Promoting choice and value for all gas and electricity customers

Gas Distribution Price Control Review
Third Consultation Document

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Target audience: Consumers and their representatives, gas distribution networks (GDNs), independent gas transporters (IGTs) and any other interested parties

Overview:

The total revenue of the gas distribution networks (GDNs) is approximately £2 billion per annum. We will be resetting the price control, which specifies the maximum revenue that a network can recover from its customers in relation to the five years from April 2008.

The effect of this type of control is to create powerful incentives on companies to reduce costs. This consultation document sets out our initial thoughts on the other possible incentive schemes and arrangements which taken together with RPI-X we think will best protect customer interests. The document includes a discussion of the high level framework of the price control, quality of service, price control incentives on capex, opex, mains replacement, network capacity and network extensions.

The GDNs have also supplied us with their forecast costs for the period 2008-09 to 2012-13. To give context to the policy debate we have published this data while we carry out our assessment of these forecasts

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Context

The price control that applies to the gas distribution networks expires on 31 March 2007 and will be reset for one year until 31 March 2008. We expect to publish our final proposals for the one year control on 4 December 2006.

This consultation document sets out our initial thoughts on the main policy issues which will apply to the price control for the period 2008-9 to 2012-13. We intend to hold a workshop to discuss some of the issues raised in this consultation on 23 January 2007. We will publish more details on the content of this seminar on our website in due course.

Our next consultation paper on the gas distribution price control (GDPCR) will be published in March 2007 and will give our initial views on the costs that an efficient GDN will incur for the period from 2008. We intend to bring together our thinking and responses to this and the March document in our initial proposals in May 2007.

Associated Documents

- GDPCR One Year Control Initial Proposals, September 2006 (Ref 169/06):
- http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/16829_169a.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon
- GDPCR Second consultation, July 2006 (Ref. No. 123/06):
- http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15829_GDPCR_2CD_FINAL19July.pdf?wtfrom=/ofgem/whats-new/archive.jsp
- GDPCR Initial Consultation, December 2005 (Ref 259/05):
- http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/13055_259_05.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/gasdistpriccon

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Summary

The price control that currently applies to the eight gas distribution networks owned by National Grid Gas, Northern Gas Networks, Scotia Gas Networks and Wales and West Utilities comes to an end on 31 March 2007. In December we will publish our final proposals to reset the control for one year. We will then be resetting the control again for a five year period from April 2008. The control will limit the revenue which GDNs are allowed to recover from their customers so changes over the five year period are limited to the rate of inflation minus X, where X is an amount determined through the price control process.

This form of regulation is known as RPI-X. It creates powerful incentives on the GDNs to outperform our cost assumptions during the five year period for the benefit of their shareholders. We will use the information on GDN performance when resetting the price control in 2013 and pass back the benefits of that outperformance to customers in future periods. The incentives that RPI-X creates are a key mechanism for fulfilling our principal objective to protect the interests of customers.

On its own there is a risk that RPI-X could create perverse incentive on companies for example, to cut back on the quality of service which they deliver to customers or to delay efficiency savings as they near the end of the control period. GDNs already have a number of statutory duties and responsibilities which mitigate this risk, covering aspects such as the safe and efficient operation of their networks. This consultation document sets out our thoughts on those additional incentives and arrangements which, taken together with RPI-X and the existing statutory framework, will best protect the interests of consumers. In most cases these policies have either been incorporated into the existing gas distribution price control or have been developed in recent price controls set by Ofgem including electricity distribution and transmission.

The document sets out:

- the high level framework for the price control including a discussion of the scope of the control, how allowed revenues vary from year to year within the five year control and our initial views on how we should address changing circumstances through the course of the control, for example through the pass through of costs, re-openers and revenue drivers;

- some options for improving the way we define and incentivise the outputs of the GDNs including the quality of service received by customers, the accuracy of GDN's records of where pipelines are laid and the possibility of defining outputs for the capacity of the network and other longer term measures of the capability of the network;

- some options for delivering constant incentives on the GDNs to deliver efficiency savings throughout the five year control period, alternatives to, and the development of, the mains replacement incentive, and our initial thoughts on the most appropriate way to incentivise the GDNs to manage efficiently the interface between themselves and the National Transmission System; and,

- our thoughts on how the price control and the incentives it creates could be modified to contribute to sustainable development, in particular the options for incentivising the extension of the gas network to fuel poor communities.

In addition the document also sets out the GDNs' forecasts of costs for the five years of the next control and a brief consideration of the financial issues. These will be considered in our next consultation on the five year control in March 2007.

This document covers a broad range of policy issues and is likely to be of interest to a wide range of different individuals and organisations. To encourage discussion and input into the decisions we will need to take in reaching our initial proposals, we intend to hold a seminar on 23 January 2007. Details are still to be confirmed and will be placed on our website in due course.

1. Introduction

Chapter Summary

This chapter sets out the purpose of the document, describes the background to and objectives of GDPCR, and explains how the document is organised.

Question box

There are no specific questions in this chapter.

Purpose of this document

1.1. Ofgem sets controls to limit the revenue that monopoly transmission and distribution companies can recover from their customers. Ofgem normally sets transmission and distribution price controls every five years. Once the price control is set, prices are restricted by RPI-X.

1.2. During the price control period companies can maximise their revenues by outperforming against the cost assumptions made by the regulator. At the end of the five year period we review the companies' actual costs and use these to reset the price control for the next five year period. Over time we would expect the price controls to set prices at their efficient level.

1.3. One of the effects of this type of regulation is that the incentive to make efficiency savings can also give companies incentives to cut back on their quality of service to consumers. Moreover, the pressure to reduce costs, in isolation, could lead to under investment in the network with a consequent impact on network reliability.

1.4. The main purpose of this document is to set out the policy options which balance the incentives created by RPI-X and which taken together with RPI-X would create a package that best fulfils our principal objective to protect the interests of gas consumers. We will publish our preferred approach in the May 2007 initial proposals document.

Background to GDPCR

1.5. We will publish our final conclusions for a one year control to apply to the GDNs from April 2007 until March 2008 in December 2006. The price control that currently applies to the GDNs expires on 31 March 2007. The GDPCR will then reset the revenue allowances for the eight GDNs for the next price control period 2008-2013.

1.6. This is the first distribution price control review since National Grid Gas plc's (NGG's) sale of four of its eight GDNs to three new GDN owners on 1 June 2005. As a result, the current industry structure is substantially different from that in place at

the time of the previous price control review. These changes will have important implications for the conduct of this review. The creation of separately owned, managed and operated GDNs will allow more effective comparisons to be made between the businesses, building on the sense of rivalry which exists between independent management teams.

1.7. The benefits from this comparative competition will build up over time and be passed back to consumers at future reviews. To do this effectively, an important part of GDPCR is to put in place a cost reporting framework designed to maximise Ofgem's ability to compare GDNs' costs at future reviews, and to pass the benefits of increasing efficiency back to consumers. As part of GDPCR we are also considering initiatives to meet our obligations on sustainable development and measures associated with safety.

1.8. The regulatory and commercial environment faced by GDNs changes over time. Significant changes are due to occur during the next price control period including the implementation of new arrangements for GDNs to purchase offtake capacity from the National Transmission System and the reform of contracted arrangements for interrupting very large customers on the GDNs. We will ensure that we manage the interactions between these projects appropriately.

Objectives of GDPCR

1.9. The Authority's principal objective under section 4AA of the Gas Act 1986 is to protect the interests of consumers, wherever appropriate by promoting effective competition. In addition (and without limitation), the following general duties are also likely to have particular relevance to GDPCR:

- the need to secure that, so far as it is economical to meet them, all reasonable demands for gas conveyed through pipes are met;
- the need to secure that licence holders are able to finance their authorised activities;
- to promote efficiency and economy on the part of licence holders and the efficient use of gas conveyed through pipes;
- to be transparent, accountable, proportionate, consistent and to target regulatory activities only in cases where action is needed;
- to protect the public from dangers arising from the conveyance of gas through pipes or the use of such gas pipes, and to take into account any advice given by the Health and Safety Commission about any gas safety issue[1];
- to have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas; and,
- to contribute to the achievement of sustainable development.

1.10. The Authority's powers and duties are set out in more detail in Appendix 2.

[1] See Gas Act 1986, sections 4AA(2)(b), 4AA(5)(b), 4A(2) and 4AA(5A)(a)

Structure of this document

1.11. This consultation document is organised as follows:

- Chapter 2 - states the high level framework of the price control;
- Chapter 3 - sets out the proposed approach for assessing costs;
- Chapter 4 – sets out GDN outputs under the price control;
- Chapter 5 - considers the incentives for the price control review;
- Chapter 6 - considers the financial issues as part of the price control;
- Chapter 7 – considers issues associated with sustainable development;
- Chapter 8 - focuses on ways to address other issues including funding of xoserve, independent systems and network extensions; and,
- Chapter 9 – sets out the next steps and the GDPCR timetable.

2. High level framework of the price controls

Chapter Summary
This chapter sets out the high level framework that underlies the price control. It considers:

- ➔ revenue drivers;
- ➔ scope of the control, including excluded services, pass through items and de minimis activities;
- ➔ price indices;
- ➔ dealing with uncertainty, new obligations and costs;
- ➔ correction mechanism; and,
- ➔ variability.

Question box

Question 1: Do you agree with our initial view on which services could be given excluded treatment? Are there any additional services that we have not considered?
Question 2: Should domestic one-off connections be treated as excluded services or ordinary price controlled services?
Question 3: Have we correctly identified the range of items that could be treated as pass through items? Should these items be treated as pass through items?
Question 4: Is there any reason why we should change our position on cost indices?
Question 5: Is there any reason why we should change our position on re-openers?
Question 6: Should we introduce a two-tier correction mechanism for over and under recovery of allowed revenue, consistent with the arrangements that apply in electricity distribution?
Question 7: Should we calculate the GDNs' allowed revenues in a way that creates a smooth revenue profile over the course of the price control period?

Revenue drivers

2.1. In the second consultation document we noted that we would review the volume based revenue driver[2] and sought views on whether other forms of revenue driver, based for example on the number of connections or load growth, would be more appropriate. Some respondents considered that the volume driver was not appropriately aligned with GDN cost drivers and should be reduced from 35 per cent to 5 or 10 per cent. One respondent suggested that revenue should be linked to customer numbers and there was some support for a connections based revenue driver and a load growth driver. One respondent suggested that a composite revenue driver would properly reflect variable cost drivers.

2.2. We have recently received forward looking Business Plan Questionnaire (BPQ) data from the GDNs which we will use to understand how costs vary with outputs. We intend to set out our initial view on revenue drivers in our May 2007 initial proposals document.

[2] The revenue driver varies 35 per cent of GDN revenue with the volume of gas transported.

Scope of the control

2.3. In the second consultation document we set out our view that there was scope to clarify the circumstances in which a cost or revenue stream is treated differently from ordinary price control treatment. Responses to the second consultation document were supportive of this view.

Excluded services

2.4. Excluded services are services provided by GDNs which are provided as part of the distribution network transportation business[3] but, unlike most price controlled services, are not recovered through ordinary transportation charges. For the purpose of setting allowed revenues, excluded services are treated as follows:

- where the costs of providing the excluded service are separately identifiable from the costs of providing regulated services, the costs and revenues associated with the services are treated as outside the price control; and,
- where the costs of providing the excluded service are indivisible from the costs of providing regulated services, the costs of providing the service are included in the estimate of GDNs' overall costs, and the expected revenues are netted off from allowed revenues[4].

2.5. Under the current gas distribution price control, the main categories of excluded service are:

- payment claims associated with last resort supply;
- emergency services to independent gas transporters (IGTs),
- charges for gas illegally taken; and,
- the provision or modification of connections to the gas network[5].

2.6. In addition, metering services provided by GDNs are treated in the same way as excluded services for the purposes of calculating price control allowances[6]. However, as the definition of transportation services explicitly excludes metering services, it is not necessary to include metering services in the definition of excluded services.

2.7. Our consultation process has identified a range of additional services that it may also be appropriate to treat as excluded services, including certain services that GDNs provide to other gas transporters and any “user-pays” services provided by xoserve.

[3] At a high level this means activities of the GDN connected with the development, administration, maintenance and operation of its pipe line system. See the definition of ‘transportation business’ in Standard Special Condition A3(1) of the GT licence.
[4] We assume that the revenue that GDNs receive for providing an excluded service is equal to the costs they incur to provide the service.
[5] Special Condition E4.
[6] See the definition of ‘transportation business’ as referenced in footnote 3.

2.8. Table 2.1 briefly describes the various services and sets out our initial views on how each should be treated going forward. In order to reach the initial view set out in Table 2.1, we have treated a service as excluded when it protects the interests of consumers, for instance because it:

- protects consumers from risks associated with uncertain revenue flows;
- places more appropriate incentives on GDNs or consumers;
- promotes competition; or,
- allows consumers to share the benefits of a commercial service[7].

2.9. Paragraphs 2.10-2.14 consider some of the issues associated with excluded services in more detail.

Table 2.1 Services that could be given excluded treatment

Service	Description	Current treatment	Initial view
1. Payment claims associated with last resort supply	If a supplier fails to continue to operate, the Authority may direct an alternative supplier to supply gas to the affected customers as a last resort supplier. The alternative supplier may recover the additional costs incurred in complying with this direction from the appropriate GDN. The GDN in turn spreads this cost to all suppliers by increasing its transportation charges.	Excluded service	Pass through item
2. Emergency services to IGTs	GDNs have agreements with IGTs to provide emergency services on behalf of IGTs on reasonable terms. These services include emergency call handling, despatch and attendance on site (including repair) and post emergency information and metering services.	Excluded service	Excluded service
3. Charges for gas illegally taken	Both gas suppliers and GDNs have a responsibility to investigate gas theft. A Reasonable Endeavours Scheme is in place that, under certain circumstances, allows GDNs to levy additional charges over and above ordinary transportation charges to sites at which gas has been taken off illegally.	Excluded service	Excluded service
4. Provision or modification of connections	Connections services for which GDNs receive customer contributions are treated as excluded services. This includes all connection services other than services that GDNs are obliged to provide without charge (for instance, services provided free under the 10 metre rule and the final connection of domestic customers). Costs associated with these services are recovered	Excluded service	Ordinary price control treatment or excluded service

[7] This principle is discussed further in paragraph 8.16.

	through the price control.		
5. Metering services	Services associated with GDNs' meter provider of last resort obligations, and other services provided to meter assets managers (such as workforce services, call handling and despatch) and suppliers (such as post emergency meter services).	Not a transportation activity (treated as excluded service)	No change
6. Services that GDNs provide to other GDNs and the NTS operator	As part of GDN sales, the NTS and GDNs entered into a range of contractual agreements. GDNs provide certain services to the NTS, including emergency services and maintenance services at offtake points. NGG GDN provides certain services to other GDNs, including the provision of the national emergency phone number, and, for a transitional period, area control centre services under the SOMSA arrangements.	Exemption from de minimis cap[8]	Excluded service
7. Xoserve user pays services	In the event that a "core services plus user pays" regime is established for the funding of xoserve, user pays services provided by xoserve would be treated as excluded services, for each of the GDNs. See Chap 7.	Not contemplated by price control	Excluded service

2.10. We are considering the treatment of domestic one-off connections in the light of the review of competition in connections[9]. Several respondents have suggested that even if that review concludes that domestic one-off connections are a monopoly service, it may be appropriate to continue to treat the service as an excluded service. This is because future workloads associated with the service are uncertain and it is difficult to accurately forecast costs. An alternative approach would be to treat domestic one-off connections as an ordinary price controlled service, but to include within the price control a revenue driver linked to connection volumes. The practicality of such an approach depends in part upon the range of costs for each new connection.

2.11. When setting allowed revenues at the last price control review, Ofgem included an allowance for final connections. This was because GDNs provided final connections to customers consuming less than 2,196,000 kWh per annum for no charge. In the light of the GDNs current charging policy with respect to connections we will need to consider whether this remains appropriate going forward.

2.12. Given their statutory obligations[10] with regard to response times, it is necessary for GDNs to maintain an emergency services workforce which may have long periods of downtime between emergency calls. In between emergency calls, GDNs currently use this workforce to provide metering services to meter asset

[8] See paragraph 2.20 for a definition of the de minimis cap
[9] Review of competition in gas and electricity connections, Ofgem, August 2006 159/06
[10] The gas (Standards of Performance) Regulations 2005 – Statutory Instruments 1135/2005 and 1136/ 2005.

managers. Expected revenue from meter asset managers is netted off the price control cost allowances so that consumers share the benefits of this more efficient utilisation of resources.

2.13. There is a risk that in future, meter asset managers may choose to procure their metering services elsewhere, with the effect that the GDNs are left with "stranded opex". To address this risk, a GDN has suggested that, for the purposes of setting cost allowances, we should provide an allowance that reflects the full cost of providing emergency services absent any metering income. To the extent that GDNs are able to earn metering income, this income should be subject to a benefit sharing mechanism. We note that if we were to adopt this proposal, GDNs' incentive to utilise their emergency services workforce efficiently would be reduced. Before we form a view on this proposal, it is appropriate to consider:

- whether it is reasonable to anticipate that meter asset managers will procure their services elsewhere; and,
- whether the GDNs' emergency workforce could provide other services between emergency calls, such as repair work.

2.14. One respondent to the second consultation document highlighted inconsistencies between the common usage of the term "excluded services" and the legal interpretation of the licence. The discussion in this chapter includes all services that we propose to treat in the manner described in paragraph 2.4 for the purposes of calculating price control allowances. We will consider the legal construction of our definition of excluded services as part of the licence drafting consultation scheduled for next year.

Pass through items (non-controllable operating expenditure)

2.15. Costs and revenue associated with pass through items are treated as being within the price control. Pass through items differ from activities that are subject to ordinary price control treatment in that we insert an adjustment term in the price control formula that allows GDNs' allowed revenues to vary in accordance with actual costs incurred. The test for determining which items should receive this treatment is the extent to which the GDNs can influence these costs. Under the current price control, network rates and licence fees are treated as pass through items.

2.16. Since the last price control was set, the arrangements for setting network rates have changed. Rateable values are set independently by the Valuation Office Agency (VOA, for England and Wales) and Scottish Assessors (SAA) for Scotland and are subject to appeal. GDNs can influence the valuation of their networks for the purposes of setting network rates for the following five year period via the revaluation process. The next rating valuation is scheduled for 2010. In TPCR, it is proposed to set an ex ante allowance based on the present level of rates, a mechanism in the transmission licences will allow companies to recover the difference between their out-turn costs and the allowance. This mechanism will be switched off from 2010/11, it will be switched on if the companies can satisfactorily demonstrate that they have engaged efficiently with the VOA and SAA at the rating

revaluation. Our initial view is that the same mechanism is appropriate for GDNs. This is also consistent with the approach taken in DPCR, although since the ratings valuation coincides with the re-setting of the price control, the adjustment mechanism is not required.

2.17. It may also be appropriate to give the following costs pass through treatment:

- **NTS charge for pension deficit costs relating to non-active scheme members.** This relates to the costs of pensions relating to former employees of the GDNs who retired prior to GDN sales. NGG NTS funds these pensions and recovers the costs via a charge to the GDNs. As this charge is regulated via TPCR, it is appropriate for the cost to appear as a pass through item in GDPCR; and,

- **Payment claims associated with last resort supply.** This activity (which is described in Table 2.1) is currently classed as an excluded service, however it may be more appropriate to treat it as a pass through item. To date, GDNs have not received a payment claim associated with last resort supply.

2.18. We discuss other costs that it may be appropriate to treat as pass through items in paragraph 5.71.

De minimis activities

2.19. The licence permits the GDN to carry on a business or activity without seeking Ofgem's consent, provided the annual aggregate turnover and aggregate amount of such activity does not exceed 2.5 per cent of the GDN's issued share capital or reserves at any time or 2.5 per cent of overall yearly turnover. Due to the insignificant revenue, costs associated with such activity are neither passed-through costs nor excluded costs within the incentives framework. De minimis activity is outside the price control.

2.20. At the time of GDN sales, GDNs entered into a range of contracts to provide services to NGG NTS, meter asset managers, suppliers and each other (see Table 2.1, items 5 and 6). The Authority gave consent to these contracts in the form of exemption to the de minimis threshold.[11]

2.21. As set out in Table 2.1, our initial view is that these services should be treated as excluded services rather than exemptions from the de minimis cap. This view is consistent with the approach adopted in TPCR and responses to the second consultation document. We note that it may be appropriate to introduce transitional provisions relating to certain services, such as System Operation Managed Service Agreements (SOMSAs).

[11] Consent issued by the Gas and Electricity Markets Authority pursuant to Standard Special Condition A36 (Restriction of Activity and Financial Ring Fencing), 25 May 2005

Price indices

2.22. In the second consultation document we consulted on whether Ofgem should link some or all of allowed revenues to a price index other than RPI. There was broad support among respondents for the continued use of the RPI index. A few of the respondents considered that some revenue could be linked to other indices or that real price effects, e.g. those associated with contractor rates and material costs, should be incorporated into the allowances.

