

## GDPCR Business Plan Questionnaire for the one year control - Guidance and Narrative Questions

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#### **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 one year control consists of two spreadsheets and some guidance and narrative questions. This document contains the guidance notes for the spreadsheets and narrative questions. The guidance notes, which should be read alongside the spreadsheets, provide guidance on completing each table and a rationale for the request.

**Contact name and details:** Chris Watts, Head of the Gas Distribution Costs and Outputs Team

Tel: 020 7901 7333

Email: chris.watts@ofgem.gov.uk

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

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

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Target Audience: Gas Distribution Networks and other interested parties

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

Office of Gas and Electricity Markets Promoting choice and value for all gas and electricity customers

## 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 which will be issued to each of the Gas Distribution Networks.

## 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

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#### Summary

The Business Plan Questionnaire for the one year 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

In addition to the questionnaire for the one year control, two questionnaires will be issued for the purpose of resetting the main price control:

- a questionnaire will be issued in June 2006 to gather updated historical and forecast information from each of the GDNs. This will include historical information up to 31 March 2006 and forecast information to 31 March 2018; and
- a questionnaire will be issued in early 2007 to ask for 2006-7 actual performance and updated forecasts.

It is intended that the information requested to set the next full price control from 1st April 2008 to 31st March 2013 will be collected where possible in the same format as for the one year control. However, it is expected that in some areas more detailed responses will be required.

Forecast data will be collected for the full period to the end of the March 2013 for the one year extension as well as for the full price control review. It is anticipated that GDNs will wish to revise some of their forecast data for the full price control review where additional information necessitates a change, but they will need to provide an appropriate justification for such changes.

## 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 2005 and forecast data for the period 1 April 2005 to 31 March 2013 – source of financial and nonfinancial 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 2005.

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.

1.4. The GDNs should be aware that for the main price control review some additional data will be required, in particular actual performance for 2005-06 and 2006-07 and updated forecasts before final proposals are made. The main control may also require more detailed information where summary information was considered sufficient for the one year control.

#### Structure of the BPQ

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

- **Financial Tables**: Tables A1 to A8 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 C19 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**

1.6. 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**

1.7. 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).

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

#### **Definitions and Accounting Principles**

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

1.10. 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 to the variance.

#### **Reporting years**

1.11. Reporting periods for capex and repex start with a one year period from 1 January 2001 to 31 December 2001, followed by a three month period from 1 January 2002 to 31 March 2002. Thereafter the reporting periods will be financial years, ie starting on 1 April and ending on the following 31 March.

1.12. Reporting years for opex will be financial years starting from 1 April 2002.

#### Units

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

#### Inflation

1.14. 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

1.15. 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

1.16. 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).

#### **Affiliates and Related Undertakings**

1.17. Costs should include the underlying costs of related parties in performing the licencee's activities, without any profit or margin for those related parties. 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, related party 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

1.18. 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'

1.19. 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

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

1.21. To the extent that it becomes necessary, due to changes in market perception, to model the financial ratios of the DNs 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**

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

Document	Date to be issued	Responses due
Extension BPQ	17 Feb 2006	7 April 2006
Main control BPQ	Early June 2006	Early October 2006

1.23. Where considered necessary this timetable may be revised to reflect changes in the overall Price Control Review timetable.

## 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 ending 31 March 2006 to 2013.

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. Should 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 this information as appropriate 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 should be separately identified rather than included in the main tables.
Incentive schemes	Assume no changes in the NTS offtake arrangements and associated GDN incentives to purchase NTS offtake capacity. 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 2004-05 to 2007-08	
A2 GDN Balance Sheet	Summary of assets, liabilities and financing of GDN each year from March 2005 to March 2008	
A3 GDN Cash flow Statement	GDN cash flow information for years 2004-05 to 2007- 08	
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 April 2004 to March 2008.	
A6 Capital Allowances	Collects information on capital allowances for April 2004 to March 2008	
A7.1 RAV	Collects information on the RAV roll-forward computations at UK distribution level for the period January 2001 to March 2002	
A7.2 RAV	Collects information on the RAV roll-forward computations at GDN level for the period April 2002 to March 2008	
A8 Performance	Collects information to compare actual performance against that assumed in setting the current price control.	
B1 Operating Cost Summary	Collects information on operating costs for years 2002-03 to 2007-08	
B2 Shared services opex	Collects information on indirectly incurred operating costs for years 2002-03 to 2007-08	
B3 Labour Costs	Collects information on labour costs for years 2002-03 to 2007-08	
B4 Pension Data	Collects financial information for the years 2002-03 to 2007-08 on ongoing pension expenses, and an update of the balance sheet position	
B5 Atypicals and Provisions	Collects information on costs that occurred in 2004-05 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 2004-05 is to be consistent with the information previously 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

#### Table A1 - Profit & Loss/Income Statement

3.4. This table collects profit and loss financial information for 2004-05 to 2007-08.

Table Reference	Instructions for completion	Purpose
A1 Licensee P&L split by GDN	All profit and loss financial information is to be presented for each year from 2004-05 to 2007-08.	The profit and loss account provides a summary of the historical information of each GDN and will be used for the financial modelling.
	For past years, it should be consistent with the information previously presented in the Regulatory Accounts.	5
	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.	

#### Table A2 - Balance Sheet

3.5. This table collects balance sheet information for 2004-05 to 2007-08.

Table Reference	Instructions for completion	Purpose
A2 Licensee Balance Sheet split by GDN	All balance sheet information presented is to be presented for each year from 2004-05 to 2007-08 and at 1.June 2005 (the	The balance sheet provides a summary of the financial position of the GDN.
	date of DN sales). Historical information is to be consistent with that previously presented in the Regulatory Accounts	This information will be used as a consistency check within the BPQ and for financial modelling purposes.

#### Table A3 – Cash flow Statement

3.6. This table collects cash flow information for 2004-05 to 2007-08.

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

## Table A4 – Additional data on Net Debt and Borrowings

3.7. This table collects information on cash and debt for March 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.

r	r	1
Table Reference	Instructions for completion	Purpose
A4 Net Debt and	Detail is to be provided of	The table will provide an
Borrowing Analysis	main categories of cash	analysis of interest costs.
	and debt, with additional	This will be used within
	information on maturity	the analysis of the cost of
	and interest rates for	capital, financeability and
	borrowings.	financial modelling.
	Additional Information	
	Please give additional	
	information about the use	
	of derivatives where	
	necessary to understand	
	the ongoing cost of debt.	
	Please give information	
	about any proposed	
	refinancings prior to March	
	2008.	

#### Table A5 - Corporation Tax Computation

3.8. This table collects information on the corporation tax computation for 2004-05 to 2007-08.

Table Reference	Instructions for completion	Purpose
A5 Licensee corporation tax computation split by	Requires the preparation of tax computations,	The provision information relating to tax charge

and loss and capital allowances schedules for 2004-05 to 2007-08 the years ended 31 March 2005 to 31 March 2008. assessment of histor allowances against a charges incurred; m and comparing tax of aross time; and der an appropriate tax a for the financial mod
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## Table A6 - Capital Allowances

3.9. This table collects information on capital allowances for 2004-05 to 2007-08.

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 2007-08.	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 A7.1 – RAV Roll-Forward Computation for January 2001 to March 2002

3.10. This table collects information on the RAV roll-forward computation for January 2001 to March 2002 at a total UK distribution level.

