

Gas Distribution Price Control Review Third Consultation Document

A Response by National Grid Gas

January 2007

High level framework of the price controls

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?

1. We agree with the position outlined by Ofgem as to which services should be given excluded services treatment and therefore support the allocation as shown in table 2.1. However, we note that rechargeable diversions appear to have been omitted from those under consideration and would urge Ofgem to continue to treat such activities as an excluded service as they are both uncertain in volume and in cost and the customer can be readily identified. For discussion of the issues around connection charging, please see our response to question 2, chapter 2.
2. In our response to the GDPCR second consultation in August 2006, we highlighted the uncertainty looking forward in relation to income arising from the provision of metering services and the possibility of implementing a sharing mechanism in relation to any income which arises.
3. Our Business Plan Questionnaire (BPQ) is based on our predicted levels of meterwork over the duration of the price control period and the further development of metering competition. Our proposal for a sharing mechanism ensures protection for both us and our customers against the uncertainties in metering workload in the competitive metering market. Whilst we believe that the prediction in the BPQ is realistic, we recognise that there is considerable uncertainty. This could be managed via the following two options:
 - i. Identify the cost of providing the emergency service when no revenues are available from meterwork. Include allowance for this cost in the settlement, but with a new incentive mechanism that ensures:
 - The GDN has sufficient incentive to actively seek all opportunities for utilising the emergency workforce between emergency calls, and
 - The benefits of any meterwork that is performed are shared with customers so that the net cost of emergency work is reduced.

- ii. Conclude the assessment on the basis of the assumptions that underpin the BPQ. Include the facility to re-open the funding of the emergency service in circumstances that differ significantly from those predicted in the BPQ.
4. Although either approach raises definitional issues, we are confident that these can be addressed.

Question 2: Should domestic one-off connections be treated as excluded services or ordinary price controlled services?

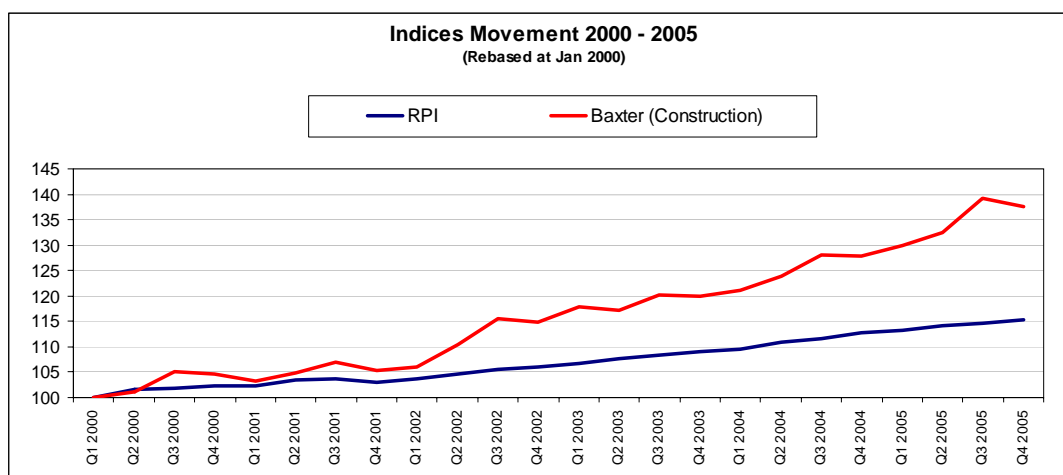
5. Domestic connections are customer driven and therefore variable in both the number of jobs required, and the cost of such jobs. Accordingly, we believe it is simpler and more robust to continue the excluded service treatment. The alternative of inclusion within the ordinary price controlled element would create risk of over/under recovery of connection charges. Even with a volume driver, the fact that the cost of individual jobs can vary significantly means that without a complicated matrix of prices, this risk would remain.
6. Many external factors can impact the volumes and associated costs of domestic connections which are, in their nature, difficult to predict. In order to mitigate any risk associated with this, we review our standard connections charges bi-annually to ensure the recovery of the appropriate level of income to cover costs, which going forward will be based on a prospective pricing approach. This approach ensures that we continue to operate in accordance with Condition 4B of our Gas Transporter Licence. Moving the cost of one off domestic connections into the main price control would increase our risks, as our total allowed revenue would not adjust for these variations.

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?

7. We support the rationale for identifying pass through items as those costs where the GDN cannot exert significant control. We agree with the range of items identified as pass through, i.e. Licence fees, network rates, NTS pension charges and payment claims associated with last resort supply. To ensure efficient costs do not go unfunded, where appeals of rating valuations for network rates are undertaken, any incremental appeals costs should also be treated as cost pass through, subject to an efficiency test.

Question 4: Is there any reason why we should change our position on cost indices?

8. We agree that RPI remains an appropriate basis upon which to index future revenues, given its general acceptance as a measure of price inflation. However, RPI is not a good index of our cost base. Ofgem must build in realistic real price effects when setting allowances, including real earnings, materials, insurance costs and, most significantly, construction contractor costs.
9. Over the period 2000-2005, RPI has captured less than half the total increase in construction contractor costs, as shown in the chart below. We estimate that this has added approximately £200m to our costs, over and above the real price effects included within the allowances for the current period.



10. Our BPQ submission has built in conservative real price effects for contractor costs. A 1% variation in this area impacts our investment costs by around £5m p.a. per network. Given the scale of possible future underfunding as a result of rising contractor costs, we believe it would be appropriate to include some protection against **extreme** movements in contractor prices. We propose that a mechanism be established which allows for adjustments if the cumulative differential between allowances and a pre-defined index, such as Baxter, becomes material across the period. This would ensure that GDNs are protected from any extreme movements in prices, whilst still maintaining appropriate exposure to price risk.
11. A symmetrical mechanism would protect customers from any overstatement of real price effects within the allowances. Any payment to or from the GDNs could then be agreed at the end of the price review as part of a logging up mechanism.

Question 5: Is there any reason why we should change our position on re-openers?

12. Investors regard the absence of correction mechanisms, such as the “Interim Determination of K” (IDOK) in water, as one reason why gas distribution is riskier than water distribution. We are pleased that Ofgem is proposing to include re-openers for the costs associated with the Traffic Management Act (TMA) and any changes arising from the implementation of International Financial Reporting Standards (IFRS), subject to appropriate safeguards. There are however a small number of other areas where significant changes to costs are expected but are as yet difficult to estimate, in either size and / or timing.

Environmental costs

13. Environmental concerns remain at the forefront of public concern, with legislation and regulatory practices liable to change at short notice. Ofgem should recognise that changes in legislation, or the way in which legislation is applied, may have a major impact on a GDN cost base within the price control period.