2.23. For reasons set out in the second consultation document, we continue to support the retention of RPI as the key price index and we do not propose to link any cost allowances to alternative cost indices, apart from gas shrinkage. We note that it will be necessary to consider real price effects, including contractor and materials costs, when determining our cost allowances and efficiency targets. GDNs and other interested parties are invited to demonstrate why any element of GDNs' costs merits special treatment.

Dealing with uncertainty, new obligations and costs

2.24. We consulted on mechanisms for dealing with uncertainty, new obligations and costs in the second consultation document. We set out our initial view that we do not support the use of a generic mechanism for dealing with uncertainty because it dampens GDNs' incentives to manage costs and forecast accurately. It may, however, be appropriate to include a specific re-opener in circumstances where significant changes to costs are expected, but the level of impact is difficult to quantify prior to the price control being implemented.[12]

2.25. GDNs have suggested a range of other services that could be the subject of a specific re-opener. Our initial view is that if there is no greater clarity on the costs associated with the Traffic Management Act and Transport (Scotland) Act before we publish our final proposals, they should be subject to a specific re-opener, consistent with the approach adopted in DPCR4. We do not propose to make other costs the subject of specific re-openers. This view is subject to further consultation.

2.26. Incentive schemes are a type of mechanism for dealing with uncertainty. For instance, the mains replacement incentive scheme was put in place in order to allow the price control to respond flexibly to uncertainty associated with mains replacement workload. We are considering a range of incentive schemes as part of GDPCR - see Chapter 5.

[12] Our reasons for our position on re-openers are set out in more detail in chapter 2 of the second consultation document. Gas Distribution Price Control Second Consultation Document, July 2006, Ref 123a/06, pgs 10-11.

Correction mechanism

2.27. The correction mechanism adjusts the price control for any previous over or under recovery against allowed revenues. At present, the correction mechanism is applied in such a way that GDNs are penalised 3 per cent over and above the base rate for any over recoveries that they incur. Specifically:

- if a GDN over recovers, the amount that they may recover in the following year is reduced by the amount of the over recovery subject to an interest charge at the base rate plus 3 per cent; and,
- if a GDN under recovers, the amount that they may recover in the following year is increased by the amount of the under recovery subject to an interest charge at the base rate.[13]

2.28. Following DPCR4, electricity distribution companies have been subject to a refined correction mechanism. Specifically:

- if a company over recovers by more than 2 per cent, they suffer a punitive interest rate of 3 per cent higher than the base rate;
- if a company over recovers by less than 2 per cent, they suffer an interest rate of 1.5 per cent higher than the base rate;
- if a company under recovers by less than 2 per cent, they may recover interest at rate of 1.5 per cent higher than the base rate; and
- if a company under recovers by more than 2 per cent, they may recover interest at the base rate.

2.29. This mechanism imposes a higher penalty on companies that incur large over recoveries compared to smaller over recoveries. We are considering whether to adopt this approach in GDPCR. Under this approach we consider that the GDNs would be neutral to the cost of under or over recovery if it is within 2 per cent. The 1.5 per cent was calculated as part of DPCR4 to reflect market views on debt premia. If we were to propose these charges going forward we may wish to revisit this number. The size of the dead band as described is intended to reflect uncertainty over variations.

2.30. It may also be appropriate to consider further graduating of incentives on companies to minimise the annual corrections made. It could be argued that the additional complexity which such a change would necessitate is not justified by the incentives it creates.

2.31. It is our initial view that the method described above does provide symmetrical incentives for GDNs around the assumed cost of debt. This picks up on the point made by a number of respondents that we should adopt symmetric penalties.

[13] Gas Transporters Licence, Special Condition E2B 8(4).

Variability

2.32. Assuming that costs are constant, transportation charges that remain stable over time are more likely to protect the interests of customers than charges that fluctuate. When forming a view on the price control formula, we will consider the extent to which charges can be expected to vary over time. To do this, it is necessary to consider the cumulative impact of each component of the price control and charging arrangements.

2.33. Ofgem is exploring a number of changes to the structure of gas distribution charges that could have the effect of reducing price variability.[14] These proposed changes include, for example, whether to alter the timing of changes to gas distribution prices from October to April in order to bring them into line with the changes in allowed revenue under the price control.

2.34. There may or may not be more that can be done on the structure of charges, but in any event, as part of the price control we will also consider the following changes which have the potential to reduce variability:

- changes to correction mechanisms that strengthen incentives for GDNs to limit over and under recoveries;
- changing the proportion of revenue linked to the throughput-based volume driver to ensure that the variability of revenue is aligned with the variability of costs; and,
- profiling allowed revenues over the price control period.

2.35. Revenue profiling sets a profile of revenue which is different from the profile of costs but in net present value terms allows companies to recover the same amount. If we do not choose to profile the revenue, then allowed revenues will vary on an annual basis in accordance with our estimate of the GDN's efficient costs plus the allowed return on capital. Any profiling adjustments are NPV neutral, so that customers pay the same amount overall regardless of whether profiling occurs. The advantages of profiling are; that it provides an easy method for explaining publicly the revenue impact of our proposals; that it reduces the extent to which charges vary year on year; and that it enables us to express baseline price control allowances using a simple formula. The disadvantage of profiling is that it introduces a discrepancy between GDNs' expected costs and their allowed revenues. This discrepancy must be corrected at the next price control, and can lead to a large P0 change in allowed revenue. Depending on the profile of costs, we may be constrained from using certain revenue profiles, because they could create financeability issues: for example if the 'X' (year on year adjustment in revenue) was larger than the annual fall in costs that a company was expected to achieve by the end of the control period, costs will exceed revenue. We would welcome views on the pros and cons of profiling as part of GDPCR.

[14] Ofgem, Reform of Interruption Arrangements on Gas Distribution Networks, October 2006, chapter 5.

2.36. Features that have the potential to increase variability include revenue drivers, incentive schemes, re-openers and pass through items. Gas distribution charges will be affected by the change in NTS exit revenue streams, but this will be offset by reductions in NTS charges[15]. Consumers are not expected to pay any more in total gas transmission and distribution charges as a result of this change. However, it will be a sufficiently large increase in gas distribution costs for us to exclude incremental NTS exit costs from any profiling exercise, as described in paragraph 2.36 above.

2.37. Overall we need to find a reasonable balance between having charges that are stable and comprehensible, charges that reflect GDNs' costs, and appropriate incentive mechanisms.

[15] Following the introduction of the enduring offtake arrangements shippers who are connected to GDNs will pay a charge to GDNs that reflects both gas distribution and transmission costs. GDNs will pay the NTS for exit charges that have formerly been paid directly by shippers to the NTS.

3. Assessing costs

Chapter Summary

This chapter presents summary historical and forecast cost data for each of the GDNs. It describes Ofgem's approach to setting operating, capital and replacement expenditure allowances for 2008-09 to 2012-13 and the regulatory asset values (RAVs) to 1 April 2008.

Question box

Question 1: Is our proposed approach to setting capital and replacement expenditure allowances for 2008-09 to 2012-13 appropriate?
Question 2: Is our proposed approach to setting opex allowances for 2008-09 to 2012-13 appropriate?
Question 3: Is our proposed approach to updating the GDNs' RAV to 1 April 2008 appropriate?

Introduction

3.1. The second consultation document set out our proposed approach for setting operating (opex), capital (capex) and replacement (repex) expenditure allowances for 2008-09 to 2012-13. We consulted on a number of specific issues including:

- whether our proposed approach to setting allowances is appropriate;
- how we should deal with the uncertainty surrounding the level of costs associated with the Traffic Management Act; and,
- how we should assess costs associated with Gas Transporter Management System (GTMS) replacement, System Operator Managed Service Agreement (SOMSA) exit and ongoing system operation.

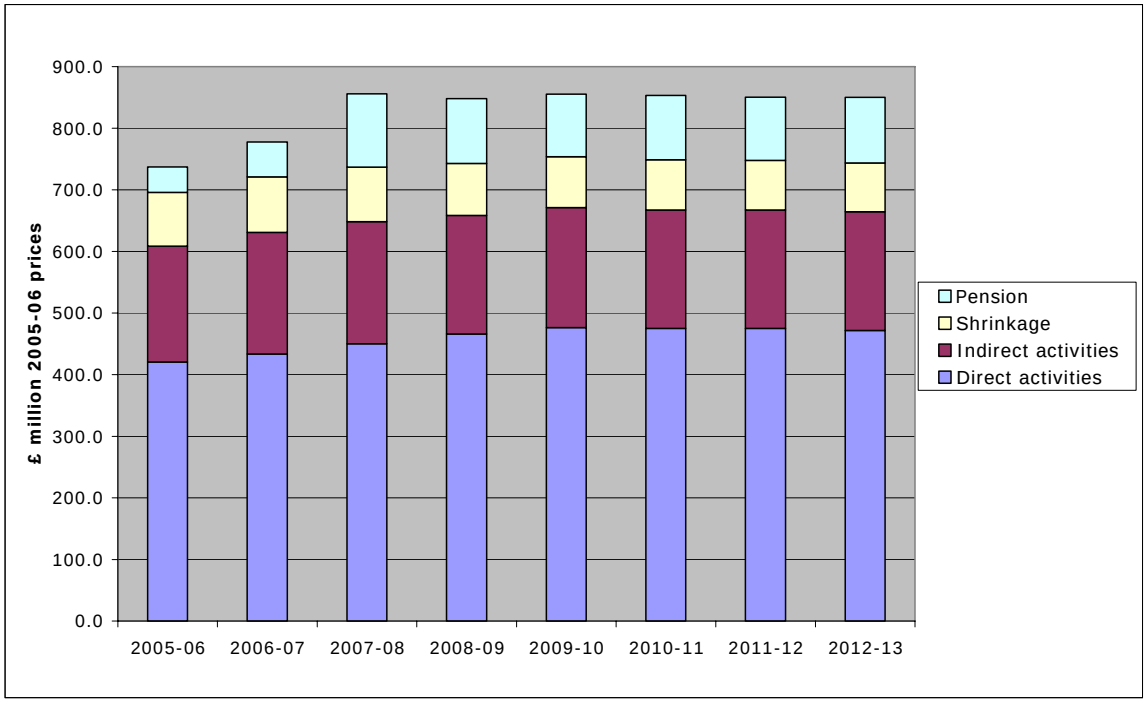
3.2. We have appointed consultants to assist us in setting appropriate expenditure allowances for 2008-09 and 2012-13. Europe Economics is carrying out top-down benchmarking and total factor productivity (TFP) analysis. LECG is assisting our work on accounting adjustments and carrying out a review of indirect opex (support service activities). PB Power is assessing appropriate expenditure requirements for direct opex activities, repex, capex and associated outputs.

3.3. In October, we received responses to the Business Plan Questionnaires (BPQs) for the main control from each of the GDNs and xoserve setting out historical and forecast cost information and an explanatory narrative. Over the next few months we will, together with our cost consultants, be assessing the appropriate expenditure requirements for 2008-09 to 2012-13 for each of the GDNs. As well as reviewing the BPQ responses, we are carrying out 3-4 day visits to each of the GDNs in November. These visits will include detailed discussion of the BPQ questionnaires, underlying cost information and forecasting processes.

Preliminary cost information

3.4. Figures 3.1 to 3.3 set out summaries of the opex, capex and repex information submitted by the GDNs. They show actual costs for 2005-06 and forecast costs for 2006-07 to 2012-13 at a total distribution level. We have not made any adjustments to the GDNs' costs. A more detailed summary of costs for each GDN is included in Appendix 12.

Figure 3.1 – GDN forecasts of controllable operating costs (all GDNs)



3.5. Overall GDNs are forecasting a significant rise in underlying controllable operating costs (excluding shrinkage and pensions) over the remainder of this price control period, the one-year control and 2008-09 to 2012-13. They are forecasting that operating expenditure will increase by £56million (9 per cent) between 2005-06 and 2012-13 due to a range of factors including:

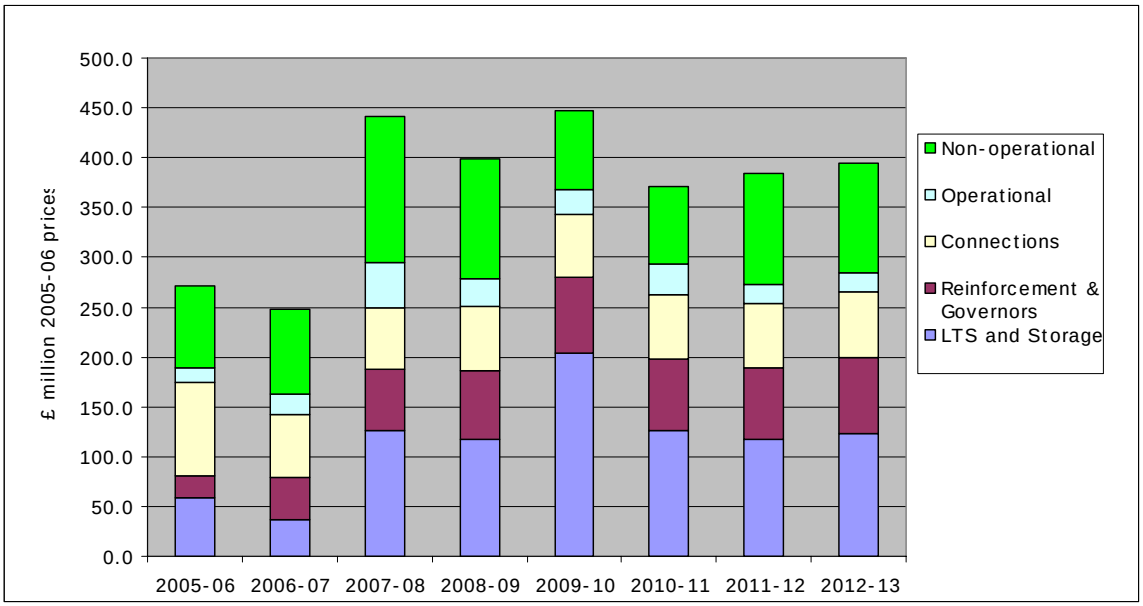
- contractor and labour market cost increases;
- increases in insurance costs;
- increases in the number of major maintenance projects;
- the potential loss of metering contracts.(the net costs of GDNs' emergency workforce are partially covered by income from the provision of metering services);
- increased system investment by xoserve to refresh and replace the UK-Link and Gemini systems; and,
- the impact of new legislation, (e.g., the Work at Heights Regulations 2005[16]).

[16] Statutory Instrument 2005 No 735

3.6. In addition, the GDNs are anticipating significant cost increases as a result of the Traffic Management Act 2004 (TMA). These costs have been excluded from the main BPQ submissions because of uncertainty over its impact and when it will take place.

3.7. The GDNs are forecasting significant increases in their pension costs as a result of increases in ongoing contribution rates, from 8.5 per cent to over 33 per cent of pensionable salary.

Figure 3.2 – GDN forecasts of net capital expenditure (all GDNs)



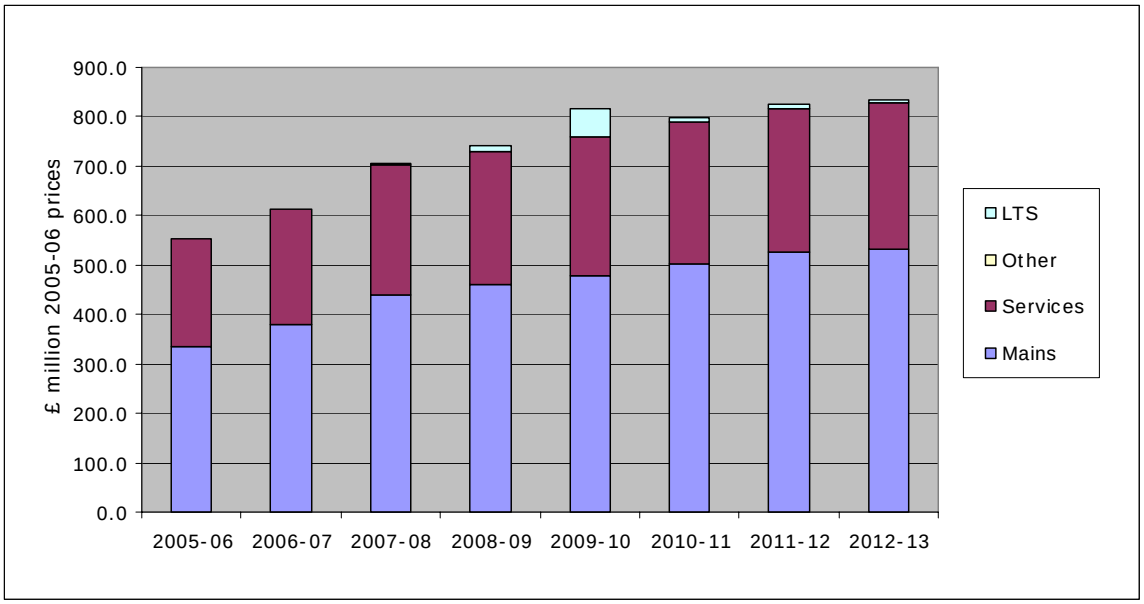
3.8. GDNs are forecasting a significant increase in capital expenditure between the current and next main price control period. Average annual forecast capex for 2008-09 to 2012-13 is £152 million (61 per cent) higher than forecast capex for 2006-07 in 2005-06 prices. This includes:

- an increased number of large LTS and storage projects;
- increased expenditure on replacing IS systems; and,
- replacement of vehicles.

3.9. Capex is forecast to be relatively volatile over the period due to a number of large one-off LTS and IS projects.

3.10. The capex forecasts in Figure 3.2 include non-operational capex such as IS, system operation and vehicles. Such expenditure has historically been treated as opex for the electricity network price controls and as capex for gas network price controls. As part of the transmission price control review Ofgem is proposing to treat all non-operational capex as opex. We are giving further consideration to how such costs should be treated for gas distribution.

Figure 3.3 GDN forecasts of net replacement expenditure (all GDNs)



3.11. GDNs are forecasting average yearly increases in repex of 6 per cent between 2005-06 and 2012-13. In total annual repex is forecast to increase by £283 million (51 per cent) in 2005-06 prices over this period. The GDNs suggest that this is due to an increase in workload and significant expected increases in contractors' rates and material prices.

Operating expenditure

Operating expenditure allowances for 2007-08 to 2012-13

3.12. The creation of separately owned, managed and operated GDNs gives Ofgem, for the first time, the opportunity to use comparative analysis to assess GDNs' costs, thereby reducing information asymmetries and strengthening incentives to reduce costs. Ofgem proposes to use top-down benchmarking of total controllable operating costs across GDNs and to carry out benchmarking of unit costs across GDNs. There are a number of important limitations in terms of the use of comparative analysis for this review:

- the industry restructuring that has occurred over the last two years will create a challenge in terms of data availability. GDN owners have been asked to provide detailed cost information for businesses that they have owned for only a relatively short period;
- the new management teams have only been in place for part of 2005-06 which is the base year for the review. They have had relatively little opportunity to make an impact on the structure of the businesses and efficiency;
- the GDNs did not exist at the beginning of the price control period. Accounts for these businesses were created for the first time for the year 2004-05; and,

- there are a relatively small number of comparators.

3.13. We propose to respond to the challenges in a number of ways, including bringing together several different approaches to the data analysis such as top-down benchmarking, bottom-up analysis and expert review of costs. Ofgem also proposes to carry out a substantive update of its analysis once 2006-07 data becomes available in June next year. Ofgem anticipates that GDNs' management will have had a greater opportunity to have an impact on their businesses and efficiency by that time.

Approach to the opex analysis

3.14. As a first step in analysing operating costs it is important to separate those controlled directly by a GDN (e.g. salaries, emergency service costs, repairs) from those that are less controllable (e.g. network rates and the Ofgem licence fee). The less controllable costs tend to be treated in price controls in one of two ways. The company is either given a direct allowance for the cost based on notification of the appropriate amount from the relevant organisation or the cost is treated as a pass-through item and the actual costs to be recovered each year are added to allowed revenue in that year through an adjustment to the price control formula.

3.15. The second step is to ensure that there is good quality comparable data. Ofgem has asked for information from the GDNs on the basis of NGG's 2004-05 accounting policies, which should limit the extent of differences in accounting treatments. We are currently reviewing the GDNs' BPQ submissions to identify whether there need to be adjustments to the data such as the removal of atypical and one-off costs, margins applied to transfers within companies and between group companies and changes to the capitalisation of overheads.