Table Reference	Instructions for completion	Purpose
A7 RAV Roll-Forward Computation at total UK distribution level	Requires the preparation of RAV computations, consistent with the CAPEX and REPEX investment schedules. For the period from 1 January 2001 to 31 March 2002, the calculation is to be performed by National Grid at the total UK distribution level. For this period only, the RAV depreciation needs to be entered in the BPQ table, and detail of the RAV depreciation calculation should be provided on supplementary sheets.	The table combines the inputs to the RAV roll-forward calculations.

# Table A7.2 – RAV Roll-Forward Computation for 2002-03 to 2007-08 on a GDN basis

3.11. These tables collect information on the RAV roll-forward computation for 2002-03 to 2007-08.

Table Reference	Instructions for completion	Purpose
A7 GDN RAV Roll-Forward Computation	Requires the preparation of RAV computations, consistent with the CAPEX and REPEX investment schedules.	The table combines the inputs to the RAV roll-forward calculations.
	For the period 2002-03 to 2007-08, the RAV roll forward tables are to be completed for each GDN.	
	Note: RAV value of assets purchased prior to March 2002 at time of disposal	
	For any assets acquired prior to March 2002 and disposed since March 2002, the RAV value of assets disposed should take account of the sculpting of the RAV values as at March 2002. <i>For example:</i>	
	GDN XX RAV as at 31 March 2002 prior to sculpting: £1,000m GDN XX RAV as at 1 April 2002 after sculpting: £800m	
	On 31 March 2003, GDN XX disposed of assets which had natural RAV as at 31 March 2002 of £50m. The sculpted RAV as at 1 April 2002 of the disposed assets is (800/1000)*£50m = £40m Depreciation in the year to 31 March 2003 is £1.4m using the pre-2002 asset depreciation factor (3.5%) applied to the sculpted RAV (£40m).	
	The RAV value of the assets disposed should therefore be entered in the table as: $(40 - 1.4) =$ £38.6m	

## Table A8 – Price Control Performance

3.12. This table provides the overall comparison of actual return against price control return for the current price control period.

Table Reference	Instructions for completion	Purpose
A8 Performance against price control analysis	Requires a summary of actual performance against allowances.	The table provides confirmation of the size of any over- or under- spends and recoveries for modelling purposes.

The sheet provides a summary of actual performance against allowances and evaluates the return on RAV. Please give any additional information which you believe may be relevant on other costs incurred which impact the overall return on RAV for the GDN.

#### Table B1 - Opex

3.13. This table collects opex information for each year from year 2002-03 to 2007-08.

Table Reference	Instructions for completion	Purpose
Table Reference         B1 Operating         Cost Matrix	Instructions for completion         General         These tables request a summary of the operating expenses incurred by the main activities within GDNs.         The tables are generally split into the following main categories:         • Direct activities         • Support services (or indirect activities) and other charges in         • De minimis         • Excluded services         The direct and indirect activities are defined in Appendix 2.         For the extension review costs are required only for the total of all direct activities and support services (or indirect activities). For the main review costs will be required for each individual activity.	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.
	Instruction for Completion	
	<ul> <li>There are in total 9 Operating cost matrix tables (B1) for each year. They are broken down into the following;</li> <li>1 total table for cumulative cost (where more than GDN is owned the same licensee).</li> <li>8 individual tables for each GDN.</li> </ul>	
	Data is to be inputted under the Gas Distribution Business heading and against each row description only where the cell is highlighted yellow. For the purpose of the extension review, only the total column is required for completion. However if further analysis is required later in our review, a	

	17 February 2006
breakdown into the various headings will be requested.	
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.	
De minimis and Excluded Services	
Have the same meaning as given in the gas distribution licence.	
Costs above £500k should be separately identified.	
For all operating units, excluded services and de minimis activities costs should be entered by the specified cost types.	
Costs are to be reported gross; no offsetting is permitted.	
<b>Cost Recoveries</b> This is the recovery of costs or the release of excess provisions or accruals 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 contingent liabilities, and any other recoveries of costs that are not categorised or required to be disclosed under de minimis activities.	
Any cost recoveries should be recorded only on the Cost Recoveries line.	
Cost Recoveries should be recorded as negative amount (-ve).	
Repex (Mains and non-mains)	
The figures to be entered here are the proportion of repex that gets treated as opex, ie 50% of the allowance for repex that was set for the current control. The balance, including any variances from allowances, remains within the capex figures. The extent to which the variance for non-mains repex is allowed in the Regulatory Asset Base will depend on the assessment of historic efficiency. Variances in mains repex are dealt with separately	

	-
through the repex incentive mechanism.	
Required Commentary	
<u>General</u>	
<ul> <li>Please explain the reasons for gross cost movements by cost line in consecutive years above £1 million, such movements include those due to:</li> <li>changes in input prices;</li> <li>changes in activity level or volume;</li> <li>new or modified regulatory or statutory requirements</li> </ul>	
<ul> <li><u>Corporate/management initiatives</u></li> </ul>	
<ul> <li>Where changes are due to corporate or management initiatives the following should be identified at a gross cost level:</li> <li>the estimated impact on the operating and capital expenditure requirements;</li> <li>define the objectives of the initiatives;</li> <li>the planned efficiency savings initially identified (including any cost v benefit analysis); and</li> <li>the actual expenditure savings or costs (including an indication of when this were realised) of implementing initiative.</li> </ul>	

## 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 2007-08.

Table Reference	Instructions for completion	Purpose
B2 Shared Service Cost	Instructions	The presentation of a summary of the operating
	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.	expenditure incurred for each year will: 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
	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.	about the base year and future costs.

For the purpose of the extension review, only the total column is required for completion. However if further analysis is required later in our review, a breakdown into the various headings will be requested. For the main review costs will be required by each indirect	
category. National Grid will provide all relevant information from financial years 2002-03 to 2004- 05. For the financial year 2005- 06, National Grid will provide information for April and May 2005 to each GDN and each GDN will then provide the full data for 2005-6, 2006-07 & 2007-08.	
Required Commentary	
<ul> <li>Please explain the reasons for gross cost movements by cost line in consecutive years above £1 million, such movements include those due to:</li> <li>changes in input prices;</li> <li>changes in activity level or volume;</li> <li>new or modified regulatory or statutory requirements.</li> </ul>	
Corporate/management initiatives	
<ul> <li>Where changes are due to corporate or management initiatives the following should be identified:</li> <li>the estimated impact on the operating and capital expenditure requirements;</li> <li>define the objectives of the initiatives;</li> <li>the planned efficiency savings initially identified (including any cost/benefit analysis); and</li> <li>the actual expenditure savings or costs (including an indication of when this were realised) of implementing initiative</li> </ul>	

Explanation of any central adjustments over £500k	
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.	