Changes to working practices associated with HSE requirements – Management of Gas Escapes

14. National Grid was served with an Improvement Notice by the Health and Safety Executive (HSE) in March 2006 in relation to an incident in Shilbottle, Northumberland, looking particularly at the attendance at gas escapes as soon as is reasonably practicable and the prevention of all gas escapes within 12 hours. We are uncertain about the outcome, and the HSE may require tighter standards of performance than that budgeted for in our BPQ submission.
15. We estimate that providing resources to prevent all escapes within 12 hours, or as soon as reasonably practicable thereafter, would add approximately £90million to our annual operating costs. If the HSE require significantly increased performance in this area, we would seek to approach Ofgem for funding to reflect the changed approach.

Carbon Monoxide Detection

16. GDNs currently respond to all public reports of gas escapes, including actual or suspected emissions of carbon monoxide (CO) from gas appliances. GDNs do not currently carry out work to pro-actively identify the presence of CO, as they believe such work is outside the scope of current obligations and not the best way to address the risk of CO poisoning. Were the HSE to identify or create an obligation to pro-actively identify or monitor for the presence of CO in properties, we would need to seek additional funding for the required activity.

How should a re-opener work in practice ?

17. We believe that the additional items identified above should be captured via a logging up process similar to that in TPCR, subject to an efficiency assessment at the end of the price control period. Depending on the materiality of costs incurred however, we may seek to discuss funding for these items sooner. The exception to this is TMA, where we expect to incur significant level of costs from 2007/8 onwards. It would not be appropriate to leave all of these costs to some form of post event correction, and therefore we believe a pragmatic approach would be to set a provisional ex ante allowance to cover set up and operating costs, with these being subject to a true up at a later date. In addition, provision within the proposals for the refund of efficient costs incurred in 2007/8 will be necessary.
18. We believe that any funding for TMA should be premised on an efficient level of delivery, including administration costs, permits and fines. We believe this reflects a realistic balance of appropriate performance versus cost. There is also the question of what level of efficient compliance to target. We advocate a 90% target as achieving full compliance would disproportionately increase costs that would ultimately be passed onto the consumer. This implies that Ofgem will need to fund an efficient level of non compliance.

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?

Charging instability

19. We welcome the moves that Ofgem have already made with respect to changing the structure of charges and hence reducing variability. The further smoothing of charges should be focused on reducing the volatility caused by the regulatory mechanism.
20. We believe there are two regulatory causes of instability that should be addressed. The first is to remove the disparity in the variability between allowed revenue and the collected income by aligning the commodity element of charges with that assumed under the revenue driver. This would minimise the current variability arising from weather effects, where the over or under recovery caused can be significant. For example, we are forecasting a brought forward K of around 6% of Maximum Allowed Revenue for 2006/7 because of this, which will have to be collected the following year.
21. The second factor is to align the date for changing transportation charges with the formula year. At present GDNs have a reasonable endeavours obligation to only change transportation charges once a year (in October), whereas the formula year runs from April to March. Charges

are set to recover the allowed revenue associated with the formula year but charging dates mean that the revenue is collected over a six month period. As a result, the price changes have to be up to 50% larger for the final six months of the formula year than the revenue change would have required.

22. We believe that the implementation of these two changes will reduce a significant element of revenue variability. However, over or under recovery against target revenue may still occur as a result of external factors such as demand forecast errors driven by weather variation or outturn performance against the mains replacement incentive scheme. We therefore welcome the proposals to introduce a more symmetrical, two tiered approach to over or under recovery.
23. Under the proposals outlined in the consultation document, the full recovery of income as warranted above would be subject to penalty interest rates at a level where the GDN would not be cost neutral relative to the cost of debt. If the modifications to the charging regime outlined above are taken forward, then we agree with the proposals as presented. If these modifications are not implemented, then we believe that the trigger at which punitive interest rates are incurred should be increased to take into account the likely impact of weather variation. We propose that this trigger should be around 6%, premised on the likely under recovery for 2006/7.

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?

24. We would support an approach that strikes a balance between ensuring that the profiling maintains credit ratios at the levels required for 'A range' ratings by the rating agencies and limits any sharp increases in prices for consumers. Consideration should also be given to minimising the impact of profiling in the last year of the formula period, to minimise any step change at the start of 2013-14 review.

3. Assessing costs

Question 1: Is our proposed approach to setting capital and replacement expenditure allowances for 2008-09 to 2012-13 appropriate?

25. We support the proposed approach for setting capital and replacement expenditure allowances by using a range of techniques to build upon the analysis completed for the extension year review including the assessment of policies, procedures and forecasting processes, reviewing forecast costs, bottom-up benchmarking and expert review of costs.

26. It has been Ofgem precedent to reward frontier companies. Although this was not the case for the one-year extension, where National Grid networks took 3 out of the top 4 efficiency positions on repex based on Ofgem's own benchmarking, we expect this to be recognised during the main review.
27. It is important that the final allowances build in real price effects as we anticipate a continuation of demand-driven price inflation well in excess of RPI for construction contractor charges and materials costs throughout the period. Further detail has been provided in our answer to question 4, chapter 2.
28. We believe that the funding of non-operational capex, such as IS and vehicles, should remain via its inclusion in the RAV. The reasons for this are:
- *True-up difficulties:* many of the items under the non-operational heading have a greater element of discretion and substitutability than operational areas and, as such, we foresee potential complications at subsequent price control reviews regarding whether funding for a particular output has or has not already been provided in a previous opex allowance. This potential is exacerbated where the detailed make-up of the opex allowance is opaque. Maintaining funding via the RAV reduces this potential future complication;
 - *Price stability:* non-operational capex represents a material proportion of the total investment in a GDN, and so funding via an opex allowance will drive a significant increase in prices for customers;
 - *Coding differences:* while not a definitive blocker, in general we believe it is good practice to minimise differences between accounting and regulatory treatment, for incentive and administrative reasons.
29. xoserve IS should be included within the scope of non-operational capex, although it can be argued that the UKLink system is actually operational in character and so should be funded via inclusion in GDNs' RAVs regardless of the outcome for other IS.
30. Our views on the issue of the correct composite asset life are given question 4, chapter 6.

Question 2: Is our proposed approach to setting opex allowances for 2008-09 to 2012-13 appropriate?