3.16. We are using a range of techniques for the assessment of opex and will bring these together to determine appropriate expenditure requirements:

- **Reviewing forecast costs** – we are assessing the GDNs' forecasts costs together with our consultants PB Power and LECG to understand whether they are based on realistic assumptions;
- **Top-down benchmarking** – we are comparing and benchmarking the controllable operating costs and employment costs of individual GDNs together with our consultants Europe Economics. As we recognise that the management of a company is an important determinant of efficiency, we are planning to benchmark both on the basis of the eight individual GDNs and the four ownership groups. These sample sizes are small but the analysis should still provide important information on efficiency. We are planning to use a combination of techniques including corrected ordinary least squares (COLS) regression analysis, data envelope analysis (DEA) and productivity indices. We are considering the use of a composite variable for the regression analysis similar to the approach used for DPCR4;
- **Total Factor Productivity** (TFP) - Europe Economics is carrying out analysis to determine the expected growth in productivity for gas distribution as a sector by

considering all factors of production. This study will consider data from relevant UK and other economic indicators and assess what trends in TFP can be sustained in the UK gas distribution sector. This will provide a good indication of the scope of future efficiency savings that GDNs as a sector could achieve in the next price control period;

- **Bottom-up activity-based analysis** - we are assessing the efficiency of individual activities such as emergency service work, repairs, work management, HR, legal and corporate centre costs together with our consultants by benchmarking the costs across GDNs. This assessment includes selecting appropriate cost drivers for each activity and then comparing unit costs across GDNs;
- **External benchmarking** – we will be supplementing the information and insights gathered by comparing the GDNs with external benchmarking, e.g. with water companies, electricity DNOs and where appropriate comparators in competitive sectors; and,
- **Expert review of costs** – our consultants will be reviewing certain key activities in detail to consider whether they could be managed differently and whether there is scope for efficiency savings, for example through more effective management of contractors and strengthened cost control processes.

3.17. We are considering how the different approaches to the cost analysis should be brought together. We intend to publish the initial results of each of the approaches as part of the March consultation document and to consult on a number of different options for bringing them together. It may be that a mechanistic process for weighting those approaches is inappropriate.

Traffic Management Act 2004 (TMA)

3.18. As discussed in paragraph 3.6 GDNs are forecasting significant cost increases to cover the permits, penalties and other compliance costs associated with the TMA. Based on recent discussions with the Department for Transport there is still considerable uncertainty about the level of these costs, the number of Local Authorities that will implement the arrangements and when they will implement them. Depending on the progress made in this area before final proposals, a specific re-opener for these costs may be necessary, consistent with the approach adopted as part of DPCR4.

Capital and replacement expenditure

Capital and replacement expenditure allowances for 2007-08 to 2012-13

3.19. The analysis of historical and forecast costs for the one year control has given us insights into GDNs' procedures, forecasting processes and expenditure requirements and where more detailed work is required.

3.20. As discussed in paragraph 3.15 for opex, a key step in our analysis is to ensure that there is good quality comparable data for capex and repex. We are currently reviewing whether there need to be accounting adjustments to the capex or repex

data or adjustments to activity information to ensure that they have been reported on the same basis across GDNs.

3.21. We are using a range of techniques to determine the appropriate capex and repex requirements for each GDN:

- **Assessment of policies, procedures and forecasting processes -** our consultants PB Power are assessing GDNs' key policies and procedures associated with capex and repex, the GDNs' approaches to asset and risk management and maintaining the integrity of their networks, criteria for investment and project approval processes and the strength and weaknesses of their forecasting processes;
- **Reviewing forecast costs -** we are carrying out an assessment of the GDNs' forecasts costs together with our consultants PB Power to understand whether they are based on realistic assumptions. We are comparing the GDNs' assumptions for both technical factors (e.g. policies and procedures) and economic factors (e.g. productivity, movements in contractors' rates, labour material prices);
- **Bottom up benchmarking -** we are assessing the efficiency of particular capex and repex activities by comparing unit costs across GDNs. Where appropriate we will also make use of additional external benchmarking, for example against water companies; and,
- **Expert review of costs** – our consultants are reviewing certain key activities in detail to consider whether they could be managed differently and whether there is scope for efficiency savings, for example through more effective management of contractors and strengthened cost control processes.

3.22. The types of techniques used vary by activity. For example, LTS and storage expenditure is largely made up of large one-off projects. It is appropriate for these to be considered on a case-by-case basis. Connections expenditure is made up of large volumes of similar work and is suited to unit cost analysis.

3.23. We will present the initial results of this work in the March consultation document.

Rolling forward the regulatory asset values to 31 March 2008

3.24. We have reviewed historical data for January 2001 to March 2005 and forecast data for April 2005 to March 2007 as part of the work on the one year control. For the purposes of initial proposals for the main review we intend to apply this analysis and the proposed capex and repex allowances for 2007-08 to update each of the GDNs' RAVs to 31 March 2008.

3.25. We intend to update our analysis of the efficiency of expenditure for 2005-06 and 2006-07 to reflect actual cost information for those two years. We will carry out this work once the updated cost information becomes available in June 2007 and use the results to update the RAVs. We will publish the results of this work in the September 2007 update paper.

GTMS replacement and SOMSA exit costs

3.26. We consulted on the treatment of gas transportation management system (GTMS) replacement and system operation managed service agreement (SOMSA) exit costs in the second consultation document. A number of issues were raised by the GDNs.

3.27. One GDN noted that GTMS needed to be replaced soon and it would be inappropriate to disallow any costs associated with this replacement unless Ofgem allowed deferral of GDNs exiting the SOMSA arrangements. It also considered that capex and opex costs associated with SOMSA exit should be allowed as GDNs are required to establish their own control centres and this will provide benefits to customers. Another GDN considered that only the marginal costs over and above setting up a single national control centre should be disallowed. Some GDNs suggested that the total allowance for ongoing system operation costs across the GDNs should not be restricted to costs incurred by NG in the years preceding the sale. They suggested that an efficient level of costs should be determined by comparative regulation. Another GDN stated that costs associated with additional functionality should be allowed in ongoing operating costs.

3.28. We propose to allow an efficient level of costs for GTMS replacement, subject to the principles set out below:

- before allowing any expenditure associated with GTMS replacement costs, we must be satisfied that the system is obsolete because, for example, of a lack of system support or insufficient spares being available; and,
- only the efficient costs of GTMS replacement will be included in the RAV. Ofgem will identify whether any of the GTMS replacement costs have increased to facilitate SOMSA exit. If so, these additional costs will be stripped out of the GDNs' revenue allowances. Similarly, if GTMS replacement has been brought forward to facilitate SOMSA exit, the additional costs (in present value terms) will be disallowed.

3.29. Ofgem made it clear in its roles and responsibilities decision document[17] that capex incurred by a GDN as a result of a loss of economies of scale would not be included in Ofgem's assessment of allowed revenue for each GDN. The costs of establishing separate area control centres are a loss of economy of scale. We propose that neither the capex costs associated with purchase of land, buildings etc nor opex costs associated with training new staff etc will be recoverable from consumers either by making allowance for it in the next price control or by retrospectively adjusting the RAV at future reviews.

3.30. The allowance for ongoing operating costs for system operation for each GDN will be set using expert review of costs and comparison between GDNs. In practice

[17] National Grid Transco – potential sale of gas distribution network businesses. Allocation of roles and responsibilities between transmission and distribution networks, Ofgem, May 2004. Ref 119/04

this means benchmarking based on the costs currently incurred by NGG as they are carrying out these activities on behalf of all GDNs. We propose that, to the extent that the same functionality is delivered, the total allowance for system operation across all GDNs will not be allowed to exceed the costs currently incurred by NGG. If the systems deliver additional functionality which provides benefits to customers, an additional efficient level of costs will be allowed for this functionality.

Cost reporting for 2007-08

3.31. We will issue the cost reporting pack we are developing for the main control to collect 2007-08 data. This will allow us to collect data in a format that will be comparable to the data collected for the main control. It will also help both Ofgem and the GDNs to understand any issues arising from the cost reporting process a year earlier.

4. Outputs

Chapter Summary

This chapter considers the options for introducing network capacity output measures, improving the quality of service outputs, amending the third party damage and water ingress arrangements and improving the accuracy of pipeline records.

Question box

Question 1: Do you support the proposed changes to the quality of service outputs?
Question 2: Do you support the proposed changes to third party damage and water ingress proposals?
Question 3: Do you support our proposals for improving the accuracy of pipeline records?
Question 4: Is it appropriate to introduce network capacity output measures? If so what type of output measures are appropriate and what sort of rewards/ penalties should the GDNs be exposed to?

Defining outputs for price control purposes

4.1. In setting price controls it is important to define the outputs companies are required to deliver. Customers expect there to be a safe and reliable gas network and for there to be an appropriate response when problems arise. We are in the process of carrying out customer research to inform our thinking.

4.2. As well as meeting the day to day requirements of customers, GDNs must also maintain and renew their assets so that they will continue to be able to meet the needs of their customers in future. We will therefore consider whether there is value in developing additional output measures in relation to network capacity and asset management.

4.3. Safety is a critical driver for investment in the GDNs. The HSE has primary responsibility for safety on the GDNs. A number of outputs that are measured have a safety dimension, for example our proposal to measure the accuracy with which pipeline records are maintained. Consistent with our role as the economic regulator and the work already done by the HSE, we are not proposing any safety specific outputs.

Quality of service outputs

Background

4.4. As price controls provide strong incentives for GDNs to reduce costs there could be a risk that they may achieve this by reducing quality of service. The quality of

service arrangements provide an important counterbalance to this. We will review the quality of service outputs to ensure that, together with the associated incentives, they provide an appropriate level of protection for consumers. The current quality of service arrangements are summarised in a guidance document[18].

4.5. Two options for how the quality of service and outputs framework should be dealt with in the next price control period (2008-13) are outlined below for further consideration.

4.6. We are currently undertaking a programme of consumer research with domestic and both large and small I&C gas consumers. The research involves focus groups, in depth interviews and a questionnaire which will be used to gauge consumers' experiences and expectations of the quality of service provided to them by their GDNs. The results from this research will be used to identify the key areas of quality of service that are important to customers, whether there are any areas where new standards are needed or where the existing standards need to be strengthened. They will help us to target the main areas for improvement and will also help us to quantify the benefits of revising the arrangements.

Discussion of the options

Option 1 - Do nothing

4.7. Under this option the existing quality of service and outputs arrangements would be maintained. There are a number of issues with the current framework including the quality of data recorded by GDNs for reporting against some standards of performance and the complex structure of the framework which may be adding undue complexity to the regime.

4.8. The main risk with the "do nothing" option is that the current framework cannot be relied upon to provide accurate information for analysing GDNs' performance. In a number of areas the data currently submitted by GDNs is not robust and so provides weak protection for customers. The standards of performance have improved since the last price control review and the accuracy of data submitted has also improved. However, there are still a number of amendments that need to be made in order to ensure that we can measure quality of service appropriately and carry out comparative analysis between GDNs.

4.9. The current framework may not be driving improvements in GDNs' behaviour or providing appropriate protection, as standards may be set at an inappropriate level or no longer reflect key areas for GDNs and customers. We need to consider whether consumers' expectations are being met through the current standards and to make appropriate amendments where this is not the case.

[18] Guidance for reporting on standards of performance and standard special licence condition D10 for gas distribution network operators and independent gas transporters. November 2005. 254/05

4.10. The scope of the current arrangements excludes larger businesses and IGT customers from a number of performance measures. We want to consider whether this remains appropriate.

Option 2 – Rationalising and updating the outputs and standards of performance arrangements and improving measurement

4.11. Option 2 aims to address the shortfalls in the current framework so that a more robust and enforceable set of performance measures and reporting requirements are developed. This should improve the accuracy and reliability of data. Option 2 will also amend a number of quality of service outputs so that they cover a more appropriate scope. The following paragraphs summarise the main changes proposed in Option 2 and the potential costs and benefits.

Rationalising and simplifying overall standards of performance

4.12. Overall standards set minimum average levels of performance for a 12 month period. A key issue with the overall standards is that it could be difficult to enforce if a licensee fails to meet specified performance levels.

4.13. Overall standards are determined under Section 33BA of the Gas Act 1986 (as amended). This requires licensees to conduct their business in such a way that they can reasonably be expected to achieve the overall standard performance levels set. In this way a failure to meet an overall standard will not in itself necessarily constitute a breach of Section 33BA(3). However, it is possible that a significant breach of an overall standard could constitute such a breach.

4.14. For this reason it may be beneficial to remove the current overall standards and replace them (where appropriate) with guaranteed standards or licence conditions in order to provide licensees with more certainty as to when we will enforce a breach. Including precise performance levels in a licence condition would enable the Authority to take more appropriate enforcement action against a licensee in the event of a failure to meet the prescribed level of performance.

4.15. As part of Option 2 we are considering how the five current overall standards for gas distribution could be amended to provide an improved level of protection to customers without placing a significant additional reporting burden on GDNs. Our proposal is to remove the overall standards and replace them with other quality of service measures, as outlined below.

Telephone calls

4.16. Overall standard (OS) 1 requires GDNs to answer at least 90 per cent of calls to the national emergency number, dedicated enquiry line and meter point reference number helpline within 30 seconds. For the emergency line this standard applies 24 hours a day and requires calls to be answered by a live operator. For the other two

services performance is monitored only during the operating hours of these services, and calls can be answered using an automated system.

4.17. At present the reporting for this standard is completed by National Grid Gas (NGG), which operates these telephone services for its own 4 GDN areas and on behalf of the other GDNs. Reporting consists of a single overall figure for calls received and a single overall figure for calls answered within 30 seconds. For reporting purposes these national figures are divided by 8 (for the number of GDNs) and allocated to each GDN.

4.18. There are already provisions both in the GDN licence[19] and in the HSE Safety Case for GDNs to provide a single continuously manned telephone service for the purposes of reporting gas escapes and emergencies. If OS1 was removed then one option would be to strengthen the current licence condition obligation on GDNs to include the 90 per cent performance level. This would ensure that GDNs are still required to meet the current performance levels in providing this service.

Notification of planned interruptions

4.19. OS2 requires GDNs to provide at least 95 per cent of customers with written notice of a planned interruption at least five working days before the commencement of the interruption.

4.20. A failure under OS2 has a direct impact on a specific customer. We consider that OS2 may better protect the interests of customers if it is amended into a guaranteed standard. This would provide compensation payments to customers in the event of a failure to provide the required period of notice.

Notification during unplanned interruptions

4.21. OS3 requires GDNs to provide information to customers affected by an unplanned interruption that is expected to last longer than 24 hours. Specifically this requires GDNs to notify customers that an interruption has occurred and of the expected time of reconnection within 12 hours of the GDN being aware of the interruption. GDNs are required to:

- Notify at least 97 per cent of customers individually when an interruption affects up to 250 customers; and,
- Notify at least 97 per cent of customers through public announcements when an interruption affects 250 customers or more.

4.22. GDNs are also required to provide progress reports and revised information to at least 97 per cent of customers after each succeeding period of 24 hours from the original notification or announcement.

[19] Standard Special Condition A8. Emergency Services and Enquiry Services Obligations

4.23. GDNs find it very difficult to record and report performance against OS3 and currently assume that they have complied with their obligations for interruptions where they had provided notification to consumers. However, this remains an important area of service for customers. GDNs insist that they do provide a level of service greater than that required, but are unsure of how to reliably record how many individual customers are provided with the required information and at what intervals following an interruption.

4.24. The service provided to customers during interruptions is covered by the customer satisfaction survey that each GDN is required to undertake each quarter. GDNs publish the results of these surveys on their websites. This provides an incentive for GDNs to improve their performance in terms of their customers' satisfaction compared to that of other GDNs' customers.

4.25. It may be beneficial to remove OS3 and the associated reporting burden and assess GDNs' performance in this area through the customer satisfaction survey. Our initial view is that this overall standard could not be easily converted into a guaranteed standard. We may wish to consider if it could be meaningfully incorporated into the licence.

Complaints

4.26. OS4 requires GDNs, in at least 90 per cent of cases, to issue a written or verbal response to a complaint within 5 working days of receipt. Where this response is not substantive the GDN is also required to issue a substantive response to the complaint within 10 working days of receipt in at least 90 per cent of cases.

4.27. This is an area where a GDN's failure to meet the required standard has a direct impact on a specific customer. It may be appropriate to amend the current OS4 into a guaranteed standard to provide direct protection to customers. Under the guaranteed standards regime individual failures would result in compensation payments to affected customers.

Attending emergencies

4.28. OS5 requires GDNs to attend any reported gas leak or gas emergency as soon as possible. It also requires GDNs to attend 97 per cent of uncontrolled emergencies within 1 hour of receiving the report and 97 per cent of controlled[20] emergencies within 2 hours of receiving the report.

4.29. This remains a very important area of service for customers and closely linked to the GDNs responsibilities with respect to safety. Due to the lack of clarity regarding the enforcement action that can be taken as a result of a licensee's failure

[20] "Controlled gas escape or other controlled gas emergency" means a gas escape or other emergency where the person reporting the escape or other emergency, after carrying out (or causing to be carried out) the actions required by the telephone operator, advises the operator that the escape of gas or other emergency appears to have ceased.

to meet overall standards we are proposing to replace this standard with a licence condition. One option would be to include the performance levels in a licence condition (such as Standard Special Condition A8). This would enable the Authority to take suitable action in the event of a failure against this important area of service.

Rationalising and simplifying guaranteed standards of performance

4.30. Guaranteed standards set performance levels that must be met in each individual case. If a GDN fails to provide the level of service required then it must make a payment or payments to the customer affected, subject to certain exemptions. Option 2 proposes that where guaranteed standards are not providing appropriate protection to customers then they could be replaced with measures in the licence, or be removed entirely.

Alternative heating and cooking facilities

4.31. We are not aware of any significant issues with reporting or performance against guaranteed standards 1 and 2, which relate to restoring customers' supplies within 24 hours following an unplanned interruption and with the reinstatement of customers' premises within 10 working days, respectively.

4.32. Guaranteed standard (GS) 3 requires GDNs to provide alternative heating and cooking facilities to priority customers if there is an interruption to their gas supply. GDNs are required to provide these facilities within 4 hours for a planned interruption if in the event of an unplanned interruption affecting less than 250 customers. If an unplanned interruption affects 250 customers or more then the GDN must provide alternative heating and cooking facilities to priority customers within 8 hours. If the GDN fails to provide this service, subject to certain exemptions, then it must make a one-off £24 payment to the relevant customer.

4.33. GDNs find it very difficult to report against this standard, as all GDNs make alternative heating and cooking facilities available to all customers in the event of an interruption. GDNs do not record the number of facilities provided specifically to priority customers, and do not restrict their supply only to those customers on the Priority Services Register (PSR)[21], as this does not include all customers eligible for the PSR.

4.34. Under Option 2 we propose to remove GS3 and replace it with a new provision in the licence. This would remove the reporting burden on GDNs and the requirement could also be extended to reflect each GDNs' practice of offering facilities to all customers rather than just those on the PSR.

4.35. Including GS3 in the licence would remove the compensation that is currently available to affected customers if a GDN fails to provide the service required. As discussed above, GDNs are providing a service greater than that specified in GS3

[21] Provided for in standard condition 37(Provision of Services for Persons who are of Pensionable Age or Disabled or Chronically Sick) of the gas suppliers licence.

and so in practice it is unlikely that a failure will occur, and therefore it is unlikely that compensation will be paid out.

Rationalising and simplifying the connections guaranteed standards of performance

4.36. GDNs are reporting performance against the connections standards in the appropriate timescales and are using the reporting template well. Some changes could be made to simplify the reporting framework and improve consistency in the presentation of the connections standards.

4.37. The changes proposed would have the benefit of improving the presentation of the standards and simplifying the framework without reducing the levels of protection afforded to customers. A simpler framework would make it easier for customers to understand the standards of service to which they are entitled.

4.38. However, on the negative side many GDNs have built systems around the existing connections guaranteed standards as implemented in May 2005 and are currently reporting in the appropriate timescales and using the appropriate template. Any changes to the standards will result in changes to the reporting template and guidance document. Continuity and consistency in reporting will allow easier comparability of performance between GDNs and over time.

Measurement improvements

4.39. We are proposing to work with the GDNs to improve the measurement of a number of guaranteed and overall standards of performance where the data currently being provided is incomplete or unreliable or is not reflective of the levels of service being provided by GDNs to consumers. This is particularly true in relation to the number and duration of interruptions.

4.40. Improvements to the accuracy and reliability of the data provided by GDNs would allow us to make more valid comparisons between GDNs and to draw conclusions as to the possible reasons why performance is improving or becoming worse.

Amending the scope of the customer satisfaction survey

4.41. The customer satisfaction survey could be extended to collate customers' views on the connections and emergency service. This would allow the intangible aspects of the service provided to customers to be measured in a way that would complement the existing standards of performance.

4.42. Extending the scope of the customer satisfaction survey would result in the GDNs incurring increased costs which would need to be considered as part of the GDPCR.

Initial view

4.43. Our initial preference is to implement all the proposals put forward in Option 2 as this will better protect the interests of consumers and will encourage further comparative competition by improving the accuracy and reliability of the data recorded and reported by GDNs. We also consider that there is merit in applying our proposed approach to those customers connected to an IGT network for the same reasons that we think apply to customers connected to GDNs. However, as Option 2 proposes a wide range of changes to individual standards of performance and other quality of service measures we could implement a more limited number of the proposals put forward, or look to apply further changes in the future.