#### Table B3 - Labour costs

3.15. This table collects information on labour costs for 2002-03 to March 2007-08.

Table B3 Labour CostsThis 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.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 identify the attribution of pension deficit payments between Opex and Capex.Tables B3.1 - 3.6 A breakdown of the total labour costs before capitalisation is required into the various elements of employee costs provided in the table for each GDN and for support services units. Temporary, agency and contract staff costs are to be recorded on this worksheet. The central adjustments column is for pension deficit/surplus figures. 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.Agency Staff Persons who are not under direct contract of employment with the licensee but are hired through a third party or employment agency. Excludes professional services.His worksheet. The services active active ac	Table Reference	Instructions for completion	Purpose
		FTE information for the total of the direct activities of each GDN and for the total of shared/support services units. <b>Tables B3.1 - 3.6</b> A breakdown of the total labour costs before capitalisation is required into the various elements of employee costs provided in the table for each GDN and for support services units. Temporary, agency and contract staff costs are to be recorded on this worksheet. The central adjustments column is for pension deficit/surplus figures. 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. <b>Agency Staff</b> 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.	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 identify the attribution of pension deficit payments between
Costs incurred when employees		Excludes professional services. Standby	

are on standby to be called upon if required in the event of a specified occurrence in accordance with their terms of employment.	
<b>Table B3.7 FTEs</b> The staff number tables for each year should show the average number of FTEs employed for the year for the total of the direct activities of each Distribution Network (including employees of related parties as defined in paragraph 1.17).	
<b>Full-time equivalent (FTE)</b> 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.	
Required Commentary	
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.	

## Table B4 – Additional data on Pensions

3.16. This table collects financial information for 2002-03 to 2007-08 on ongoing pension expenses, and an update of the balance sheet position.

Table Reference	Instructions for completion	Purpose
B4 Pensions data	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.	The table will assist in the calculation of appropriate levels of allowances for pension funding and also for financial modelling.

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.	
Detail is also requested on the size and funding position of the pension scheme, to the extent available.	
National Grid will provide information for financial years 2002-03 to 2004-05 and for the 2 month period April and May 2005.	
Each GDN will then complete the 10 month period June 2005 to March 2006 and remaining financial years 2006-07 to 2007-08.	
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.	
Please provide any additional details that you think would be useful as a narrative response.	
Additional Information	
Please give the following details of the pension schemes for gas distribution staff (including staff whose costs are allocated to gas distribution):	
<ul> <li>Are any of these closed schemes, if so when were they closed and what has happened to existing members?</li> <li>Which pension scheme(s) do new starters join?</li> </ul>	

## Table B5 – Atypicals and Provisions

		During a second
Table Reference	Instructions for completion	Purpose
B5 Atypicals and	Details to be provided of	The table identifies those
provisions	atypical events and movements	costs that occurred in
	on provisions or accruals for	2004-05 that are not
	2004-05.	expected to recur
		regularly.
	An atypical event is one that is	
	not expected to recur regularly	It also identifies
	under normal circumstances	movements in provisions
	due either to its size or nature.	to allow us to differentiate
	Atypical items of more than	between costs arising due
	£500k each should be disclosed	to those movements and
	separately.	the underlying cash costs.
		, , , , , , , , , , , , , , , , , , ,
	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.	
	Additional Information	
	Please provide an explanation	
	of any items on this sheet	
	5	
	exceeding £500k.	

3.17. This sheet collects information on atypicals and provisions for 2004/05.

Table B6 Non-financial data and Shrinkage

Table Reference	Instructions for completion	Purpose
B6 Non-financial,	Details to be provided on a LDZ basis for	The table will assist
B6 Non-financial, Shrinkage	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. Theft refers to that which the GDN is responsible for. Projections for throughput should assume the base case scenario for demand. Pressure and temperature correction information is only relevant for years 2002- 03 and 2003-04 since this adjustment has not been applied since.	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.

#### Index and Guidance

#### **General Guidance**

4.1. Data is collected in 19 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.

4.2. 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:

<b>Reliability Band</b>	Description	
Α	Data from established systems and procedures, properly	
	documented and auditable	
В	As A but with minor shortcomings	
С	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	
Ε	Less reliable than above; state the source and why less	
	reliable.	

4.3. In addition, there are further definitions in paragraphs 4.30 to 4.42 following the tablespecific guidance, of pipe size bands and investment driver definitions. These definitions are applicable to many of the tables.

4.4. In some sections you 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 you have more than this number of projects to list in any one section, please complete a supplementary table in the same format.

4.5. 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.

4.6. National Grid should also provide a UK distribution total for allocated non-operational Capex (sheet C6A) for the period up to Network sales. This should be provided in the same workbook as the totals for the period January 2001 to March 2002.

4.7. 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.

## 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
C6 Non Operational Capex	Other direct non operational Capex
- Direct	
C6A Non Operational Capex	Other allocated non operational Capex
- Allocated	
C7 Capex Summary	Summary of Capex spend
C8 Repex Mains	Mains Repex, installed and decommissioned, by size
	and type
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	Storage volumes by type and NTS offtake capacities
Asset data	5 5 5 1
C12 Mains and Governor	Mains by material, mains programmed for replacement
Asset Data	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	Mains age by material size and age and governor age by
profile	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

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

## **Guidance Notes for each table**

#### Table C1 LTS and Storage Capex

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

Table Reference	Instructions for Completion	Purpose
1.1 Projects	List all projects (from Jan 2001 to 2012-13) where the total project expenditure is or will be £0.5m or more in the categories listed: Above Ground Installations other than PRSs are included with the pipeline. Where a pipeline project has storage benefit, include the project under storage or pipelines (only once) depending on which is the main driver for the investment. For pipeline projects state the start and finish point 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.	To identify major projects for review and analysis.
1.2 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.
1.3 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.31 to 4.42 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.
<ul><li>1.4 Gross</li><li>Expenditure</li><li>(excluding</li><li>capitalised</li><li>overheads)</li><li>1.5 Contribution</li></ul>	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. Enter the annual contribution, if any, in £m received for each project (and aggregate of projects below £0.5m) in each investment category for each year. Contributions should be entered as a +ve number.	To understand the expenditure for each project and the split across activities and years. To understand where contributions are received.
1.6 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution from gross expenditure.	To understand the net expenditure for each project and the split

Table Reference	Instructions for Completion	Purpose
		across activities and years.
1.7 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.
1.8 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 and forecast for the remaining period from 1st April 2005 to project completion. In each case the values should add to 100%.	To understand how the project cost splits vary between activities.
1.9 Investment drivers	No entry required. This section summarises overall split of mains Capex drivers using the data entered in 1.3.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
1.10 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%.	To understand how the project cost splits vary between activities.
1.11 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

4.9. 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 1. It collects sufficient data to support a meaningful comparison of unit costs between activities and companies.

Table Reference	Instructions for Completion	Purpose
2.1 Activities and	For the period 2004/5 to 2007/8 inclusive,	Disaggregate activities
Projects	data is primarily collected by installed pipe	to an appropriate level
	size in 8 ranges (from less than 75mm to	to be able to analyse
	greater than 630mm). Guidance regarding	unit costs. Identify
	the pipe size band ranges is given under	major projects.
	section 4.9. For the periods pre 2004/5 and	
	post 2007/8, the data is collected in two	
	aggregate ranges only; above and below	
	180mm.	
	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	

Table Reference	Instructions for Completion	Purpose
	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).	
2.2 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.31 to 4.42 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.
2.3 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.
2.4 Contribution	Enter the annual contribution, if any, in £m received in each investment area for each year.	Understand where contributions are received.
2.5 Installed pipe length	Enter the length in km of the pipe installed for each activity area and each project.	Enable calculation of unit costs.
2.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and length.	Enable comparison of unit costs.
2.7 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.
2.8 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.
2.9 Cost analysis	Enter in % the cost split for each major project (over £0.5m) between direct labour, contract labour, materials and other. The 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%.	Understanding how the project cost splits vary between activities.
2.10 Investment drivers	No entry required. This section summarises overall split of mains Capex drivers using the data entered in 2.2.	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
2.11 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	Understanding the how the expenditure splits vary between activities.

