5.21 One-Off Opex	Enter the one-off Opex expenditure in £m for each Project for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs. The sums entered into these cells must also be captured in the normal way in the Opex workbook.	To understand the total expenditure for each project (Capex and Opex) and the split across years.
C5.22 Ongoing Opex	Enter the ongoing Opex expenditure in £m for each Project for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs. The sums entered into these cells must also be captured in the normal way in the Opex workbook.	To understand the total expenditure for each project (Capex and Opex) and the split across years.
C5.23 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure excluding overheads for each of the time periods indicated on the table. In each case the values should add to 100%.	Understanding the how the project cost splits vary between activities.
C5.24 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.

Table C6 –Breakdown of Capitalised Overheads

4.17. This table is to capture the breakdown of Capitalised Overheads between various categories of transfer from the Opex account. The figures entered into this worksheet are for balancing/breakdown analysis only, they do not feed into the total analysis used in worksheets C7/C8 or C9.

Table Reference	Instructions for Completion	Purpose
C6.1 Categories of Opex Transfer	<p>Please enter for each year a breakdown of the total transfer from the Opex account into the categories of; Capitalised Labour, Capitalised Interest, Capitalised pension costs, and other Capitalised costs.</p> <p>Any sums entered into the 'Other Capitalised Costs' line should be explained in detail in the comments box.</p> <p>The total entered for each year should balance the total overheads entries on all Capex and Repex worksheets.</p> <p>The Total should also balance with the total transfer from the Opex account</p>	To understand the breakdown of the Opex transfers.
C6.2 Summary Overheads from other worksheets	No entry is required into these cells. They are provided to enable a balance to be carried out.	To allow the balancing of the sums entered in the overheads breakdown with the sums entered onto other worksheets
C6.3 Check Indication	If the sums entered balance with the totals entered on all other worksheets the indicator shows 'OK'. If the figures are out of balance the indicator shows 'Check'	To flag if the sums entered do not balance with the total overheads entered in all other worksheets

~~Table C6A Non-Operational Capex – Allocated~~

4.18. This table has been removed from the workbook

Table C7 Capex Summary

4.19. This table collates a high level overview of capital expenditure. The data is calculated directly from other sheets.

Table C8 Repex Mains

4.20. This table collects expenditure and activity data for Repex mains activities. It collects sufficient data to support a meaningful comparison of unit costs between activities and companies. Mains data is collected by installed pipe size in 8 ranges (from less than 75mm to more than 600mm) and for decommissioned pipes from <3" to more than 48". For abandoned, decommissioned or removed mains enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C8.1 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment
C8.2 Gross Expenditure	Enter the annual expenditure in £m for each activity category for each year. For the periods up to end of 2003-04 and from 2008-09 to 2012-13, expenditure may be entered as < = 180mm and > 180mm. For 2004-05 to 2007-08 inclusive, For the period up to 2017/18 expenditure must be entered by diameter band. Include here the cost of mains connections and de-commissioning. Costs should be entered to the nearest £100k. Do not include capitalised overheads in these costs.	Understand the expenditure for each activity and project and the split across activities and years.
C8.3 Contribution	Enter the annual contribution, if any, in £m received for each activity in each investment area for each year.	Understand where contributions are received.
C8.4 Workload	Enter as appropriate, the length in km of the pipe installed/abandoned for each activity area.	Enable calculation of unit costs.
C8.5 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and workload.	Enable comparison of unit costs.
C8.6 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution (C8.3) from gross expenditure (C8.2).	Understand the net expenditure for each activity and the split across activities and years.
C8.7 Capitalised Overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each Repex mains category and diameter band for each year. For the periods up to end of 2003-04 and from 2008-09 to 2012-13 inclusive, capitalised overheads may be entered as < = 180mm and > 180mm. For the years 2004-05 to 2007-08, For the period to 2017/18 overheads must be entered by diameter band. Provide a description of the overheads included.	Understand the allocation of capitalised overheads.

Table Reference	Instructions for Completion	Purpose
C8.8	Enter expenditure, workload etc. for <u>replacement mains required under the HSE's Enforcement Policy for the Replacement of Iron Gas Mains.</u> identified for replacement by the risk model.	Understand the cost of the risk programme.
C8.9	Enter expenditure, workload etc. for mains identified for replacement under the medium pressure ductile iron (MP DI) Improvement Order and thereafter.	Understand the cost of the MP DI programme.
C8.10	Enter expenditure, workload etc. for <u>replacement mains required under other policy or through condition.(i.e. in addition to the HSE iron mains programme)</u> identified for replacement through condition.	Understand the cost of the condition programme.
C8.11	Enter expenditure, workload etc. for diverted mains that are not re-chargeable.	Understand the cost of non-rechargeable diversions.
C8.12	No entry required. Sums costs and workloads of all replacement mains except re-chargeable diversions.	Understand total for the Incentive Mechanism.
C8.13	Enter expenditure, workload etc. for diverted mains that are re-chargeable.	Understand the cost of rechargeable diversions.
C8.14	Enter lengths abandoned <u>under the HSE's Enforcement Policy for the Replacement of Iron Gas Mains.</u> <u>(Enter only iron mains included in the HSE approved/forecast programme) (C8.8)</u> under the risk programme (C8.8).	Understand overall install/abandon ratios.
C8.15	Enter lengths abandoned under the medium pressure ductile iron (MP DI) programme (C8.9).	Understand overall install/abandon ratios.
C8.16	Enter lengths abandoned <u>under other policy or through condition.(i.e. in addition to the HSE iron mains programme)</u> through condition. (C8.10).	Understand overall install/abandon ratios.
C8.17	Enter lengths abandoned after non re-chargeable diversions (C8.11).	Understand overall install/abandon ratios.
C8.18	No entry required. Sums all abandoned mains except re-chargeable diversions.	Understand overall install/abandon ratios.
C8.19	Enter lengths abandoned after re-chargeable diversions. (C8.13)	Understand overall install/abandon ratios.
C8.20 LTS pipelines and installations	Enter data for LTS Repex activities for all projects in all years where the total project expenditure is or will be £0.5m or more. All data for projects less than £0.5m should be entered on an aggregate basis. Enter here any pipeline diversions. Show contributions for enforced diversions. Show the appropriate investment driver. A diversion does not affect the build date of the pipeline (see asset sheets) unless it is from node to node.	Understand LTS Repex.
C8.21 Ratio installed/abandoned	Optional Field. For each of the 8 size ranges of pipe abandoned enter the ratio of length of main	Understanding how installation activity relates to lengths

Table Reference	Instructions for Completion	Purpose
Not required for 5 year Review	installed to main abandoned for that size of main abandoned (2004-05 and 2007-08 only).	abandoned.
C8.22 Service Connections/ km mains abandoned Not required for 5 year Review	Optional Field For each of the 8 size ranges of pipe abandoned, enter the number service connections per km of mains abandoned (2004-05 and 2007-08 only).	Understanding how installation activity relates to lengths abandoned.
C8.23 Investment drivers	No entry required. This section summarises overall split of Repex drivers using the data entered in C8.1.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C8.24/25 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other. The values should be provided for total actual activity expenditure excluding overheads for each category for each time period indicated on the table. In each case the values should add to 100%.	Understanding the how the project cost splits vary between activities.
C8.26 Overheads Analysis	Enter the overhead as a % of gross expenditure by diameter band for each time period indicated on the table.	Understand the allocation of capitalised overheads.
C8.27 Workload analysis	Enter the % workload completed by direct employees (rather than by contractor) for each time period indicated on the table.	To facilitate inter GDN cost comparisons.

Table C9 Repex Services

4.21. This table collects services expenditure and workload in a similar format to table 8 above.

4.22. Include the cost of replacing service connections and restoring supplies; exclude the cost of any meter work carried out on behalf of others.

Table Reference	Instructions for Completion	Purpose
C9.1 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.34 to 4.45 of this Guidance):	Facilitate high level analysis of different business drivers across the entire

Table Reference	Instructions for Completion	Purpose
	Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	range of Capex and Repex investment.
C9.2 Gross Expenditure	Enter the annual expenditure in £m for each activity category for each year up to 2017/18 . Include the cost of replacing service connections and restoring supplies; exclude the cost of any meter work carried out on behalf of others. Costs should be entered to the nearest £100k. Do not include capitalised overheads in these costs.	Understand the expenditure for each activity and project and the split across activities and years.
C9.3 Contribution	Enter the annual contribution, if any, in £m received for each activity in each investment area for each year.	Understand where contributions are received.
C9.4 Workload	Enter as appropriate, the number of services jobs.	Enable calculation of unit costs.
C9.5 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and the number of services,	Enable comparison of unit costs.
C9.6 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution (C9.3) from gross expenditure (C9.2).	Understand the net expenditure for each activity and the split across activities and years.
C9.7 Capitalised Overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each Repex services category for each year. For the periods up to end 2003-04 and from 2008-09 to 2012-2013 inclusive, capitalised overheads may be entered as totals for domestic services, non-domestic services & multiple occupancy buildings. In the years 2004-05 to 2007-08 For the period to 2017/18 capitalised overheads must be entered by specific activity. Provide a description of the overheads included.	Understand the allocation of capitalised overheads.
C9.8	Enter expenditure, workload etc. for domestic services by job type. Note: "Reposition domestic meter" means services that are replaced for condition or economy in the course of the work. Exclude any meter work carried out on behalf of others. "Service relay domestic meter-work" means work downstream of the new meter position to re-connect consumer pipe-work. Exclude any meter work carried out on behalf of others.	Understand the cost of domestic services work.
C9.9	Enter expenditure, workload etc. for non-domestic services by job type. Note:	Understand the cost of non-domestic services work.

Table Reference	Instructions for Completion	Purpose
	"Non-domestic meter-work ass. replacement" means work downstream of the new meter position to re-connect consumer pipe-work. Exclude any meter work carried out on behalf of others.	
C9.10	Enter expenditure, workload etc. where the risers are >20m length.	Understand the cost of riser replacement.
	Enter riser workload in metres Enter lateral workload in units	
	Risers < 20m length and associated laterals and service connections should be included at C8 (C8.10) & C9 (C9.8) as appropriate.	
C9.11 Investment drivers	No entry required. This section summarises overall split of Repex drivers using the data entered in C9.1	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
C9.12 Overall Expenditure analysis	Enter in % the cost split for each activity between direct labour, contract labour, materials and other in each category and for each time period indicated on the table. In each case the values should add to 100%.	Understanding the how the project cost splits vary between activities.
C9.13 Overheads Analysis	Enter the overhead as a % of gross expenditure by activity type - Domestic services, Non-domestic services & multiple occupancy buildings.	Understand the allocation of capitalised overheads
C9.14 Workload analysis	Enter the % workload completed by direct employees (rather than by contractor) expenditure by activity type - Domestic services, Non-domestic services & multiple occupancy buildings.	To facilitate inter GDN cost comparisons.

Table C9A Repex Summary

This table collates a high level overview of replacement expenditure. The data is calculated directly from other sheets.

Table C10 LTS Pipelines and PRS Asset Data

4.23. This table collects asset data by size and pressure tier and tracks installation and removal. For abandoned or removed assets enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C10.1	Enter new or abandoned LTS pipelines by diameter band over time. Note: if an LTS pipeline is down-rated to operate below 7 bar, this should be shown as a new asset in the mains data table C12 .	To understand the changes over time to the pipeline assets.

Table Reference	Instructions for Completion	Purpose
C10.2	Enter the new or abandoned LTS pipelines by pressure tier over time. Note; if a pipeline is down-rated (or uprated) from one LTS tier to another, this should be clearly shown as a + and – entry in the same year in the relevant rows.	To understand the changes that investment makes to the pressure tiers over time.
C10.3	Enter the number of NTS offtakes and LTS PRSs installed or abandoned in each year.	To understand the changes over time to the LTS assets.

Table C11 Capacity and Storage Asset Data

4.24. This table collects asset data by age and asset type and tracks installation and removal. For abandoned or removed assets enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C11.1	<p>This collection relates to all physical storage installations owned by the GDN and to contracted storage capacity from third party owners e.g. salt cavities, LNG. Enter the absolute usable capacity of HP storage and LP gasholders. Enter the owned or contracted usable annual volume of storage from salt cavities, LNG (direct into LTS), mined caverns or any other direct feed, showing any such volumes built into the long term plan, whether contracted now or not. Abandoned to be entered as negative.</p> <p>For LTS linepack installed, show diminishing value of this in succeeding years, where appropriate, as a negative in 'Lost'.</p> <p>For Mothballed, show as negative in abandoned when it is no longer in the plan as available for re-commissioning.</p> <p>For 'Contracted NTS linepack', it should be noted that during the review periods the treatment of contracted NTS linepack has changed. Initially the diurnal storage that a GDN could take from the NTS was agreed between the two parties both as a maximum volume and as a daily profile. In the current arrangement diurnal storage taken from the NTS is referred to as flexibility gas and is formalised in a contract with NG. The maximum total daily volumes of storage from the NTS should be entered for each year of both regimes e.g. agreed volumes in the past and flexibility volumes for the years in which the new regime has applied.</p>	To understand the age profile of physical storage installations, the annual contracted volume of any contracted seasonal storage and the (contracted or planned) capacity of supplies into the LTS.
C11.2	Enter the changes to maximum installed design capacity for all NTS offtakes and other direct feeds, over time.	To understand the changes that investment is making to that profile.
C11.3	Enter the Flat Capacity daily volume as an aggregate for all NTS offtakes for each time period; 'agreed' volumes up to the regime change date and 'contracted' volumes after that date.	To understand these changes to date and the volumes assumed in the business plan.