4.44. In order to conduct a full assessment of the costs and benefits of Option 2 it is necessary to develop a more detailed view of how it would operate in practice. We are consulting on these issues both through responses to this document and via industry dialogue. We are undertaking a programme of consumer research that will seek domestic and non-domestic consumers' views on the quality of service and outputs framework and how they feel this could be improved. We intend to publish a draft impact assessment as an attachment to our initial proposals document.

4.45. We have considered how to present the different aspects of measured GDN performance in a way which enables us to make meaningful comparisons between GDNs. A precursor to doing this is the collection of robust data. Over time we are considering developing a balanced score card which would enable us to compare GDNs' performance across a number of key areas and which could focus on measures which are most valuable to consumers and to GDNs. We welcome views and ideas on what this score card might look like together with views on the pros and cons of such an approach.

Third party damage and water ingress arrangements

Background

4.46. As with other interruptions on the GDNs, we will set an opex allowance to cover an efficient level of compensation payments relating to interruptions caused by third party damage or water ingress, and GDNs will be able to use this allowance to manage the impact of the events through faster restoration of supplies or to purchase insurance to cover potential payments. We are also undertaking consumer research which will inform any changes to the current levels of compensation and timescales for restoration.

4.47. The weaknesses with the current arrangements are: lack of clarity over how compensation payments would be allocated to consumers if compensation caps were breached; the arrangements do not apply to consumers on IGT networks and the current price control allowance and costs of insurance appear relatively high compared to the compensation payments made.

4.48. In reviewing and updating these arrangements, we consider that the key objectives should be to ensure that protection is extended to cover IGT consumers and that appropriate protection is provided for domestic consumers and both small and large I&C consumers. We consider that all GTs should have the same incentive to restore all consumers' supplies, regardless of the cause of interruption, within 24 hours of being made aware of the interruption and minimise compensation paid out.

Discussion of options

Option 1 – Do minimum

4.49. Option 1 is to roll forward the existing third party and water ingress arrangements, but with the removal of the annual liability cap for GDNs. A revised opex allowance would be set as part of the main control.

4.50. Option 1 does not involve significant change to the current arrangements, and is unlikely to have any impact on customers. A new letter of understanding would need to be agreed with the GDNs to extend the arrangements until 31 March 2013 and an appropriate opex allowance would be consulted on in the March document.

4.51. This option does not resolve any of the issues identified with the current arrangements nor does it achieve Ofgem's objectives.

Option 2 – Incorporate into guaranteed standard

4.52. Option 2 proposes incorporating the arrangements into the supply restoration guaranteed standard of performance (GSOP) for domestic consumers and into the Uniform Network Code (UNC) for non-domestic consumers. This would require the removal of the current exemption under the GSOP for third party damage and water ingress incidents. A possible alternative is to move all of the arrangements for interruptions into the GSOPs.

4.53. Incorporating the arrangements into the supply restoration GSOP would have the added benefit of ensuring that all consumers on both GDN and IGT networks would be covered by the amended Gas (Standards of Performance) Regulations.

Arrangements for non-domestic customers

4.54. We initially proposed that the exemption in the UNC that excludes Third Party Water Ingress (TPWI) interruptions from the compensatory arrangements could be removed. All domestic interruptions would be included within the GSOP and all non-domestic interruptions would be included in the UNC. Alternatively the non-domestic interruptions arrangements could be moved from the UNC into the Regulations. This would mean that the entire interruptions regime, for both domestic and non-domestic consumers, would be covered through a GSOP.

4.55. This would ensure that all customers receive an equal level of protection regardless of the cause of the interruption and would simplify the regime which would make performance monitoring easier and so allow greater comparability between GDNs. The inclusion of the entire regime within the Regulations would also ensure that customers on IGT networks receive the same level of protection as customers on GDN networks.

4.56. Drafting of the Regulations could specify fixed compensation payments for smaller non-domestic consumers while payments to larger I&C consumers could be capacity based, consistent with the current arrangements in the UNC. This would require the statutory instrument (SI)[22] to cross-reference with the UNC although this would be limited to determining appropriate capacity based compensation payments for larger non-domestic consumers.

Limiting GTs' exposure to liabilities in these events

4.57. The bespoke arrangements for dealing with TPWI reflect concerns about GDNs' potential liabilities. We consider that a more effective approach to limiting GDN exposure to liabilities would be to implement a cost pass through mechanism similar to the storm compensation arrangements for electricity DNOs. GDNs would be liable for payments under these arrangements up to a certain limit (a percentage of their annual revenue) and beyond that limit the majority, but not all, of the costs of the payments are passed through to consumers. This would ensure that customers receive the same compensation for any events covered by the arrangements but GDNs retain an incentive to restore customers' supply quickly.

4.58. Table 4.1 below sets out GDNs' current exposure under the incident and annual caps as a percentage of their revenue. We propose that GDNs be fully exposed to payments up to 1.5 per cent of their annual revenue. GDNs would be liable to pay 5 per cent of any subsequent payments in excess of this amount with the remaining 95 per cent of these payments passed through to consumers. A threshold of 1.5 per cent is broadly equivalent to the average exposure for GDNs under the existing incident caps.

[22] Gas (Standards of Performance) Regulations (SI no. 1135)

Table 4.1 – GDNs' revenue and current caps

GDN	Revenue nominal 05-06 prices (£m)	Incident cap (£m)	Cap as per cent of revenue	Aggregate cap (£m)	Cap as per cent of revenue
EofE	406	4.0	1.0	8.4	2.1
Lon	229.1	4.0	1.8	5.0	2.2
NW	246.8	4.0	1.6	6.0	2.4
WM	198.8	4.0	2.0	4.3	2.2
NoE	266.7	4.0	1.5	6.5	2.4
Scot	176.7	4.0	2.3	5.1	2.9
SoE	390.5	4.0	1.0	8.4	2.1
W&W	231	4.0	1.7	6.3	2.7
Average	268.2	4.0	1.5	6.3	2.3

4.59. One possible issue with transferring the TPWI arrangements into the GSOPs and limiting GDNs' exposure through the price control is that it does not address IGTs' exposure. A similar set of issues arose with the exposure of IDNOs to the storms arrangements aspect of DPCR4. We concluded that most major interruptions were likely to arise upstream and the number of interruptions on an IDNO network itself would be relatively small. However, we weakened the requirement to pay storms compensation to a requirement to pay as "soon as reasonably practicable" to reflect this issue. We would like to discuss with IGTs whether a similar approach is appropriate for them.

Event cap

4.60. GDNs are currently exempt from making payments if more than 50,000 consumers are interrupted as a result of an incident. We are proposing to reduce this event cap to 30,000 consumers. There has only been one interruption in the last fifteen years where more than 10,000 consumers were affected, this involved 30,000 consumers in 1994. It is highly unlikely that an incident would affect more than this number of consumers and in order to do so would involve either failure of a district governor or damage to the LTS network. This has the benefit of reducing the maximum compensation that could be paid out by GDNs. We would expect this to feed through to a lower opex allowance.

Initial view

4.61. We consider that Option 2 better meets Ofgem's objectives and addresses the issues with the current arrangements. Option 2 would ensure that all consumers receive compensation for third party and water ingress incidents regardless of

whether they are connected to a GDN or an IGT network and would also ensure protection for domestic and both large and small I&C customers. The limited cost pass through mechanism would ensure that both GDNs and consumers have an appropriate level of exposure to liabilities and would provide incentives on GTs to restore consumers' supplies within 24 hours and to minimise the compensation paid out regardless of the cause of the interruption.

Accuracy of pipeline records

4.62. GDNs need accurate records of their pipeline systems to maintain their assets efficiently and safely. Third parties use these records to enable them to connect efficiently to or safely avoid existing gas pipes when they are carrying out excavation works in an area. Ofgem is aware of issues with the accuracy of this data and proposes to introduce additional outputs and incentives as part of the price control to encourage GDNs to improve and maintain accurate records. This is discussed further in the incentives chapter.

Network capacity outputs and longer-term measures

Network capacity outputs

4.63. As discussed in chapter 3 the GDNs are forecasting significant increases in LTS and storage capex for 2008-13. In reviewing the efficiency of their forecasts and setting appropriate expenditure allowances it is important to understand what levels of LTS and storage capacity they intend to deliver in return. This is particularly the case with the development of incentives for GDNs to contract for an efficient level of NTS offtake capacity, which will provide incentives for GDNs to trade-off their use of NTS offtake capacity against investment in capacity on their own network, the use of GDN storage and interruption. We will need to ensure that GDNs are not remunerated twice for the provision of the same capacity through the GDN incentives and the capital expenditure allowances within the price control. Capacity incentives are discussed further in chapter 5.

4.64. As part of the cost assessment work, together with our consultants PB Power, we will be analysing the relationship between changes in levels of GDN capacity and costs.

4.65. As discussed in chapter 5 there is a risk that if we were to set a strong capex rolling incentive, where the GDNs retain a relatively high proportion of any efficiency savings they make, GDNs could have perverse incentives to defer necessary investment in order to maximise their capex revenues. This could have a detrimental effect on network quality.

4.66. One option to address both the concerns outlined above is to supplement the current quality of supply measures with network capacity output measures.

4.67. There are a number of ways in which we could set the output measures. For example, we could continue to rely on the licence obligation for GDNs to develop their networks to meet 1 in 20 peak demand and leave it up to the GDNs to decide the most efficient way to meet this requirement. For example, they could use a mix of NTS capacity, interruption and new investment. An alternative option would be to require the GDNs to invest to meet certain demand/supply scenarios. A more detailed option would be to set prescriptive physical measures specifying the volumes of NTS flat and flex capacity that they should purchase and the levels of LTS capacity and interruption.

4.68. The advantage of the first option is that it give the GDNs the most flexibility in deciding how meet capacity requirements. GDNs are best placed to decide how to manage their networks most efficiently. However, under this approach it is more difficult to verify that GDNs are remunerated only once for given spend and to assess the efficiency of expenditure. The main advantage of the alternative approaches is that the GDNs would have greater clarity on what we expect them to deliver and it would be relatively straightforward to verify that they had delivered against the output measures

4.69. If we were to develop detailed output measures we would also need to consider what financial rewards/ penalties to apply for meeting/ failing to comply with the measures.

Longer term performance measures

4.70. It is important that GDNs take appropriate steps to manage the longer-term performance of the network through appropriate asset risk management processes and efficient investment in their networks. This is integral to delivery of future service performance and capacity to meet customers demand.

4.71. Ofgem reviewed the medium and longer-term asset risk management processes of the network companies through a survey in 2002. The survey was developed to enable Ofgem to gain assurance that each network operator was employing a systematic and co-ordinated approach to asset stewardship and risk management. Since the completion of the survey, the Publicly Available Specification for Asset Management (PAS) 55 was published by BSI British Standards, which sets out a systematic approach to the processes that link company objectives and the assets used to deliver them. Ofgem has encouraged all network businesses to become PAS 55 certified. These developments will give Ofgem greater assurance that appropriate asset risk management processes are in place.

4.72. We would welcome views on whether it is appropriate to gather any other additional information on medium and longer-term performance of networks, such as fault rates or condition for particular types of asset which could act both as an input into price control cost assessment and assist in understanding changes in the longer-term performance of the GDNs assets.

Scope of networks

Riser replacement

4.73. There are large numbers of high rise blocks of flats with gas supplies in major cities including London, Birmingham and Glasgow. Many of these properties were built during the 1960s and gas supplies were usually installed during construction. Gas is typically connected to the flats within the buildings by means of a vertical steel riser and lateral service pipes. Those parts of the riser and service laterals not actually within the individual flats are typically routed within service ducts through the fabric of the structure, which may lead to the riser being locally encased in concrete. This makes it difficult to assess the condition of the pipes limiting inspection to exposed areas.

4.74. Historically the need for riser repairs or replacement has usually been identified following a reported gas escape or as part of mains replacement work. In such cases an inspection and risk assessment are carried out. Where appropriate permanent repairs are carried out but it may be necessary to replace the riser on safety grounds.

4.75. GDNs are currently undertaking surveys to identify the total number of high rise buildings with gas supplies and those needing immediate repair or replacement. GDNs are surveying all multiple occupancy buildings with 6 storeys or more over a period of 5 years. Based on information already gathered from these surveys, gas escapes and mains replacement work GDNs are considering moving towards a pro-active policy to replace a certain volume of risers each year.

4.76. In considering the move to a more pro-active replacement programme it is important to consider the cost implications. This work involves significant additional costs including scaffolding and compliance with Working at Height regulations. The exact costs will vary significantly depending on the type of building and supply options but they are much higher than those associated with the mains replacement programme. GDNs have estimated costs in excess of tens of thousands of pounds per high rise building.

4.77. GDNs have found that in some cases a significant proportion of flats within a high rise property use no gas or only use a small amount of gas for cooking. In such cases the costs of replacing the riser may be disproportionate relative to the gas transportation charges received from customers. In some cases it may be more economic to pursue alternative arrangements in agreement with the customers and freeholders such as compensating them for using electricity and paying for new electrical appliances and upgrades to their electricity supplies.

4.78. It may be appropriate to introduce a form of economic test to identify extreme cases where it is disproportionately costly to replace risers and appropriate to adopt alternative arrangements taking into account issues including:

- fuel poverty;
- total replacement costs per customer;
- customer penetration and gas usage;
- building life expectancy; and,
- the cost of alternatives etc.

4.79. There needs to be further industry discussion on whether it is appropriate to move to a more proactive riser replacement policy. If so we would need to assess the appropriate volume of replacement that should be carried out, the efficient costs of carrying out this work and whether in some cases it would be appropriate in consultation with those affected to adopt alternative arrangements should be considered. We would welcome views on these issues.

Private networks

4.80. There are a few gas networks in the UK that are not owned by GDNs or IGTs, and which are known as private gas networks. These networks offtake gas from the GDN to supply downstream premises. The owners of these networks include local councils and universities. Based on available information, Ofgem estimates that up to approximately 80,000 domestic customers are currently being served by such networks. These networks are exempt from the prohibition of unlicensed conveyance of gas, under section 5(1) of the Gas Act 1986, providing they have a gas supplier licence.[23] For private networks, Ofgem issues a supply licence without standard conditions. The regulatory framework for private networks means that customers on these networks have less protection through the licence than customers on GDNs or IGTs, although these networks are covered by the HSE's requirements including adherence to the Gas Safety Management Regulations in the same way as other networks.

4.81. Ofgem is aware that some private networks have previously been "adopted" or "engineered out" by GDNs during re-development projects for housing estates and the GDN network. The GDNs have concerns about facilitating such approaches in the future, because of the lack of information about the location and condition of the assets, the risks associated with adopting networks whose assets were constructed and maintained to a lower standard than the GDN's networks, the need for a transitional period to avoid breaches of their safety cases and standards of performance, and recovery of their costs. While recognising the potential difficulties, Ofgem does not want the regulatory framework to be a barrier, where the owner of a private network and the GDN are interested in considering adoption of an existing network by a GDN. Ofgem would work with the GDN to try to agree a process for including assets in the RAV and managing transition issues relating to service quality on a case by case basis. Ofgem would consider, as appropriate, how any significant costs of upgrading the network to meet safety requirements should be funded, for example by including a contribution from the existing network owner.

[23] Gas Act 1986 (Exemptions) (No.1) Order 1996.

4.82. Ofgem would welcome views on whether it is appropriate to do more now to facilitate “adoption” of private networks by GDNs, and if so how the issues arising should be addressed.

5. Incentives

Chapter Summary

This chapter considers the options for the gas distribution incentives including:
- ➔ capex rolling incentive and the information quality incentive;
- ➔ opex rolling incentives;
- ➔ mains replacement incentives;
- ➔ capacity output incentives;
- ➔ quality of service incentives;
- ➔ accuracy of gas pipeline incentive scheme; and,
- ➔ other incentives.

Question box

Question 1: Have we identified all the issues for each of the incentives?
Question 2: Is it appropriate to better align capex and opex incentives?
Question 3: Do you agree with our initial view that a capex rolling incentive and information quality incentive should be implemented?
Question 4: Given the issues raised is there a case for an opex rolling incentive?
Question 5: Do you agree with our proposals to retain the mains replacement incentive?
Question 6: Is flexibility capacity the key incentive to focus on for the capacity outputs? Should we assume that the use of existing NTS flex capacity is the most efficient flexibility capacity product?
Question 7: Is it appropriate to assume that NTS and LTS flat capacity are complementary products? Should we incentivise tradeoffs between flat capacity and interruptible capacity?
Question 8: Should we incentivise accuracy of pipeline records? If so, how could accuracy be measured and audited?
Question 9: Is there a case for an innovation funding incentive?

Introduction

5.1. Historically, Ofgem has used incentives to align the interests of the regulated company more closely with the interests of consumers through financial rewards. Incentives have therefore been developed that encourage companies to deliver services that consumers value at efficient costs. We have traditionally used the RPI-X form of incentive but over time we have augmented this with volume and capacity drivers, sliding scale mechanisms and quality of supply incentives.

5.2. In this section we consider the options for further refining the current incentives for the next price control and consider enhancements to the incentives, for example through the application of rolling incentives.

Capital expenditure rolling incentive and information quality incentive

Background to the capex rolling incentive and information quality incentive

5.3. Under a standard RPI-X incentive, companies retain efficiency savings until the end of the price control period. Consequently, the length of time that companies are allowed to retain efficiency savings depends on whether the saving was made at the start, middle or end of the price control period. Companies could respond to the weakening incentive by delaying efficiency initiatives if by doing so they can retain the benefit for longer. With a rolling incentive companies retain efficiency savings for a fixed period of time regardless of when the saving was made.

5.4. As part of our consultation on developing network monopoly price controls[24] we concluded that rolling incentives should be implemented to provide a consistent strength of incentive over time.

5.5. One of the challenges for Ofgem is to set allowances in circumstances where the GDNs have better quality information about the need for expenditure and have an incentive to inflate their forecasts in order to benefit from rewards for out performance. In DPCR4 the DNOs were rewarded for submitting reliable capex forecasts through the information quality incentive, known then as the sliding scale incentive. Under the incentive companies that had forecast allowances close to our consultant's forecasts were rewarded with a higher powered incentive. This would allow them to retain a high proportion of efficiency savings if they beat the allowance. DNOs that forecast capex spend significantly above our consultant's forecasts had a lower powered incentive so they retained a lower proportion of efficiency savings from their underspend. Under the incentive the DNOs earned the highest income if they submitted a forecast closest to their actual costs, thus incentivising them not to inflate their capex forecasts.

5.6. Our current view is that if a capex rolling incentive were to be implemented it should be done in conjunction with the information quality incentive. The rolling incentive would ensure that any savings are retained for a fixed period and the information quality incentive would determine the power of the capex incentive.

5.7. In the second consultation document we put forward the option for a strong capex rolling incentive which would enable us to rely on the strength of the incentive to govern the companies' investment decisions rather than conducting detailed ex post efficiency reviews. Against this background there is a greater risk than usual that the companies would inflate their forecasts to protect themselves from the power of the incentive. One option could be to benchmark GDN capex costs to reduce information asymmetry. However, we are only likely to have robust data to make comparisons in the next price control. Also the benchmarking of capex costs is harder than for opex. The information quality incentive would assist in minimising this risk. We have considered the pros and cons of two options: the first is to

[24] Ofgem 54/03, Developing network monopoly price controls. Initial conclusions, June 2003

implement a capex rolling incentive with the information quality incentive, the second is not to implement either of the two incentives.

Discussion of options

Minimising the risk of inflating the capex allowance

5.8. The GDNs are less likely to inflate their capex allowance with the information quality incentive as it would provide them with incentives to submit accurate capex spend forecasts. Without the two incentives there is a greater incentive for GDNs to inflate their capex bids and to undertake investment in a way that would maximise their incentive revenues, for example by making cost savings early in the price control period.

Minimising the risk of deferring necessary investment

5.9. There is a risk with implementing the capex rolling incentive that a strong incentive for cost efficiency could result in the GDNs pursuing efficiency savings by deferring investment at the expense of quality of service and capacity outputs in the short and long term. In particular, if we set stronger incentives for low capex bids, the risk of necessary investment being deferred is potentially greater than for high capex bids as there may be less scope for out performance in the former case. Without the capex rolling incentive there could be incentives to make efficiency savings at the start of the price control in order to retain the savings for the full duration of the control.

Minimising the risk of over investment in the network

5.10. The extent to which there is a risk of over investment in the network would depend on the strength of the incentives. A weak incentive may not encourage GDNs to make efficiency savings and may not discourage overspending against the allowance. With a weak incentive we are more likely to want to review ex post the costs incurred by the GDN and their inclusion in the RAV because we will be less confident that the incentives are effective in delivering efficient spend.