Table Reference	Instructions for Completion	Purpose
	excluding overheads for each of the time periods indicated on the table.	
	In each case the values should add to 100%.	
2.12 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
2.13 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)

4.10. 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.

Table Reference	Instructions for Completion	Purpose
3.1 Activities	For the period 2004-05 to 2007-08 inclusive, data is collected for five categories of expenditure on governors: IP/LP Renewal MP/LP Renewal IP/LP Growth MP/LP Growth Service Governor For the periods pre 2004-05 and post 2007- 08, data is collected split by total renewal, growth and service governors.	Disaggregate activities to an appropriate level to be able to analyse unit costs.
3.2 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions paragraphs 4.31 to 4.42 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
3.3 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.
3.4 Contribution	Enter the annual contribution, in £m received for each activity for each year.	Understand where contributions are received
3.5 Volume	Enter the number of governors installed for each activity area	Enable calculation of unit costs
3.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and	Enable comparison of unit costs

Table Reference	Instructions for Completion	Purpose
	number of governors.	
3.7 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.
3.8 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.
3.9 Investment drivers	No entry required. This section summarises overall split of Capex drivers using the data entered in 3.2	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
3.10 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.
3.11 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
3.12 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

4.11. This table collects expenditure and activity data for both mains and services connections activities that are directly customer driven. This excludes general reinforcement spend (which is included in tables 2 and 3). The table collects sufficient data to support a meaningful comparison of unit costs between activities and companies.

4.12. 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.

4.13. Additional narrative information will be required in order to assess the 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.

Table Reference	Instructions for Completion	Purpose
4.1 Activities	For the period 2004-05 to 2007-08 inclusive,	Disaggregate activities
	data is collected for:	to an appropriate level
	<ul> <li>Mains for 8 pipe size ranges (from less</li> </ul>	to be able to analyse
	than 75mm to more than 630mm).	unit costs.
	Guidance regarding the pipe size band	

Table Reference         4.2 Investment	<ul> <li>Instructions for Completion <ul> <li>ranges is given in paragraph 4.27. If</li> <li>disaggregation of pipe sizes is not</li> <li>possible in the range 180mm &amp; below</li> <li>then include all sizes in the &gt;125mm –</li> <li>180mm range and indicate in the</li> <li>spreadsheet narrative box that you have</li> <li>done this.</li> </ul> </li> <li>Mains for 5 activity categories <ul> <li>Each of district and service IP and MP</li> <li>governors</li> </ul> </li> <li>Each of new housing services, existing housing services and non-domestic services</li> <li>For the periods pre 2004-05 and post 2007-08, data is collected for: <ul> <li>Mains for 5 activity categories.</li> </ul> </li> <li>Total district and total service governors</li> <li>Each of new housing services, existing housing services and non-domestic services.</li> </ul>	Purpose Facilitate high level
Driver	specific investment activity from the list (see definitions in paragraphs 4.31 to 4.42 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory Non-Mandatory - Asset Condition Non-Mandatory - Business Support Non-Mandatory - Economic/Other	analysis of different business drivers across the entire range of Capex and Repex investment.
4.3 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.
4.4 Contribution	Enter the annual contribution, in £m received for each activity for each year.	Understand where contributions are received.
4.5 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.
4.6 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and length.	Enable comparison of unit costs.
4.7 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.
4.8 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.
4.9 Investment drivers	No entry required. This section summarises overall split of connections Capex drivers using the data entered in 4.5.	Facilitate high level analysis of different business drivers

Table Reference	Instructions for Completion	Purpose
		across the entire range of Capex and Repex investment
4.10 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.	Understanding the how the activity cost splits vary between activities.
4.11 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.
4.12 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 Operational Capex

4.14. This table collects high level data for other operational plant, equipment land and buildings 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 6.

Table Reference	Instructions for Completion	Purpose
5.1 Projects	With the exception of the period post 2007- 08, list all projects where the total project expenditure will be £0.5m or more in the categories: Plant and equipment Land and buildings. All data for projects less than £0.5m is to be collected on an aggregate basis for each category, but if there are fewer than three projects in any category above £0.5m, list the 3 highest spend projects. Non-project Plant and Equipment expenditure is to be entered under Leakage Management P&E. For the period post 2007/8, data is collected for total expenditure only.	Identify the major projects.
5.2 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.31 to 4.42 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.
5.3 Gross	Enter the annual expenditure in £m for each	Understand the
Expenditure	project (and aggregate of projects below	expenditure for each

Table Reference	Instructions for Completion	Purpose
	£0.5m) in each investment area for each year. Costs should be entered to the nearest £100k. Do not include capitalised overhead labour in these costs.	project and the split across activities and years.
5.4 Contribution	Enter the annual contribution, if any, in £m received for each project (and aggregate of projects below £0.5m) in each investment area for each year.	Understand where contributions are received.
5.5 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.
5.6 Capitalised overheads	Enter the annual amount in £m of capitalised overheads (central labour and services) for each activity category and each project (and aggregate of projects below £0.5m) in each investment area for each year.	Understand the allocation of capitalised overheads.
5.7 Investment drivers	No entry required. This section summarises overall split of other operational investment drivers using the data entered in 5.2	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
5.8 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.
5.9 Overheads analysis	For each activity enter the capitalised overheads as a percentage of gross expenditure excluding overheads.	Understanding activity cost splits.

#### Table C6 Non-Operational Capex - Direct

This table collects high level data for all non-operational Capex that is directly charged this includes vehicles, telecoms, furniture and fittings, tools and equipment and any other directly charged costs. For each category, a description of the total expenditure should be provided in the narrative part of the BPQ.

Table Reference	Instructions for Completion	Purpose
6.1 Projects	Data is collected for:	Identify the directly
	Vehicles	charged non
	Telecoms, Office	operational
	Security	expenditure
	Property	
	Furniture and fittings	
	Tools and equipment	
	Other directly charged expenditure	
	At the foot of 6.1 information is gathered for	
	comparison purposes including:	
	<ul> <li>Capitalised labour</li> </ul>	
	<ul> <li>Capitalised Interest</li> </ul>	