Table C12 Mains and Governor Asset Data

4.25. This table collects mains and governor data by category and tracks installation balances. For abandoned or removed assets enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C12.1	For each year, enter the changes to the asset population and the total at the year end.	To understand profile of assets and the changes that investment is making to that profile
C12.2	For each pipe material enter lengths installed as new and replacement mains and also lengths removed. Sum to new population at year end.	To understand the proportions of pipe materials in the population.
C12.3	Enter the % of the year end population operating at the higher pressure tiers i.e. % Medium Pressure plus Intermediate Pressure (IP+MP).	To understand the proportions operating at the higher pressure tiers.
Target Population for Replacement		
C12.4 Actual/forecast population for replacement	Enter the population of mains in service, at the end of each year, by diameter band. For years up to 2005-06 enter the actual / forecast population under contemporary policy. For 2006-07 onwards enter the forecast end of year population under current policy. For mains identified under the HSE Enforcement Policy enter the % of the year end population operating at the higher pressure tiers i.e. % (MP + IP).	To understand the proportions of the target population by diameter band and pressure tier.
C12.5	Enter the length of other materials (asbestos cement, PVC etc.) included in the programme and in-service at the year end. Enter the % of the year end population operating at the higher pressure tiers i.e. % (MP + IP).	To understand the proportion of other materials in the target population.
C12.6	Enter, by diameter band, the length of MP DI included in the programme and in-service at the year end.	To understand the future MPDI workload.
C12.7 Governors	For each installation type enter the number installed as new and replacement, also enter any removed. Sum to new population at year end.	To understand the population of governors by type.

Table C13 Services Asset Data

4.26. This table collects services data by category and material and tracks installation balances. For abandoned or removed assets enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
	Domestic and Non-domestic Services	
C13.1	For each service pipe material enter units installed as new and replacement and services removed. Sum to new population at year end.	To understand the proportions of service pipe materials in the population.
C13.2	Enter the % of the year end population operating at the higher pressure tiers i.e. % (MP + IP).	To understand the proportions operating at the higher pressure tiers.

Table C14 LTS age profile

4.27. This table collects age data for pipelines and installations. For abandoned or removed assets enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C14.1	Enter pipelines by diameter by decade built	To understand the age profile of pipelines
C14.2	Enter pipelines by maximum design operating pressure tier by decade. Note: The age of a pipeline is the build date of a full section from node to node; replacement diversions, for whatever reason, of sections of a pipeline do not amend the installation date.	To understand the age profile of the various tiers of the LTS.
C14.3	Enter NTS offtakes and PRSs by decade built. Note: The replacement of moving parts for normal wear and tear (R&M) does not affect the build date for an installation; however if there is a major refurbishment probably including an upsize of regulators and other primary equipment, such that the design capacity materially increases, then the build date will become the date of that refurbishment.	To understand the age profile of offtakes and PRSs.

Table C15 Storage age profile

4.28. This table collects age data for physical and contracted storage facilities. For abandoned or removed installations or for terminated contracts, enter a **negative** figure.

Table Reference	Instructions for Completion	Purpose
C15.1	Enter the volumes (same units as in Table 11) for each type of storage. For physical storage owned by the GDN enter by decade of construction. For contracted storage enter in the decade in which any current or planned contract will expire.	To understand the age profile of the owned and contracted storage volumes.

Table C16 Mains and Governors Age Profile

4.29. This table collects the age profile of the populations by material and installation type.

Table Reference	Instructions for Completion	Purpose
	Mains	
C16.1	For each pipe material enter the population, at the year end, by age-band. Entries sum to total and express material as a % of total population.	To understand the age profile of the network and of mains pipe materials in the population.
	Governors	
C16.2	For each installation type enter the population, at the year end, by age-band.	To understand the age profile of the installations in the population.

Table C17 Services Age Profile

4.30. This table collects the age profile of the population by material.

Table Reference	Instructions for Completion	Purpose
	Domestic and Non-domestic Services	
C17.1	For each pipe material enter the population, at the year end, by age-band. Entries sum to total and express material as a % of total domestic and non-domestic services populations.	To understand the age profile of the network and of service pipe materials in the population.

Table C18 Additional Data

4.31. This table collects additional data to understand network condition and expenditure requirements.

Table Reference	Instructions for Completion	Purpose
C18.1 Fracture rate & Corrosion rate	For MP and LP tiers, and for CI and SI mains enter the total number of fractures and the number of pipe fractures per 1000 km of pipe (as reported under IIP & RIGs) for each year (actual and forecast) Enter the total number of DI mains fracture/corrosion events by pressure tier and the number of events per 1000km of pipe for each year (actual and forecast).	Understand effect of pipe replacements and system performance trends.
C18.2 Corrosion rate Gas in Buildings	Enter the number of instances of GIB, (actual and forecast) arising from the network, for each year. Mains - (as reported under IIP & RIGs) Services – The number of instances of Gas in Buildings (GIB) arising from services each year.	Understand effect of pipe replacements and system performance trends.

Table Reference	Instructions for Completion	Purpose
C18.3 Gas in Buildings PREs	<p>Enter the number of internal external escapes (actual and forecast) reported by the public together with the number where no escape was found.</p> <p>Enter the number of external escapes (actual and forecast) reported by the public together with the number where no escape was found.</p> <p>Enter the total number of external & internal escapes (actual and forecast) reported by the public together with the number where no escape was found.</p>	<p>To understand the trend in PREs.</p> <p>To understand system condition.</p>
C18.4 Actioned Repairs PREs	<p>Enter the number of repairs to mains and services (actual and forecast) arising from system condition.</p> <p>Enter the number of repairs to mains and services (actual and forecast) arising from third party damage.</p>	To understand system condition.
C18.5 Average system pressure	Enter the average system pressure in mbarg as used in national leakage models (actual and forecast).	Understand effect of pipe replacements and system performance trends.
C18.6 Leakage	Enter the actual/forecast leakage from MP and LP systems for each year in tonnes methane.	Understand effect of pipe replacements and system performance trends.
C18.7 Total network risk	Enter the total risk forecast by the model at the end of each year. (A description of the model and its components is requested in the narrative).	Understand effect of pipe replacements and system performance trends.
C18.8 CSEP Connections	Enter the total number of Connected System Exit Point connections at the end of each year (actual and forecast) and the associated load in MW.	Understand connections work volumes.
C18.9 New domestic services to existing properties	Enter the number of new service connections to existing domestic properties constructed by the GDN each year (actual and forecast) and the estimated share of the market for these connections (in %).	Understand connections work volumes.
C18.10 New domestic services to new properties	Enter the number of new service connections to new domestic properties constructed by the GDN each year (actual and forecast) and the estimated share of the market for these connections (in %).	Understand connections work volumes.
C18.11 New non-domestic connections	Enter the number of connections to non-domestic properties constructed by the GDN each year (actual and forecast) and the estimated share of the market for these connections (in %).	Understand connections work volumes.

Table Reference	Instructions for Completion	Purpose
18.12 Connection quotations	Enter the total number of connection quotations issued and accepted for the following connections: <ul style="list-style-type: none"> • standard \leq 275 kWh per annum • non-standard \leq 275 kWh per annum • non-standard \geq 275 kWh per annum 	Understand connections work volumes.
18.13 Reinstatement works	Enter the number of reinstatements works completed from repairs to mains and services and the average number of working days taken to complete these works. Enter the number of reinstatements works completed from the replacements of mains and services and the average number of working days taken to complete these works.	Understand reinstatement work volumes and timescales.
18.14	Enter the total number of telephone calls received to the following lines: <ul style="list-style-type: none"> • national emergency helpline • dedicated enquiry line • meter point reference number helpline 	Understand telephone call volumes.

Table C19 Contract Data

4.32. This table collects additional data to understand the changes in contract arrangements. The worksheet is not locked and the table may be copied and reproduced as many times as necessary.

Update only required. Provide data only for new contracts omitted from the one year BPQ response.

Table Reference	Instructions for Completion	Purpose
C19.1 Contract Data	<p>For each new mains and services replacement contract and from 1st Jan 2001, enter the contractor name, contract identifier and duration.</p> <p>For completed contracts indicate (with a x) where the activity was carried out.</p> <p>For current contracts enter the headcount for each replacement activity on a typical basis. Narrative may be provided as necessary.</p> <p>Direct Employees: Those employed directly by the GDN. Agency Staff: Those employed indirectly by the GDN other than via the contractor.</p>	To understand the change in contract arrangements.

Table Reference	Instructions for Completion	Purpose
	<p>Contractor Employees: Those employed directly and via sub-contracts by the contractor.</p> <p>Operatives: Mains and service-laying crews and physical support.</p> <p>Staff: engineering, management, supervisory, administrative and other support.</p>	

Table C20 Capacity Outputs

This table collects additional data to understand the capacity requirements of the LTS networks and gain an understanding of how the GDN is meeting its demand requirements using NTS Offtakes, LP holders, interruption etc. The principal data is based on the PS3/ODC statements as supplied to NGT.

Table Reference	Instructions for Completion	Purpose
20.1 Name	Enter the name of the offtake. Include proposed Offtakes from the year in which they will be constructed.	Provide Number of Offtakes.
20.2 NTS exit zone	Enter the exit zone number. The completed returns should show the offtakes listed by exit zone, alphabetically within each zone.	Identify Network input points.
20.3 Demand	Enter the demand under 1 in 20 conditions for each offtake.	To enable a balance of supply and demand.
20.4 Flow Flat Required	Enter the Flat capacity daily volume for each offtake under 1 in 20 conditions.	Identify the flat volumes taken from the NTS.
20.5 Flow Flex Required	Enter the Flex capacity daily volume for each offtake under 1 in 20 conditions.	Understand the use of flex from the NTS.
20.6 Peak Rate	Enter the peak rate taken through each of the Offtakes.	Identify peak rates
20.7 Min Inlet @SOD	Enter the Min inlet pressure at Start of Day (barg). This is the inlet pressure required to pack the linepack system to the full stock position.	Understand use of capacity at each offtake within day.
20.8 Min Inlet @ SOD contracted by NTS	Enter the pressure contracted by NTS to be available at Start of Day (barg)	Identify robustness of assumptions and understand if there is any potential conflict with NTS
20.9 Min Inlet @EOD	Enter the Min inlet pressure at End of Day (barg). This is the end of the Storage day, i.e. when linepack systems are expected to be at minimum stock values.	Understand use of capacity at each offtake within day.
20.10 Min Inlet @ EOD	Enter the pressure contracted by NTS to be available at End of Day (barg).	Identify robustness of assumptions and

Table Reference	Instructions for Completion	Purpose
contracted by NTS		understand if there is any potential conflict with NTS
20.11 Total volume of storage needed	Enter the total volume of storage needed for each zone Enter the total for each zone against the first named offtake only.	Understand Zonal storage capacity required.
20.12 Total volume of storage available	Enter the total volume of storage available for each zone (excluding use of NTS flex). This should include available LP holder volume, available Linepack, HP bullets, and other storage volumes. Enter the total for each zone against the first named offtake only.	Understand Zonal storage capacity available and robustness of LTS.
20.13 Volume of interruption	Volume of interruption. Enter the total volume of interruption for each zone against the first named offtake only.	Use of GDN interruption.
20.14 Number of Interruptible loads	Identify the number of loads interrupted to correspond with the volume entered in 20.12.	Use of GDN interruption.
20.15 No. of NSLs	Enter the Number of Network Sensitive Loads by offtake zone. Enter the number in the first named offtake for each zone.	Identify constraints on Network.
20.16 Day 46 (Cold)	Repeat the entries above for Day 46 under severe LDC. Storage available and linepack modelling should be carried out assuming that normal operation is taking place and that full interruption has been carried out. This day will have the same total demand as Day 46 Warm (below) but will have a different load distribution depending on the location of interruptible loads.	To assess impact of demand on Linepack availability.
20.17 Day 46 (Warm)	Repeat the entries above for the day when the total demand (Firm and Interruptible demands) is equal to Day 46 on a firm severe load duration curve and assuming that all interruptible loads are being supplied. Storage available and linepack modelling should be carried out assuming that normal operation is taking place with no forecast error.	To understand sensitivity of LTS to changes in demand and interruptible loads.

Definitions

Guidance regarding pipe size bands

4.33. Pipe size bands for all pipe materials are expressed in terms of the equivalent metric PE size band, as indicated in the table below:

Aggregate size banding – imperial	Nominal Diameter	Imperial Cast/Duct Iron	Metric Ductile Iron	Imperial Steel	Metric Steel	Imperial PE*	Metric PE	Aggregate size banding – metric
	(ins)	(ins)	(mm)	(ins)	(mm)	(ins)	(mm)	
	2	2		2		2	63	< 180mm
	3	3		3	89	3	75	
	4	4	100	4	114	4	90	
	5	5					125	
	6	6	150	6	168	6	180	
	7	7						
>12" - 18"	8	8	200	8	219	8	250	> 180mm
	9	9						
	10	10	250	10	273		315	
	12	12	300	12	324		355	
	14	14			356		400	
	15	15	400					
	16	16		16	406			
>18" - 24"	18	18	450	18	457		500	>355 - 500mm
	20	20			508			
	21	21					630	
	24	24	600	24	610			
	30	30		30	762			
	36	36		36	914			
	42			42	1067			
>24"	48	48		48	1219			>630mm

Guidance regarding investment drivers

4.34. The Capex and Repex tables require the identification of the principal investment driver for all activities shown on the spreadsheet. The investment must be identified in one of the following categories:

- Mandatory - Safety
- Mandatory - Security of Supply
- Mandatory - Other Statutory
- Non-Mandatory - Asset Condition
- Non-Mandatory - Business Support
- Non-Mandatory - Economic/Other

4.35. At the highest level, investment must be split between mandatory and non-mandatory:

- mandatory investment relates to compliance with external statutory and/or other external regulatory obligations; and
- non-mandatory investment relates to work not driven by external regulatory or legal requirements.