31. We support the overall approach outlined in the document to use a variety of methods and agree with Ofgem on the limitations concerning the number of comparators and the length of time GDNs have been under separate ownership.
32. Substantive volumes of information and evidence in this area have already been provided to Ofgem as part of the BPQ process and will need to be reflected in any analysis. In carrying out comparative assessments of operating cost allowances for 2008-2013, a difficult, but key activity will be normalisation of costs between GDNs. Normalisation issues include:
 - The unique circumstances and higher costs posed by operating in London;
 - Differences in age, type and concentration of asset types across GDNs that drive cost differences in maintenance and other operational activities;
 - The requirement to fund the emergency service against differing levels of metering work that might be available;
 - A consistent approach to the identification of atypical cost/benefits, and
 - Different organisation structures and capitalisation policies since sale.
33. In conducting bottom up comparisons, differences in processes and organisational structures do lead to varying individual activity performance. Ofgem must guard against adopting an “eclectic mix” of activity benchmarks from different companies that together form an unachievable target in reality.
34. A further consideration for Ofgem when carrying out comparisons is that of driving industry policy. There is unarguable evidence that NGGD continues to play a disproportionately large role in these areas, not least in terms of engagement with, and response to, regulatory and commercial consultations and engineering issues. This is not surprising, given 2005/06 was the first year of existence, as standalone businesses, for the sold networks and they will have been gauging the appropriate levels at which to man-up to ensure proper, proportionate engagement in longer term industry matters.
35. With respect to the review of forecast costs for all networks, Ofgem will need to have particular consideration of the continuing and new pressures in a GDN’s cost base, including training, an increasing aged industrial workforce, cyclical maintenance requirements and impacts of new legislation such as waste management.
36. In considering the scope for frontier shift, after 18 years of RPI-X regulation, the ability of GDNs to outperform economy wide productivity improvements that are already reflected in RPI must

be limited. A GDN's cost base has a very significant proportion of wage / contractor costs and managing real growth will present GDNs with a greater challenge than that presented to UK firms in general. The CAA recognised this effect in their December 2006 initial proposals in respect of BAA.

Question 3: Is our proposed approach to updating the GDNs' RAV to 1 April 2008 appropriate?

37. We support the approach taken to updating the GDNs RAV to 1 April 2008 and agree that the RAVs published in the one year control final proposals should be updated to reflect 2005-06 and 2006-07 actual expenditure. In addition, we believe that the 1 April 2008 RAV should be updated to reflect the updated capex and repex forecasts for 2007-08 that will be submitted this year.

4. Outputs

Question 1: Do you support the proposed changes to the quality of service outputs?

38. We agree with Ofgem that the time is right to review and simplify the existing quality of service outputs regime. However, whilst we support some of the changes proposed, we do have concerns with the proposed approach to re-classify some of the current Standards of Service as Licence conditions.
39. We constantly aim to achieve the performance levels required by all of the Standards of Service and operate business processes to do so. The proposal to convert some Overall Standards into Licence conditions however could expose GDNs to an immediate Licence breach in the event that the required performance level is missed, whatever the cause. We assume that any mitigating circumstances, particularly external factors such as extreme weather, would be taken into account by Ofgem when deciding on the appropriate course of action following any breach.
40. Therefore, if this proposal is to be adopted, the process to transfer standards into the Licence must ensure that adequate protection against this enhanced exposure is afforded, with drafting recognising that failure to meet a performance level may be subject to mitigating factors.
41. In relation to the transfer of some Overall Standards to Guaranteed Standards, we recognise and support the benefit to individual customers should a failure against the service level occur. As this change would in effect place an obligation on GDNs to provide a 100% level of service, additional funding over and above that assumed to meet our current targets would be required. Our BPQ submission is based on the current regime and the proposed change to Guaranteed

Standards will incur on-going incremental costs in the region of £350k per annum for all four of our networks for OS2 and OS4, primarily for additional resourcing to deliver this level of service. Comments on specific Standards of Service proposals covered in Chapter 4 are provided below

Notification of Restoration following an Unplanned Interruption (OS3)

42. We acknowledge that proactively recording and reporting on performance for OS3 has proved difficult. This is an area where we believe we provide a good level of service to customers through face to face communications and the media. However, this is difficult to proactively capture for reporting purposes when the focus in the field is primarily to make the situation safe and restore interrupted supplies as quickly as possible.
43. We support Ofgem's suggestion to measure performance in this area through a customer satisfaction survey. Limitations of the use of surveys must be recognised however. We estimate the on-going incremental cost to deliver this new requirement will be in the region of £100k per annum for all four of our networks for sourcing the services of a market research agency and for administration.

Complaints (OS4)

44. We believe the consultation represents an ideal opportunity to simplify the current service level for responding to complaints. We suggest that a similar standard of service to that operating within the water industry would be more appropriate, with written complaints being responded to within ten working days from the date of receipt of the letter. This would make the standard clear and consistent for customers and simplify administration and reporting for the GDN and Ofgem.

Reinstatement of Customer Premises (GS2)

45. We believe that the payment levels for failing to reinstate customer premises within 10 working days (GS2) should be capped in order to make it consistent with other Guaranteed Standard payments. A cap of £250 per domestic customer and £500 per non-domestic customer would provide an appropriate incentive to ensure GDNs maintain focus on providing the required level of service to the customer.

Alternative Heating and Cooking (GS3)

46. Whilst Guaranteed Standards require us to provide alternative heating and cooking to customers on the Priority Services Register (PSR), our existing processes go beyond this on a voluntary basis. In the event of an incident, our Operations team work closely with local

authorities and the affected communities to identify vulnerable customers not on the Register to ensure that needs are met on a case by case basis.

47. We would not support extending the obligation to all customers as the requirement to source and maintain sufficient levels of stock, and the necessary logistical capability will generate significant extra costs that would ultimately have to be borne by end consumers.
48. Furthermore, the knock-on impact onto the electricity distribution system also warrants consideration. Where large numbers of electrical appliances are provided in an area following an interruption to gas supplies, there have been instances of tripping of local electricity substations due to the increased electrical load. An extension of the current arrangements would only increase the likelihood of such a situation occurring.
49. Maintaining the link to the PSR will drive improvements in the industry to ensure that PSR data is kept updated, which in turn ensures vulnerable customers benefit as a priority from this (and other) important service.

Rationalising and Simplifying the Connections Guaranteed Standards of Performance (GS4-GS11)

50. It is unclear in the consultation document what changes are being proposed for the existing connections Guaranteed Standards. However, we support Ofgem's view that processes and systems have been developed to deliver required service levels and reporting requirements under the current regime.
51. We do not believe there is any reason to change the existing connections Guaranteed Standards of Service that provide individual customers with recompense if there is a failure in the required service level. There is however currently duplication of these standards with the requirements of Licence Condition D10.
52. If all GDNs are willing to continue to pay compensation to Utility Infrastructure Providers (UIPs) and Independent Gas Transporters (IGTs) on the same basis under a voluntary scheme as that required under the Statutory Instrument, we do not believe that there is a requirement for the D10 standards as the payment of compensation and reporting of such payments provides sufficient protection to customers.

Amending the Scope of the Customer Satisfaction Survey

53. We support in principle Ofgem's suggestion that the customer satisfaction surveys be extended to include connections and emergency work. Indeed, we are currently trialling post-event surveying of customers in relation to interruption, replacement and connections work. It should

be recognised however that the surveys will not provide an absolute measurement of performance.