Table Reference	Instructions for Completion	Purpose
	Capitalised pension costs	
	<ul> <li>Other Capitalised Opex</li> </ul>	
	- Other capitalised Opex	
	The capitalised labour, and other capitalised	
	Opex, should equate to the capitalised Opex	
	as shown on the Opex spreadsheets.	
6.2 Investment	Enter the principal driver for undertaking the	Facilitate high level
Driver	specific investment activity from the list (see	analysis of different
DIIVEI		business drivers
	definitions in paragraphs 4.31 to 4.42 of this Guidance):	across the entire
	Mandatory - Safety	range of Capex and
	Mandatory - Salety Mandatory - Security of Supply	Repex investment.
	Mandatory - Other Statutory	Repex investment.
	Non-Mandatory - Asset Condition	
	Non-Mandatory - Business Support	
6.3 Gross	Non-Mandatory - Economic/Other.	Understand the
Expenditure	Enter the annual expenditure in £m for each investment area for each year. Costs should	Understand the expenditure for each
	be entered to the nearest £100k. Do not	investment area and
	include capitalised overhead labour in these	the split across
	costs.	activities and years.
6.4 Contribution	Enter the annual contribution, if any, in £m	Understand where
	received for each investment area and	contributions are
	project for each year.	received.
6.5 Net	Enter the annual net expenditure in £m after	Understand the net
Expenditure	receipt of any contribution for each	expenditure for each
Experiantare	investment area and project for each year.	project and the split
	investment area and project for each year.	across activities and
		years.
6.6 Capitalised	Enter the total annual amount in £m of cost	Understand the
overheads	for each investment area. Note that at the	allocation of central
ovornoudo	foot of 6.6. The capitalised overheads data in	costs to operational
	Tables 1 to 6A, 8 and 9 for each year is	investment activities.
	imported and summed for comparison.	
6.7 Investment	Enter the principal driver for undertaking the	Facilitate high level
drivers	specific investment activity from the list (see	analysis of different
	definitions in section 4.10 of this Guidance):	business drivers
	Mandatory - Safety	across the entire
	Mandatory - Security of Supply	range of Capex and
	Mandatory - Other Statutory	Repex investment.
	Non-Mandatory - Asset Condition	
	Non-Mandatory - Business Support	
	Non-Mandatory - Economic/Other.	
6.8 Expenditure	Enter in % the cost split for each activity	Understanding the
analysis	between direct labour, contract labour,	how the cost splits
	materials and other. The values should be	vary between
	provided for total actual activity expenditure	activities.
	excluding overheads for each of the time	
	periods in the table.	
	In each case the values should add to 100%.	
6.9 Overheads	For each activity enter the capitalised	Understanding activity
analysis	overheads as a percentage of gross	cost splits.
	expenditure excluding overheads.	
( 10 6		
6.10 Summary of	No entry required. Values for total capitalised	This information will
6.10 Summary of Capitalised Overheads	No entry required. Values for total capitalised overheads for LTS and storage, mains reinforcement, governors, connections, other	This information will be used to compare the source of

Table Reference	Instructions for Completion	Purpose
	operational and Repex will be imported from	capitalised overheads
	tables 1 to 6A, 8 and 9. Values for Non	with their allocation to
	operational - direct and indirect, will be	the specified
	copied from other locations on this table.	expenditure
		categories.

# Table C6A Non-Operational Capex - Allocated

4.15. This table collects high level data for all allocated non-operational Capex including IS, System Operation, and other allocated costs. For large projects, we request that you provide detailed project descriptions in the narrative part of the BPQ to allow a full, project by project evaluation. National Grid should provide an additional copy of this sheet with UK distribution totals for January 2001 to March 2005.

Table Reference	Instructions for Completion	Purpose
6A.1 Projects	<ul> <li>Data is collected for:</li> <li>System Operations</li> <li>IS</li> <li>Xoserve capex</li> <li>Other allocated costs</li> </ul> Separately for System Operations, IS and other allocated costs, list all projects where the total project expenditure will be £0.5m or more. If there are less than 5 projects where the total expenditure exceeds £0.5 m, list the 5 largest projects. Aggregate the data for projects less than £0.5m in these 3 categories. Thus, data for IS projects, System Ops (eg GDN Control Centre) and other allocated costs will be provided both as an overall total and also by project. System Operation expenditure shall include; telemetry communications, remote telemetry units and any contribution made to the capital expenditure of the DNCC. It shall also include project expenditure for the replacement of the DNCC.	Identify the major projects
6A.2 Investment Driver	Enter the principal driver for undertaking the specific investment activity from the list (see definitions in paragraphs 4.31 to 4.42 of this Guidance): Mandatory - Safety Mandatory - Security of Supply Mandatory - Other Statutory	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.

Table Reference	Instructions for Completion	Purpose
	Non-Mandatory - Asset Condition	
	Non-Mandatory - Business Support	
	Non-Mandatory - Economic/Other	
6A.3 Gross	Enter the annual expenditure in £m for each	Understand the
Expenditure	investment area and project for each year.	expenditure for each
	Costs should be entered to the nearest	project and the split
	£100k. Do not include capitalised overhead	across activities and
	labour in these costs.	years.
6A.4 Contribution	Enter the annual contribution, if any, in £m	Understand where
	received for each investment area and	contributions are
<i></i>	project for each year.	received.
6A.5 Net	Enter the annual net expenditure in £m after	Understand the net
Expenditure	receipt of any contribution for each	expenditure for each
	investment area and project for each year.	project and the split
		across activities and
(A ( Conitalized	Enter the total english english in the of east	years.
6A.6 Capitalised overheads	Enter the total annual amount in £m of cost for each investment area.	Understand the allocation of central
overneaus	for each investment area.	costs to operational
		investment activities.
6A.7 Investment	No entry required. This section summarises	Facilitate high level
drivers	overall split of non-operational Capex	analysis of different
differs	investment drivers using the data entered in	business drivers
	6.2.	across the entire
	0.2.	range of Capex and
		Repex investment.
6A.8 Overall	Enter in % the cost split for each activity	Understanding the
Expenditure	between direct labour, contract labour,	how the cost splits
analysis	materials and other. The values should be	vary between
5	provided for total actual activity expenditure	activities.
	excluding overheads for each of the time	
	periods in the table.	
	In each case the values should add to 100%.	
6A.9 Overheads	For each activity enter the capitalised	Understanding activity
analysis	overheads as a percentage of gross	cost splits.
	expenditure excluding overheads.	

# Table C7 Capex Summary

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

# Table C8 Repex Mains

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
8.1 Investment	Enter the principal driver for undertaking the	Facilitate high level
Driver	specific investment activity from the list (see	analysis of different
	definitions in paragraphs 4.31 to 4.42 of this	business drivers

Table Reference	Instructions for Completion	Purpose
	Guidance):	across the entire
	Mandatory - Safety	range of Capex and
	Mandatory - Security of Supply	Repex investment
	Mandatory - Other Statutory	Repex investment
	Non-Mandatory - Asset Condition	
	Non-Mandatory - Business Support	
	Non-Mandatory - Economic/Other	
8.2 Gross	Enter the annual expenditure in £m for each	Understand the
Expenditure	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	expenditure for each activity and project and the split across
	as < = 180mm and > 180mm. For 2004-05 to 2007-08 inclusive, expenditure must be entered by diameter band. Include here the cost of mains connections	activities and years.
	and de-commissioning. Costs should be entered to the nearest £100k. Do not include capitalised overheads in these costs.	
8.3 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.
8.4 Workload	Enter as appropriate, the length in km of the	Enable calculation of
	pipe installed/abandoned for each activity area.	unit costs.
8.5 Unit Cost	No entry is required. The unit cost is calculated from gross expenditure and workload.	Enable comparison of unit costs.
8.6 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution (8.3) from gross expenditure (8.2).	Understand the net expenditure for each activity and the split across activities and years.
8.7 Capitalised	Enter the annual amount in £m of capitalised	Understand the
Overheads	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, overheads must be entered by diameter band. Provide a description of the overheads included.	allocation of capitalised overheads.
8.8	Enter expenditure, workload etc. for mains identified for replacement by the risk model.	Understand the cost of the risk programme.
8.9	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.
8.10	Enter expenditure, workload etc. for mains identified for replacement through condition.	Understand the cost of the condition programme.
8.11	Enter expenditure, workload etc. for diverted mains that are not re-chargeable.	Understand the cost of non-rechargeable diversions.
8.12	No entry required. Sums costs and workloads of all replacement mains except	Understand total for the Incentive