4.36. Activities may have benefits applicable to more than one driver but only the primary driver should be used for the BPQ spreadsheets.

4.37. For example, a pipeline construction project may primarily be driven by capacity requirements (Mandatory - Security of Supply) but may also allow an existing pipeline that has TD1 infringements to be downgraded to operate at below 7 bar (Mandatory - Other Statutory). The pipeline could also provide additional diurnal storage capacity (Mandatory - Security of Supply), which may reduce dependence on support from the NTS, or allow one or more LP holders to be decommissioned facilitating land disposal (Non-mandatory - economic). The primary driver must be used when completing the BPQ templates. Any secondary drivers will be covered within the supporting documentation for major projects.

Mandatory – Safety

4.38. This should include investments that are primarily driven by compliance with specific HSE requirements, the Gas Safety Regulations, the H&S at Work Act or similar legislation. For example, all mains and services replacement work in compliance with the Health and Safety Executive agreed programme to replace iron mains within 30 metres of a building within 30 years.

Mandatory – Security of Supply

4.39. This should include investments that provide additional system capacity to meet demand requirements as specified in national industry standards for times of peak load e.g. new LTS pipelines, new and upgraded LTS PRSs, new below 7 bar mains (reinforcement) and growth related below 7 bar governors.

Mandatory – Other Statutory

4.40. This should include investments that relates to compliance with other legislation such as:

- Traffic Management Act systems and compliance costs
- Water Discharge consents
- Dangerous Substances Explosive Atmosphere Regulations

4.41. This category would also include investments related to gas transportation licence obligations such as new connections

Non-Mandatory – Asset Condition

4.42. This should include investments related to the renewal of assets that have reached the end of their useful life where it is uneconomic, or no longer practical, to repair and/or maintain. This would include condition based mains and services replacement, renewal of water bath heaters and major mechanical, electrical and/or instrumentation upgrade work to LP holders.

4.43. This driver also covers investment related to compliance with internal asset policies or standards. For example, replacement of governors that are not compliant with T/PR/R6.

Non-Mandatory – Business Support

4.44. This should include investments in non-operational assets that are required to ensure the continued and efficient working of the business. This would include investment in commercial vehicles, IS, property and security of strategic assets.

Non- Mandatory – Economic/Other

4.45. This should include investments of a more discretionary basis that are justified on financial grounds (for example, NPV assessment) and improve the efficiency of the business. Examples may include investment in new technology to increase productivity in field force activities, investment to facilitate asset disposals or the costs of business restructuring.

5. Operating expenditure - additional narrative questions

Chapter Summary This chapter set outs detailed questions asking for additional narrative information on operating expenditure to get a better understanding of historic and forecast costs and the GDNs' efficiency to support the determination of appropriate allowances and incentives.

General questions

5.1. These narrative questions are intended to allow an initial review and understanding of the operating expenditure costs presented in the GDN's forecasts. Ofgem intends to appoint consultants to support their review in a number of areas and further additional information will be required when this occurs.

5.2. A separate response to each of these questions is required for each of the 8 GDNs. Where policies, procedures or other information is the same for two or more GDNs then the responses may cross refer to each other to avoid duplication.

5.3. If the requested information has already been provided in the extension review and the information in that earlier response is unchanged and sufficient to answer the following questions fully (taking into account the longer time period covered by this main review), then the answer may simply refer to that earlier response.

5.4. Describe how management information is used to improve productivity. Give details of productivity measures used with any historic information and targets to 2007-08.

5.5. Please provide a description of your current legal and operational structure together with any proposed changes to it, including:

- 5.5.1. number and location of employees,
- 5.5.2. details of activities carried out directly by the GDN and activities carried out for the GDN by service, support or corporate functions
- 5.5.3. use of subcontractors with details of main contracts.

Please provide a narrative explanation as to why the structure identified represents an efficient and appropriate operational structure.

5.6. For both direct and indirect operating expenditure please provide any internal documentation (including project board papers and management documents) setting out information or the results of analysis regarding:

- 5.6.1. the efficiency/inefficiency of historic expenditure;
- 5.6.2. the scope for future efficiency saving in these areas; and
- 5.6.3. benchmarking costs against other GDNs or external comparators.

5.7. Please provide details of the main differences in operating costs from the levels assumed for the current price control. Identify where, and quantify the extent to which, these changes are due to external factors such as changes in input prices, changes in legislation, etc.

5.8. In addition to the specific commentary below for the direct activities of each DN and the indirect/shared services please provide:

- 5.8.1. The key policies underlying the main activities and resultant workload for each year;
- 5.8.2. Detail of the areas where "Best Practice" has been adopted for the activity.

5.9. Describe the organisation of the activity, details should include:

-
- 5.9.1. number of employees and distribution by function, grade and geographic location
 - 5.9.2. use of subcontractors with details of main contracts, and
 - 5.9.3. planned or anticipated changes by 2012-13

5.10. Explain the impact on costs for each of the following on each of the activities:

- 5.10.1. The separation and sale of the GDNs
- 5.10.2. What efficiency benchmarks are used by each operating unit to measure its performance?

5.11. Please describe the practices and operations, providing examples and narrative explanation, where you think you have achieved exceptional performance or best practice and how this is measured.

Work Management (including Asset Management)

5.12. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.13. Please provide details of the processes and systems used to plan, schedule, track and monitor work including customer driven activities as well as the other activities covered below.

Emergency (first visit only)

5.14. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.15. Please describe and quantify the effect the mains replacement programme is expected to have on the level of reported leaks and emergency call out by 2012-13.

5.16. Provide details of other factors expected to affect either the number of emergency call outs or the cost of such response during the period to 2012-13.

Repairs

5.17. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.18. Identify additional costs that may arise if GDNs were required to attend and prevent gas escaping within 12 hours of being informed for:

- 5.18.1. 50% more publicly reported gas escapes than at present, and
- 5.18.2. ALL publicly reported gas escapes.

State the assumptions you have made and where these additional costs will arise in terms of opex, capex and repex

5.19. Please provide copies of the GDN's policies and procedures for carrying out repairs on mains and services.

5.20. Where policies or procedures have changed since DN sales, or where changes are planned up to 2012-13, please provide details of the impact and reasons for those changes.

Maintenance - general

5.21. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.22. Where levels of any particular category of maintenance are expected to vary from one year to another during the price control period (eg due to cyclical maintenance patterns or some external factor affecting the level of maintenance) please provide details of that variation together with information to support it.

5.23. Please provide details of policies and practices for surveying and monitoring assets on the GDN's system. Explain and provide examples of how the results of such activities feed into the maintenance programme and/or repair work.

5.24. Please describe how the level of capex has impacted the maintenance programme. Explain the processes and procedures used to make the trade-off between higher ongoing maintenance costs and capex.

Maintenance - storage

5.25. Please provide details of the type, quantity and capacity of storage assets used on the GDN's network.

5.26. For each category of storage asset, provide copies of the maintenance policies and procedures.

5.27. Where policies or procedures have changed since DN sales, or where changes are planned up to 2012-13, please provide details of the impact and reasons for those changes.

Maintenance - LTS

5.28. Please provide copies of the GDN's policies and procedures for the maintenance of LTS assets including pipelines and AGI/PRS installations.

5.29. Where policies or procedures have changed since DN sales, or where changes are planned up to 2012-13, please provide details of the impact and reasons for those changes

Maintenance - other

5.30. Please provide your policies and procedures for repair and maintenance of:

- 5.30.1. distribution mains and services
- 5.30.2. instrumentation
- 5.30.3. district governors

5.31. Please provide details of other activities designed to control leakage, including gas conditioning, pressure profiling etc. Include details of how you determine appropriate locations for use of such measures and the extent to which those measures are used at those locations.

Transport & Plant

5.32. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.33. Please provide details of the numbers and type of vehicles and mobile plant owned or operated by the GDN.

5.34. Please provide details of the GDN's policies and procedures for maintaining, operating and running the vehicles and mobile plant described above. Include details of how you determine a necessary and efficient level of such vehicles/plant for your operations and strategies adopted to minimise the costs.

Other (direct activities)

5.35. Please provide details of the assumptions underlying your forecast of costs in this activity. It should include unit cost forecasts, changes in workload and any other factors that you believe will impact costs until 2012-13.

5.36. Please provide an analysis of the activities included under this heading, including

- 5.36.1. description of each item
- 5.36.2. the costs associated with each item
- 5.36.3. anticipated changes in such items in the price control period

Shrinkage

5.37. Give reasons for the volumes for each component of shrinkage and detail of measures taken to minimise these. Please provide an outline of the Leakage reduction policy.

5.38. Please provide detail on cost allocated to the different sources of shrinkage.

5.39. Please provide an outline of the contracts which ensure that gas is efficiently procured for shrinkage. Detail is required on what kind of price index is used and the period this covers. For example, gas maybe purchased based on a forward looking curve on a quarterly basis. We would like details of price paid for gas and volumes bought on a weekly/monthly basis (dependent on the contract) over this price control period and the one year extension.

Policies and Practices

5.40. Details of the following policies should have been provided as part of the one year review:

- 5.40.1. Maintenance
- 5.40.2. Emergency Service
- 5.40.3. Inspections
- 5.40.4. Strategic spares
- 5.40.5. Specialist centres and laboratories
- 5.40.6. Specialist maintenance plant and equipment
- 5.40.7. Replacement and Refurbishment
- 5.40.8. Connection and reinforcement
- 5.40.9. Operational control and safety procedures
- 5.40.10. Environmental Issues e.g. disposal of waste materials
- 5.40.11. Use of sub contracting core and non core services
- 5.40.12. Procurement

5.41. If the forecasts anticipate any significant changes in any of the above policies please provide details of the proposed changes and their impact.

Benchmarking

5.42. Please provide the following information with respect to benchmarking:

- 5.42.1. specify any performance targets sets each year as a result of the above benchmarking exercises
- 5.42.2. provide copies of the results for the latest exercises

Work Management systems

5.43. Describe how the works management system is used. This should cover:

- 5.43.1. Key inputs, e.g. policies, resourcing etc
- 5.43.2. Key outputs, e.g. outage planning, workplace, performance management, reliability centred maintenance
- 5.43.3. Interaction with financial systems
- 5.43.4. A Review of plan vs. performance and feedback into future planning and performance
- 5.43.5. The extent of any multi-utility activity within gas distribution, eg operational staff doing work on both gas assets and other assets such as water/electricity assets, operational staff on both gas distribution and gas transmission assets.

Indirect and support costs

Legal

5.44. Please provide a breakdown of contracts for consultancy, legal and professional services and their associated costs giving details of the nature of service provided in each instance in each year.

Procurement and logistics

5.45. Please provide a description of services provided by this activity to Gas Distribution.

HR and Scheme Trainees

5.46. Please provide details of:

- 5.46.1. Employee performance appraisal systems. What kind of benchmarks are used within the system?
- 5.46.2. Training schemes - specialist and general
- 5.46.3. Staff turnover each year
- 5.46.4. Change in percentage of staff on defined contribution pension schemes
- 5.46.5. Pay policies and pay agreements including negotiations with trade unions.
- 5.46.6. Job grading system
- 5.46.7. Services and functions that have been outsourced.

Insurance

5.47. Please provide a list of all insurance policies relating to the business, assets, liabilities or properties of the GDN giving for each policy:

- 5.47.1. Insurer (specifying whether UK based, or if overseas which location)
- 5.47.2. Policy number

-
- 5.47.3. Term of coverage
 - 5.47.4. Property or risk covered
 - 5.47.5. Appraisal value of covered property (where appropriate)
 - 5.47.6. Extent of coverage
 - 5.47.7. Annual premium
 - 5.47.8. Amount of premiums that are prepaid or are unpaid from prior years.

5.48. If the policies cover risks, assets or liabilities other than those of the licensed distribution business, please describe how costs are apportioned to distribution

5.49. Please provide details of all insurance claims (over £500k in amount) currently pending.

Property

5.50. Please set out the properties used by the GDN, specifying:

- 5.50.1. Operational and non-operational property separately
- 5.50.2. Where any of the above property is solely used by certain operating units
- 5.50.3. Where the above property is not held and managed by the GDN
- 5.50.4. Indicate the occupancy/usage level of the property above

5.51. Please describe the impact of the separation and sale of GDNs on the property portfolio of each GDN, including any planned/expected changes to the property portfolio.

5.52. Please set out details as per paragraph 5.15 of properties disposed since April 2002 over £500k including sales proceeds and profit/loss on disposal.

Information Systems

5.53. Please describe the main IS systems and services provided to the GDN; this should include (specify which of these costs are incurred by the IS Unit):

- 5.53.1. Infrastructure and hardware
- 5.53.2. Software
- 5.53.3. Backup systems
- 5.53.4. Maintenance and ongoing support
- 5.53.5. Telecommunications

In each case split between operational and non-operational where applicable.

5.54. Please describe the impact of the demerger and sale of GDNs on the IS functions. To what extent and at what cost are new systems being developed? Where existing systems will be used by networks, how will this affect the cost for those networks?

5.55. What appraisal techniques are used to evaluate potential investments and upgrades to the IT systems?

5.56. Please list all upgrades and developments over £500k since April 2002.

5.57. What services and functions have been outsourced? Please provide details.

Corporate centre

5.58. Provide an outline of the main corporate functions.

5.59. Provide a breakdown of corporate function costs for 2005-06. What proportion of these costs is charged to other activities such as overseas activities, unlicensed activities or licensed activities other than Gas Distribution.