5.11. With a capex rolling incentive the risk of over investing in the network could be minimised as GDNs are likely to seek to minimise their capex spend in order to maximise their gains (or minimise the penalty) from the incentive. Without the capex rolling incentive there may be stronger incentives to over invest towards the end of the price control period in order to negotiate higher allowances for the subsequent price control.

Implementation issues

5.12. Implementing the capex rolling incentive with the information quality incentive is likely to be complex as we will need to develop an incentive matrix and give the

GDNs the opportunity to respond to the cost forecasts and alternative incentive rates.

Minimising the cost of regulation

5.13. If we were to implement the capex rolling incentive and information quality incentive and were to place strong incentives on the GDNs to make efficiency savings the need for a detailed ex post efficiency review may be negated. This would significantly reduce our workload and the associated costs of undertaking a price control review. It would also increase regulatory certainty in the GDNs' RAV and the future return they will be able to earn. If we do not implement either of the two incentives there is a risk of over investment in the network towards the end of the price control period and a detailed ex post assessment will form an important part of the review.

Initial view on the capex roller and information quality incentive

5.14. Our initial preference is to implement a capex rolling incentive which is modified by an information quality incentive. GDNs would have strong incentives to provide accurate forecasts of their capex spend and would have incentives to make efficiency savings throughout the rolling period.

5.15. Our initial view is that relatively strong capex incentives could provide the right balance of incentives for GDNs and would protect the interests of consumers. In particular, GDNs would have strong incentives to make efficiency savings and as we are likely to be more confident that the final capex forecasts are accurate it could negate the need for a detailed ex post efficiency review which would significantly reduce our workload and the associated costs of undertaking a price control review. A strong incentive may also minimise the tendency for GDNs to over spend against their allowances since GDNs will know in advance the proportion of costs they will not be able to recover from customers.

5.16. Our latest thinking is that we will publish the details of the information quality incentive as part of the March consultation document to allow companies to take this into account in developing their updated BPQ forecasts which are due to be submitted in June 2007. We will give further consideration to the appropriate timing of this mechanism taking into account the practicalities of this approach, responses to this consultation and our consultants' progress in assessing costs.

5.17. There is a risk with a strong incentive that GDNs may defer necessary investment at the expense of quality of service and network integrity in the short and long term. The risk is lower for gas distribution than for other networks because much of the non load related work is captured through the mains replacement programme leaving the capex rolling incentive to apply to load related expenditure where the risk of deferment is smaller. We will also give further consideration to the strength of the quality of supply incentives and the role of output measures in relation to network integrity, as part of the work on output measures in chapter 4.

Operating expenditure rolling incentives

Background to opex rolling incentive

5.18. As discussed in paragraph 5.4 we concluded in 2003 that opex rolling incentives would address issues of periodicity and the impact that it could have on distorting companies' incentives to make efficiency savings. There is, at present, a lack of alignment between the capex and opex incentives as the opex incentives tend to be stronger. As it can be difficult to distinguish between the treatment of certain costs as either capex or opex there is an incentive for the GDNs to capitalise their opex costs. This could be reduced by making improvements to the cost reporting requirements and by placing annual cost reporting obligations on the GDNs. Where there are genuine tradeoffs between the two incentives GDNs would be more likely, other things being equal, to make an opex saving over a capex saving.

5.19. In addition, benchmarking of opex allowances could strengthen the opex incentives. With benchmarking the opex incentive is strengthened as the GDN not only retains any efficiency savings for the duration of the price control but it also benefits if its relative efficiency is greater than the industry average. Consequently, benchmarking of opex costs in the next price control could also have the impact of further strengthening the opex incentive.

5.20. When the opex rolling incentive was reviewed as part of DPCR4 we decided not to implement it due to concerns about capex and opex tradeoffs as well as concerns about how the mechanism would work in practice. As we undertake a review of costs for the price control before the end of the previous control any benchmarked savings that the GDNs make in the last couple of years would not be taken into account when setting the allowances. GDNs would be able to maximise their future allowance and earn revenues from efficiency savings by reducing spend at the end of the price control period.

Options

5.21. We have considered the two options of either implementing or not implementing the opex rolling incentive.

Implement the opex rolling incentive

5.22. We would apply a rolling opex incentive to any incremental efficiency savings that the GDNs make. Any incremental opex underspend during the rolling period would be offset against any overspend to discourage the GDNs from making efficiency savings in some years and incurring additional costs in other years. Under the incentive the final year's opex spend would be included in the next price control period as it would not be known at the time of setting the price control. GDNs could be exposed to negative incentive payments if they incur incremental costs over the rolling period. Alternatively we could collar the incentive payment so that GDNs cannot incur negative payments from overspend in any given year but any

incremental over spend would be carried forward to the next year and netted off against any under spend.

Do not implement opex rolling incentive

5.23. Under this option we would not introduce an operating expenditure rolling incentive. Instead GDNs would be exposed to any over or under spend for the duration of the price control period.

Discussion of options

Impact of misaligning the capex and opex incentives

5.24. Currently, the opex incentives are stronger than the capex incentives and there is an incentive for the GDNs to capitalise their opex costs. There can also be genuine tradeoffs between opex and capex costs. It may be possible to implement the opex rolling incentive and to align the capex and opex incentives, correcting for the difference in strength of a five year capex rolling incentive and a five year opex incentive. Some thought would also need to be given to the interaction with the information quality incentive.

Incentives for opex savings

5.25. Opex incentives are stronger than the capex incentives and it appears from the GDNs' actual performance that the RPI-X mechanism already provides strong incentives to make opex savings. During the current control there has been an overall opex cost reduction as total GDN controllable opex costs, excluding shrinkage and pensions, have fallen from £684.1m in 2002-03 to a forecast of £650.3m for 2006-07. These costs are in 2005-06 prices. Some companies have argued that there are additional costs associated with making opex savings, e.g. the cost associated with implementing new IT systems, and consequently, GDNs need the opportunity to recover this cost if they are to make these savings. A rolling incentive would ensure that GDNs have the same strength of incentive throughout the control, subject to benchmarking.

Asymmetry in treatment of incremental opex savings and costs

5.26. Ofwat has implemented an opex rolling incentive that provides some protection for companies from negative incentive payments as these are not deducted from the company's allowance but are carried forward to be netted off against any future incremental underspend. This asymmetry in the incentive could skew the company's incentives to make efficiency savings. If we were to implement an opex rolling incentive we would want to give further consideration to whether a cap on negative incentive payments was appropriate.

Initial conclusions

5.27. Our initial view is that there does not appear to be a strong case for implementing the opex rolling incentive. In particular it could inefficiently increase incentives on the GDNs to capitalise opex costs, to maximise opex savings and where possible to tradeoff operating expenditure for capital expenditure. If we benchmark the opex allowances this will further strengthen the opex incentive. Also the GDNs' allowances will no longer be based on their actual costs (other than for the frontier GDN who would be rewarded in other ways).

5.28. Moreover, there is scope for gaming by the GDNs as they can manipulate the timing of efficiency savings in order to maximise their allowance in the next price control period.

5.29. Historical performance against the opex allowance has been good, suggesting that the standard RPI-X approach already provides a strong incentive for efficiency. Moreover, if we were to implement an opex rolling incentive it may be appropriate for the incentive to be symmetrical i.e. GDNs would be exposed to negative incentive payments.

Mains replacement incentive

Background

5.30. In 2002 the HSE set an accelerated mains replacement programme which required GDNs to replace all iron mains within 30 metres of premises over 30 years. The GDNs are required to survey the remaining mains annually and submit proposed mains replacement volumes for each financial year on the basis of a HSE approved risk model.

5.31. The key cost driver for mains replacement costs is considered to be the diameter mix of replacement mains. As the GDNs are required to review their mains replacement volumes annually there is some uncertainty about whether GDNs would be appropriately funded through an annual capex allowance.

5.32. During the last price control review we decided to set a mains replacement allowance with a supplementary incentive which adjusted revenues depending on the volume and diameter mix of mains replacement. The supplementary incentive also provided incentives on GDNs to make unit cost efficiency savings. GDNs bear 50 per cent of overspend if unit costs are higher than projected. GDNs retain 33 per cent of efficiency savings if costs are lower than projected.

5.33. The strength of the mains replacement incentive, determined by the sharing factors, is higher than the capex and repex incentives which can encourage the GDNs to reallocate mains replacement costs to other cost categories. It may therefore be appropriate to align the mains replacement incentive with the strength of the capex and repex incentives.

Analysis of current arrangements

5.34. In the September 2001 document, Review of Transco's Price Control From 2002, we set Transco's mains replacement allowance for each year of the price control based on forecasts of expenditure. Under our proposals 50 per cent of mains replacement allowance was treated as opex and 50 per cent of the allowance as capex. We also put in place a supplementary incentive, the mains replacement incentive, to take account of variations in the diameter mix of mains replaced and to provide incentives for Transco to minimise the unit costs of mains replacement.

5.35. In the September 2001 document we referred to the original mains replacement allowance i.e. the allowance that was based on forecasts of expenditure, as the price control projection. We referred to the allowance determined by the mains replacement incentive as the price control allowance. For consistency we have used the same terminology in this document.

5.36. Under the mains replacement incentive, if in any year the price control allowance was higher or lower than Transco's price control projection Transco would make a one off increase or reduction in its allowance to take account of these differences. To explain the incentive by way of an example, if we had set the price control projection as 100 and variations to the diameter mix of mains resulted in a lower price control allowance of 90, then Transco's allowance would fall by 10 to take account of the reduction.

5.37. In June 2003 we issued our final proposals on the separation of Transco's distribution price control which set individual price control projections and matrices of unit costs for each of the eight gas distribution networks.

5.38. Table 5.1 shows the adjustments that have been made (2006-07 based on forecasts) to the price control projection as a result of the mains replacement incentive. Overall the mains replacement incentive has resulted in a revenue reduction in aggregate over the five year period of approximately £64m (in 2005-06 prices), from the price control projection.

Table 5.1, Adjustment to the GDNs' mains replacement allowance (£m, 2005-06 prices)

GDN	Year	Mains replacement adjustment ($DNMRA_t$) Savings/ (costs)
Transco	**2002-03**	**31.94**
Transco	**2003-04**	**28.42**
North West	2004-05	7.06
East England		(2.61)
West Midlands		(3.05)
London		2.68
Northern		0.59
Scotland		1.22
South England		2.01
Wales and West		(0.52)
Total	**2004-05**	**7.39**
North West	2005-06	10.70
East England		(15.10)
West Midlands		4.82
London		11.38
Northern		0.16
Scotland		0.35
South England		1.85
Wales and West		(1.42)
Total	**2005-06**	**12.74**
North West	2006-07	8.60
East England		(18.75)
West Midlands		(5.56)
London		10.91
Northern		(1.64)
Scotland		(5.40)
South England		(1.36)
Wales and West		(2.84)
Total	**2006-07**	**(16.04)**
Total	**all years**	**64.44**

5.39. Table 5.2 sets out the revenues that each of the GDNs earned in aggregate between 2004-05 and 2006-07 under the price control allowance (i.e. the mains replacement incentive) and compares it to the allowance we originally set (i.e. the price control projection) in June 2003 and outturn costs. It shows that four of the eight GDNs have made unit cost efficiency savings (i.e. the price control allowance is higher than outturn costs). One GDN's price control allowance and outturn costs were broadly equal. Three GDNs, North West, Northern and Scotland, incurred costs greater than the price control allowance. However, in aggregate, across all the GDNs, outturn costs have been higher than the price control allowance showing that the efficiency savings made by four of the GDNs has been outweighed by the additional costs incurred by the other three GDNs.

Table 5.2, Analysis of GDNs' performance against the different funding options (£m, 2005-06 prices)

	GDN	Initial projection	Price control allowance	Outturn costs
NGG	North West	169.6	143.3	147.3
	East England	151.9	188.3	186.0
	West Midlands	101.3	105.1	99.4
	London	114.8	89.8	89.8
NGN	Northern	124.8	125.7	126.1
SGN	Scotland	77.3	81.1	89.0
	South England	195.3	192.8	192.2
WWU	Wales and West	91.4	96.2	95.2
	Total	**1026.4**	**1022.3**	**1025.0**

5.40. We have attempted to compare the GDNs' actual performance under the mains replacement incentive with what it would have been under a traditional RPI-X approach or a capex rolling incentive. We have used an NPV basis to compare the cash incentives under the mains replacement incentive or RPI-X with the present value of the capex rolling incentive over 2004-05–2006-07. This analysis was undertaken by isolating the efficiency savings/ additional costs made or incurred by each of the GDNs between 2004-05 and 2006-07. We have done this by comparing each GDN's outturn costs with its costs determined by the mains replacement cost matrix for each year between 2004-5 and 2006-07. We then analysed how these savings or costs, when added to or deducted from the outturn costs, would have been passed on to consumers under each of the three incentives. Table 5.3 summarises the results.

Table 5.3 Cost to consumers of funding mains replacement under the three options in NPV terms (£m 2005-06 prices)

	GDN	Mains replacement incentive	Capex rolling incentive	RPI-X incentive
NGG	North West	143.3	144.8	139.2
	East of England	188.3	188.5	194.1
	West Midlands	105.1	104.8	116.7
	London	89.8	89.8	89.8
NGN	Northern	125.7	126.4	127.1
SGN	Scotland	81.1	84.1	73.3
	South England	192.8	193.0	194.8
WWU	Wales and West	96.2	96.5	99.3
	Total	**1022.4**	**1028.0**	**1034.4**

5.41. Under the mains incentive the GDNs retain 33 per cent of any savings and 50 per cent of any additional costs. The capex rolling incentive (based on a five year retention period) assumes that GDNs retain 31.2 per cent of any savings and costs. The RPI-X incentive assumes that GDNs retain 100 per cent of any savings for the period up to the next review. Overall, our analysis suggests that costs to the consumers are at their lowest under the mains replacement incentive. However, analysis of this kind is difficult as the incentives for GDNs to make efficiency savings would have been different if we had placed alternate incentives on them.

Additions to the mains replacement incentive

5.42. The GDNs have noted that the current mains replacement programme has focused on replacing smaller diameter pipes. However, looking ahead there will be a greater need to replace larger diameter pipes. The current matrix of costs which sets one unit cost for the higher diameter bands may not sufficiently compensate GDNs for the costs of replacing higher diameter pipes.

5.43. It has also been argued that the scope of the mains replacement incentive should be widened to include the replacement costs associated with service pipes. These have been separately classified as services costs and riser costs.

5.44. Services costs are the costs associated with replacing the service pipe i.e. the pipe which runs between the main and the customer's premises. The replacement of services costs are not included as part of the mains replacement programme but the GDNs are required to replace services pipes if leakage has been detected or if the service pipe is at risk of corrosion. The GDNs have argued that they predominantly undertake service pipe replacement in association with the mains replacement work.

5.45. Riser costs are the costs associated with replacing vertical and lateral service pipes in multi storey buildings. If a gas leak has been detected or the service pipe is considered to be at risk of corrosion the entire vertical service pipe and laterals within the building must be replaced before gas supply can be restored. Riser costs have the potential to be substantial because replacing the service pipe within a multi storey building can be challenging from an engineering perspective.

5.46. Our initial view is that it is appropriate to include services costs in the mains replacement incentive as these costs tend to be incurred in conjunction with mains replacement costs and it would remove any opportunity for GDNs to reallocate costs between the two incentives.

5.47. We also consider that we should include a larger number of diameter bands in the mains incentive to reflect the costs of larger diameter pipes. This will ensure that the GDNs are sufficiently compensated for replacing large diameter pipes.

5.48. We do not consider that it is appropriate to include riser costs in the mains incentive. We consider that there is no clear relationship between mains replacement and riser replacement. The cost of riser replacement is relatively high compared to services costs and unlike service replacement work it is not carried out in parallel with mains replacement. Consequently we consider that riser costs are essentially a separate workload and should be subject to a separate allowance. As discussed in chapter 4, we are considering whether a policy on the replacement of riser pipes needs to be developed.

5.49. We have considered 3 options each of which would include services pipes and large diameter pipes but not risers as discussed above.

Options

Option 1: Retain the mains replacement incentive

5.50. Under this option we would retain the current form of the mains replacement incentive. We would revise the mains replacement cost matrix with updated unit costs for each of the diameter bands and would review the five year price control cap on mains replacement costs.

5.51. Under this option we could also review the sharing factors to improve the alignment of incentives for efficiency with the capex and repex allowances if appropriate.

Option 2: Set a mains replacement allowance

5.52. Under this option we would set an allowance for mains replacement based on the best available forecasts of the volume of each diameter of mains that is likely to be replaced during the price control period. Any over or under spend would be treated in line with our capex incentive proposals

Option 3: Set mains diameter revenue driver

5.53. Under this option, we would set unit costs for each of the diameter bands, similar to the matrix of costs. On an annual basis, the GDNs would calculate their revenue based on the appropriate unit cost and the volume of mains replaced. The revenue would be capped over a five year period. If the GDN is able to make efficiency savings it would retain the savings consistent with our capex proposals. We would set a cap on the total amount that a GDN can earn from the revenue driver over the five year period.

Discussion of the options

Incentives to minimise mains replacement unit costs

5.54. There are incentive properties with each of the options to minimise mains replacement costs. Under Options 2 and 3 GDNs would retain any efficiency savings in accordance with our capex incentive proposals and under Option 1 GDNs would retain efficiency savings based on the sharing factors. Currently the mains replacement incentive is stronger than the capex incentive so under Option 1 GDNs have had stronger incentives to make mains replacement cost savings than other capex and repex cost savings. If we change the sharing factors under Option 1 so that they are better aligned with our capex incentive proposals the incentives to make cost savings will equalise.

Minimise the incentives to game the allowance

5.55. Options 2 and 3 minimise the incentive for GDNs to game the capex and repex allowances as strength of the incentives are the same.

5.56. If we were to implement Option 1 we would need to give further consideration to how we better align the strength of the mains replacement incentive with the capex incentive to minimise the risk of GDNs reallocating mains costs to other repex or capex allowances. This could also be managed through annual cost reporting requirements.

Ease of implementation/ enforcement

5.57. Options 1,2 and 3 are likely to be relatively straight forward to implement. Under Option 2 we would set an allowance for mains costs and the current matrix of mains costs sets the framework for either Options 1 or 3.

5.58. With Option 1 we will need to consider whether to change the sharing factors to give better alignment of the proposals with the capex incentives. With any of the options we could also place annual cost reporting obligations on the GDNs so that we can monitor performance against the incentives annually and identify misallocation of costs during the price control period.

Flexibility of arrangements to deal with changes to workload within the price control period

5.59. For options 1 and 3 the allowance is determined by the diameter mix of mains replaced. Both options can flexibly adapt to changes in the workload. Option 2 does not adapt to changes to workload. GDNs could make windfall gains or losses from a workload change

Initial view on mains replacement incentive

5.60. We consider that the costs associated with the diameter mix of pipes will continue to give rise to forecasting uncertainties in the next price control and as the diameter of the pipe is a significant contributor to mains replacement costs we do not consider it appropriate to support Option 2 as it could result in significant windfall gains or losses for the GDNs.

5.61. It is also worth noting that if we were to cap the revenue driver over the five year period and equalise the mains replacement incentive with the capex incentives, Options 1 and 3 effectively become the same option as they have the same properties. On this basis our initial view is that Option 1, which retains the current form of the mains incentive but addresses the problems of aligning the capex and repex incentives, should be implemented.

Capacity output incentives

Background

5.62. GDNs have a licence obligation to develop and maintain their pipeline system to enable them to meet gas demand on their networks in the event of a 1 in 20 peak demand day(s). There are various ways that the GDNs can meet this standard: by investing on their own network, paying to interrupt their customers, investing in storage, and purchasing offtake capacity on the NTS. The capacity output incentives are intended to incentivise GDNs to make appropriate tradeoffs between the outputs so as to minimise overall costs.

5.63. The different methods of meeting the 1 in 20 planning standard all come with different incentive properties for the GDNs. For example, interruption is a substitute for NTS offtake capacity and also for investment on the GDN. In setting an efficient opex allowance for interruption, we would have to consider the tradeoff a GDN would face with a capex allowance for investment on its own network against an opex allowance for buying NTS offtake capacity.

5.64. Any incentive mechanism should not distort incentives to make efficient tradeoffs. For example, if we were to set different strength efficiency incentives for each of the capacity output measures, the GDNs would have incentives to minimise the costs by under utilising those capacity outputs with strong incentives and procure more capacity outputs (and incur greater costs which would be borne by consumers) where the efficiency incentives are weaker.

5.65. The incentives for procuring capacity outputs are being developed against the background of major reform to NTS offtake and interruptions arrangements. Implementation of these arrangements is proposed to take place mid way through the price control period and forms the subject of a number of Uniform Network Code modification proposals which will need to be considered by the Authority. One of the challenges will be to ensure that the incentive arrangements remain suitable post reform.