Table Reference	Instructions for Completion	Purpose
	re-chargeable diversions.	Mechanism.
8.13	Enter expenditure, workload etc. for diverted	Understand the cost of
0.13	mains that are re-chargeable.	rechargeable
	Thans that are re-chargeable.	diversions.
8.14	Enter lengths abandoned under the risk	Understand overall
0.14	programme (8.8).	install/abandon ratios.
8.15	Enter lengths abandoned under the medium	Understand overall
0.15	pressure ductile iron (MP DI) programme	install/abandon ratios.
	(8.9).	
8.16	Enter lengths abandoned through condition.	Understand overall
	(8.10).	install/abandon ratios.
8.17	Enter lengths abandoned after non re-	Understand overall
	chargeable diversions (8.11).	install/abandon ratios.
8.18	No entry required. Sums all abandoned	Understand overall
	mains except re-chargeable diversions.	install/abandon ratios.
8.19	Enter lengths abandoned after re-chargeable	Understand overall
	diversions. (8.13)	install/abandon ratios.
8.20 LTS pipelines	Enter data for LTS Repex activities for	Understand LTS
and installations	all projects in all years where the total	Repex.
	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.	
8.21 Ratio	Optional Field.	Understanding how
installed/	For each of the 8 size ranges of pipe	installation activity
abandoned	abandoned enter the ratio of length of main	relates to lengths
	installed to main abandoned for that size of	abandoned.
	main abandoned (2004-05 and 2007-08	
	only).	
8.22 Service	Optional Field	Understanding how
Connections/ km	For each of the 8 size ranges of pipe	installation activity
mains abandoned	abandoned, enter the number service	relates to lengths
	connections per km of mains abandoned	abandoned.
	(2004-05 and 2007-08 only).	
8.23 Investment	No entry required. This section summarises	Facilitate high level
drivers	overall split of Repex drivers using the data	analysis of different
	entered in 8.1.	business drivers
		across the entire
		range of Capex and
		Repex investment.
8.24/25	Enter in % the cost split for each activity	Understanding the
Overall	between direct labour, contract labour,	how the project cost
Expenditure	materials and other. The values should be	splits vary between
analysis	provided for total actual activity expenditure	activities.
	excluding overheads for each category for	
	each time period indicated on the table.	
	In each case the values should add to 100%.	

- · · ·		
Table Reference	Instructions for Completion	Purpose
8.26 Overheads	Enter the overhead as a % of gross	Understand the
Analysis	expenditure by diameter band for each time period indicated on the table.	allocation of capitalised overheads.
8.27 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

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

4.17. 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
9.1 Investment	Enter the principal driver for undertaking the	Facilitate high level
Driver	specific investment activity from the list (see	analysis of different
	definitions in paragraphs 4.31 to 4.42 of this	business drivers
	Guidance):	across the entire
	Mandatory - Safety	range of Capex and
	Mandatory - Security of Supply	Repex investment.
	Mandatory - Other Statutory	
	Non-Mandatory - Asset Condition	
	Non-Mandatory - Business Support	
	Non-Mandatory - Economic/Other	
9.2 Gross	Enter the annual expenditure in £m for each	Understand the
Expenditure	activity category for each year. Include the	expenditure for each
	cost of replacing service connections and	activity and project
	restoring supplies; exclude the cost of any	and the split across
	meter work carried out on behalf of others.	activities and years.
	Costs should be entered to the nearest	
	£100k. Do not include capitalised overheads	
	in these costs.	
9.3 Contribution	Enter the annual contribution, if any, in £m	Understand where
	received for each activity in each investment	contributions are
	area for each year.	received.
9.4 Workload	Enter as appropriate, the number of services	Enable calculation of
	jobs.	unit costs.
9.5 Unit Cost	No entry is required. The unit cost is	Enable comparison of

Table Reference	Instructions for Completion	Purpose
	calculated from gross expenditure and the number of services,	unit costs.
9.6 Net Expenditure	No entry is required. The net expenditure is calculated by taking the contribution (9.3) from gross expenditure (9.2).	Understand the net expenditure for each activity and the split across activities and years.
9.7 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 overheads must be entered by specific activity. Provide a description of the overheads included.	Understand the allocation of capitalised overheads.
9.8	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.
9.9	Enter expenditure, workload etc. for non- domestic services by job type. Note: "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.	Understand the cost of non-domestic services work.
9.10	Enter expenditure, workload etc. where the risers are >20m length. Risers < 20m length and associated laterals and service connections should be included at C8 (8.10) & C9 (9.8) as appropriate.	Understand the cost of riser replacement.
9.11 Investment drivers	No entry required. This section summarises overall split of Repex drivers using the data entered in 9.1	Facilitate high level analysis of different business drivers across the entire range of Capex and Repex investment.
9.12 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.

Table Reference	Instructions for Completion	Purpose
9.13 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
9.14 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 C10 LTS Pipelines and PRS Asset Data

4.18. 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
10.1	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.	To understand the changes over time to the pipeline assets.
10.2	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.
10.3	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

4.19. 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
11.1	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 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.

Table Reference	Instructions for Completion	Purpose
Table Reference	Instructions for Completionto be entered as negative.For LTS linepack installed, show diminishing value of this in succeeding years, where appropriate, as a negative in 'Lost'.For Mothballed, show as negative in abandoned when it is no longer in the plan as available for re-commissioning.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.	Purpose
11.2	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.
11.3	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

4.20. 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
12.1	For each year, enter the changes to the asset	To understand profile
	population and the total at the year end.	of assets and the
		changes that
		investment is making
		to that profile
12.2	For each pipe material enter lengths installed	To understand the
	as new and replacement mains and also	proportions of pipe
	lengths removed. Sum to new population at	materials in the
	year end.	population.
12.3	Enter the % of the year end population	To understand the
	operating at the higher pressure tiers i.e. %	proportions operating
	Medium Pressure plus Intermediate Pressure	at the higher pressure
	(IP+MP).	tiers.

Table Reference	Instructions for Completion	Purpose
Target Population		
for Replacement		
12.4 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 <b>actual/forecast</b> 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.
12.5	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.
12.6	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.
12.7 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

4.21. 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	
13.1	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.
13.2	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

4.22. The completion of this table is **NOT now required for the one year review**; however it will be reinstated for the 5 year BPQ and so the instructions and tables are still in place to permit the GDNs to commence the population work as soon as they are able to do so.

4.23.

Table Reference	Instructions for Completion	Purpose
14.1	Enter pipelines by diameter by decade built	To understand the age profile of pipelines
14.2	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.
14.3	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

4.24. The completion of this table is **NOT now required for the one year review**; however it will be reinstated for the main control BPQ and so the instructions and tables are still in place to permit the GDNs to commence the population work as soon as they are able to do so.

Table Reference	Instructions for Completion	Purpose
15.1	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

4.25. The completion of this table is **NOT now required for the one year review**; however it will be reinstated for the main control BPQ and so the instructions and tables are still in place to permit the GDNs to commence the population work as soon as they are able to do so.

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

Table Reference	Instructions for Completion	Purpose
	Mains	
16.1	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	
16.2	For each installation type enter the population, at the year end, by age-band.	To understand the age profile of the

Table Reference	Instructions for Completion	Purpose
		installations in the
		population.

# Table C17 Services Age Profile

4.27. The completion of this table is **NOT now required for the one year review**; however it will be reinstated for the main control BPQ and so the instructions and tables are still in place to permit the GDNs to commence the population work as soon as they are able to do so.

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

Table Reference	Instructions for Completion	Purpose
	Domestic and Non-domestic Services	
17.1	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

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

Table Reference	Instructions for Completion	Purpose
18.1 Fracture 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.
18.2 Corrosion rate	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.
18.3 Gas in Buildings	Enter the number of external escapes (actual and forecast) reported by the public.	To understand the trend in PREs. To understand system condition.