Documentation

5.60. Supporting evidence: Greater credence will be given to commentary on tables and additional narrative supported by relevant documentation including:

- 5.60.1. quarterly and annual financial reports for each operational unit
- 5.60.2. business plans for each operational unit
- 5.60.3. proposal papers and reports in support of complete and planned initiatives submitted to the board of directors or management/executive committees
- 5.60.4. progress reports on sanctioned initiatives submitted to the board of directors or management/executive committees
- 5.60.5. analysis supporting completed and planned initiatives e.g. benchmarking cost benefit studies
- 5.60.6. details of historic redundancies programs
- 5.60.7. all market studies, feasibility studies, analyses, and similar reports concerning the GDN prepared within the past three years.
- 5.60.8. recent analyses of the GDN's business or its industries prepared by investment bankers, engineers, management consultants, accountants, or others, including marketing studies, credit reports, and other types of reports, financial or otherwise.

5.61. Please separately describe and quantify the GDN's policy in relation to Research & Development costs. Provide sufficient details to allow Ofgem to understand the Research and Development activities (including potential benefits, risks etc).

Independent Undertakings (supplied by LNG/LPG)

5.62. For each applicable year from 2002-03 to 2013-14 provide details of the charge made by the GDN to the NTS for operating and maintaining independent undertakings. Also provide a detailed breakdown of the opex, capex and repex costs associated with each of undertakings in the GDN's area.

New legislation/regulations

5.63. Please provide an explanation of each item of anticipated uncertain costs of complying with new legislation/regulations included in table B5.1, including assumptions made and details of how the cost has been estimated.

5.64. Where the new legislation/regulation means that some item of existing cost will no longer be incurred, please provide details of those savings.

6. Capex and Repex - additional narrative questions

→ **Chapter Summary:** This chapter set out detailed questions asking for additional narrative information on capital and replacement expenditure to gain an understanding of past expenditure, efficiency and investment management processes. To aid readers, the changes that have been made since the issue of the One Year Review are highlighted by ~~striketrough~~ for deletions and **yellow** for insertions. Some questions are **greyed out** as they do not require further answers in this review. For these questions data provided in the one year review will be used as appropriate. Comments to explain the changes are highlighted in **green**.

General

6.1. Please note that a separate response is needed for each of the 8 GDNs. Where policies or procedures are the same, cross-referencing may be used.

6.2. Provide any **additional** internal papers or reports (including project board papers and management papers) setting out information or the results of analysis regarding:

- 6.2.1. The efficiency/inefficiency of historic LTS and storage Capex projects
- 6.2.2. The scope for future efficiency saving in these areas
- 6.2.3. Benchmarking costs against other GDNs or external comparators
- 6.2.4. The allocation of Capex or non-mains Repex expenditure to the 3 categories set out in Ofgem's March 2004¹ letter.

Provide only additional papers or reports not available at the time of the one year review.

6.3. For the areas of Capex and Repex spend listed below provide any **additional** internal papers or reports (including project board papers and management papers) setting out information or the results of analysis regarding:

- 6.3.1. The efficiency/inefficiency of historic expenditure
- 6.3.2. The scope for future efficiency saving in these areas
- 6.3.3. Benchmarking costs against other GDNs or external comparators
- 6.3.4. The allocation of Capex or non-mains Repex expenditure ~~should be allocated~~ to the 3 categories set out in Ofgem's March 2004 open letter.

The relevant areas of Capex and Repex are:

- General Mains reinforcement
- Governors
- Connections
- Other operational Capex
- Non-operational Capex
- Mains Repex
- Services Repex.

Provide only additional papers or reports not available at the time of the one year review.

¹ Ofgem open letter, Gas Distribution Price Controls, 16 March 2004.

6.4. Describe the GDN's approach to the development, direction, motivation and management of its directly employed staff and operatives including:

- 6.4.1. How does the GDN ensure that activities are aligned to deliver required outputs?
- 6.4.2. How does the GDN monitor the activities undertaken and the quality and quantity of outputs?
- 6.4.3. How does the GDN monitor & address quality and productivity issues?
- 6.4.4. What incentives are in place to reward appropriate and exceptional behaviour and outcomes?

No further information is required. Responses to the one year review will be used.

Assumptions

6.5. For the purpose of completing the questionnaire it will be necessary to make a range of assumptions. Please specify the new or amended key assumptions used.

Please specify the key assumptions used for any new or amended return made under this review.

Capitalisation policy

6.6. Describe the capitalisation policy adopted for Repex and Capex investment. Detail the categories of overhead capitalised and describe any changes in capitalisation policy during the historical period and quantify their effects. Explain the process and provide details of the build up for each category, including manpower resource allocations.

Provide details of any changes from the information returned for the one year review.

6.7. In the event that the accounting policies applied to prepare the BPQ differ from those used in the Regulatory accounts (for some or all years), include appropriate details including quantification of the variance.

Overall comparison of allowed and actual capital and replacement expenditure

6.8. Provide a comprehensive overview narrative, supported by (free format) tables, to demonstrate how the business has managed overall Capex and Repex spend from ~~January 2001 to March~~ April 2005 to March 2006. Compare actual spend in each material area of expenditure with the Capex and Repex allowances given for this time period. Identify any material workload or cost changes that have caused such variances and explain the nature of the drivers for these changes (both external and internal management changes). Describe the actions taken to mitigate the effects of any other negative external or internal drivers and any actions taken to increase the benefits from positive drivers.

6.9. The purpose of this section is to understand how the business has acted to offset potential areas of overspend by deferrals or reduced work in other areas or by the accelerated implementation of cost saving initiatives, to enable it to stay within the overall allowances for this time period.

Forecasting

6.10. Provide a comprehensive overview narrative, supported by (free format) tables to explain the workload and expenditure required to meet the forecast business needs. This should cover the period from ~~2005-6 to 2012-13~~ 2006-7 to 2017-18 and identify trends in workload and costs over this period. Demonstrate how Capex and Repex will change in each

material area of expenditure, from 2005-6 to 2007-8 2006-7 to 2012-13, identifying any material workload or cost changes and explaining the drivers for these. Describe any external or internal drivers which influence future expenditure and what actions will be taken to mitigate negative drivers and accelerate positive drivers.

6.10a. In particular, state for each major category of expenditure, the planning assumptions made and how these vary from those made for the One Year Review.

6.10b. Describe your forecasting processes for each major category of expenditure and show how the forecast volumes in the spreadsheets have been derived from the specific investment drivers identified in the forecasting process.

6.10c. Describe how your asset risk management process has been integrated into your forecasting and how this leads to the optimisation of planned expenditure.

6.10d. List any areas of material uncertainty in your investment planning and how you plan to mitigate these.

6.10e. Describe and quantify any unique or unusual factors that affect the forecasts for a particular network: e.g London costs, skewed asset age/condition, legacy issues.

6.10f. For each area of expenditure describe the tools that you will use to monitor and control costs, especially where there are projected savings.

6.10g Describe any capital expenditure efficiency initiatives planned for the period 2006-07 to 2017 -18. Provide a detailed summary of the main features of each initiative. Identify the estimated financial impact (include a cost-benefit analysis for each initiative for each year of the plan), separately identifying 'one-off' and 'recurring' reductions in capital expenditure expected to arise from implementation of the initiative.

6.11. The purpose of this section is to understand the changes that the business will be making to control and reduce costs and to enhance value and benefits to the GDN's customers and how and why you will be making these changes.

Policies

6.12. Where a narrative question asks for policies or procedures to be provided, GDNs should state whether the legacy 'Transco' policy or procedure applies (to a given time period) and if this policy or procedure is planned to change, state at what date, provide a copy of the new policy or procedure and say in what ways this is more beneficial to the business than the displaced one. If the legacy policy or procedure is being retained, state that this is the case. and provide a copy, if not provided for the One Year Review.

6.12a. State your replacement policies for assets other than mains and services. For each asset category describe the optimisation of cost reduction between maintenance and replacement including risk mitigation.

Provide details of any changes from the information returned for the one year review.

Specific Expenditure Areas

LTS and Storage Capex

System diagrams

6.13. Provide any new or modified diagrams in PDF format detailing the Local Transmission System (LTS). The diagram should enable Ofgem to identify the following:

- 6.13.1. Location of a pipeline, its Maximum Design Operating Pressure, and diameter. Where operational pressures of any pipelines are to be changed within the forecast price control periods please indicate these.
- 6.13.2. Off-takes or other feeds into the LTS.
- 6.13.3. Storage facilities.
- 6.13.4. New assets constructed or assets abandoned during the current price control and assets forecast to be constructed in the forecast price control periods

Provide only any diagrams which are new or have been modified since those returned for the one year review.

NTS Offtakes, Pipelines, PRSs and Storage

6.14. For all **additional or revised** projects listed in Table C1 of the BPQ spreadsheets provide:

- 6.14.1. a short description of each project including planned and actual scope and timing
- 6.14.2. appropriate line diagrams
- 6.14.3. financial summary: including at least Ofgem allowed cost, (Transco) forecast cost and actual outturn.
- 6.14.4. an explanation of any variances and actions taken to manage them.
- 6.14.5. post investment appraisal (PIA) summary, where undertaken

Provide the above information for any project which was not listed in the return for the one year review OR for which the details have materially changed, including timing changes.

6.15. Ofgem will select a number of projects for review (at least **[number TBC]** per GDN). Further details will then be requested for these projects, at a later date, but ahead of any visit to the GDN:

- 6.15.1. Planning and justification information including consideration of alternative solutions,
- 6.15.2. Environmental impact analysis
- 6.15.3. Project submission including risk analysis
- 6.15.4. Financial approval papers, contractor selection process
- 6.15.5. Contracts and major material sourcing and procurement details
- 6.15.6. Expenditure control information
- 6.15.7. Project commissioning and QA details
- 6.15.8. Project closure and PIA information (or such documents as are commensurate with the stage of completion of the project).

Distribution Capex

6.16. Provide tabulated details of all projects costing more than £0.5 **m that were completed in 2005-6** in the reporting period of this questionnaire (i.e. projects identified in the BPQ tables) including the following information:

- 6.16.1. Description, including a statement to justify the expenditure against previously agreed outputs
- 6.16.2. Work content summary
- 6.16.3. Approved scope, timing and cost

- 6.16.4. Actual scope, timing and cost
- 6.16.5. Reasons for variations and the steps taken to manage them
- 6.16.6. Details of post investment appraisals (PIAs) carried out and the actions taken to address the issues identified. Copies of one or more of these PIA reports may be required for examination

6.17. Ofgem will select a number of projects for review, at least [number TBC] per GDN. Further details will be requested for these projects at a later date, but in advance of any visit to the GDN.

6.17a. Provide details of the approval processes for Capex projects. Explain the project cost estimation process and how uncertainties are managed. Explain the processes for monitoring and control of work in progress, and for post completion review of quantities and costs.

6.18. Provide a list of all internal audits carried out on capital projects [that were completed in 2005-6]. Copies of one or more of these audit reports may be required for examination.

6.19. Explain the policy and process to forecast unit costs for the following expenditure categories:

- 6.19.1. Mains reinforcements and other <7bar build (mains, diversions)
- 6.19.2. Governors
- 6.19.3. Connections (mains, governors, services)

Include details of planned actions to improve efficiency and the associated effects on unit costs.

Provide details of any changes from the information returned for the one year review.

6.20. Describe the policy and process to determine asset life expectancy. Provide a list detailing the asset life for all operational and non operational asset types.

Connections

6.21. Explain any differences between [the Price Control Review allowances for 2005-6] allowances for the 2001 Price Control Review period and actual investment for all mains, governors and services activities. This should describe all connections mains and service categories (for example, domestic new housing, domestic existing housing and non-domestic) as well as all specific reinforcement activities associated with these connections. Provide explanations for variances between forecast [allowed] and actual unit costs and work volumes.

6.22. For the period posts ~~Jan 2001 to 2003-4 and 2008-9~~ to 2012-13, specify the principal investment driver for the total investment activity for each mains category, governors and services.

For the period post 2012-13, spreadsheet data is collected by activity sub-total and total entries only. The spreadsheet format does not permit identification of Investment Drivers against these entries.

6.23. Provide detailed information regarding standard connections charges for the ~~review~~ period post 2004-05, include details of the costs and assumptions that support the charges. Describe the process for review of these charges and allocation of overheads, including the build up.

Provide details of any changes from the information returned for the one year review.

6.24. Provide copies of all contracts with Connections Services Providers (CSPs) for the ~~review~~ period post 2004-05 and the dates of operation. Include:

- 6.24.1. The relevant work types undertaken and included activities.
- 6.24.2. General terms and conditions.
- 6.24.3. Definitions.
- 6.24.4. Schedule of rates and any arrangements for adjustment.
- 6.24.5. A description of efficiency incentives within the contract.
- 6.24.6. Copies of any correspondence, or notes of meetings with the contractor, relevant to changes in contract terms or rates.

Provide details of any changes from the information returned for the one year review

6.25. Describe the processes for evaluation of these contract arrangements and GDN management of the work. Include details of information systems used to monitor performance and customer charging processes.

Provide details of any changes from the information returned for the one year review

6.26. Provide details of the direct employment and contract resources deployed by the CSPs. Describe the processes within the CSPs for procurement of contract services and management of these services including work issue and performance monitoring.