54. We estimate the on-going incremental cost to deliver both new surveys to be in the region of £200k per annum for all four of our networks, for sourcing the services of a market research agency and administration. We welcome Ofgem's comments that the additional costs should be considered as part of the GDPCR.
55. We would like to better understand the proposal for collecting robust data to provide more meaningful comparisons between GDNs before commenting further. Key objectives would be to ensure any requirements are simple and achievable, balancing the value of the data and the cost to collect it.

Balanced scorecard approach

56. We support the view that a quality of service balanced scorecard approach could provide customers, Ofgem, GDNs and other parties with a better view of performance. Ascertaining the best measures to use will be the key to success, and we suggest that these measures should reflect levels of service to **all** customer groups and could include results from the following;
 - Satisfaction surveys from shippers, UIPs and IGTs;
 - Consumer satisfaction surveys;
 - Performance against the emergency standards, and
 - The number of customer complaints received relating to each GDN by energywatch or its successor.

Question 2: Do you support the proposed changes to third party damage and water ingress proposals?

57. We believe the current third party damage and water ingress arrangements should be reviewed and therefore support an examination of alternative options. We agree with Ofgem that incorporating the arrangements within Guaranteed Standards of Service for both domestic and non domestic customers under a statutory instrument would be a pragmatic approach. Whilst this would have little impact on the customers of GDNs, it should improve levels of protection afforded to customers of IGTs.
58. To ensure that the frequency and magnitude of such third party incidents are monitored accurately, the relevant standard should be measured separately from the existing Guaranteed Standard (GS1) applying to interruptions to supply as a consequence of GDN activity.

Revenue exposure

59. We support Ofgem's proposal to replace the existing incident and aggregate caps with an annual cap based on 1.5% of GDN annual revenue. This should provide more clarity in specifying insurance requirements for GDNs. As Ofgem note, there have not been any incidents in the past fifteen years affecting more than 30,000 customers and this might provide an indication that the risk of similar large incidents in the future may be small although not absent.
60. We agree that, all other things being equal, this will reduce opex costs, though in a world of generally rising insurance costs, the reduction is more likely to be a mitigating cost item.
61. The reasons for the storm compensation arrangements being applied in DPCR4 to DNOs were largely driven by performance concerns in relation to supply interruption at the time. We do not believe such concerns arise in relation to gas. We therefore do not support the idea of retaining a 5% exposure when the threshold of 1.5% of turnover is exceeded. Under such circumstances, GDNs would already be incurring significant costs to restore customers quickly, including compensation costs.
62. Such a payment is unlikely to make any difference to events on the ground. The additional exposure will however be reflected in higher premiums from insurers. Given the historic level of incidents and the record of GDNs in dealing with these events, we believe there is no objective basis for such an incentive on either an efficiency, or a past performance basis.

Question 3: Do you support our proposals for improving the accuracy of pipeline records?

63. We do not believe networks require additional incentives for improving the accuracy of pipeline records. Pipeline record accuracy is affected by a number of factors including the historic source data, the geographical background of digital mapping, boundary building line and ground level changes since construction, age of data, hand offs between parties laying and recording mains and transposition errors.
64. We recognise that our records are not 100% correct and we pursue every economic opportunity to improve their accuracy. Developments in this area include:
 - Section 79 of the New Roads and Street Works Act requires that, "In preparing the record, the location and route of the apparatus shall be recorded so that the measured position shall be within 300mm of the actual position and the recorded position shall be within 500mm of the actual position";

- We have developed arrangements to pay UIPs and IGTs for the additional cost of mains extensions where a main has been inaccurately recorded. These arrangements were enhanced in September 2005 to include a payment where a main was found to be a different material/size from that recorded.
65. Processes are in place to ensure that corrections to existing asset records are made as soon as all of our operators identify them in the field. We believe that the existing combination of statutory requirement, financial compensation and internal controls represents a comprehensive and efficient approach. Whilst we are willing to consider proposals for improving mains records, we do not believe that it is feasible to reach a point where 100% accuracy can be guaranteed and hence safety will **always** depend upon the records being treated as indicative. Given our commitment, underpinned by our legal obligations, we are unsure what an additional incentive scheme on accuracy of pipeline records would actually deliver in terms of efficient behaviours, over and above the actions already taken and the incentives placed upon us by the compensation paid.

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?

66. We agree that it is important to demonstrate consumer benefit from network investments and that output measures that increase visibility of system improvements would assist Ofgem in assuring appropriate and efficient investment. A GDN's capital programme however is aimed at delivering several business objectives, one of which is providing sufficient network capacity. The proportion of our capital programme (including mains renewal) that is directly related to capacity enhancement will vary year on year, and across price control periods, particularly influenced by large LTS projects which provide step changes in capacity, but is typically only around 15% at most. However, the majority of the programme for the next 5 years relates to asset renewal.
67. Any output measure should reflect the GDN's Licence condition to provide network capacity to meet a 1 in 20 peak demand, which is aimed at delivering the key consumer requirement of supply security in all but the most extreme weather conditions. At present, the risk associated with forecasting, planning and delivering this capacity rests with GDNs, who are clearly best placed to manage this.
68. The two other options identified in the consultation document leave questions as to how to manage the risk, should actual 1 in 20 capacity required be different to the target identified.

This may result in GDNs making decisions to deliver the targets, rather than the capacity required to meet the fundamental obligations.

69. It would be premature to comment on reward/penalties until the regulatory objective is clearer. However, GDNs should be fully funded for providing sufficient capacity to meet their regulatory requirements. Provisions for serious sanctions already exist, including compensation payments, to deal with a capacity shortfall where this appears to be from sustained and deliberate under-provision.

Longer term performance measures

70. We confirm that we are adopting the principles of PAS 55, which provides a good basis for long term asset management and ensures that investments are optimised to achieve organisational objectives (e.g. safety and security of supply). The forecasting of future asset performance is generally complex and requires detailed understanding. The 5-yearly price control review (including specialist consultants reviews) already provides a very good opportunity for Ofgem to assure itself that each GDN has been effectively managed to ensure long term sustainability. It is not clear at this stage what additional information would be useful.

Scope of networks

71. We note the discussion in the consultation document as to the possibility of GDNs adopting private network assets going forward. Whilst in principle this is possible, many of the networks in question were built in the 1950's and are now due for replacement. As Ofgem recognise, significant issues would need to be resolved ahead of any transfer, including accurate and wholesale surveying to ensure the quality and location of the pipes is validated, and agreeing how and to what timescale such networks should be brought up to National Grid standards.
72. Such adoption of private networks would require a suitable level of additional funding to cover replacement costs and opex associated with the necessary surveys and validation. Agreement from the HSE will also be required to allow sensibly programmed remediation that recognises resource constraints. A requirement to replace these networks on an immediate basis would be costly.
73. Our views on the proposal to introduce an economic test for the replacement of risers are included in our response to question 5, chapter 5.