Table Reference	Instructions for Completion	Purpose
18.4 PREs	Enter the number of repairs to mains and services (actual and forecast) arising from system condition.	To understand system condition.
	Enter the number of repairs to mains and services (actual and forecast) arising from third party damage.	
18.5 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.
18.6 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.
18.7 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.
18.8 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.
18.9 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.
18.10 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.
18.11 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 C19 Contract Data

4.30. 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.

Table Reference	Instructions for Completion	Purpose
19.1 Contract Data	For each mains and services replacement contract and from 1st Jan 2001, enter the contractor name, contract identifier and duration.	To understand the change in contract arrangements.
	For completed contracts indicate (with a x) where the activity was carried out.	

Table Reference	ble Reference Instructions for Completion		
	For current contracts enter the headcount for each replacement activity on a typical basis. Narrative may be provided as necessary.		
	Direct Employees: Those employed directly by the GDN. Agency Staff: Those employed indirectly by the GDN other than via the contractor. Contractor Employees: Those employed directly and via sub-contracts by the contractor. Operatives: Mains and service-laying crews and physical support. Staff: engineering, management, supervisory, administrative and other support.		

# Definitions

# Guidance regarding pipe size bands

4.31. 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	ui Nominal si Diameter	) ui) Cast/Duct Iron	()	(sui) (sui)	(m) Metric Steel	(sui) (sui)	( ) 虽 Metric PE	Aggregate size banding - metric
	2	2		2		2	63 75	
	3	3		3	89	3	90	
	4	4	100	4	114	4	125	
	5	5	150	1	1(0		100	
	6	6	150	6	168	6	180	. 100mm
	7	7		0	010	0	050	< 180mm
	8 9	8 9	200	8	219	8	250	> 180mm
	10	10	250	10	273		315	
	12	12	300	12	324		355	
	14	14			356		400	
>12" -	4.5	4 -	100					055 500
18"	15 16	15	400	14	404		_	>355 - 500mm
	18	16 18	450	16 18	406 457		500	
	20	20	430	10	508		500	
>18" -	20	20	_		000			
24"	21	21					630	>500 - 630mm
	24	24	600	24	610			

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	30	30	30	762		
>24"	36	36	36	914		>630mm
	42		42	1067		
	48	48	48	1219		

## Guidance regarding investment drivers

4.32. 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

4.33. 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.

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

4.35. 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

4.36. 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

4.37. 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

4.38. 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

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

#### Non-Mandatory – Asset Condition

4.40. 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.

4.41. 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

4.42. 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

4.43. 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 costs and the GDNs' efficiency to support the determination of appropriate allowances and incentives.

# **General questions**

5.1. In addition to the specific commentary below please provide for each GDN:

- 5.1.1. the key policies underlying the main activities and resultant workload for each year;
- 5.1.2. detail the areas where the 'Best Practice' has been adopted for the activity.

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

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

- 5.3.1. number and location of employees,
- 5.3.2. details of activities carried out directly by the GDN and activities carried out for the GDN by service, support or corporate functions
- 5.3.3. 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.

5.4. Please provide information on each of the following:

- 5.4.1. the impact of the separation and sale of the GDNs on costs
- 5.4.2. what efficiency benchmarks are used for each operating unit to measure its performance?
- 5.4.3. please describe practices and operations, providing examples and narrative explanation, where you think that you have achieved exceptional performance or best practice and how this has been measured

5.5. 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:

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

5.6. 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.

# **Gas Distribution Business – Operating Activities**

#### Shrinkage

5.7. 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.

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

5.9. 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**

5.10. Please provide documents of the following policies:

- 5.10.1. Maintenance
- 5.10.2. Emergency Service
- 5.10.3. Inspections
- 5.10.4. Strategic spares
- 5.10.5. Specialist centres and laboratories
- 5.10.6. Specialist maintenance plant and equipment
- 5.10.7. Replacement and Refurbishment
- 5.10.8. Connection and reinforcement
- 5.10.9. Operational control and safety procedures
- 5.10.10. Environmental Issues e.g. disposal of waste materials
- 5.10.11. Use of sub contracting core and non core services
- 5.10.12. Procurement

#### Benchmarking

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

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

#### Work Management systems

- 5.12. Describe how the works management system is used. This should cover:
  - 5.12.1. Key inputs, e.g. policies, resourcing etc
  - 5.12.2. Key outputs, e.g. outage planning, workplace, performance management, reliability centred maintenance
  - 5.12.3. Interaction with financial systems
  - 5.12.4. A Review of plan vs. performance and feedback into future planning and performance
  - 5.12.5. 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

#### Insurance

- 5.13. Please provide:
  - 5.13.1. A list of all insurance policies relating to the business, assets, liabilities or properties of the GDN giving for each policy:
    - 5.13.1.1. Insurer (specifying whether UK based, or if overseas which location)
    - 5.13.1.2. Policy number
    - 5.13.1.3. Term of coverage
    - 5.13.1.4. Property or risk covered
    - 5.13.1.5. Appraisal value of covered property (where appropriate)
    - 5.13.1.6. Extent of coverage
    - 5.13.1.7. Annual premium
    - 5.13.1.8. Amount of premiums that are prepaid or are unpaid from prior years.
  - 5.13.2. If the policies cover risks, assets or liabilities other than those of the licensed distribution business, a description of how costs are apportioned to distribution
  - 5.13.3. A description of all insurance claims (over £500k in amount) currently pending.

#### Property

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

5.14.1.	Operations and non-operational property separately
5.14.2.	Where any of the above property is solely used by certain operating
units	
5.14.3.	Where the above property is not held and managed by the GDN
5.14.4.	Indicate the occupancy/usage level of the property above

5.15. 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.

5.16. 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

5.17. 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):

- 5.17.1. Infrastructure and hardware
- 5.17.2. Software
- 5.17.3. Backup systems
- 5.17.4. Maintenance and ongoing support
- 5.17.5. Telecommunications

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

5.18. 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?

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

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

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

#### Documentation

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

- 5.22.1. quarterly and annual financial reports for each operational unit
- 5.22.2. business plans for each operational unit
- 5.22.3. proposal papers and reports in support of complete and planned initiatives submitted to the board of directors or management/executive committees
- 5.22.4. progress reports on sanctioned initiatives submitted to the board of directors or management/executive committees
- 5.22.5. analysis supporting completed and planned initiatives e.g. benchmarking cost benefit studies
- 5.22.6. details of historic redundancies programs
- 5.22.7. all market studies, feasibility studies, analyses, and similar reports concerning the GDN prepared within the past three years.
- 5.22.8. 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.

5.23. 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)

5.24. For each applicable year from 2002-03 to 2007-08 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.

# 6. Capex and Repex - additional narrative questions

**Chapter Summary** This chapter set outs detailed questions asking for additional narrative information on capital and replacement expenditure to gain an understanding of past expenditure, efficiency and investment management processes.

# 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 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 2004<sup>1</sup> letter.

6.3. For the areas of Capex and Repex spend listed below provide any 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
- o Governors
- o Connections
- o Other operational Capex
- Non-operational Capex
- o Mains Repex
- o Services Repex.

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?

<sup>&</sup>lt;sup>1</sup> Ofgem open letter, Gas Distribution Price Controls, 16 March 2004.

#### Assumptions

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

#### **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.

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 2005. Compare actual spend in each material area of expenditure with the Capex and Repex allowances given for the appropriate price control periods. 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 the price control periods.