Provide details of any changes from the information returned for the one year review

6.27. For the ~~review~~ period post 2004-05, provide copies of all contracts between the CSPs and their contractors and the dates of operation. Include:

- 6.27.1. The relevant work types undertaken and included activities.
- 6.27.2. General terms and conditions.
- 6.27.3. Definitions.
- 6.27.4. Schedule of rates and any arrangements for adjustment.
- 6.27.5. A description of efficiency incentives within the contract.
- 6.27.6. Copies of any correspondence, or notes of meetings with the contractor, relevant to changes in contract terms or rates.

Provide details of any changes from the information returned for the one year review

6.28. Provide the tabulated summary details for connections projects with a project value > £0.5m completed during the review period **2005-6**. If there are less than 5 projects then list the 5 highest spend projects. Include the following information:

- 6.28.1. Approved cost, actual cost, overheads and contribution
- 6.28.2. Work content summary (kms mains, no. governors, no. services)
- 6.28.3. System reinforcement required
- 6.28.4. Reasons for variations between actual costs plus overheads and contributions and steps taken to manage them
- 6.28.5. Details of post investment appraisals carried out and the actions taken to address the issues identified. Copies of one or more of these PIA reports may be required for examination

6.28a. Provide details of the CSPs policies and procedures for the procurement of pipelaying materials and the management of usage.

6.28b. Provide in tabulated form, the current costs to the CSPs for the purchase of frequently used mains & services connections materials and, for comparison, the GDN direct purchase costs. Items should include 63 – 250mm PE pipe, bends, elbows, tees, electro-fusion couplings, cap ends etc. and 20, 25 & 32mm PE pipe, elbows, tapping tees etc. Also, provide details of any overheads applied by your CSPs to the supply of materials including an explanation of the build-up.

6.29. Ofgem will select a number of projects for review (at least one per GDN). Further details will then be requested for these projects at a later date, but ahead of any visit to the GDN.

6.30. Describe the strategy and process used to identify the requirement for specific network reinforcement as a direct consequence of connections work. Provide details of the planning process used to develop a cost effective reinforcement solution.

6.31. List and describe the various allowances that are applied to connections work charges.

6.32. Describe the process used to manage the application of the Domestic Load Connection Allowance ('10m' rule) and determine the effects on connections expenditure. For ~~each year of the review period~~ the period post 2004-05 quantify the costs associated with compliance. Explain how quantified historic and forecast costs are determined.

Provide details of any changes from the information returned for the one year review

6.33. Describe the process to manage the application of the Economic Test and assess the contribution required against specific reinforcement expenditure. For ~~each year of the review period~~ the period post 2004-05 quantify the costs incurred as a consequence of this rule. Explain how quantified historic and forecast costs are determined. Also, provide details of any post investment appraisal or audit actions taken to confirm connected load conformance with the load specified at the enquiry stage when the degree of contribution is assessed.

Provide details of any changes from the information returned for the one year review

6.34. Describe and quantify actions that have been taken and are proposed to control connections expenditure. Include details of any changes in contractual arrangements with CSPs, describe the reasons for these changes and quantify the expected benefit.

Provide details of any changes from the information returned for the one year review

General Mains Reinforcement and Governors

6.35. Explain any differences between the Price Control Review allowances for 2005-6 ~~allowances for the 2001 Price Control Review period~~ and actual investment for all general reinforcement mains activities. Include an explanation of variances between ~~forecast~~ allowed and actual unit costs, and work volumes.

6.36. Explain any differences between the Price Control Review allowances for 2005-6 ~~allowances for the 2001 Price Control Review period~~, allowances and actual investment for all reinforcement driven, and other, governor investment. Include an explanation of variances between ~~forecast~~ allowed and actual unit costs and work volumes.

6.37. For the periods ~~post Jan 2001 to 2003-4 and 2008-9 to~~ post 2012-13, specify the principal investment driver for the total below and above 180mm mains general reinforcement investment activities.

For the period post 2012-13, spreadsheet data is collected by activity sub-total and total entries only. The spreadsheet format does not permit identification of Investment Drivers against these entries

6.38. For the period posts ~~Jan 2001 to 2003-4 and 2008-9~~ to 2012-13, specify the principal investment driver for each category of governor investment activity.

For the period post 2012-13, spreadsheet data is collected by activity sub-total and total entries only. The spreadsheet format does not permit identification of Investment Drivers against these entries

6.39. If the number of governors in your GDN which are installed below ground is material, please state this as a percentage of the total and explain why there is the requirement to install below ground and how this affects the cost.

6.40. Describe the strategy and process used to identify the requirement for network reinforcement as a consequence of general load growth. Provide details of the planning process to develop a cost effective reinforcement solution.

6.41. Provide tabulated details of all projects costing more than £0.5m, **that were completed in 2005-6**, with an overspend in excess of 20% above the original approved expenditure level. If this is less than 5 projects, then list the 5 projects with the greatest overspend. Include the following information:

- 6.41.1. Project description
- 6.41.2. Work content summary
- 6.41.3. Approved cost
- 6.41.4. Actual cost
- 6.41.5. Reasons for cost variations and the steps taken to manage them
- 6.41.6. Details of post investment appraisals carried out and actions taken to address the issues identified.

6.42. Project Reviews: Ofgem will select a number of projects for review (at least **number TBC** per GDN). Further details will then be requested for these projects, at a later date but ahead of any visit to the GDN.

6.43. Describe and quantify actions that have been taken and are proposed to control overall mains reinforcement and governor expenditure.

Provide details of any changes from the information returned for the one year review

Other Operational Capex

6.44. Explain any differences between **the Price Control Review allowances for 2005-6** ~~allowances for the 2001 Price Control Review period~~ and actual investment for all other operational Capex (including leakage management plant and equipment, land and buildings). Include an explanation of variances between forecast **allowed** and actual workload.

6.45. For the periods ~~Jan 2001 to 2003-4 and 2008-09 to~~ **post** 2012-13, specify the principal investment drivers for the total Plant & Equipment and Land & Buildings investment activities.

For the period post 2012-13, spreadsheet data is collected by total entries only. The spreadsheet format does not permit identification of Investment Drivers against these entries

6.46. Provide a copy of the GDN policies and procedures for investment in leakage management plant and equipment. Describe the planning process and the process to assess the operating cost benefit.

6.47. Provide tabulated details of the leakage management projects (such as improved pressure control, gas conditioning) completed during **2005-6** ~~the review period~~. Include the following information:

- 6.47.1. Project description
- 6.47.2. Network information:
 - 6.47.2.1. LP system (Length, PE: Length, other materials: (both in kms))
 - 6.47.2.2. Number of service connections
 - 6.47.2.3. Number of PRS infeeds
- 6.47.3. Approved cost
- 6.47.4. Actual cost
- 6.47.5. Reasons for cost variations and the steps taken to manage them
- 6.47.6. Details of post investment appraisals carried out and actions taken to address the issues identified. Include summary information regarding subsequent distribution system performance to confirm operating cost benefit.

6.48. Ofgem will select a number of projects for review (at least one per GDN). Further details will then be requested for these projects, at a later date, but ahead of any visit to the GDN.

6.49. Describe the strategy and process for procurement of leakage management equipment, services and materials.

6.50. Describe and quantify actions that have been taken and are proposed to control other operational Capex.

Provide details of any changes from the information returned for the one year review

6.51. Land and Buildings: list locations where operational land exceeding 100 square metres has been bought or sold **during 2005-6**, giving prices or receipts. Where land has been sold, indicate whether monies were spent on decontamination, making clear the gross and net value of the disposal and indicate where any residual future contamination risk lies. In addition, separately list any operational buildings sold (definition as per asset register).

Non-Operational Capex

Information Systems

6.52. If any Capex IS Systems projects have an associated Opex cost, provide an explanation of such relationships in the commentary.

6.53. Please describe what **revised** appraisal techniques are used to evaluate potential Capex investments to the IT systems?

Only include changes to the appraisal techniques from those provided for the one year review.

6.54. (FOR NGG only) Provide a brief description of all IS Capex projects undertaken/planned for all GDNs >£0.5 million from ~~01.01.01 to 31.03.05~~ 1 April 2005 to 31 March 2006. Include for each project a cost breakdown into the following categories:

- 6.54.1. System provision (or development)
- 6.54.2. Data preparation
- 6.54.3. Testing
- 6.54.4. Implementation/training.

This question is limited to the IS projects undertaken by the central NGG IS department and recharged to the individual GDNs. Project details between 1 Jan 2001 and 31 March 2005 will be taken from the replies to the one year review.

6.55. (For NGG only) ~~Ofgem will review the list of projects and will request further information in the following areas during GDN visits~~ Provide the following information for IS Capex projects undertaken/planned for all GDNs >£0.5 million from 1 April 2005 to 31 March 2006:

- 6.55.1. A brief overview of IT work and/or asset management systems and how they are used
- 6.55.2. Business level outputs (e.g. customer service) which the project is targeted at improving
- 6.55.3. Risk mitigation and management strategies
- 6.55.4. Sample project documents (i.e. scope of work documents, close-out reports)

This question is limited to the IS projects undertaken by the central NGG IS department and recharged to the individual GDNs. Project details between 1 Jan 2001 and 31 March 2005 will be taken from the replies to the one year review.

6.56. (For NGG only) For the IS Capex investment undertaken/planned for all GDNs from ~~1 January 2001 to 31 March 2005~~ 1 April 2005 to 31 March 2006 provide:

- 6.56.1. An overview narrative on the actual level of IS system costs encountered compared with that forecast in the 2001 submissions to Ofgem. Also provide narrative on the external and internal drivers for those variations. Provide narrative on any actions taken to mitigate the effects of adverse drivers and the actions taken to benefit from positive ones.
- 6.56.2. A list of post completion appraisals carried out on IS projects with a project >£0.5m completed in this time period. Ofgem may ask for copies of one or more of these reports.

This question is limited to the IS projects undertaken by the central NGG IS department and recharged to the individual GDNs. Project details between 1 Jan 2001 and 31 March 2005 will be taken from the replies to the one year review.

6.56a Provide a brief description of all IS Capex projects >£0.5 million from 1 April 2005 to 31 March 2006. Include for each project a cost breakdown into the following categories:

- 6.56a.1 System provision (or development)
- 6.56a.2 Data preparation
- 6.56a.3 Testing
- 6.56a.4 Implementation/training.

This is a new question which all GDNs must answer. Exclude any projects provided centrally by NGG IS department.

6.56b Provide the following information for IS Capex projects >£0.5 million from 1 April 2005 to 31 March 2006:

- 6.56b.1 A brief overview of IT work and/or asset management systems and how they are used
- 6.56b.2 Business level outputs (e.g. customer service) which the project is targeted at improving
- 6.56b.3 Risk mitigation and management strategies
- 6.56b.4 Sample project documents (i.e. scope of work documents, close-out reports)

This is a new question which all GDNs must answer. Exclude any projects provided centrally by NGG IS department.

6.56c For the IS Capex investments from 1 April 2005 to 31 March 2006 provide:

- 6.56c.1 An overview narrative on the actual level of IS system costs incurred compared with forecasts in the 2001 submission to Ofgem. Also provide narrative on the external and internal drivers for those variations. Provide narrative on any actions taken to mitigate the effects of adverse drivers and the actions taken to benefit from positive drivers.
- 6.56c.2 A list of post completion appraisals carried out on IS projects with a project >£0.5m completed in this time period. Ofgem may ask for copies of one or more of these reports.

This is a new question which all GDNs must answer. Exclude any projects provided centrally by NGG IS department.

6.57. Describe the key features of the forecast IS investment plans 1 April 2005 **2006** to 31 March 2013, including any significant changes to historic spend profiles.

6.57a Describe the plans and assumptions that have been used to develop the forecasts for IS Capex including the changes required to deliver and develop systems in the post GDN sales environment.

6.58. Explain how a budget is established for a Capex IS project and what level of contingency is applied.

The returns from the one year review will be used for this information.

~~6.59. Ofgem will review the list of projects and will request further information in the following areas during GDN visits~~ **Provide the following information:**

- 6.59.1. The prioritisation process for IS system projects.
- 6.59.2. Details of the system procurement strategy with commentary on how the strategy is aimed at minimising the whole life cost of procuring and operating the system.
- 6.59.3. The use of subcontracting and specialist consultants.

System Operation

6.60. Describe **additional** IS systems within System Operation, including both engineering control systems and commercial systems. Describe any performance limitations on these systems and provide justification for any actual replacement expenditure in the reporting period. Explain the Capex costs (in terms of hardware and software development time, and testing and service delivery) of obtaining the required performance.

Only provide details of systems not submitted for the one year review

6.60a. Describe the commercial, operational and regulatory business drivers that have been taken into account when compiling the forecast expenditure plans.

6.60b What risks and issues have been identified which impact the forecast expenditure plans?

6.60c Describe the plans and assumptions that have been used to develop the forecasts for System Operation given the fundamental changes which will occur over the next 5 years.

6.60d What assumptions have been made regarding the asset lives of Scada and Telemetry systems in compiling the forecast expenditure plans?

6.61. ~~Ofgem will review the list of projects given in table 6 and will request further information in the following areas during GDN visits~~ **Provide the following information:**

- 6.61.1. Number of new Remote Telemetry Units installed during the period January 2001 to March 2005 **2006**
- 6.61.2. The replacement policy of telemetry systems
- 6.61.3. Procurement policy for IS systems supporting System Operation

6.62. Describe the basis for the allocation of System Operation centralised expenditure to the GDNs. What System Operation assets are currently owned by your GDN and is this expected to change during the full PCR period?

The returns from the one year review will be used for this information.

Other Allocated Costs

6.63. Explain any **additional** allocation of costs between NTS and GDNs.

Only include additional costs from those provided for the one year review

Xoserve

6.63a Describe the business drivers and investment plans for Capex expenditure on Xoserve systems.