5. Incentives

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

74. We do not believe that all of the issues have been identified in relation to the incentives covered. Any comments with respect to the incentives outlined within the consultation have been covered as part of the individual question response.

Question 2: Is it appropriate to better align capex and opex incentives?

75. In theory, the incentives for capex and opex should be aligned so as to remove the incentive to over capitalise or make inefficient investments. However, altering the relative incentives around the margins, such as is proposed with the capex incentive, is unlikely to achieve the desired outcome. Two other options remain available to Ofgem therefore: reducing the power of the opex incentive or setting a clear specification of regulatory capitalisation rules. Presumably such a specification will be determined as part of the cost reporting work later in the review. Accordingly we believe there is no need for Ofgem to drive for further alignment.

Question 3: Do you agree with our initial view that a capex rolling incentive and information quality incentive should be implemented?

76. The overlaying of the capex rolling incentive with the Information Quality Incentive ultimately provides GDNs with improved incentives to submit realistic capex allowances and manage their overall risk and reward profile. This should, in the longer term, lead to a greater likelihood of a stable outcome, as the need to reach an all or nothing agreement is reduced. It is however crucial that proposals underpinning the allowance and incentive options are balanced and consistent.

77. In responding to the 2nd consultation document we stated serious concerns regarding the implementation of rolling capex incentives. We acknowledged in principle that periodicity should not be a feature of incentives but stated that, to ensure successful implementation, the following features should exist:

- A stable and known requirement of spend, and / or
- Accurate and reflective revenue drivers, and
- A relatively small potential for interaction between opex and capex, or similar incentive regimes for each.

78. We continue to have significant concerns over the ability to set a *balanced* capex rolling incentive that meets the above requirements. In implementing any incentive, it is critical that the incentive creates suitable motivation for the GDNs to initially forecast accurately and subsequently deliver their plans, whilst balancing the risk for consumers. The design of such an incentive, we believe, must balance three connected components, symmetry, the impact of exogenous factors and the strength of the incentive.

Symmetry

79. In order to encourage the accurate forecasting of investment plans (i.e. P50), we consider that any incentive on capex should be symmetrical. To do otherwise introduces undue risk for either the customer or the GDN.

Exogenous Factors

80. Whilst we would agree that GDNs should face a *reasonable* level of risk, we firmly believe that protection should be in place for significant external factors that cannot be predicted at the time of plan formulation, particularly as the vast majority of our investment spend is non discretionary. GDNs are particularly exposed in the latter years of the period due to the unpredictable nature of demand driven volume and the consequential impact upon LTS capex. We do not believe it is possible to clearly identify a robust relationship and hence revenue driver, which will provide appropriate protection. Given this, and a symmetric incentive, the remaining option available to balance risk is to set the power of the incentive.

Strength

81. Under a pure five-year rolling incentive GDNs would be exposed to approximately one third of any overspend, a significantly higher proportion than that arising in a conventional price control. Traditionally, equal levels of over or under spend in all years would generate an incentive equivalent to around 20%, whilst a spend profile reflective of historic performance (overspending primarily in the last two years on any control) reduces this to only 10%.
82. In view of the unpredictability of GDN capex, in most cases driven by forecast errors from external factors, the fact that the vast majority is non-discretionary and customer driven, we believe that the strength of the incentive should be relatively **low-powered** and more reflective of historical expenditure patterns. This would provide protection for consumers and GDNs by reducing any potential pressure to defer necessary expenditure and / or overload initial forecasts, which would exist under a high-powered incentive.

Information Quality Incentive

83. We maintain our support for the Information Quality Incentive. With reference to the 'sliding scale' mechanism introduced in DPCR4, should the approach at GDPCR be similar, it is imperative the incentive drives the correct behaviour by rewarding GDNs who submit credible, stretching and well evidenced plans (as confirmed by Ofgem's consultants) and symmetrically does not reward inflated bids.
84. Capex relating to exit, network extensions and adoption of private networks should remain outside of the Information Quality Incentive, given their uncertain nature and dependency on policy positions that are as yet undetermined. These areas should also be excluded from any capex rolling incentive for the same reason.

Question 4: Given the issues raised is there a case for an opex rolling incentive?

85. Again, looking at the key aspects separately, on periodicity there appears to us to be a stronger case for rollers on opex than there is on capex. Further operating cost savings within GDNs are becoming more difficult to achieve and paybacks on initiatives are becoming longer. A rolling incentive would enable management to pursue a greater number of these initiatives across the formula period, rather than being limited to those with paybacks of only two or three years. In capex, for reasons covered above, an incentive that declines in strength as time progresses - and as unavoidable volumes and prices become more difficult to predict - can be argued is an appropriate apportionment of risk across the five years.
86. We acknowledge the very real difficulties in implementing a practical opex roller, and also the reasons given by Ofgem, particularly the problems associated with increasing the power of the incentive. In the absence of a roller, given the importance of not deterring GDNs to pursue cost savings initiatives with medium term paybacks, we believe it is necessary for Ofgem to instead allow customers to contribute towards the up-front costs of unlocking future savings. This should be achieved by including within opex allowances the reasonable costs-to-achieve that companies can evidence as being in long term customer interests and NPV positive. In particular, this should include pension strain costs associated with reducing manpower levels through voluntary methods.

Question 5: Do you agree with our proposals to retain the mains replacement incentive?

87. As recognised at the time of the last review, accurate forecasting of replacement workload over a five-year control period is difficult, with particular uncertainty around the mains diameter mix.

Going forward, volumes should be more predictable but may still be subject to new requirements from the HSE. The mains replacement incentive provides flexibility for changes in workload volume and diameter mix and minimises the risk of windfall gains or losses that might otherwise occur if a fixed allowance were set.

88. On balance, we therefore support the proposal to retain the mains replacement incentive, but suitably amended to include services costs and additional diameter bands to cover larger diameter mains.
89. The potential for variation in mains replacement activity flows through to the volume of service replacement, as around 85% of service replacement workload is now as a direct consequence of the iron mains replacement programme. Continuation of a fixed allowance for services exposes GDNs and customers to potential windfall gains or losses.
90. The decommissioning of larger diameter mains (i.e. >12") is planned to increase significantly from the relatively low level required during the current price control period. It is important that the matrix values accurately reflect the increased complexity (and hence cost) of this work.
91. Inclusion of services costs would remove any concerns there may be over the allocation of costs between mains and services. We presume that services will be included by setting matrix values for an appropriate range of service replacement activities. To attempt to include an element of service costs within the mains matrix values would be unnecessarily complex. We believe an appropriate level of granularity would be *domestic service renewal associated with mains replacement, service transfers, other domestic services (including after escapes) and non domestic services*. Purge and relight costs should be incorporated into each rate.
92. In terms of additional diameter bands for larger diameter mains, we support, as a minimum, the three additional bands (12-18", 18-24" and >24") for which information was requested via the BPQ.
93. Setting the correct matrix values for both mains and services is of fundamental importance and should reflect the outcome of the detailed review of company submissions for the main review, and not simply roll forward the 2007/8 allowances. It is also important that rates for adjoining networks do not distort market forces, making the retention of resources difficult and thereby putting at risk the delivery of the mains replacement programme.
94. We believe the sharing factors should be amended to remove the current asymmetry, whereby a GDN retains 33% of any efficiency savings if costs are lower than projected but bears 50% of any overspend if unit costs are higher. We support 50:50 sharing of both efficiency savings and overspend to ensure symmetrical incentives going forward.