#### 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 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, 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.

6.11. The purpose of this section is to understand the actions that the business will be taking to control and reduce costs and to enhance value and benefits to the GDN's customers.

#### 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 was changed, 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 still in force, state that this is the case and provide a copy.

# **Specific Expenditure Areas**

#### LTS and Storage Capex

#### System diagrams

6.13. Provide 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

NTS Offtakes, Pipelines, PRSs and Storage

6.14. For all 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.

6.15. 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:

- 6.15.1. 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 million 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 one per GDN. Further details will be requested for these projects at a later date, but in advance of any visit to the GDN.

6.18. Provide a list of all internal audits carried out on capital projects. 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.

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 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 and actual unit costs and work volumes.

6.22. For the periods 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.

6.23. Provide detailed information regarding standard connections charges for the review period, 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.

6.24. Provide copies of all contracts with Fulcrum for the review period 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.

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.

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

6.27. For the review period, provide copies of all contracts between Fulcrum & its 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.

6.28. Provide the tabulated summary details for connections projects with a project value >  $\pm 0.5$ m completed during the review period. 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

6.29. 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, quantify the costs associated with compliance. Explain how quantified historic and forecast costs are determined.

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, 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.

6.34. Describe and quantify actions that have been taken and are proposed to control connections expenditure.

# General Mains Reinforcement and Governors

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

6.36. Explain any differences between 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 and actual unit costs and work volumes.

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

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

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 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 one per GDN). Further details will then be requested for these projects, at a later date but ahead of any visit to the GDN.

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

#### Other Operational Capex

6.44. Explain any differences between 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 and actual workload.

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

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 asimproved pressure control, gas conditioning) completed during 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 expenditure.

6.51. Land and Buildings: list locations where operational land exceeding 100 square metres has been bought or sold 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 appraisal techniques are used to evaluate potential Capex investments to the IT systems?

6.54. (FOR NGG only) Provide a brief description of all IS Capex projects >£0.5 million from 01.01.01 to 31.03.05 . 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.

6.55. (For NGG only) Ofgem will review the list of projects and will request further information in the following areas during GDN visits:

- 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)

6.56. (For NGG only) For the IS Capex investment from 1January 2001 to 31 March 2005 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.

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

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

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

- 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 the 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.

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:

- 6.61.1. No of new Remote Telemetry Units installed during the period January 2001 to March 2005
- 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?

## Other Allocated Costs

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

#### Repex

HSE Enforcement Policy and other requirements from 01.01.2001

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

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

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

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

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

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)

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

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 cost variations between different mains and services replacement techniques?

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

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

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 2005 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 2005.

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 2005. 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

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

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. Describe any proposed enhancements to the model.

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?

For risers > 20m length:

- 6.134.2. How many high rise blocks within the GDN are connected to the network?
- 6.134.3. How many of these have already been replaced?
- 6.134.4. 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?
- 6.134.5. 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

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

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?

#### Traffic Management Act

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

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**

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.

6.160. 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?

6.164. 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?

6.166. 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.

# Safety

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

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

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

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**

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

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.

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.

6.194. Provide a summary report highlighting any problem areas for networks other than the LTS.

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

6.198. Is the demand forecasting methodology likely to change in the forecast period? If so please describe the changes.

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.

6.201. Explain how diurnal storage requirements are determined.

6.202. Describe any network analysis programmes used and the network validation process

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. Give reasons for any trends.

### **Resource Planning**

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**

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

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.

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# Appendices

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# Appendix 1 - Ofgem's Statutory Responsibilities

1.1. Ofgem is the office set up to assist the Gas and Electricity Markets Authority in carrying out its statutory functions - regulating the gas and electricity industries in Great Britain

1.2. Ofgem's powers and duties are provided for under the Gas Act 1986, the Electricity Act 1989, as amended principally by the Utilities Act 2000, Competition Act 1998, Enterprise Act 2002 and Energy Act 2004. Ofgem has concurrent powers with the Office of Fair Trading ("OFT") to apply the Competition Act 1998 to the gas and electricity sectors in Great Britain.

1.3. Ofgem's principal objective is to protect the interests of consumers present and future, wherever appropriate by promoting effective competition. We must also have regard to:

- The need to ensure that all reasonable demands for electricity and (so far as it is economical to met them), gas are met
- The need to secure that licence holders are able to finance their obligations, and
- The interests of those people who are disabled or chronically sick, of pensionable age, living on low incomes, or living in rural areas.

1.4. We are also required to carry out our functions in the manner, which we consider best calculated:

- To promote efficiency and economy including efficient use of energy
- To protect the public from dangers
- To contribute to the achievement of sustainable development
- To secure a diverse and viable long term energy supply, and
- Shall have regard, in carrying out those functions, to the impact on the environment of the gas and electricity industries.

1.5. In carrying out our functions we must also have regard to 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 us to represent the best regulatory practice.

1.6. Furthermore, we must have regard to social and environmental guidance issued by Ministers. Ofgem also has a duty to consult and take into account any advice given by the Health and Safety Commission about all gas and electricity safety issues that may be relevant to our functions under the Gas Act and the Electricity Act

# Appendix 2 - Cost categories

### **Direct Activities**

The direct activities are as follows:

### Work Management (incl 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.
- o 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
- o Safety & Engineering
- o Call Centres
- o The activities now sitting in Xoserve

Note: This category does not include the costs of Network Finance or facilities departments, which should be costed to 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

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

### Transport & Plant

Vehicle and mobile plant costs

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

### The categories used for support services and indirect costs are:

### Communications

Costs associated with supporting the business through 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.

### Corporate Centre

Including tax, treasury, investor relations, Company Secretariat and Corporate Affairs.

### Finance

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.)

### HR

Provide 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.

### 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.

• IS

Provision of IS Services for day to day service delivery including help desk, data centres, applications support, non operational telecoms. Additionally 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.

### Procurement & Logistics

Responsible for the procurement of goods and services in the support of day to day operations and the capital plan though 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.

### Property

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).

### R&D

Research and development. 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.

### Regulation

Support in managing the UK businesses licence, legislative obligations and regulatory issues.

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# 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** 

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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 barg.

### 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 75mbarg.

### LTS

Local Transmission System is the pipeline system operating at >7barg 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 75mbarg to 2 barg.

#### 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 and includes depreciation.

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

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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 GDNs are required to complete and return the BPQs and associated documentation to Ofgem by 7 April 2006. Ofgem together with its consultants will then review this information 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 one year control.

1.2. Ofgem will issue a further BPQ in June 2006 for the main price control for completion by October 2006.

Next Steps	
One year control BPQ issued	17 February 2006
Completion of extension BPQs	7 April 2006
Main control BPQ issued	Early June 2006
Completion of main control BPQ	Early October 2006

1.3. GDNs' responses should be received by 5pm on 7 April 2006 and should be sent to:

- Chris Watts, Head of the Gas Distribution Costs and Outputs Team
- 9 Millbank, London SW1P 3GE
- 020 7901 7333
- chris.watts@ofgem.gov.uk and copied to <u>GDPCRcosts@ofgem.gov.uk</u>

1.4. All spreadsheets should be submitted electronically via email. As far as possible all supporting narrative documentation should be submitted both electronically via email and in hard copy.

### Provision of data to other GDNs

1.5. 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

1.6. 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.

GDPCR BPQ -	Guidance and	Narrative Questions
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1.7. 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.

1.8. 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.