Repex

HSE Enforcement Policy and other requirements from 01.01.2001

For questions 6.64 –6.77 below provide an update, as necessary, to the response for the one year review.

6.64. Provide details of the mains replacement required, under the HSE's 2001 Enforcement Policy, for each year from 2001.

6.65. Provide copies of the programme and other documents submitted to and approved by the HSE each year under Regulation 13A of the Pipelines Safety Regulations together with the associated performance monitoring data.

6.66. Explain any variance from the HSE requirement.

6.67. What affect did this HSE requirement have on the GDN's workload and costs?

6.68. Provide details of the HSE's MP DI Improvement Notice and the GDN's position at 30 April 2003 (the required completion date).

6.69. Provide copies of the programme and other documents submitted to and approved by the HSE.

6.70. Explain any variance from the HSE requirement.

6.71. What affect did this HSE requirement have on the GDN's workload and costs?

6.72. What is/will be the requirement under this policy from 2003 onwards?

6.73. Provide details of any other mains replacement required by HSE during the period 1 January 2001 to date.

6.74. Provide details of any services replacement required by HSE during the period 1 January 2001 to date.

6.75. Provide copies of any relevant documents submitted to and approved by the HSE.

6.76. Is the GDN aware of any future changes to the programme, or policies and procedures, for mains and services replacement that may be introduced or required by the HSE?

6.77. Provide a copy of correspondence, or the minutes or notes of any meetings, with the HSE concerning the HSE's requirement and/or the GDN's policies and procedures for delivery of mains and services replacement.

Strategy

For questions 6.78 –6.80 below provide an update, as necessary, to the response to the one year review.

6.78. Describe how the mains replacement programme has been managed from 1 January 2001 and how this efficiently achieves HSE objectives.

6.79. State how the mains replacement policy is managed to optimise network rationalisation, resource planning, materials procurement and cost performance.

6.80. Describe any proposed changes to the management process that will improve efficiency.

Policy and Procedures

For questions 6.81 –6.88 below provide an update, as necessary, to the response to the one year review.

6.81. Provide copies of the GDN's current Policies and Procedures for mains and services replacement.

6.82. Provide copies of any earlier Policies and Procedures in use during the period 1 January 2001 to date and explain the reasons for the changes.

6.83. Explain the GDN's investment policy for mains and services replacement expenditure and provide a copy of the relevant section of the policy.

6.84. Describe the GDNs' policy towards the safe operation of that part of the network within high rise apartment blocks & similar and provide a copy of the policy.

Repex/Capex Interface

6.85. Where there has been an increase in capacity in the replacement main, and it operates at a higher pressure tier, or is significantly larger than the abandoned main, is the cost charged to replacement or capital expenditure?

6.86. If any such costs are charged to capital, please provide details (length, diameter band, cost etc.) for each year from 1 January 2001.

Repex/Opex Interface

6.87. Have any replacement activities been directly charged (rather than allocated) to Opex? For example, if a main is decommissioned without replacement is the cost charged to Opex or Repex?

6.88. If any such costs were charged to Opex, please provide details (length, diameter band, cost etc.) for each year from 1 January 2001

Budget preparation and cost control

For questions 6.89 –6.92 below provide an update, as necessary, to the response to the one year review.

6.89. Describe the cost sources included in replacement expenditure?

6.90. Explain how the replacement budget is established and provide a map of the budget process from planning assumptions to budget approval including the link with desired outputs.

6.91. Explain the policy and process to forecast unit costs for the following expenditure categories:

- 6.91.1. Mains replacement and diversions
- 6.91.2. Services replacement

Include details of planned actions to improve efficiency and the associated effects on unit costs.

6.92. Explain the policy and process for the assessment of capitalised overheads for mains and services replacement. Provide details of the build up for each category including manpower resource allocations.

Project Preparation

For questions 6.93 –6.96 below provide an update, as necessary, to the response to the one year review.

6.93. Describe the process for the selection of mains and services for replacement and the design of the replacement projects. Provide a process map showing all the steps in the process.

6.94. Provide details of the approval processes for replacement projects. Explain the project cost estimation process and how uncertainties are managed.

6.95. Provide the levels of financial authority within the GDN.

6.96. How does the GDN establish, maintain and communicate a design strategy for each physical network?

Procurement

For questions 6.97 –6.101 below provide an update, as necessary, to the response to the one year review.

6.97. Describe the GDN's contract strategy for mains and service replacement work from 01.01.2001.

6.98. How did the strategy address the essential requirements such as work quality, progress, productivity and cost?

6.99. How did the strategy address recruitment, training and development, and the need to deal efficiently with changes in workload?

6.100. How did the strategy address issues that may occur at the contract interfaces such as work issue, work planning, job completion and the provision of asset records?

6.101. Provide copies of the contracts (for mains and services replacement) in place at 01.01.2001. Provide copies of all subsequent contracts and the dates of operation. For each contract include:

- 6.101.1. The relevant work types undertaken and included activities
- 6.101.2. General terms and conditions
- 6.101.3. Definitions
- 6.101.4. Schedule of rates and any arrangements for adjustment
- 6.101.5. A description of efficiency incentives within the contract
- 6.101.6. Copies of any correspondence, or notes of meetings with the contractor, relevant to changes in contract terms or rates
- 6.101.7. What are the expiry dates or termination arrangements for the current contracts

Materials (Pipe & fittings)

For questions 6.102 –6.106 below provide an update, as necessary, to the response to the one year review.

6.102. Describe how materials are sourced, warehoused and delivered to site.

6.103. Describe the arrangements for the security of materials on site and protection from loss or damage.

6.104. Describe the arrangements for monitoring the wastage of materials issued for mains and service replacement work.

6.105. Provide current costs (delivered to site) for common mains and services replacement materials. Items should include 63–315mm PE pipe, bends, elbows, tees, electro-fusion

couplings, cap ends etc, and 20, 25 & 32mm PE pipe, elbows, tapping tees, tees, electro-fusion couplings, meter box adaptors, GRP sleeve, PVC bend, meter control & meter box.

6.106. Describe the trend in materials costs since 1 January 2001. How does the GDN expect material costs to change in the period to 2013?

Construction and commissioning

For questions 6.107 – 6.114 below provide an update, as necessary, to the response to the one year review.

6.107. Describe the current work issue process and the interface between project preparation and construction.

6.108. How has this changed since 1 January 2001?

6.109. Does the GDN expect further change in the period to 2013? If so, what is the benefit of this?

6.110. What are the **typical costs of, and** cost variations between different mains and services replacement techniques?

6.111. How are mains replacement techniques chosen and executed for each project?

6.111a How are quality of service issues i.e. the number and duration of interruptions, managed during the construction phase?

6.112. How are unit costs and overall activity costs optimised?

6.113. How is the utilisation of efficient techniques measured and monitored?

6.114. What are the arrangements for the monitoring and control of work in progress and for the post-completion review of quantities and costs?

Audit and Review

For questions 6.115 – 6.118 below provide an update, as necessary, to the response to the one year review.

6.115. Provide tabulated details of any mains and services replacement projects costing more than £0.5 million and completed in the period 1 January 2001 to 31 March **2006** including the following:

- 6.115.1. Description, including a statement to justify the expenditure against previously agreed outputs
- 6.115.2. Work content summary
- 6.115.3. Approved cost, actual cost and reasons for cost variations
- 6.115.4. Details of post investment appraisals carried out and the actions taken to address the issues identified. Copies of one or more of these PIA reports may be required for examination.

6.116. If no mains and services replacement projects >£0.5m were undertaken then please provide details of the largest five projects.

6.117. Provide project documents (i.e. scope of work documents, specifications, costs estimation, special contract documentation, cost monitoring reports, closure reports) for the

five largest mains and services replacement projects completed in the period 1 January 2001 to 31 March 2006.

6.118. Provide a list of all internal audits carried out on mains and services replacement projects during the period 1 January 2001 to 31 March 2006. Copies of one or more of these audit reports may be required for examination.

Comparison of allowed and actual expenditure from 1 January 2001 to 31 March 2005 2006.

For questions 6.119 – 6.123 below provide an update for 2005-06 and as otherwise necessary, to the response to the one year review.

6.119. Explain any variations in work volumes for replacement mains (by pipe size), and replacement services (by category), between actual work and the PCR allowances. Explain the external and internal drivers for those variations. Also describe any actions taken to mitigate the effects of adverse drivers and the actions taken to benefit from positive ones.

6.120. Explain any variations in (unit) costs for replacement mains (by pipe size), and replacement services (by category), between actual costs and the PCR allowances. Explain the external and internal drivers for those variations. Also describe any actions taken to mitigate the effects of adverse drivers and the actions taken to benefit from positive ones.

6.121. Explain any variations in the ratio of length of mains installed to length abandoned for different pipe sizes. How has actual data related to predictions of these ratios at the last PCR?

6.122. Explain any variations in the ratio of no. of services replaced and transferred to mains length abandoned for different pipe sizes. How has actual data related to predictions of these ratios at the last PCR?

6.123. Provide the calculation made at the end of each year (2002-03 onwards) under the Supplementary Incentive Mechanism to determine the price control allowance for replacement mains.

Asset Condition

For questions 6.124 – 6.127 & 6.128 – 6.134 below provide an update, as necessary, to the response to the one year review.

6.124. Provide a description of the model used for the prediction of asset risk (mains) and the categories of asset assessed.

6.125. Include a history of the model from 1 January 2001 with an explanation of the features of each version and the version implementation date.

6.126. Provide also the planning year in which each version took effect and the dates that data was refreshed.

6.127. Indicate any changes to total GDN risk arising from updates to the model.

6.127a. Describe any proposed enhancements to the model or other condition monitoring initiatives and explain the purpose and expected benefits.

6.128. Identify (location, length, material, diameter, pressure tier, risk) the ten mains units (not “pinch points”) with the highest risk score currently in service in the GDN.

6.129. Identify (location, length, material, diameter, pressure tier, risk) the ten “pinch points” with the highest risk score currently in service in the GDN.

6.130. Provide details of any work undertaken to model the risk arising from service connections.

6.131. If the risk arising from services has been modelled, provide details of the current and future risk profile for the GDN.

6.132. Provide (Excel format) a mains risk profile for the GDN at the end each year from 2001. A standard format may be used but should include:

- 6.132.1. A table showing the length of main in each (30 point) band up to 240 points (and > 240 points) and the associated risk for CI<12", CI>12" and DI.
- 6.132.2. A bar chart showing the length of mains in each risk band.
- 6.132.3. A bar chart showing the total risk arising from each band.
- 6.132.4. A bar chart showing the total risk from each diameter band.

6.133. Provide a bar chart (Excel format) of the number of incidents arising from mains and services for each year from 2000. The chart should indicate incidents from steel services, steel mains, DI mains, CI/SI mains > 12" CI/SI mains <=12" and any other category. Also indicate the number of fatalities in each year.

6.134. How does the GDN monitor, maintain, upgrade and replace the risers, laterals and services to high rise apartment blocks?

- 6.134.1. What are the alternatives to replacement?
- 6.134.2. For risers > 20m length:
- 6.134.3. How many high rise blocks within the GDN are connected to the network?
- 6.134.4. How many of these have already been replaced?
- 6.134.5. How many risers (< 40m length) and (>40m length) are likely to require replacement in the period to 2013 and how many consumers are likely to be affected?
- 6.134.6. Provide an example of a riser renewal project including the number of connections, number, length and diameter of risers, laterals etc. and cost.

Asset Life

For questions 6.135 – 6.136 below provide an update, as necessary, to the response to the one year review.

6.135. Describe the strategy and process to determine asset life expectancy.

6.136. Provide a list detailing the asset life for distribution mains and services.

Operation and maintenance

For questions 6.137 – 6.140 below provide an update, as necessary, to the response to the one year review.

6.137. Explain, and provide a map of, the processes for risk management.

6.138. How does the GDN monitor and control physical and financial risks arising from the operation of the assets?

6.139. Provide examples of actions taken under the risk management process e.g. design validation, technical and financial audit reports, and post-investment appraisals.

6.140. What changes to asset and risk management techniques have occurred since 2000?

6.140a. Describe the effect of mains and services replacement activity on operation and maintenance costs. For each year from 2001 to 2005-6 describe how these costs have been influenced by replacement and for each year from 2006-7 to 2012-13 describe the forecast effects.

Traffic Management Act

For questions 6.141 – 6.143 below provide an update, as necessary, to the response to the one year review.

6.141. Describe the requirements of the Traffic Management Act and explain how project planning, work planning and construction arrangements will be changed to comply with the Act and mitigate its effect.

6.142. Provide details of any cost changes arising from the Act in respect of systems (IT) changes, work scheduling, work management, permitry or other effects.

6.143. Provide details of these changes on a year by year basis as the costs are incurred.

Other Supporting Information

Asset and Risk Management Processes for Investment

For questions 6.144 to 6.154, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to policies and procedures.

6.144. Describe how the overall GDN framework for making asset management decisions incorporates Capex and Repex investment management. Does the GDN adopt the principles specified in BSI PAS55 and if so, how?

6.145. Describe the process to ensure that the business risks related to specific physical assets (or groups of assets) are identified, recorded and managed.

6.146. Provide a list of asset management systems and procedures operated by the GDN. Describe the principal characteristics for each and provide examples to demonstrate effectiveness in terms of asset risk management and investment planning.

6.147. Explain how lifetime costs of operation, maintenance and losses are taken into account in the investment decision process.

6.148. Summarise the policies adopted and procedures and techniques used to define, analyse, and rank investments in new and replacement equipment, pipelines and services. Provide lists of manuals, guidelines, etc where available.