5.66. In many instances the capacity outputs are likely to be substitutes for each other, e.g. between NTS flex capacity and LTS storage. In other instances the capacity outputs are likely to be complementary products e.g. NTS flat capacity and LTS capacity. GDNs are likely to face differing risks and costs associated with different capacity output options. In setting the incentive arrangements we would want the GDNs to be incentivised to choose the lowest cost option to meet the 1 in 20 obligations.

5.67. Incentives to procure capacity outputs could also be distorted if the perceived risks associated with the various schemes differ. For example a GDN may decide to procure more interruption capacity rather than procure long term flat capacity should the cost of flat capacity only be known within the year that the capacity is delivered

when NGG NTS publishes its charges[25]. The GDN may therefore procure a less efficient capacity output because it considers the risk associated with the price of flat capacity to be a strong disincentive.

Short term GDN incentives as part of the interruptions reform consultation

5.68. In the October 2006 consultation on interruption reform arrangements[26] we consulted on whether to implement a one year incentive for interruption and NTS offtake capacity by March 2007 to apply from 1 October 2010 until 30 September 2011. In the event that UNC modification 090 comes into effect, this would ensure that the GDNs are aware of their incentives prior to the June 2007 tenders for interruption and the proposed July 2007 booking window for NTS offtake capacity[27].

5.69. In proposing the one year incentive we noted that on balance certainty regarding the incentives may outweigh the detriment associated with any distortion of trade offs between the capacity outputs for one year. Responses to the interruptions reform consultation will be an important input into the capacity outputs incentives for the one year control. We have built on this in developing the options for consideration in the years which follow.

Options

Option 1: Sliding scale incentives for NTS flat capacity, NTS flex capacity and interruptions

5.70. Under this option GDNs would have a target cost for the purchase of NTS offtake capacity and interruption on their network. The target cost would need to be determined based upon certain price and volume assumptions associated with the costs of purchasing NTS flat capacity, NTS flex capacity and interruptions. If the GDNs exceed this cost they would be fully exposed (i.e. the sharing factor is 100 per cent) up to a pre-agreed collar. If they outperformed against the target cost they would retain all the benefit up to a pre-agreed cap. We would set capex and opex allowances for the other capacity outputs delivered through investment on the GDN within the price control.

[25] It is noted that NGG NTS are currently consulting on a draft Exit Capacity Release Methodology Statement for the enduring offtake period from 1 October 2010. This consults on two options for users, including DNs, to procure incremental capacity. Under these options commitments to incremental capacity can be made at the flat capacity price in place at the time the commitment is made or on the prices that prevail at the time that capacity is delivered.
[26] Ofgem 191/06, Reform of interruption arrangements on gas distribution networks – An update, 31 October 2006
[27] More information on NGG NTS's offtake reform proposals can be found in UNC modification proposal 0116, 'Reform of NTS offtake arrangements'.

Option ::Capex and opex allowances for each of the capacity outputs

5.71. Under this option we would set capex and opex allowances for each of the capacity outputs. GDNs would have incentives to minimise costs through the capex and opex efficiency incentives. If appropriate GDNs could be protected from price risk associated with NTS flat capacity. For example we could allow the GDNs to pass through any significant cost differences between the indicative price of flat capacity at the time of booking the capacity and the actual costs that they pay.

Option 3: Flexibility capacity incentive

5.72. Under this option we would set a single incentive scheme for the tradeoff of NTS and LTS flex[28] products and would remunerate investment in NTS and LTS flat[29] capacity (net of the cost of interruption) through the price control. Under the flexibility capacity incentive mechanism we would review each GDN's forecast of its flexibility capacity requirement. We would use this to set a central estimate of the amount of NTS flex capacity they required.

5.73. GDNs would be able to pass through the actual costs of NTS flex capacity that they purchased. For each additional unit of flexibility capacity that they actually purchased above the target their allowed revenue would be reduced by the marginal cost of incremental NTS flex capacity multiplied by the GDN's capex incentive rate. Conversely for each unit of NTS flexibility capacity they no longer required they would receive an increase in allowance equivalent to the marginal cost of incremental flex capacity multiplied by the GDN's capex incentive rate. They could use this revenue to invest in flexibility capacity on their own network. This would provide a continuous incentive for GDNs to book less capacity and invest in their own network instead up to the point at which it was cheaper to buy from the NTS and vice versa.

5.74. In setting the allowances for flat capacity we have assumed that there is no opportunity for substitution between the flat capacity products. Rather we considered that NTS and LTS flat capacity are complementary products. To address the tradeoffs which can be made between NTS and LTS flat capacity with interruption products, we could set capex and opex allowances for the flat capacity products and a zero allowance for interruptions so that the GDNs would only enter into interruptible contracts if they could do so at a lower cost than incurring NTS and LTS flat capacity costs. This would have some of the same strengths and weaknesses as Option 2. Alternatively we could consider a similar incentive scheme to that set out for flex capacity.

[28] NTS flex capacity gives the holder the right to offtake capacity on the gas day according to a profile that varies over the day. In this context we are using flexibility capacity on the LTS to describe assets which are used to accommodate a profile which varies within day. This includes storage and incremental investment on the LTS which is made for the purposes of meeting within day variation in demand.
[29] NTS flat capacity gives the holder the right to offtake a volume of gas during the day at a constant rate.

Discussion of options

5.75. Setting incentives, either within a price control or through specific incentive schemes, which are properly aligned so that a GDN purchases the most efficient combination of outputs on its network or the NTS, is complicated. We have started this discussion in the paragraphs below. In addition to consideration of the consultation responses this is an area where we will be looking to engage actively with the GDNs and others with an interest. We welcome responses on the options described and alternative approaches as appropriate.

Managing the uncertainties associated with NTS charges for flat capacity

5.76. Under the enduring NTS offtake reform proposals GDNs will be able to procure flat capacity in the long term at an administered price but there is a risk that they will not know the price of the capacity until the year in which the capacity is due to be delivered as NGG NTS can adjust their charges on an annual basis. This leads to greater uncertainty for GDNs when managing NTS offtake costs.

5.77. Option 1 manages this risk by setting a cap and collar on the offtake incentive. If offtake costs for flat capacity are much higher than the GDN forecasts, once it reaches the collar on its incentive all the costs are passed on to consumers. Under Options 2 and 3 could manage the risk if we allowed the GDNs to pass through any significant unforeseen additional costs i.e. the difference between the indicative costs that are known to the GDN at the time of booking NTS flat capacity and actual costs known in the year that the capacity will be delivered.

Managing distortions in the NTS offtake capacity market

5.78. There is a risk under Option 3 that allowing GDNs to pass through their NTS offtake capacity costs could distort the market for NTS offtake capacity between GDNs and directly connected gas supply points. However, the flexibility capacity incentive is intended to provide strong incentives for the GDNs to minimise costs incurred in the auctions and not to over book flex capacity. If NTS flex capacity is constrained the GDNs would be incentivised to consider other lower cost flex capacity options.

5.79. The pass through of capacity costs is unlikely to distort the NTS flat capacity market. Prices will be subject to administered prices and GDNs will be constrained by their allowance not to over book NTS capacity.

Incentives for trading off between the capacity outputs

5.80. Under Option 1 the GDNs have incentives to make efficient tradeoffs between the capacity outputs until they reach either the cap or collar. Once they reach these limits they have no further financial incentives to manage the costs. Under Option 2 the GDNs are incentivised to make tradeoffs between the capacity outputs in

accordance with the capex and opex incentives. Under Option 3 GDNs are incentivised to make tradeoffs between the flexibility capacity outputs.

5.81. In order to encourage GDNs to make efficient tradeoffs between the different capacity outputs it is important for the incentives to be aligned. In the case of Option 2 this will depend on the differing strength of the capex and opex incentives. In the case of Option 1 this would also depend on the strength of the sliding scale incentive. Option 3 minimises this risk as the aim is to equalise the incentive strength for all flexibility products.

Managing the uncertainties associated with demand for interruptible products

5.82. There is currently uncertainty over the volume of interruption that GDNs will contract for following the implementation of interruption reform. There is also some risk that sites with potential market power e.g. network sensitive loads (NSLs) may only offer to be interrupted at very high prices. The GDNs could minimise these risks by making arrangements to meet their capacity obligations through other capacity outputs for example by investing in their networks. This may lead to inefficient outcomes if the alternatives are more expensive to procure at the margin than interruption.

5.83. Option 1 manages this risk by setting a cap and collar on the interruptions incentive. With Options 2 and 3 the GDNs would not be able to pass on the higher costs of interruptions to consumers. However, it could be argued that paying a high price for interruptions is unlikely to be efficient and if some parties, such as the NSLs, are abusing their dominant position in the interruptions market we may wish to consider our Competition Act powers.

Initial view

5.84. Option 3 is our theoretical preference because it focuses on aligning the incentives which GDNs face for meeting planning standards through the different flexibility capacity options. However, there are many practical issues to consider. We will need to review the GDNs' forecasts of their capacity requirements and consider whether it is possible to identify the incremental costs of NTS flex capacity for the purposes of the incentive.

5.85. With Option 1 the incentives to manage NTS flat, flex and interruption capacity are limited to the caps and collars on each of the incentives. Once the cap or collar has been breached there is no financial incentive for the GDNs to trade off the capacity outputs efficiently. In comparison the incentive properties under Options 2 and 3 are not limited.

5.86. Also under Option 1 the GDNs' performance under the sliding scale incentives could be undermined if they are exposed to flat capacity pricing uncertainties, i.e. if actual flat capacity prices are only known in the year that the capacity is delivered. If flat capacity prices are volatile the GDNs may determine that any effort to cut

costs may be futile and they may simply rely on the protection of the cap and collar. Under Options 2 and 3 the GDNs may be more willing to consider ways of minimising NTS flat capacity procurement as they are protected from volatile prices.

5.87. Option 3 has the benefit of having a focused incentive on the flexibility capacity options. If it is true that the extent of tradeoffs for flat capacity is limited then the flexibility capacity incentive provides targeted and balanced incentives based on the marginal cost of NTS flex capacity. If however the trade off for flat capacity is significant then we may wish to adapt Option 3.

Quality of service incentives

5.88. As the RPI-X framework provides a strong incentive for GDNs to reduce costs there is a risk that they may try to achieve this by reducing quality of service. The quality of service outputs and incentives provide an important counterbalance to this. The guaranteed standards of performance provide incentives on GDNs to deliver an appropriate level of service to consumers and so protect consumers. Where the GDN fails to meet the required standard customers receive compensation. At this stage we are consulting on increasing the scope of the Guaranteed Standards (see chapter 4). We are also considering the size of the payments which should be made under the guaranteed standards. As well as providing customers with a payment in the event of poor service, this also provides GDNs with an incentive to improve their performance.

Accuracy of gas pipeline records incentive scheme

Background

5.89. All GDNs keep and maintain electronic records of some of their gas pipeline systems. GDNs need accurate records to maintain their assets efficiently and safely. Third parties use these records to enable them to connect efficiently to the network or safely avoid existing gas pipes when they are carrying out excavation works in an area. Ofgem is aware of issues with the accuracy of this data and proposes to introduce an incentive scheme to encourage GDNs to maintain accurate records.

5.90. There are various different ways we could look to measure and incentivise performance in this area including:

- an audit of the process for recording information including an annual audit of a sample of jobs; and/ or,
- reporting of the number of times that information provided by the GDNs was inaccurate.

Costs and benefits

5.91. This is a complex area that is dependent on the accurate transcription of records received from both GDNs and IGTs. There will be a number of difficulties in administering such a scheme, including how accuracy will be measured. This is an area that has an impact on safety.

5.92. This is also an issue that potentially has an impact on competition, particularly in the provision of connections by IGTs and ICPs. An incentive scheme would be an appropriate way of addressing this important issue and would provide the opportunity to work with the HSE to devise an appropriate solution for both the HSE and Ofgem. There are some important practical issues which would determine whether we can give effect to such a scheme.

Initial view

5.93. Views are invited on how an incentive scheme for gas pipeline records would work and on the scope of such a scheme.

Other incentives

Innovation Funding Incentive

5.94. The innovation funding incentive (IFI) was introduced as part of DPCR4 to address concerns that DNO expenditure on research and development (R&D) had declined to the extent that opportunities for opex and capex efficiency were being lost. This was seen not to be in the interests of consumers for the short and long term. It was noted that the regulatory regime which requires DNOs to pass on cost savings after five years may bias R&D to more certain shorter term projects or may result in an avoidance R&D altogether. DPCR4 introduced the IFI that allows a significant proportion of R&D costs to be passed through, up to a cap of 0.5 per cent of regulated revenue, on a “use it or lose it” basis.

5.95. The TPCR updated proposals document considered that an IFI should also be implemented for electricity and gas transmission companies. We noted that although investment in R&D is more prevalent in the gas transmission network the risks associated with the regulatory regime are similar in gas transmission as they are in electricity.

5.96. In gas distribution we are aware, from speaking to the GDNs, that there continues to be significant innovations, incentivised through the traditional price control. Examples of such innovation include new technologies and techniques used by contractors to carry out the mains replacement programme. These include the development of camera inspection systems, service isolation techniques, and revised technologies to assist with the flow stopping for larger diameter mains. At this stage it is not clear that there is a need for an IFI in gas distribution.

6. Financial issues

Chapter Summary

This chapter sets out our initial thoughts on some of the financial issues we propose to review as part of the main control. These include the cost of capital, tax allowances, financeability and depreciation. Items such as pensions and the move to a post-tax cost of capital that are addressed in our initial proposals for the one year control are not discussed.

Question box

Question 1: Should we allow for an ex post adjustment for changes in tax treatment of certain kinds of expenditure, as outlined in paragraphs 6.3 and 6.4?
Question 2: Which key ratios should we use as financeability indicators?
Question 3: How should we finance replacement expenditure, having regard to its impact on the overall financeability of the price control?
Question 4: Should we change our depreciation rate for new assets in response to the changing mix of assets being capitalised?

Background

6.1. In previous documents, we have briefly set out and considered issues in relation to cost of capital, tax, depreciation and financeability for the period from 2008. We intend to cover these issues in more detail in the March consultation paper. In the meantime, we have outlined below our current thinking on some of these issues, in order to take the opportunity to gather early feedback.

Cost of capital

6.2. As noted in the second consultation document we will be undertaking a full review of the cost of capital for the price control (in contrast to the proposed approach taken for the one year extension). The appropriate cost of capital depends on the overall balance of risks and rewards contained in the price control package. As such we do not expect to be in a position to determine the final cost of capital until we have determined the rest of the price control package. For the same reason, it does not follow that we should simply adopt the same cost of capital as TPCR, as the risk and reward profile of GDPCR may be materially different from that which the transmission companies will face in their price control. We will however draw on the work done on the components of the cost of capital for TPCR and update this work where appropriate.

Tax

6.3. We will set an ex ante allowance based on information provided by the licensees, and assuming notional gearing and interest rates based on those implied by our cost of capital assumption. We will also assume that the current tax treatment of the companies' expenditure continues. It is possible that during the

control, the companies will be required to restate their accounts under international financial reporting standards (IFRS) instead of the prevailing UK accounting standards (NGG has already switched its accounting method to IFRS). This may lead to a change in the timing of tax relief of certain items, especially where the tax treatment follows the accounting treatment. In many cases the amounts will be small, or will reverse the following year, but in some cases they may be large and only reverse over several decades.

6.4. If this is the case we will consider whether it would be appropriate to have a specific re-opener to allow the companies to recover higher tax allowances where they are required. We would only do this where companies were able to demonstrate that they had taken all possible steps to mitigate this liability, such as contesting HM Revenue and Customs' treatment. This would specifically include not changing their basis of accounting to IFRS where they were not required to do so. We would also have to consider the effect on charges, i.e. this recovery might need to be smoothed over a number of years.

Financeability

6.5. In setting price controls, we determine cost allowances consistent with a well managed and efficient business. We recognise that over the lifecycle of the network, licensees will require substantial investment at times and may consequently experience periods of deteriorating credit ratios or apparent financial strain. We will examine carefully the impact the price control settlement might have upon the ability of licensees to finance their networks while meeting benchmark levels for key financial indicators consistent with a comfortable investment grade rating. However, an element of judgement will also be necessary. Reliance solely on these tests would not be appropriate because ratings agencies' assessments are also based on qualitative judgements.

6.6. We will need to determine which key indicators are appropriate for assessing financeability. In DPCR4 we used Funds From Operations ("FFO")/Interest, Retained Cash Flow/Debt, and Debt/RAV. For rating gas distribution businesses, all three of the accredited agencies also use adjusted interest cover ratios (adjusted FFO/cash interest payments), where the 50 per cent of repex that is expensed for regulatory purposes (see below for further details) is deducted from the FFO. We will explore this issue further in the 4th consultation document, but would welcome comments in the meantime.

Financing of replacement expenditure

6.7. In the current price control, the introduction of the HSE mains replacement programme required Ofgem to give consideration to how this enhanced level of replacement expenditure should be financed[30]. Previously replacement expenditure had been capitalised for regulatory purposes, i.e. added to the RAV, even though its

[30] Review of Transco's Price control from 2002 Final proposals, paragraphs 6.5 – 6.10, September 2001

accounting and tax treatment might be different. The scale of the mains replacement programme, and the fact that it was driven primarily by current safety requirements rather than the network's investment cycle led us to the conclusion that it was appropriate for part of this expenditure to be financed by consumers in the year incurred. We decided at that time that a 50/50 split of capitalisation and expensing repex struck the right balance between current and future customers, and ensuring financeability in both the short and long term.

6.8. The GDNs' BPQs show that they expect replacement expenditure to rise even further in the period 2008-13, as described in paragraph 3.11. Additionally, we will need to consider the overall financeability of the price control package, which will be affected by the way we finance repex. We will give consideration to whether the 50/50 split is still appropriate, or whether a different mix of capitalising and expensing repex would be more appropriate.

Depreciation

6.9. In the second consultation document we said that we saw no reason at that time to review the depreciation rates used. Assets acquired since 1 April 2002 have been depreciated at a uniform straight-line rate over 45 years. This estimate of the useful economic life of assets was derived by averaging the expected useful economic lives of all assets. The BPQs recently received show a large increase in expected IS costs. IS assets, whether hardware or software generally have a useful economic life of only a few years, compared to 50+ years for most physical elements of the network. A significant increase in the proportion of capital assets with a short lifespan could decrease the weighted average lifespan of assets as a whole. Additionally, changes to the way repex is financed, as discussed above could also impact the mix of asset lives. We will consider as part of the work on assessing costs whether the assumed depreciation rate remains appropriate.

7. Sustainable development

Chapter Summary

In this chapter, we set out how we propose to take account of our sustainable development commitment and duty as part of GDPCR through:

- ➔ Gas shrinkage arrangements;
- ➔ Network extensions; and,
- ➔ Corporate social responsibility.

Question box

Question 1: Which of the two forms of the network extensions incentive scheme should we adopt going forward?
Question 2: Do you agree with our assessment of the risks, costs and benefits attributable to the options for facilitating network extensions (see Appendix 6)
Question 3: Is our proposed methodology for quantifying the costs and benefits associated with the various options appropriate (see Appendix 6)?
Question 4: Is it appropriate to set an incentive scheme which recognises the initiatives that some companies undertake with respect to their corporate social responsibilities?
Question 5: What other criteria should be included in a Corporate Social Responsibility incentive scheme for GDNs?

Introduction

7.1. As part of GDPCR we have identified three areas where we can make an impact on sustainable development. They are:

- Gas shrinkage arrangements, which includes emissions of methane (a greenhouse gas) due to leakage from the network;
- Network extensions, which could both reduce emissions of carbon dioxide and other air pollutants and heating costs; and,
- Corporate social responsibility, which could encourage GDNs to take initiatives (e.g. network extensions) that fall within the ambit of social responsibility.

Gas shrinkage arrangements

7.2. Gas shrinkage is gas that is lost from the network through leakage, theft and own use gas. Shrinkage gas constitutes approximately 0.7 per cent of annual throughput and 90 per cent of this relates to leakage. Gas lost through leakage contributes to climate change since methane is a greenhouse gas. Shrinkage volumes have decreased between 2002-03 and 2005-06 as pipes are replaced through the mains replacement programme.

7.3. Gas shrinkage has been an important part of the one year control where we have focused on removing the risk of wholesale variations in gas prices from the

GDNs. As part of GDPCR for the main control, we will reconsider whether our treatment of the leakage component of shrinkage is appropriate. In particular:

- whether leakage measured for the purposes of the shrinkage incentive is sufficiently robust and, in particular, whether operational incidents on the network are effectively captured in this data; and,
- whether the incentives on GDNs to control leakage are appropriate given the causes of leakage, the way it is measured, and the impact of methane as a greenhouse gas[31].

Network extensions

Network extensions

Background

7.4. Our principal objective is to protect the interests of consumers – present as well as future. Some of our statutory duties are also clearly consistent with encouraging GDNs to carry out gas network extensions[32]. In addition, the Government's social and environmental guidance, to which we must have regard to, requires us to consider putting in place measures, within the Authority's sphere of responsibility, to help achieve the Government's fuel poverty target[33] and its carbon dioxide emissions reduction target.