95. We do not believe it is necessary to align repex incentives with any placed on capex, given the limited scope in practice for overlap between the two areas, and the clear rules set down in accounting policies. Any areas of inconsistency which may have existed in the past in relation to the allocation of service costs would disappear under the proposals to fund services within the matrix. With greater certainty surrounding repex workloads going forward, as opposed to the volume variability inherent within GDN capex, it is entirely appropriate that the two schemes are subject to different incentives, reflecting the different workload risks.
96. The final proposals for the one-year extension included a cap on mains replacement expenditure of 115% of the mains allowance. An aggregate company wide cap at 115% should continue to be applied as part of the main review, reflecting the way the HSE view risk reduction on a company wide basis and that resources should move between networks according to annual risk calculations and / or changes in policy.

Economic replacement of risers

97. We agree with Ofgem that not all riser replacements are economic and hence it is right to look at alternatives in exceptional circumstances. Whilst the proposal outlined in the consultation would ensure that riser replacement remains economic, further consideration has highlighted concerns with respect to the ability to grant exemptions to the Gas Act or the Pipeline Safety Regulations, in particular the ability to cease supplies to existing properties without agreement.
98. The use of the economic test is an accepted vehicle for new connections, but is not currently used in relation to replacement activities. Indeed existing consumers can only have a supply withdrawn voluntarily, with actions to withdraw supplies against consumers' wishes possibly subject to legal appeal. Fuel poverty issues (identified elsewhere in the consultation document) are likely to be used to support such an appeal. The consultation document does not comment on whether Ofgem believes the existing Gas Act obligations might be amended.
99. Whilst such difficulties are being resolved, we believe that a proactive approach to the maintenance of risers offers the least-cost solution. Our proposed approach is to acquire information from surveys to identify those properties where there is a higher likelihood of an unplanned interruption of supplies, due to the age, condition and location of existing risers, and where the consequence of an unplanned interruption would be particularly severe due to the nature of gas usage within the property. Where these factors combine to create a particularly high risk of severe consequence, we propose to carry out proactive measures (including riser replacement) to reduce this risk. We have proposed funding for these measures in our BPQ submission.

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?

100. Please see below for our response.

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?

101. Many possible trade offs exist in the area of exit capacity and interruption, including:

- Re-configuring the distribution network to take more flat capacity from offtakes where flat capacity is cheaper;
- Building new distribution assets to take more flat capacity from offtakes where flat capacity is cheaper;
- Purchasing interruption capacity to reduce the need for flat exit capacity and/or investment in distribution network capacity;
- Investment in distribution network storage to reduce usage of NTS flow-flex;
- Purchase of interruption to increase the line pack available within the distribution network and hence reduce usage of NTS flow-flex.

102. Given this complexity, we support the introduction of a single incentive scheme which covers interruption, flat capacity and flow-flex. This will minimise the risk of perverse incentives being created by multiple incentive schemes, for example, where one scheme is on the cap or collar but there is still headroom on the other. Even under a single incentive scheme there remains the issue of how to incentivise trade-offs between short term purchase of exit/interruption products and longer term investment in the network. Attached in Appendix One to this consultation response is a high level paper discussing how such an incentive scheme might work.

103. Regarding flow-flex, we have the following comments:

- We do not see flexibility as the key incentive to focus on because, as demonstrated above, it is not possible to isolate actions taken in respect of flexibility from those relating to flat capacity/interruption;
- We have recently raised a UNC modification proposal regarding the definition of flow-flex. We need to achieve a robust definition of flow-flex before incentives can be agreed;
- The most efficient flexibility to use is linepack in either the upper tiers of the DN or the NTS (as accessed via flow-flex). However, as flow-flex is a by product of the NTS providing Flat Capacity, GDNs can have no certainty that it will be available beyond the time period

covered by the auctions. This is particularly problematic when considering irrevocable decisions such as the demolition of a gas holder. On the other hand, additional linepack within the DN is usually provided as part of a wider investment project to increase DN capacity. This combination of uncertainty over future availability of flow-flex and limited windows of opportunity for increasing DN storage via line pack means that GDNs will not always have the information required to achieve a trade off between flow-flex and investment;

- The use of existing NTS flexibility should generally be an efficient flexibility product as the marginal cost of releasing existing flexibility should be low. It is probable that release of existing NTS linepack and LTS linepack are equally efficient. However, when considering new build pipelines we would expect new build LTS linepack to be more efficient than new build NTS linepack. GDNs typically are able to cycle the LTS pressures more deeply than the NTS, which is primarily concerned with bulk transport. Assuming that the costs of constructing pipelines are equivalent, then the LTS pipeline project would generate more storage and be more efficient. Therefore, under an efficient exit reform regime we would not envisage NTS constructing new pipelines primarily in response to flexibility signals.

Question 8: Should we incentivise accuracy of pipeline records? If so how could accuracy be measured and audited?

104. Please see our answer to question 3, chapter 4.

Question 9: Is there a case for an innovation funding incentive?

105. We continue to innovate through the traditional price control revenue allowance. However, focus is on short term asset management decision making techniques and improving existing methods and materials rather than long term innovation and development of new technologies looking 5-10 years ahead.

106. Joint industry projects can be developed via the Gas Distribution Collaboration Forum but other priorities, such as safety, policy development, emergency and incident investigation, have meant that R&D projects have not been forthcoming. We believe this is due primarily to lack of funding and resource.

107. An innovation funding incentive (IFI) scheme could provide opportunities to collaborate with other research organisations by allowing proper engagement and financing, or enhance our collaborations with existing partners. The DTi also provide opportunities for innovation in energy

R&D. However, the present approach does not allow the commitment of internal resource to related projects.

108. The World Gas Conference held in Amsterdam in June 2006 reported the outcome of a study regarding the role of R&D and technology in Gas Distribution and highlighted the following key findings:

- The gas industry worldwide has seen a downward trend in R&D investment;
- Deregulation and liberalisation has meant focus has been on short term financial results and cost savings, not long term issues;
- The economic and technical views differed. Financially, R&D was not deemed as a priority, technology was considered mature and it was viewed that there was a limited need to continue development. Technically, however, operators felt R&D was necessary to address longer-term issues and realise benefits to increase competitive advantage;
- Collaborative research was the preferred future approach in areas of mutual benefit e.g. safety and environmental areas.