6.149. Explain the methodologies used to identify, compare and justify alternative means of satisfying requirements and state under what circumstances are different techniques employed. Describe the financial evaluation methods used (e.g. NPV, IRR, payback) and the discount rates used for investment appraisal purposes and the basis for their selection.

6.150. Provide copies of three recent project appraisals per GDN relating to approved capital expenditures which demonstrate these methodologies.

6.151. Explain how a budget is established for a Capex project and what level of contingency is applied. Is the budget a P50 estimate in which case, what proportion of projects have had an outturn cost above this level?

6.152. Identify any initiatives that have yielded efficiency improvements (e.g. avoided/reduced Capex) in the present price control period. What mechanisms exist to ensure that such improvements continue to be identified?

6.153. Describe the changes to asset and risk management processes that have been implemented since 2000.

6.154. Provide details of the management information systems in use, the reporting levels, the relevance and promptness of the reports provided, the frequency of reporting, and the procedure for managing exceptions. Provide a copy of the reports produced at each level for the year ending 31 March 2006.

Procurement and Logistics

With the exception of new questions, the information for questions 6.155 to 6.171 will be taken from the responses to the one year review. Provide any ADDITIONAL information which has become available since then and any changes to policies and procedures.

6.155. In the following section, where information has already been requested against a specific area above, please make a cross reference in your response.

6.156. Provide a copy of your sourcing strategy.

6.157. Provide copies of Policies and Procedures for your Procurement and Logistics operation. Provide details of any changes made to these since the last PCR, giving reasons for the change.

6.158. Provide summary information for the following strategic purchases:

- 6.158.1. PE pipe and fittings (indicate now if you have had or anticipate any material changes in PE pipe costs and say why)
- 6.158.2. Protective Clothing
- 6.158.3. Steel Pipe and fittings (indicate now if you have had or anticipate any material changes in steel pipe or fittings costs and say why)
- 6.158.4. Contractors (for pipelaying and replacement activities)
- 6.158.5. LTS Project management
- 6.158.6. DS Mains to meter fittings

6.159. Copies of the above contracts and associated documentation will be requested later to demonstrate how each stage of the process is dealt with. Where a GDN has not yet tendered for any of the above then examples of other tenders completed will be acceptable along with a strategy document on how they intend procuring the above in the future.

6.159a. How are all the potential sources of supply identified? How are contractors/suppliers initially selected to ensure that they can perform in all aspects to meet the GDN's requirements and comply with legislative requirements in the gas market?

6.160. What measures are in place to ensure that the most cost effective contracts are in place? How are the costs evaluated to ensure that the best total cost of acquisition as opposed to just best price has been achieved?

6.161. What processes are in place to ensure security of supply (for materials, labour and services)?

6.162. How are Health, Safety and Environment requirements managed through the procurement process?

6.163. How are specifications and standards managed through the procurement process to ensure that products being supplied are compliant?

6.163a How are contracts managed to ensure that they are working effectively and achieving the commitments made at the contract award?

6.164. What procedures and processes are in place to avoid contract leakage (off contract buying)?

6.165. How is cost reduction managed through the procurement process?

6.165a How does the GDN ensure that all possible initiatives and product developments in the market place are identified and where appropriate procured to support continuous improvement and cost reduction?

6.166. How is historical spend data and usage captured and recorded? Provide evidence of such data being recorded.

6.167. Provide a copy of any contracts you have in place for the supply of labour to meet varying volumes of service work. If no contracts are in place, state how you intend meeting any such fluctuations.

6.168. How are stock levels established?

6.169. How do you measure the cost effectiveness of the warehousing operation?

6.170. What emergency stocks are held and how are levels determined?

6.171. When specific areas of work are selected by Ofgem for full review, the P&L aspects of these will be investigated in more detail and specific documents relating to these areas will be requested in advance.

6.171a Describe the GDN's strategy for bulk purchases for Vehicles, Telecomms & Office, Security equipment, Furniture and Tools & Equipment. Highlight in particular changes (implemented or planned) to the strategy since the Network Sales.

Safety

With the exception of the new questions, for questions 6.172 to 6.179, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to policies and procedures.

6.172. List the primary policies developed for safety that impact on investment.

6.172a. Specifically describe any known or anticipated safety related initiatives or legislative changes that are in your assumptions and that will affect your investment plans; quantify any such changes.

6.173. Describe the main legislation and regulatory requirements that drive these policies

6.174. Provide details of any investment programmes and initiatives that have been instigated as a result of the policies above.

6.175. State how investments required to improve safety are justified.

6.176. State the criteria used to evaluate safety projects.

6.177. State any current and future safety issues that may have an impact on investment.

6.178. State how safety issues have affected capital expenditure in the present price control period.

6.179. Describe any anticipated or known changes to policies or policy implementation in the future.

Environment

With the exception of the new questions, for questions 6.180 to 6.189, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to policies and procedures.

6.180. List the primary policies developed for environment issues that impact on investment.

6.180a. Specifically describe any known or anticipated environmental initiatives or legislative changes that are in your assumptions and that will affect your investment plans; quantify any such changes.

6.181. Describe the main legislative and regulatory requirements that drive these policies

6.182. Provide details of any investment programmes and initiatives that have been instigated as a result of the policies above.

6.183. Describe any overarching environmental objectives and targets that you have in place.

6.184. State how investments required to improve environmental performance are justified.

6.185. State the criteria used to evaluate environmental projects and any targets that are used to measure performance.

6.186. State any current and future environmental issues that you consider will have an impact on investment.

6.187. State how environmental issues have affected capital expenditure in the present price control period.

6.188. Provide details of how the outcomes of environmental investments are assessed.

6.189. Describe any anticipated or known changes to policies or policy implementation in the future.

Total Life Cycle Cost Management

For questions 6.190 and 6.191, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to policies and procedures.

6.190. Explain how Opex and Capex spend are jointly optimised in the following areas:

- 6.190.1. Maintenance and Inspections
- 6.190.2. Strategic spares
- 6.190.3. Specialist centres and laboratories
- 6.190.4. Specialist maintenance plant and equipment
- 6.190.5. Replacement and Refurbishment
- 6.190.6. Connection and reinforcement
- 6.190.7. Operational control and safety procedures
- 6.190.8. Environmental Issues e.g. disposal of waste materials
- 6.190.9. Use of sub contracting core and non core services.

6.191. Policies in the areas above should be provided for the following asset types where applicable:

- 6.191.1. Pipelines
- 6.191.2. Mains
- 6.191.3. Services
- 6.191.4. Storage Installations
- 6.191.5. Governors and PRSs
- 6.191.6. Metering (excluding end user metering)
- 6.191.7. Telemetry and system control.

Network Design

For questions 6.192 to 6.203 provide only new information which has become available since the one year review, unless otherwise stated.

6.192. For LTS, provide a system flow study report for the 1 in 20 condition and actual system peak day for each year, including entry and exit flow at each point and pressure at key points.

Provide any new information since the one year review for years to 2012-13; provide high level data for 2013-14 to 2017-18.

6.193. Provide a report on LTS network capacity at 1 in 20 peak day demand for each year. This should include information on any validation work which has been carried out and provide information on simulated daily and peak hour entry flows and maximum and minimum pressures at key points.

6.193a Provide a report on LTS network capacity at 1 in 20 peak day demand for 2005-06. This should provide information on simulated daily and peak hour entry flows and maximum and minimum pressures at key points. Provide supporting information on validation work carried out on cold weather experience arising from the 2005-06 winter.

6.193b Make available the most recent full validation report for each LTS network and provide a sample for a significant below 7bar network and a low pressure network.

6.194. Provide a summary report highlighting any **significant** problem areas for networks other than the LTS, **which will arise during the period up to 2012-13 highlighting how these are to be resolved**.

6.195. Describe how load forecasts are derived and what level of load disaggregation is used.

6.196. Identify any significant changes, if any, in demand and supply forecasts, or forecasting methods, since the last published ten-year statement.

6.197. Explain how demands for each type of gas user are calculated. Describe the methodology for deriving nodal demands for distribution networks and explain how these are then translated into demands on the LTS networks. Describe how the total GDN peak day forecast and the LP network pk6 demands are reconciled with each other.

6.197a Describe how the total GDN peak day forecast and the LP network pk6 demands are reconciled with each other.

6.197b Explain how demand diversity issues are resolved in network modelling.

6.198. Is the demand forecasting methodology, either for the total LDZ forecast or for individual consumer values, likely to change in the forecast period? If so please describe the changes.

6.198a Much of the current demand philosophy for distribution networks was encapsulated in DEC 86/600 "Planning and Design of Distribution Systems" with some later updates including IGE/GL/1. Explain your reasons for believing or not that these parameters are still fully appropriate. If they are in need of revision, explain what changes you intend to make. Describe any plans you have to carry out load research to support the use of existing figures or to provide data to assist in establishing a revised methodology or new parameters.

6.199. Describe the trends in the GDN's demand forecasting performance over the reporting period.

6.200. Explain the basis for estimating future large customer connections and the contributions receivable to the networks.

6.201. Explain how diurnal storage requirements and availabilities are determined.

6.202. Describe any the network analysis and associated programmes used, the network analysis processes and the network validation process processes. Provide information on any potential changes to any of these.

6.203. Provide details of the maximum volume of diurnal storage required and express this as a % of the 1 in 20 peak day demand in each year over recent years and the projected plan period. Give reasons for any trends.

6.203a Explain how the sourcing of diurnal storage is determined and provide your policy and strategy for sourcing long term diurnal storage including any plans to investigate or utilise novel diurnal storage techniques.

6.203b Tabulate NTS minimum guaranteed inlet pressures to offtakes against pressures required by the GDN. Explain how this is resolved if the NTS guaranteed pressure is not adequate and/or describe any contingencies which may be available to the GDN.

6.203c Provide an analysis of the levels of NTS exit capacity charges (flat and flex) that would trigger additional investment in LTS capacity and storage on the GDN and an economic assessment of how the additional capex investment would be triggered.

- 6.203d Provide an analysis which sets out the possible range for efficient LTS capacity and storage investment dependent on a likely range of out-turn NTS exit capacity charges.
- 6.203e Provide a list of interruptions data identifying pressure tier from which they are fed. Identify in particular where any of the interruptions are due to planned maintenance.
- 6.203f Describe the processes for identifying and declaring Network Sensitive Loads.
- 6.203g Provide a list of Network Sensitive Loads and identify pressure levels at which constraint occurs and at what demand level.

Resource Planning

For questions 6.204 to 6.206, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to policies and procedures.

- 6.204. Describe your resource planning processes. How do these ensure that sufficient competent labour is available to meet your investment plans. How does competition from other utilities affect this?
- 6.205. Describe the GDN policy with regard to the employment and development of professional engineers and managers to ensure competent and effective management of operational activities.
- 6.206. What changes to resource planning issues are expected in the forecast period and how will these influence investment?

Research and Development

For question 6.207, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to your funding policies for R&D.

- 6.207. List expenditure on R&D for any area above £100kpa. Describe how this feeds back into benefits for the business, indicating timescales from expenditure to planned payback.

Benchmarking

For questions 6.208 and 6.209, the information will be taken from the responses to the one year review. Provide only any ADDITIONAL information which has become available since then and any changes to your plans for benchmarking exercises.

- 6.208. List any specific benchmarking exercises that have been completed from Jan 2001 to date and quantify any benefits implemented or planned.
- 6.209. List any planned benchmarking exercises in the forecast period and quantify any benefits that have been built into the forecast.

Standards of Service

- 6.210. Describe the GDN's expected performance over the next price control period (2008-2013) for each of:

- the current guaranteed standards of performance;
- the current overall standards of performance;
- the current third party and water ingress arrangements; and
- Standard Special Licence Condition D10.

In setting out the GDN's performance, please identify any assumptions made, particularly regarding applicable cost drivers, the levels of performance and failures and any associated levels of compensation payments. Please include any appropriate tables.

6.211. For each of the suggested changes to the standards below, please identify any variations you would expect in expenditure (opex, capex, repex) and impacts on network performance:

- GS1 – Timeframe for supply restoration reduced from 24 to 18 hours.

Example: GTs are required to restore domestic customers' supplies within 18 hours following unplanned interruptions on their network. Where a GT fails to achieve this level of service it is required to pay the customer £30 compensation. GTs are required to pay further compensation for each additional period of 24 hours until the customer's supply is restored. The total payment for any particular customer would be capped at £1,000 per incident. The current exemptions (both specific and generic) would remain unchanged.

- GS2 – Timeframe for reinstatement of customers' premises is reduced from 10 working days to 5 working days.

Example: This standard requires GTs to reinstate a customer's premises within 5 working days following completion of work to re-lay a service pipe and any associated work to a distribution main within or under those premises. It requires GTs to reinstate access to any building on the customer's premises so that it is fit for purpose and to reinstate other parts of the premises to a reasonable standard having regard to its condition prior to the commencement of the work.

If the GT fails to achieve this level of service it is required to make a payment of £50 to domestic customers and £100 to non-domestic customers. GTs are required to pay further compensation of £50 for domestic customers (or £100 for non-domestic customers) for each subsequent period of 5 working days until the premises are reinstated.

- OS2 and OS3 – The overall standards for notification of planned supply interruptions and informing customers when they are due to be reconnected are revoked and replaced with a guaranteed standard.

Example: For planned interruptions, GTs are required to provide customers with written notice of the need for an interruption to their gas supply at least 5 working days before the expected start of the interruption. Where a GT fails to provide this level of service, it is required to pay domestic customers £20 and non-domestic customers £50.