7.5. There are two main consumer costs associated with network extensions:

- Up front connection costs – These mainly include infrastructure costs such as the installation of pipelines, mains and services to connect to the existing network; and,
- 'In house works' costs – These are additional costs necessary to make use of the new gas connection such as installing gas central heating and insulation, and buying gas appliances.

7.6. GDNs are involved in providing infrastructure but not 'in house works'. Even if the regulatory regime is amended in a way that allows GDNs to provide a connection to the gas network at a low cost, consumers may not be able to afford the 'in house works' costs. In order for network extensions to be beneficial, both types of cost need to be addressed. There are a number of Government initiatives that can

[31] Methane is a greenhouse gas which is twenty-one times more powerful than CO2.
[32] These include: to secure that, as long as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met (Section 4AA(2)(a), Gas Act 1986); to have regard to the interests of consumers including low income individuals and those residing in rural areas (Section 4AA(3), Gas Act 1986); and, to contribute to the achievement of sustainable development (Section 4AA(5)(ba), Gas Act 1986).
[33] That is, no household should be living in fuel poverty by 2016-2018 and no vulnerable household should be fuel poverty by 2010.

contribute towards the costs involved, however consumers may find it difficult to find out about and access Government funding.

7.7. Extending the gas distribution network could have both social and environmental benefits. In particular, households with gas heating systems generally have lower fuel costs than households heated with other fuels thus gas extensions could help to alleviate fuel poverty. Further natural gas has lower emissions of CO2 and other pollutants, such as SO2 and particulates, than other domestic heating fuels, such as electricity or oil. Consequently increasing access to the gas network could also be associated with environmental benefits.

7.8. Eight respondents to the initial consultation document expressed support for Ofgem's suggestion that GDPCR should consider network extensions. This prompted us to set out five options to encourage GDNs to carry out network extensions along with a preliminary qualitative assessment in the second consultation document. The options included:

- Option 1 - No regulatory intervention;
- Option 2 - Change the application of the 10 metre rule;
- Option 3 - Implement an incentive scheme;
- Option 4 - Net-back pricing for infill extensions carried out by the GDN; and,
- Option 5 - Treat income from network extensions as excluded revenue.

Options

7.9. Based on responses to the second consultation document, we propose to consider four options going forward, which include options proposed by some GDNs.

Option 1 - No regulatory intervention

7.10. This option consists of "doing nothing" as better targeting and co-ordination of existing government funding may be the solution rather than regulatory intervention.

Option 3 – Implement an incentive scheme

7.11. We are proposing two options for the structure of the incentive scheme:

- Option 3a – Follow the discretionary reward scheme introduced as part of DPCR4 for electricity Distribution Network Operators (DNOs). This scheme would reward the performance of companies that best serve the interests of consumers across chosen categories throughout the year, including a network extensions dimension, and could form part of a broader incentive on corporate social responsibility (please see paragraphs 7.25 to 7.26); or,
- Option 3b – Specifically link funding to an output measure for example based on the number of fuel poor connected to the gas network.

7.12. The intent of Option 3 is to incentivise GDNs to find ways to increase the affordability of network extensions. We envisage that GDNs would achieve this by making resources available for the coordination of existing sources of government funding[34], such as those aimed at tackling fuel poverty as well as funding available for regeneration. GDNs could either develop an in house coordination operation or contract the work out, for example, to one of the Design & Demonstration Unit's[35] Community Interest Companies.

Option 5 – Treat income from network extensions that tackle fuel poverty as excluded revenue (as proposed by WWU)

7.13. Under this option, GDNs would charge customers in eligible communities in accordance with their schedule of standard connection charges. Under the current arrangements, non-gas communities are not eligible for these rates because they are located more than 23 metres from a relevant gas main. Specific criteria would need to be developed to determine eligibility based upon social and potential environmental criteria.

7.14. In carrying out the network extension, GDNs would incur costs that are higher than the value of the standard connection charges paid by infill customers. To recover these costs, GDNs would be permitted to hold transportation charges received from infill consumers in a separate accounting pot. The GDNs would make a payment from the excluded services revenue pot into the price controlled revenues of the regulated business to match the opex, capex, and repex costs (including depreciation and return on capital) incurred by the regulated business in providing services to infill consumers. After an agreed period, income from infill consumers would be treated as usual under the price control.

7.15. This arrangement would be given effect through the price control licence conditions and the GDNs' accounting processes. It would be invisible to both suppliers and end-use customers.

7.16. To ensure competitive neutrality, it may be necessary to amend the IGT licenses so that they have the opportunity to adopt this strategy as well.

[34] Specific government programmes include benefits provisions such as Pensions Credit and the Winter Fuel Payment as well as a number of schemes including Warm Front (England), Central Heating Programme, Warm Deal (Scotland), Home Energy Efficiency Scheme (Wales), Warm Homes (Northern Ireland), Decent Homes Standard, Energy Efficiency Commitment (EEC), Community Energy and Warm Zones Limited (WZL). There are also wider avenues of assistance available, in particular linked to regeneration programmes such as European grants, neighbourhood renewal funding, and funding from regional development agencies.

[35] The DDU is a small industry-led team presently on secondment from National Grid to the Department of Trade and Industry. The Unit facilitates and coordinates network extensions.

Option 6 – Amend the economic test for network extensions that tackle fuel poverty (as proposed by NGG)

7.17. This option involves an amendment to the economic test when it is applied to infill projects to fuel poor communities. Again, specific criteria would need to be developed to determine eligibility based on social and environmental criteria.

7.18. Under the current arrangements, the economic test identifies whether a customer should pay a contribution towards the reinforcement required for a new connection. It compares the marginal cost of reinforcement with the future transportation income generated by the new load over an appraisal period of ten years for a typical load (under 50 million therms pa) and 15 years for larger loads. If the marginal cost of reinforcement is greater than the anticipated transportation income, the economic test is not met, and the customer requesting the connection has to provide a capital contribution to cover the shortfall if they wish to proceed with the connection. Conversely, if the expected transportation revenue exceeds the cost of reinforcement then the GDN funds the work and the costs are recovered from all customers via transportation charges. None of the transportation revenue expected from the new connection is used to reduce the connection charge to the customer in this case.

7.19. Under Option 6, GDNs would be permitted to use a special version of the economic test in relation to network extensions to fuel poor communities. When applying the amended economic test, the GDN would compare all of the connection costs associated with a network extension, not just those associated with reinforcement but also new infrastructure (i.e. mains and services), to the future transportation income that will be generated by the new load. When reinforcement is not necessary, only the infrastructure costs will be compared to the future transportation income. Funding would then be made available to the point where the connection cost of the infill equals the future transportation income generated from the consumer. Where the revised economic test is met, the funding would be made available by the GDN. Any excess over the future transportation costs (that is not able to be met by government programmes) would be provided by the infill consumer.

7.20. In order to ensure competitive neutrality, it would be necessary to require GDNs to make the amended economic test contribution available to infill customers regardless of whether the GDN, or a competitor, carries out the connection. Otherwise, the GDNs' transportation business would be able to offer a discount of connections charges that IGTs cannot, which would distort competition in the connections market. In this case, the GDNs' amended economic test contribution would reflect the value of future CSEP charges minus any upstream reinforcement costs.

7.21. We no longer propose to consider the option whereby the application of the 10 metre rule[36] is changed to include all new connections due to the responses we

[36] GT Standard Licence Condition (SLC) 4B(1) obliges any GT that makes a connection to domestic premises under section 10(2)(a) of the Gas Act (as amended) to supply and lay free of charge the first 10

received from the second consultation document and concerns that it would increase cross-subsidies between new and existing customers. Option 6 was proposed by a GDN and is essentially the same as Option 4 which is why we have eliminated Option 4.

Initial view

7.22. Whereas Option 3 has the potential to reduce the 'in house works' costs borne by individual customers as better use is made of alternative sources of funding, Options 5 and 6 are directed towards reducing up front connection costs.

7.23. Many respondents to the second consultation document indicated that an incentive scheme, on its own, will not make a sizeable impact on increasing network extension activity. Our initial view is that Option 3 (i.e. an incentive scheme) could be implemented as a complement to either Option 5 or 6.

Next steps

7.24. In Appendix 6, we have included an initial impact assessment which will be followed by a final impact assessment in the May 2007 initial proposals document. We are currently discussing our proposed approach with the DTI to quantify the costs and benefits of each option for the final impact assessment.

Corporate social responsibility

7.25. We are considering including a Corporate Social Responsibility (CSR) incentive in the price control. As discussed in paragraph 7.11, a discretionary reward scheme was introduced as part of DPCR4 to incentivise initiatives relating to priority customer care, CSR and wider communication strategies implemented by DNOs. The scheme rewards those electricity DNOs whose overall approach in these areas best serve the interests of consumers.

7.26. We could introduce a similar reward scheme for GDNs. The types of behaviour we could encourage include network extensions and other initiatives which fall within the ambit of social responsibility. Other initiatives could include GDNs providing customers with approved carbon monoxide (CO) detectors[37] when they respond to emergency call outs. This would be complementary to the initial policy proposals of the Supply Licence Review (SLR)[38] which consists of broadening the information requirement so that suppliers are required to provide information to all customers on

metres of pipe which is in land that is not owned and occupied by the customer. Section 10(2) (a) applies to premises which are within 23 metres of a relevant gas main and GTSLC4B (1) applies to premises at which a supply is taken wholly or mainly for domestic purposes. The cost of this allowance is recovered through GTs' transportation charges levied on all customers.

[37] According to the Health & Safety Executive (HSE), on average 20 people die every year from carbon monoxide (CO) poisoning associated with gas appliances. The HSE argue that this figure could be reduced if households were educated on the risks associated with CO and took sensible precautions.
[38] Supply Licence Review, Initial Policy Proposals, July 2006, Ref: 113/06.

the dangers of CO poisoning and the benefits in fitting CO alarms, and on where to seek assistance if appliances are condemned following a safety check.

8. Other issues

Chapter Summary

In addition to the issues that would be considered as part of any Ofgem price control review, there are a number of other issues that are specific to GDPCR. These include the arrangements for the funding of xoserve and independent systems. This chapter consults on two options for the funding of xoserve:

➔ Option 1 - Do nothing; and,
➔ Option 2 - Core services plus user pays.

Our early preference is for Option 2, however further work is required to define how it would work in practice. This chapter also discusses and seeks views on the arrangements to be put in place for independent systems.

Question box

Question 1: Do you agree with our assessment of the risks, costs and benefits attributable to the two options for the funding of xoserve?
Question 2: If we adopt a core services plus user pays approach (Option 2), how should we define core services and user pays services?
Question 3: What costs/benefits would your organisation incur in the event that we adopt Option 2?
Question 4: What questions do we need to ask GTs, xoserve and shippers in order to accurately quantify the costs associated with Option 2?
Question 5: In the event that the Secretary of State requires GDNs to put in place further alternative arrangements relating to independent systems, should the excess costs associated with independents systems be:

➔ spread across all GB consumers via transmission charges; or,
➔ borne by customers located in gas distribution areas where independent systems are located (primarily Scotland)?

Funding of xoserve

8.1. The second consultation document consulted on three options for the funding of xoserve. It also proposed that matters relating to xoserve were considered further through an industry dialogue. Following consideration of responses we have:

- established an industry dialogue, and
- developed an initial impact assessment that considers the costs and benefits associated with two options for the funding of xoserve:
  - Option 1 - do nothing; and,
  - Option 2 - core services plus user pays.

8.2. This section describes the industry dialogue and the key features of the two options considered in our initial impact assessment. It also sets out our initial view and proposed way forward on this issue. Our initial impact assessment on the funding of xoserve is set out in Appendix 7.

Industry dialogue on the funding of xoserve

8.3. We have established an industry dialogue involving xoserve, GTs and shippers and other interested parties.[39] The dialogue covers five key areas:

- Features of xoserve's systems – the high level features of the gas industry central information systems following planned rewrites;
- Cost requirements – the level of costs that dialogue participants are willing to incur in order to receive an agreed level of xoserve services;
- Xoserve funding arrangements – which of xoserve's services should be funded through the price control and which should be subject to user pays;
- Service standards – the service standards to be associated with core services; and,
- Governance – the governance arrangements that could be used to support a user pays approach to the funding of xoserve.

8.4. The final product of the dialogue will be a report to Ofgem setting out participants' views on each of these issues.

Option 1 - Do nothing

8.5. Xoserve currently provides services on behalf of the GDNs and NGG NTS in accordance with the terms of the Agency Services Agreement (ASA).[40] The ASA details the services to be provided by xoserve and the service standards to be achieved. It also sets out the arrangements by which xoserve charges GTs for its services. GTs pay these charges using price controlled revenue.[41]

8.6. At present, around 99 per cent of xoserve's revenue is derived from the ASA. Xoserve also enters into contracts with parties other than GTs for the provision of additional services. For instance, xoserve provides ad-hoc data extracts and training services to shippers, and data transfer services to meter asset managers. Xoserve reports that where ASA resources have been used to deliver these additional services, it has attributed the value of these resources back to the ASA, so there has been no cross subsidy between regulated and commercial activities.

8.7. The Uniform Network Code (UNC) refers to a process whereby shippers are able to initiate (and pay for) changes to UK Link - the Class 3 modifications process. Historically, this process has not been fully utilised as parties have not been able to reach agreement on the level and allocation of costs.

8.8. Under Option 1, these arrangements would be retained in their current form. Ofgem would form a view on the level of efficient costs associated with providing

[39] Further information on the dialogue is available at www.gasgovernance.com.
[40] The Agency Services Agreement is available on the Joint Office website. See http://www.gasgovernance.com/Publications/Misc/.
[41] The current price control includes an allowance for Transco plc's "shipper services" which reflects the industry structure in place at the time the control was set.

central information services through the price control process. GTs would receive a price control allowance to cover xoserve's costs, which xoserve would recover through the ASA charging arrangements.

Option 2 - Core services plus user pays

8.9. The introduction of a core services plus user pays regime does not necessarily entail changes to the arrangements described in paragraphs 8.5-8.7 above. Rather, it represents an enhancement of the existing arrangements.

8.10. Under a core services plus user pays approach, regulated services provided by xoserve would be classified as one of:

- Core services. Regulated services that it is appropriate to fund using price control allowed revenues. The costs associated with these services are spread across all customers through transportation charges.
- User pays services. Regulated services that it is appropriate to fund using charges levied directly upon the party requesting the service. For the purposes of the price control, such services would be excluded services[42].

8.11. The following paragraphs discuss the key elements of Option 2 and highlight those areas where further development is required. In particular, we consider:

- the definition of core and user pays services;
- how to set price control allowances under a user pays regime;
- the invoicing arrangements; and,
- the governance regime to support user pays.

Defining core and user pays services

8.12. The definitions of core and user pays services need to strike a balance between clarity and flexibility. We envisage that the price control would specify a set of principles that determine whether a service is treated as core or user pays. The principles should be flexible enough to allow xoserve's package of services to evolve over the course of the price control, without stifling beneficial developments as a result of disagreement over how the development should be funded.

8.13. The extent to which Option 2 represents a divergence from Option 1 depends on which services are considered to be user pays services. For instance, if all services currently provided in accordance with the ASA were classed as core services, then the user pays arrangements would only come into effect in relation to new enhanced services. Alternatively, if certain services currently provided by xoserve under the ASA become subject to user pays, then the effect of Option 2 would be more wide reaching.

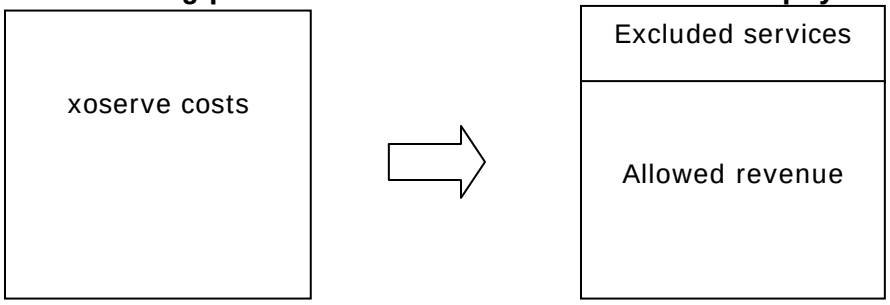
[42] While we would expect xoserve to invoice shippers for these services, they would do so on behalf of GTs.

8.14. Ofgem has not formed a view on how xoserve's regulated services should be allocated between core and user pays. Given that the current arrangements generate poor incentives on shippers to limit the costs they impose on xoserve, our initial view is that it may be appropriate to class some of xoserve's existing services as user pays. In particular, it may be appropriate to classify services that xoserve carries out at the request of a shipper as user pays.

Setting price control allowances under a user pays regime

8.15. The systems underlying gas market processes are complex and inter-related. In practice, it is likely to be very difficult to differentiate between the costs that xoserve incurs in providing core services and the costs associated with user pays services. To overcome this, we propose that the price control allowance is determined as set out in Figure 8.1.

Figure 8.1 - Setting price control allowances under a user pays regime



1. Estimate overall costs of xoserve based on the cost of providing core services and a reasonable set of enhanced services which are subject to user pays.

2. Form a view on proportion of xoserve costs attributable to core services. Price control allowance recovered through gas transportation charges covers only core services and remaining revenue is recovered through excluded services directly from shippers.

8.16. Any xoserve services that are provided using regulated assets would be treated as either core services (funded through allowed revenue) or excluded services. An increase in the level of expected revenues from excluded services would have the effect of reducing the level of costs funded through allowed revenue.

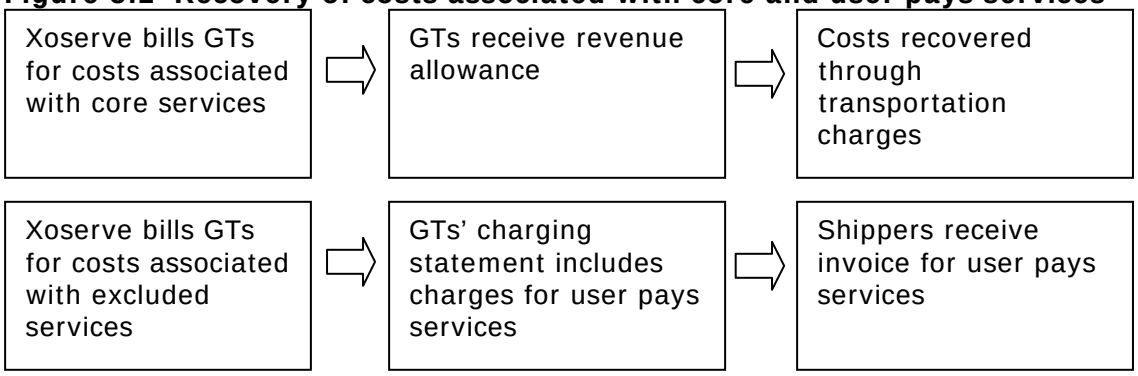
8.17. There is potentially a third category of xoserve services - those that have nothing to do with regulated assets. If xoserve provides commercial services that are wholly separate from its regulated activities, these services would be treated as outside the price control. Such services must not utilise resources used to provide regulated services and must be fully ring fenced from xoserve's regulated activities. In particular, information systems used to provide unregulated services should be stand alone systems that have not been funded using price controlled revenue.

Invoicing arrangements

8.18. An aspect of Option 2 that requires further development is the invoicing arrangements. User pays services would be a form of excluded service that xoserve provides on behalf of each GDN and NGG NTS. At present, shippers receive a separate invoice from each GT. We are considering how shippers should be invoiced for user pays services given that the contractual relationships (and licence obligations) lie with GTs, not xoserve.

8.19. Figure 8.2 sets out, at a high level, how the costs associated with core and user pays services could be recovered under Option 2.

Figure 8.2 Recovery of costs associated with core and user pays services



8.20. If we were to maintain the current arrangements for recovering xoserve costs, charges for user pays services would be split between GTs. In this case, the invoice that shippers receive from each GT would include the portion of user pays charges attributable to that GT. Xoserve could issue explanatory notes that reconcile the charges appearing in each GT invoice to the user pays services received by the relevant shipper.

Governance of user pays regime

8.21. For Option 2 to be effective in promoting the introduction of services between price control reviews, the parties need to be able to agree how much the service should cost, and who should bear the cost associated with the service.

8.22. GDPCR is concerned with the price control arrangements for the funding of xoserve. The governance arrangements that support user pays are relevant, but they are not part of the price control arrangements. We do not propose to develop governance arrangements as part of GDPCR, although we welcome any developments in this area.

Initial view and way forward

8.23. Based on the cost benefit analysis set out in Appendix 7, our initial preference is for Option 2.

8.24. In order to conduct a full assessment of the costs and benefits of Option 2 it is necessary to develop a more detailed view of how it would operate in practice. In particular, we need to form a view on the allocation of xoserve's existing services between core and user pays. We also need to develop a more detailed understanding of the implementation costs associated with user pays.