109. National Grid's response to the 'Consultation on the Innovation Funding Incentive and Registered Power Zone Schemes for Distribution Network Operators' dated 29 November 2006, provides evidence that the gas industry would benefit from an IFI scheme as DNOs face similar pressures tackling longer term business issues. Therefore, there is a need to introduce an IFI scheme to encourage R&D investment within gas distribution to stimulate wider innovation.

110. Examples that we believe would benefit in the long term from investment in R&D include:

- Technology development - understanding risks associated with new technology - pipe location, improved replacement techniques, safe barriers and excavation protection systems;
- Environmental development – understanding the impact on gas quality of changing gas sources, recycling technologies, hazardous waste reduction and vibration noise reduction;
- Asset management – optimising asset life, establishing the condition of assets to support capital and revenue plans; asset data capture and quality.

6. Financial issues

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?

111. Any accounting changes, which occur after the final proposals have been published, should be captured by a specific re-opener to allow NGG to recover different tax allowances to those assumed in the proposals. As any such changes could impact each and every year significantly and so we consider that smoothing of the recovery would not be appropriate.

Question 2: Which key ratios should we use as financeability indicators?

112. The most appropriate indicators to assess financeability in relation to debt finance remain those used by the credit rating agencies. Thought must also be given to those indicators used to assess equity.

Debt financing

113. The conditions of the GDN Licence specify Moody's, Standard & Poors and Fitch as appropriate agencies for assessing the credit quality of the regulated businesses. Furthermore, the Licence specifies a cash lock up if any of these ratings drop below 'BBB- stable'.

114. The key indicators used to assess the creditworthiness of the GDNs by the three agencies are;

	Moody's Investor Service	Standard & Poors	Fitch Ratings
Funds from operations interest cover	✓	✓	
Funds from operations to debt	✓	✓	
Retained cash flow to debt	✓	✓	
Gearing (net debt to RAV)	✓	✓	✓
PMICR	✓		✓
EBITDA / Interest cover			✓
Net debt / EBITDA			✓

The detailed calculation of these ratios may differ between agencies, with various adjustments made for pensions deficits, leases etc.

115. We believe that it would be appropriate to look at the key indicators used by all of these agencies and ensure that the combination of limits set by each agency are achievable at an "A" grade credit rating to allow room to avoid an automatic Licence breach should circumstances change.

Equity Financing

116. Since the GDNs are, or are likely to be assumed by the regulator to be, funded by a mixture of equity and debt, it is also appropriate to consider indicators that will be used by providers of equity finance to determine financeability. The most commonly used indicators in the utility industry to assess financeability from an equity perspective are dividend yield, EBITDA and Price/Earnings (P/E).

Question 3: How should we finance replacement expenditure, having regard to its impact on the overall financeability of the price control?

117. We continue to believe that the current 50-50 financing of repex remains appropriate, when considering the cash flows of the businesses over the price control period, the option of altering asset lives should also be considered.

118. It is our understanding that, in calculating a number of the ratios used to assess the financeability of the business, the agencies deduct the amount of repex that is treated as opex in the regulatory calculations. Therefore varying the accounting treatment of repex will not, on its own, vary the view of the credit rating agencies of the financeability of the business.

Question 4: Should we change our depreciation rate for new assets in response to the changing mix of assets being capitalised?

119. We support a review of depreciation lives to reflect the increased weighting of short-life assets. We also believe that the terminal value risk arising from a 45 year asset life in gas distribution is a factor of at least equal magnitude, and warrants serious consideration during GDPCR. Current depreciation rates when set were informed by views on remaining gas supplies. Going forward, there is a risk of substantial asset stranding as accessing the remaining gas supplies starts to become uneconomic.

120. There are two obvious avenues of mitigation in respect of this stranding risk. The first would be to alter existing asset lives and accelerate the depreciation of the regulatory asset value. The second is to factor such risks into the allowed cost of capital. Given the finite nature of gas supplies, it is arguable that such risks are unique to the gas industry. Our thinking is not fully formed on this aspect but our preference at this stage would be to accelerate the depreciation of the regulatory asset base. We believe that it would be timely as part of this review to instigate new research into the remaining life of gas supplies and the potential impact on the gas distribution business.

7. Sustainable development

Question 1: Which of the two forms of the network extensions incentive scheme should we adopt going forward?

121. We do not support the option of including network extensions in any discretionary reward scheme established to promote Corporate Social Responsibility. If network extensions are to make a difference to fuel poverty, it is imperative that funding is made available to co-ordinate access to other Government funding, ensuring maximum uptake in connecting to the mains. To include this within a wider discretionary scheme may result in a dilution effect. We therefore support the introduction of option 3b whereby funding is specifically linked to outputs.

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)

122. We broadly agree with Ofgem's assessment of the risks, costs and benefits associated with the options as set out in table A6.1. However, we believe that Ofgem have considerably overstated the complexity associated with option 6. Fundamentally, both of the options are based on the principle of using the economies of scale generated by the networks to reduce the cost borne directly by the consumers. In identical circumstances, both options would provide similar levels of funding for the infill project, approximately £1200 per customer, with a comparable impact upon existing customers.

123. However, we believe that the use of an existing mechanism, such as the economic test, achieves this in a simple and flexible manner and also allows UIPs and / or IGTs to participate. Any additional revenues above the level of the costs incurred would be passed back to all of the current users through lower transportation charges, with all opex and capex costs considered within the economic test parameters.

124. One question seemingly not considered at present is whether or not the GDNs should have discretion over the connection of a fuel poor load or not. An economic test approach, given the pre-specified criteria, would oblige GDNs to connect loads where they are efficient and economic. An excluded services approach may allow more discretion depending on the scheme design.

125. It is not clear how projects will be identified and prioritised under either option. Our preferred option would be for Ofgem to work with relevant Government bodies to compile a list of eligible communities for fuel poverty solutions.

Question 3: Is our proposed methodology for quantifying the costs and benefits associated with the various options appropriate (see Appendix 6)?

126. We agree with Ofgem's method for assessing the relative effectiveness of the proposed options and we would welcome the opportunity to work with Ofgem and the DTI in reviewing the effectiveness of each of the proposals.
127. In order to capture the full costs associated with each option, we encourage Ofgem to also consider the ongoing costs of managing the arrangement within their assessment.

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?

128. We welcome the setting of such an incentive scheme. National Grid is involved in many community and social initiatives as part of our day to day business. Such an incentive scheme would provide an additional mechanism to fund community projects over and above those already in place, as well as providing the option to work with a suitable partner where relevant.

Question 5: What other criteria should be included in a Corporate Social Responsibility incentive scheme for GDNs?