In the event of a planned interruption to the gas supply, GTs must tell the customer in writing when the supply will be restored and must keep to that time. If a GT fails to provide this level of service it is required to pay domestic customers £20 plus a further £10 for each 24 hour period the supply remains unrestored; and £50 for business customers plus a further £25 for each 24 hour period the supply remains unrestored.

- OS4 – The overall standard for responding to complaints is revoked and a replaced with a guaranteed standard.

Example: GTs are required to provide a substantive response to a written or oral complaint within 10 working days of receipt of the complaint from a customer relating to its gas transportation business. Where a GT fails to achieve this level of service it is required to pay the customer £20.

6.212. To ensure that the standards of performance Regulations are being interpreted in a consistent manner and to increase the accuracy and transparency of other GDN data collected, Ofgem is considering introducing audit arrangements, particularly for standards of performance and interruptions information. As part of Standard Special License Condition D10, GDNs are required to undertake an audit each year. As the reporting requirements under D10 are aligned with the connections guaranteed standards of performance, the D10 audit will also apply to the connections guaranteed standards.

Describe the financial and non-financial impacts that each audit model listed below would have, should it be introduced for interruptions reporting and the remaining standards of performance.

- a self audit, where the GDN designs and undertakes the audit itself, after acceptance from Ofgem;
- an independent audit, where independent auditors are appointed to undertake the audit;
- an audit undertaken by Ofgem; and
- a combination of the above, for example where Ofgem and independent auditors or the GDN undertake the audit together.

Volume Drivers

6.213. As part of the main price control review Ofgem is considering whether the existing volume driver is appropriate or whether it is appropriate to consider other forms of revenue driver. To inform this process we need initial analysis on the relationship between incremental costs and changes in outputs such as capacity, throughput, numbers of connections etc. Provide analyses examining the relationship between the GDN's incremental capex, repex and opex costs and the following outputs:

- Annual throughput
- Capacity and diurnal storage requirements to meet 1 in 20 demand conditions
- Number of connections, and
- Any other output measures considered to be appropriate

Appendices

Index

Appendix	Name of Appendix	Page Number
1	The Authority's Powers and Duties	88
2	Cost categories	90
3	Glossary	93
4	Next steps	97

Appendix 1 - The Authority's Powers and Duties

1.1. Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This Appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.²

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly³.

1.4. The Authority's principal objective when carrying out certain of its functions under each of the Gas Act and the Electricity Act is to protect the interests of consumers, present and future, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the shipping, transportation or supply of gas conveyed through pipes, and the generation, transmission, distribution or supply of electricity or the provision or use of electricity interconnectors.

1.5. The Authority must when carrying out those functions have regard to:

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them⁴; and
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.⁵

1.6. Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

² entitled "Gas Supply" and "Electricity Supply" respectively.

³ However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

⁴ under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.

⁵ The Authority may have regard to other descriptions of consumers.

- Promote efficiency and economy on the part of those licensed⁶ under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and
- Secure a diverse and viable long-term energy supply.

1.7. In carrying out the functions referred to, the Authority must also have regard, to:

- The effect on the environment of activities connected with the conveyance of gas through pipes or with the generation, transmission, distribution or supply of electricity;
- The principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- Certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation⁷ and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

⁶ or persons authorised by exemptions to carry on any activity.

⁷ Council Regulation (EC) 1/2003

Appendix 2 - Cost categories

Direct Activities

The direct activities are as follows:

▪ **Work Management (including Asset Management)**

Staff and other non-operational costs previously held within the Network structures including activities associated with:

- Asset Management including network integrity, planning and design.
- Operations Management including supervisory costs
- Contract Management, managing the relationship with engineering contractors and other bought in services
- Customer Management, managing the processes that interface with consumers and shippers
- Network Support, costs associated with engineering back office e.g. records management and work scheduling processes.
- Health, Safety and Environment.

Plus those costs previously held centrally by National Grid Transco in the functions of:

- Network Policy
- Safety & Engineering
- Call Centres
- The activities now sitting in Xoserve

Note: This category does not include the costs of Network Finance or facilities departments, which should be included in the respective Shared Services & Other activity.

▪ **Emergency (first visit only)**

Service to respond to all gas escapes and making safe including a repair allowance and the cost of rechecks.

▪ **Repairs**

The repair of mains and service public reported escapes.

▪ **Maintenance: Storage**

Low pressure storage and maintenance.

▪ **Maintenance: LTS**

DN pipeline and AGI/PRS maintenance.

- **Maintenance: Other**

- Other Leakage Control e.g. mains surveys, gas conditioning, pressure profiling
- Distribution Mains and Services – mains and service repair and maintenance
- Instrumentation – repair and maintenance
- District Governors

- **Transport & Plant**

Vehicle and mobile plant running costs

- **Other (direct activities)**

- Tools and consumables
- Other operational e.g. reinstatement inspection costs, cathodic protection, odorant.

Please provide a separate analysis of any costs included under this heading greater than £500k.

The categories used for support services and indirect costs are:

- **IS**

- Provision of IS Services for day to day service delivery including help desk, data centres, applications support, non operational telecoms. Also activities associated with establishing and managing IS applications and infrastructure projects to meet business requirements.

- **Legal**

Provide guidance and legal advice, both internal and external, in the areas of energy and regulation, commercial, dispute resolution, information assurance, employment and risk and compliance.

- **Audit, Finance & Regulation**

- Internal audit and related assurance activities
- Financial management and reporting activities, including the costs of payments, claims handling, banking, system support, credit & risk, and the key business facing decision support, performance delivery, management accounting, budgeting and planning activities. (Note: includes Network finance previously held within the Network.)
- Support in managing the UK businesses licence, legislative obligations and regulatory issues.

- **Procurement & Logistics**

- The procurement of goods and services in the support of day to day operations and the capital plan through the management of procurement contracts with suppliers.

- Logistics includes the management of the acquisition, warehousing and transporting of goods to final location, taking account of stock management policies.

- **HR (including training)**

HR services in the full range of professional activity from recruitment to retirement and from professional HR advice to directly resolving grievances. Includes the costs of payroll, HR advice to management and staff, management development, provision of technical training and the costs of both graduate trainees and apprentices.

- **Research and Development (R & D)**

The activity has the meaning attributed to it in the relevant accounting standards. This includes payments to external or related parties for specific research projects

- **Insurance**

Support and expertise to develop the business risk profile, managing the claims process and provision of information and understanding to the business in relation to insurable and uninsurable risks. Includes the costs associated with insurance premiums and claims.

- **Property Management**

In addition to property costs of rent, heat light and power this includes the provision of the facilities / property services including reception, security, access, mechanical and electrical, energy, water, catering, cleaning, mailrooms and conference bookings. (Note: this includes facilities costs that were coded to old Networks).

- **Corporate Centre & Communications**

Tax, treasury, investor relations, Company Secretariat and Corporate Affairs.

Provision of services in the areas of internal communications, dealing with the press, crisis communications and issues management, regional communications, community relations, charitable donations, event management, intranet and internet site development, stakeholder management and corporate branding.

- **Other support activities (indirect)**

Any other shared or indirect costs not covered by the above categories, where a proportion of the costs incurred are allocated or attributed to the distribution business. Please provide a separate analysis of any costs included under this heading, showing separately any amounts greater than £500k attributed or allocated to distribution.

Appendix 3 - Glossary

1 in 20 peak demand

The level of demand that, in a long series of winters, with connected load held at the levels appropriate for the winter in question, would be likely to be exceeded in one out of 20 winters, with each winter counted only once.

Accounting Standards

The term encompasses Financial Reporting Standards (FRS), Statements of Standards Accounting Practice (SSAP) and Urgent Issue Task Force (UITF) statements, International Accounting Standards (together IAS) and the International Financial Reporting Interpretations Committee (IFRIC) interpretations.

AGI

Above Ground Installation

BPQ

Business Plan Questionnaire

Capital expenditure (capex)

Capital expenditure is investment in assets whose benefits can be expected to last for some years, such as high-pressure pipelines and lower pressure mains. This includes expenditure on extending or reinforcing the pipe networks or adding new connections. For pipelines and mains a further distinction can be made between capital and replacement expenditure.

CI

Cast Iron

CSEP

A Connected System Exit Point is a connection to a more complex facility than a single supply point, for example a connection to another gas transporter.

DI

Ductile Iron

DNCC

Distribution National Control Centre

Full-time equivalent (FTE)

The number of normal hours worked by an employee divided by the normal hours of a full-time member of staff in an equivalent role according to his or her contract of employment.

GDN

Gas Distribution Network

GDPCR

Gas Distribution Price Control Review

GIB

Gas in building

HSE

Health and Safety Executive

IGT

Independent Gas Transporters

IP

Intermediate Pressure is network comprising the highest pressure mains of the distribution system operating from 2 to 7 bar.

LDZ

Local distribution zones

Linepack

Linepack is the volume of gas within the National or Local Transmission System at any time.

LNG

Liquid Natural Gas is gas cooled until it becomes a liquid and stored in insulated metal tanks. As required the liquid can be re-gasified for entry onto gas networks.

LP

Low Pressure is network comprising the lowest pressure mains of the distribution system operating at less than 75mbar.

LTS

Local Transmission System is the pipeline system operating at >7 bar that transports gas from NTS offtakes to distribution systems. Some large users may take their gas direct from the LTS.

Materials

The physical components that go into the make-up of a tangible asset or are used for maintenance or other duties for the activities undertaken by the GDN, includes:

- Tangible items that become part of the network assets,
- Small tools, equipment and consumables utilised to allow work on the network and to undertake other activities
- Materials provided by a contractor where the costs have been separately identified.

MDOP

Maximum Design Operating Pressure

MP

Medium Pressure is the network of the distribution system operating from 75mbar to 2 bar.

MPDI

Medium Pressure Ductile Iron

NTS

The National Transmission System is high-pressure system consisting of terminals, compressor stations, pipeline systems and offtakes. The NTS is designed to operate at pressures up to 85 bar. NTS pipelines transport gas from terminals to NTS offtakes.

Offtake

An offtake is the installation defining the boundary between NTS and LTS or a very large consumer. The offtake installation includes equipment for metering, pressure regulation and more.

Ofgem licence fee

Payments by the GDN to the Authority determined in accordance with the gas distribution licence.

Operational expenditure (Opex)

Expenditure which relates to the day-to-day operations of the distribution business and which is not capital expenditure.

PE

Polyethylene (PE) is a form of plastic used for manufacturing gas distribution mains and services.

PRE

Public Reported Gas Escape

PRS

Pressure Reduction Station

RAV

Regulatory Asset Values

Regulatory Accounts / Regulatory Financial Statements

Accounts prepared in accordance with Standard Special Condition A30 of the gas distribution licence.

Replacement expenditure (repex)

Repex is expenditure on replacing component mains and services, where the replacement does not lead to an increase in the capacity or extends the life of the network.

RIGs

Regulatory Instructions and Guidance

RPI

Retail Price Index

SI

Spun Iron

Standby

Costs incurred when employees are on call outside normal working hours to respond if required in the event of a specified occurrence in accordance with their terms of employment.

Appendix 4 Next Steps

1.1. The BPQ spreadsheets referred to in this document and the narrative questions set out in this document constitute formal information requests under Standard Special Condition A26 (Provision of Information to the Authority) of the DN licence. The Authority requires the information to be provided by the dates set out below for the purpose of performing its statutory functions.

1.2. Further supplementary questions (either written or as part of costs visits which take place once the BPQ has been submitted) issued by Ofgem or other consultants (on its behalf) will also be formal requests under condition A26 and should be provided by the dates set out in those requests.

1.3. The GDNs are required to complete and return the BPQs and associated documentation to Ofgem electronically by 6 October 2006. This will be sufficient for the purposes of submitting the BPQ and additional hard copies are not needed. If it is not possible to provide some of the information electronically (for example, if the document can't practically be scanned) please provide the information in hard copy to Ofgem at the following address:

GDPCR Cost Team
Ofgem
9 Millbank
London
SW1P 3GE

1.4. Along with the final BPQ submission please provide a register of all documents that have been submitted and identify whether they have been submitted electronically or a hard copy has been provided or both. A confirmation e-mail should be sent to chris.watts@ofgem.gov.uk, copied to GDPCRcosts@ofgem.gov.uk by 5pm on 6 October 2006 confirming that all the BPQ information has been provided and including a copy of the register.

1.5. Ofgem together with its consultants will review the information once it has been submitted and carry out cost assessment visits to each of the GDNs to review their costs in more detail and challenge key assumptions regarding forecasts. This will be used to make an assessment of the efficiency of historic spend, appropriate adjustments to the RAV and determine appropriate allowances for the main control

Provision of data to other GDNs

1.6. Some information we receive from one GDN may be relevant in setting the price controls of other GDNs. In such cases it may be appropriate to share the information with those companies. The GDNs should therefore carefully mark any parts of a response they do not want shared with other GDNs and provide appropriate justification.

Publication

1.7. The publication of historical and forecast financial information is an essential component in performing a transparent price control review to ensure that the price control is clearly understood by all stakeholders. The publication of information obtained from the completed BPQs will provide fundamental background information to support the publication of the Ofgem financial model and final determination of allowed GDPCR revenue.

1.8. It is Ofgem's intention, once it has considered the views of the GDNs and other interested parties, to publish relevant BPQ data on the Ofgem website, only excluding those parts that are confidential, prohibited (because of relevant stock exchange listing rules) or for which Ofgem has already agreed a publication exemption. The GDNs should therefore carefully mark as confidential any parts of a response they do not want published and provide justification as to why publication would or might seriously and prejudicially affect their interests.

1.9. Ofgem would also like to hear the views on publication of all those with an interest in the GDPCR including consumers and their representatives, investors and city analysts.