8.25. We are consulting on these issues both through responses to this document and via the industry dialogue. We intend to issue a survey in February that will ask GTs, xoserve, shippers and other interested parties on the costs that they expect to incur under a core services plus user pays approach. We intend to publish a more detailed impact assessment as an attachment to our initial proposals document.

Independent systems

8.26. Independent systems are small gas networks serving communities that are not connected to the main gas transportation system. They are supplied by lorries or boats carrying natural gas in liquefied form, or with propane. Independent systems are more costly to operate than the main distribution network. The large majority of these networks are in Scotland.[43]

8.27. A series of Determinations issued by the Secretary of State provided the GDNs and NGG NTS with approval for a set of alternative arrangements in respect of independent systems located within their distribution area.[44] "Alternative arrangements" means arrangements to protect the interests of consumers connected to independent systems, which have been determined by the Secretary of State as suitable.

8.28. The current alternative arrangements, which take the form of a series of undertakings by GTs, have the effect that customers connected to independent systems pay no more than the average GB transportation charge. The undertakings expire on 31 March 2008. If the Secretary of State decides to require the GTs to put in place further alternative arrangements to take effect after 31 March 2008, then it may be necessary to adjust the price control arrangements to reflect the new alternative arrangements.

8.29. For instance, it may be appropriate to adjust both NTS and GDN GT licences to ensure that customers located in gas distribution areas that contain independent systems (such as Scotland) do not bear the full burden of the excess costs

[43] In addition, small independent systems are located in Wales and North England.
[44] Set out in 'National Grid Transco – Potential Sale of Gas Distribution Networks: Statement of Reasons Following the Secretary of State's Decision', February 2005. See http://www.dti.gov.uk/energy/index.html.

associated with independent systems. Rather, these excess costs could be spread across all customers via transmission charges. This would necessitate changes to the transmission price control as well as the relevant GD controls.

9. Next steps and timetable

Chapter Summary

This chapter sets out the next steps and timetable for the rest of the GDPCR.

Question box

There are no questions relating to this chapter

Next Steps

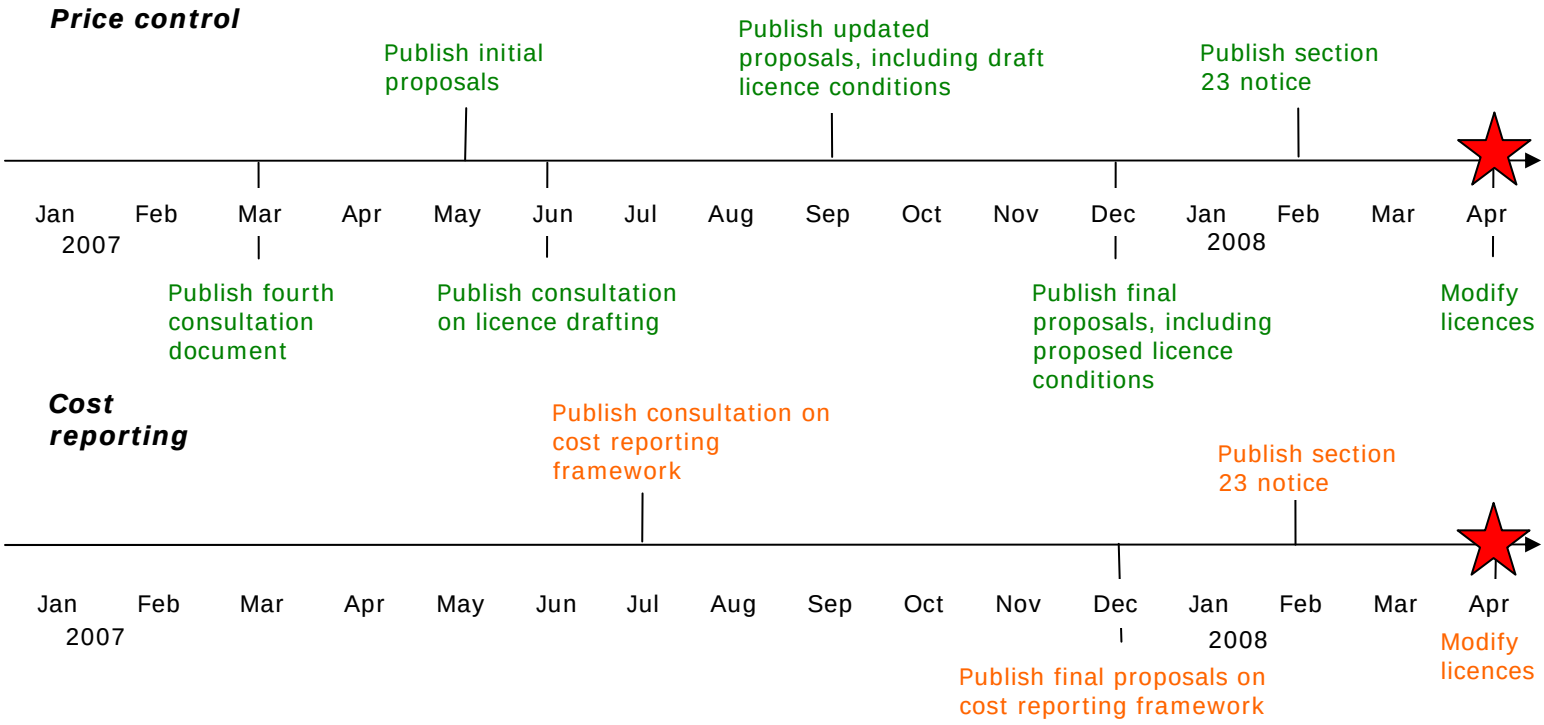
GDPCR seminar

9.1. On 23 January 2007, we will hold a seminar which will address some of the issues raised in this document. The seminar will include a panel session where attendees will have the opportunity to ask questions. If you would like to attend, please contact Paul Newman on 020 7901 7026 or email GDPCR@ofgem.gov.uk by no later than 15 December 2006. Further details will be made available closer to the event.

Timetable

9.2. Figure 9.1 shows Ofgem's timetable for completing the gas distribution price control review.

Figure 9.1 - Timeline for GDPCR



Appendices

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Index - Supplementary Appendices

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8	Capex/opex rollers and information quality incentive mechanism preliminary impact assessment
9	Capacity booking preliminary impact assessment
10	Network extensions preliminary impact assessment
11	Xoserve preliminary impact assessment

The Supplementary Appendices can be found in a separate appendices document.

Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document. (In particular, we would like to hear from gas distribution licensees, gas transporters and any other interested parties.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 26 January 2006 and should be sent to:

- GDPCR Responses
- Ofgem
- 9 Millbank
- London SW1P 3GE
- Email: GDPCR@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, we will publish initial proposals for the GDPCR price control in May 2007 which will be followed by updated proposals in September 2007 and final proposals in December 2007. Any questions on this document should, in the first instance, be directed to:

- Ayesha Uvais
- Senior Manager, Incentives
- Ofgem, 9 Millbank, London, SW1P 3GE
- Tel: 020 7901 7307
- Email: ayesha.uvais@ofgem.gov.uk

CHAPTER: One

There are no questions specific to this chapter.

CHAPTER: Two

Question 1: Do you agree with our initial view on which services could be given excluded treatment? Are there any additional services that we have not considered?
Question 2: Should domestic one-off connections be treated as excluded services or ordinary price controlled services?
Question 3: Have we correctly identified the range of items that could be treated as pass through items? Should these items be treated as pass through items?
Question 4: Is there any reason why we should change our position on cost indices?
Question 5: Is there any reason why we should change our position on re-openers?
Question 6: Should we introduce a two-tier correction mechanism for over and under recovery of allowed revenue, consistent with the arrangements that apply in electricity distribution?
Question 7: Should we calculate the GDNs' allowed revenues in a way that creates a smooth revenue profile over the course of the price control period?

CHAPTER: Three

Question 1: Is our proposed approach to setting capital and replacement expenditure allowances for 2008-09 to 2012-13 appropriate?
Question 2: Is our proposed approach to setting opex allowances for 2008-09 to 2012-13 appropriate?
Question 3: Is our proposed approach to updating the GDNs' RAV to 1 April 2008 appropriate?

CHAPTER: FOUR

Question 1: Do you support the proposed changes to the quality of service outputs?
Question 2: Do you support the proposed changes to third party damage and water ingress proposals?
Question 3: Do you support our proposals for improving the accuracy of pipeline records?
Question 4: Is it appropriate to introduce network capacity output measures? If so what type of output measures are appropriate and what sort of rewards/ penalties should the GDNs be exposed to?

CHAPTER: FIVE

Question 1: Have we identified all the issues for each of the incentives?

Question 2: Is it appropriate to better align capex and opex incentives?
Question 3: Do you agree with our initial view that a capex rolling incentive and information quality incentive should be implemented?
Question 4: Given the issues raised is there a case for an opex rolling incentive?
Question 5: Do you agree with our proposals to retain the mains replacement incentive?
Question 6: Is flexibility capacity the key incentive to focus on for the capacity outputs? Should we assume that the use of existing NTS flex capacity is the most efficient flexibility capacity product?
Question 7: Is it appropriate to assume that NTS and LTS flat capacity are complementary products? Should we incentivise tradeoffs between flat capacity and interruptible capacity?
Question 8: Should we incentivise accuracy of pipeline records? If so how could accuracy be measured and audited?
Question 9: Is there a case for an innovation funding incentive?

CHAPTER: SIX

Question 1: Should we allow for an ex post adjustment for changes in tax treatment of certain kinds of expenditure, as outlined in paragraphs 6.3 and 6.4?
Question 2: Which key ratios should we use as financeability indicators?
Question 3: How should we finance replacement expenditure, having regard to its impact on the overall financeability of the price control?
Question 4: Should we change our depreciation rate for new assets in response to the changing mix of assets being capitalised?

CHAPTER: SEVEN

Question 1: Which of the two forms of the network extensions incentive scheme should we adopt going forward?
Question 2: Do you agree with our assessment of the risks, costs and benefits attributable to the options for facilitating network extensions (see Appendix 6)
Question 3: Is our proposed methodology for quantifying the costs and benefits associated with the various options appropriate (see Appendix 6)?
Question 4: Is it appropriate to set an incentive scheme which recognises the initiatives that some companies undertake with respect to their corporate social responsibilities?
Question 5: What other criteria should be included in a Corporate Social Responsibility incentive scheme for GDNs?

CHAPTER: EIGHT
Question 1: Do you agree with our assessment of the risks, costs and benefits attributable to the two options for the funding of xoserve?
Question 2: If we adopt a core services plus user pays approach (Option 2), how should we define core services and user pays services?
Question 3: What costs/benefits would your organisation incur in the event that we adopt Option 2?

Question 4: What questions do we need to ask GTs, xoserve and shippers in order to accurately quantify the costs associated with Option 2?
Question 5: In the event that the Secretary of State requires GDNs to put in place further alternative arrangements relating to independent systems, should the excess costs associated with independents systems be:

- ➔ spread across all GB consumers via transmission charges, or
- ➔ borne by customers located in gas distribution areas where independent systems are located (primarily Scotland)?

CHAPTER: NINE

There are no questions specific to this chapter.

Appendix 2 – The Authority's Powers and Duties

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

1.2. The Authority's powers and duties are largely provided for in statute, principally the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Act 2004, as well as arising from directly effective European Community legislation. References to the Gas Act and the Electricity Act in this Appendix are to Part 1 of each of those Acts.[45]

1.3. Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This Appendix must be read accordingly[46].

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

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

- The need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;
- The need to secure that all reasonable demands for electricity are met;
- The need to secure that licence holders are able to finance the activities which are the subject of obligations on them[47]; and,
- The interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[48]

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

[45] entitled "Gas Supply" and "Electricity Supply" respectively.
[46] However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.
[47] under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Act in the case of Electricity Act functions.
[48] The Authority may have regard to other descriptions of consumers.

- Promote efficiency and economy on the part of those licensed[49] under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;
- Protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity;
- Contribute to the achievement of sustainable development; and,
- Secure a diverse and viable long-term energy supply.

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

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

1.8. The Authority has powers under the Competition Act to investigate suspected anti-competitive activity and take action for breaches of the prohibitions in the legislation in respect of the gas and electricity sectors in Great Britain and is a designated National Competition Authority under the EC Modernisation Regulation[50] and therefore part of the European Competition Network. The Authority also has concurrent powers with the Office of Fair Trading in respect of market investigation references to the Competition Commission.

[49] or persons authorised by exemptions to carry on any activity.
[50] Council Regulation (EC) 1/2003

Appendix 3 - Glossary

A

Agency Services Agreement (ASA)

Agreement for the provision of information, data processing, invoicing and supply point administration services in relation to the transmission and distribution of gas in Great Britain.

Area Control Centres (ACC)

The Area Control Centres currently carry out system control activities on behalf of all the GDNs and are located at National Grid Gas' facilities in Hinckley. Activities carried out include monitoring system pressures, flows and alarm management at LTS (Local Transmission System) sites and other key sites on the distribution networks.

B

Business Plan Questionnaire (BPQ)

Expenditure information requested by Ofgem from the GDNs to inform decisions about setting the price control.

C

Capacity (Gas)

The amount of natural gas that can be produced, transported, stored, distributed or utilized in a given period of time under design conditions.

D

Direct activities (operating expenditure)

Direct activities are the main activities of the GDN e.g. LTS maintenance and repair.

Distribution Network Operator (DNO)

DNOs are holders of electricity distribution licences. Licences are granted for specified geographical areas. Currently in Great Britain there are seven companies who own the fourteen licensed distribution areas.

Distribution Price Control Review 4 (DPCR4)

The price control review for the electricity distribution network operators which covers the five years from 1 April 2005 to 31 March 2010.

F

Flat capacity

Flat capacity gives the holder the right to offtake a volume of gas during the day at a constant hourly rate

Flexibility (flex) capacity

Flex capacity gives the holder the right to offtake a volume of gas according to a profile that varies over the day.

G

Gas Distribution Network (GDN)

GDNs transport gas from the NTS to final consumers and to connected system exit points. There are currently eight GDNs in Great Britain which comprise twelve LDZs.

Gas Distribution Price Control Review (GDPCR)

The review of the price control applying to gas distribution networks. The review will extend the existing price control for the year 2007-8 and reset the control for the period commencing 1 April 2008.

Gas Transporter (GT)

The holder of a Gas Transporter's licence in accordance with the provisions the Gas Act 1986.

Gas Transportation Management System (GTMS)

GTMS is the interface between the GDN outstations and the control centre.

Gemini system

The Gemini information system replaced the AT Link (energy balancing) information system and the RGTA (entry capacity trading) information system.

Guaranteed Standards of Performance (GSOP)

Guaranteed standards of performance set service levels that must be met in each individual case. If a gas transporter fails to provide the level of service required, it must make a payment to the consumer affected, subject to certain exemptions.

H

Health and Safety Executive (HSE)

The Health and Safety Commission is responsible for health and safety regulation in Great Britain. The Health and Safety Executive and local government are the enforcing authorities who work in support of the Commission.

I

Independent Gas Transporter (IGT)

IGTs are GT licence holders that own and operate small local gas networks and levy distribution charges on shippers.

Indirect activities (operating expenditure)

Indirect activities are costs that do not relate directly to the main activities of a GDN but are incurred to support the GDN's activities e.g. HR costs.

L

Local Distribution Zones (LDZs)

LDZs are low pressure pipeline systems which deliver gas to final users and Independent Gas Transporters. There are twelve LDZs which take gas from the high pressure transmission system for onward distribution at lower pressures.

Local Transmission System (LTS)

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.

N

National Grid Gas (NGG)

The GT licence holder for the North West, West Midlands, East England and London GDNs. NGG also hold the GT licence for the gas national transmission system (NTS). Prior to 10 October 2005, NGG was known as Transco.

National Transmission System (NTS)

National Grid's high pressure gas transmission system. It consists of more than 6,400 km of pipe carrying gas at pressures of up to 85 bar (85 times normal atmospheric pressure).

Network sensitive load (NSL)

GDNs can designate an offtake point as an NSL if certain pressure levels would be triggered in the network if the offtake at the site was not interrupted.

NTS offtake capacity

Built to ensure sufficient pipeline capacity is available to convey gas from the NTS to the GDNs and NTS direct connects at the required rate and quantities

Northern Gas Networks (NGN)

The GT licence holder for North England GDN.

O

One in twenty planning standard (1 in 20)

A licence obligation imposed on GDNs under Standard Special Condition A9 (Pipe-Line System Security Standards). A GDN is required to plan and develop its pipe-line systems so as to enable it to meet peak aggregate daily demand for gas which is likely to exceeded (whether on one or more days) only in one year out of twenty years.

Overall Standard of Performance (OSOP)

Overall standards of performance set minimum average levels of performance in areas where it is not necessarily appropriate to put in place guarantees for individual consumers. These are determined separately for each gas transporter by the Authority.

P

Priority Services Register (PSR)

PSR includes domestic consumers who are of pensionable age, have a disability, have long term ill health, and/ or are blind or visually impaired. Individuals on this register qualify for a selection of free services by gas and electricity suppliers.

R

Regulatory Asset Value (RAV)

The value ascribed by Ofgem to the capital employed in the licensee's regulated distribution business (the 'regulated asset base'). The RAV is calculated by summing an estimate of the initial market value of each licensee's regulated asset base at privatisation and all subsequent allowed additions to it at historical cost, and deducting annual depreciation amounts calculated in accordance with established regulatory methods. These vary between classes of licensee. A deduction is also made in certain cases to reflect the value realised from the disposal of assets comprised in the regulatory asset base. The RAV is indexed to RPI in order to allow for the effects of inflation on the licensee's capital allowances for the regulatory depreciation and also for the return investors are estimated to require to provide the capital.

RPI-X

The form of price control currently applied to network monopolies. Each company is given a revenue allowance in the first year of each control period. The price control then specifies that in each subsequent year the allowance will move by 'X' per cent in real terms.

S

Scotia Gas Networks (SGN)

The GT licence holder for Southern GDN and Scotland GDN.

Shrinkage

Shrinkage gas is gas lost from the network through leakage, theft or own use gas.

System Operation Managed Service Agreements (SOMSAs)

SOMSAs are contracts between NGG and each GDN purchaser under which NGG carries out system operation on behalf of the new GDNs. They provide for the scheduling, monitoring and control (under the direction of the independent distribution network, i.e. IDN) of flows of has in the parts of the GDN system operable remotely from the control centre using the control system, in order to achieve a physical balance. Other services provided under the SOMSAs include:

- services for the notification of call-outs, alarms and faults;
- coordination services in the event of contingencies and emergencies;
- services to support the preparation of a plan covering scheduling of engineering; works and maintenance affecting the remotely operable parts of the GDN system; and,
- recording details of engineering works and maintenance carried out.

T

Therm

A unit of heating value equivalent to 100,000 British thermal units (Btu) (0.1 MMBtu).

Third party damage or water ingress (TPWI)

Third party damage occurs when a gas supply interruption is caused by a third party. Water ingress is an incident whereby water has escaped from pipes vested in water companies and entered pipes operated by public gas transporters. From there, water has then sometimes penetrated into domestic premises, causing damage to the customers' gas appliances[51].

Traffic Management Act (TMA)

[51] http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/rd032001

The Traffic Management Act is intended to provide better conditions for all road users through proactive management of the national and local road network[52].

Transco plc (see National Grid Gas)

Transco plc changes its name to National Grid Gas on 10 October 2005.

Transmission Price Control Review (TPCR)

The TPCR will establish the price controls for the transmission licensees which will take effect in April 2007 for a 5-year period. The review applies to the three electricity transmission licensees, National Grid Electricity Transmission, Scottish Power Transmission Limited, Scottish Hydro-Electric Transmission Limited and to the licensed gas transporter responsible for the gas transmission system, NGG.

Total factor productivity (TFP)

TFP addresses any effects in total output not caused by inputs or productivity[53]. It is also known as the Solow residual.

U

UK-Link

UK-Link is the central information system that shippers and suppliers use to interface with the GTs and each other.

Uniform Network Code (UNC)

As of 1 May 2005, the UNC replaced National Grid Gas' Network Code as the contractual framework for the NTS, GDNs and system users.

W

Wales & West Utilities (WWU)

The GT licence holder for Wales & West GDN.

Water ingress

An incident where water enters gas pipes resulting in a loss of gas supply.

Water Services Regulation Authority (Ofwat)

Ofwat is the economic regulator of the water and sewerage industry in England and Wales.

[52] Department for Transport: http://www.dft.gov.uk/stellent/groups/dft_roads/documents/divisionhomepage/032064.hcsp
[53] http://en.wikipedia.org/wiki/Total_factor_productivity

X

xoserve

A transporter agency which provides a single, uniform interface between the IT systems of relevant GTs and shippers.

Appendix 4 - Feedback Questionnaire

1.1. Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2. Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE
andrew.macfaul@ofgem.gov.uk