129. In setting a Corporate Social Responsibility (CSR) incentive scheme for GDNs, we would suggest a focus on areas relating to the energy and environment, education and skills and community investment. Initiatives to raise awareness of CO poisoning are already undertaken by our emergency personnel.
130. In order to encourage levels of commitment over and above that already undertaken, it would be preferable if such a scheme is ex ante in nature, allowing the acceptance of the initiative ahead of commencement, rather than on a post event basis. Any mechanism should be sufficiently flexible to promote innovation and creativity, with the choice of delivery mechanisms sitting with the GDN to ensure deliverability. As already mentioned, we do not believe that incentives relating to the co-ordination of network extensions should be included within any CSR scheme.

8. Other issues

Question 1: Do you agree with our assessment of the risks, costs and benefits attributable to the two options for the funding of xoserve?

131. We have a number of comments on the cost benefit assessment presented in the consultation document in relation to the options available for xoserve funding. Our position with respect to the funding of xoserve has always been that user pays relates to **new** services, hence removing some of the current inertia towards delivering better service for customers. Ofgem's proposal to classify an element of existing or core UNC services as user pays **may** have exactly the opposite effect.

Cost efficiency

132. We agree that a move to user pays would reduce the number of wasteful shipper modifications and hence may reduce xoserve costs. However, there is a risk that efficiency is lost due to additional complexity in system and charging activities, leading to costs outweighing benefits if too many services are classified as user pays. Classifying modifications as user pays that deliver wider industry benefit, such as enabling wider benefit from Automatic Meter Reads (AMR), is likely to have an adverse effect on their approval, as agreeing cost allocation, and therefore payment, will become a key element of the modification process.

133. In relation to existing services, we believe it to be unlikely that the re-classification of core services to user pays will lead to increased efficiency due to the large sunk cost element. All current services should be classified as core services given their inclusion in either the Licence or Unified Network Code (UNC).

Responsiveness

134. We agree that Option 2 could create further opportunity to earn additional revenues through offering services that users are willing to pay for but we believe applying this to a subset of existing services, plus any new service or change, will undoubtedly cause delays in taking wider change forward. A potential solution would be to provide a number of agreed cost allocation models up front and to then restrict the charges to these models only, however this in itself may stifle innovation.

Promoting competition

135. A move to user pays (option 2) would allow shippers to request added value services. However, the ability to do this already exists through bilateral agreements with xoserve. Demand for these services is virtually non-existent, so it is difficult to see how this will change.

Xoserve standards

136. Option 2 would allow shippers to request different standards to those that are currently delivered, thus allowing cost/benefit judgements that are not currently available. To date however we believe that Shippers are largely happy with the current level of service standard that xoserve operates, evident in the lack of UNC modifications raised to address any such issues. User pays may however allow the selection of different standards based on users own requirements if they so wished.

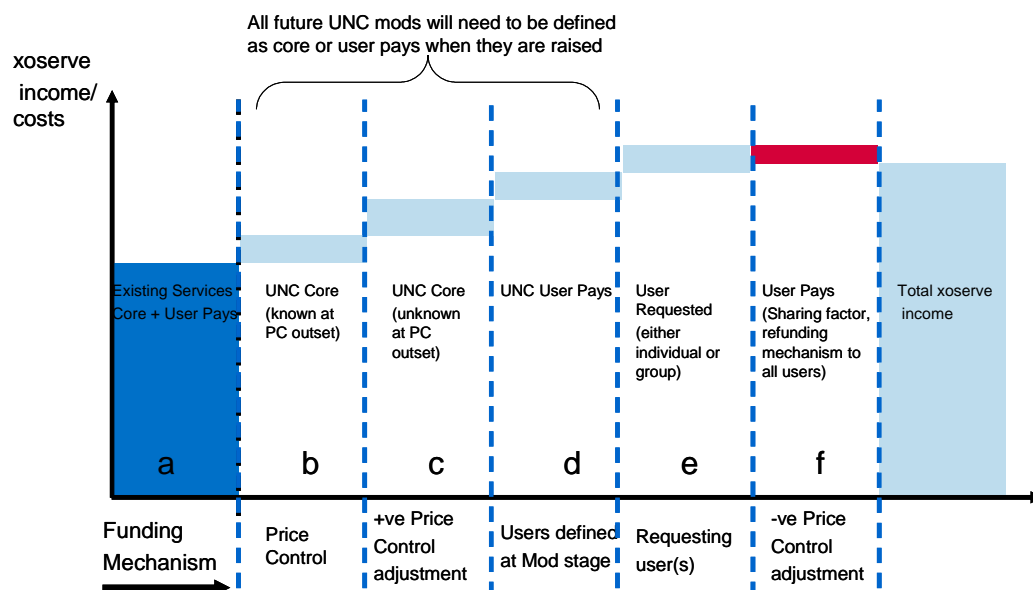
Simplicity

137. User pays is likely to be more complex and costly to operate due to numerous charging terms and allocation methodologies, hence increasing the administrative burden on the industry. To avoid further undue complexity, existing services and any UNC modifications, which deliver wider industry benefit, should be classified as core services.

Question 2: If we adopt a core services plus user pays approach (Option 2), how should we define core services and user pays services?

Principles of funding change for core + user pays

138. To ensure that “core and user pays” delivers a workable solution which has the ability to react to industry developments, clarity over the funding mechanism for changes to xoserve services is imperative. On a simple level, any change to user pays services would be funded by users and charged via a published charging methodology, whilst GTs would fund core service changes explicitly through the price control. On a more detailed level, some recognition of shared assets between core services and user pays must be available to allow users and transporters to benefit from an increased take up of premium services. The lack of clear identifiable funding available for industry developments or changes to existing services in option 2 means that GTs are still incentivised to minimise change where no direct benefit to GTs is identifiable.
139. We believe the main components of such a funding mechanism for change and new services are illustrated overleaf.



140. Columns A to C should be funded via the price control allowance either due to the sunk cost nature of existing services or the fact that the UNC modifications concerned deliver wider industry benefit / change. All services are covered via Licence or UNC obligations. To fund any proportion of these services as User pays would add undue risk into the GT business should volume take up be insufficient to cover the costs of such services. Any price control funding should also include some form of automatic correction for wider industry benefit change which is not yet on the planning horizon. We would envisage any such mechanism is simple and transparent and would therefore not require significant input from Ofgem.

141. Columns D to E represent services which would be defined as user pays for which xoserve are paid directly. It is not necessary for these services to be contracted for directly with the GT. For UNC raised changes in columns C and D, the funding category could be determined as part of the modification process using existing UNC governance. We envisage these to be;

- Services via UNC modification for subsets of users e.g. I&C shippers only, Domestic Shippers only,
- Optional service lines e.g. premium services at a level higher than the UNC baseline, and
- Bilateral agreements between xoserve and individual users such as one off reports.

142. Column F acknowledges that where user pays services utilise core assets, a sharing of xoserve's revenue from these services should be passed back to all users via a sharing incentive. This could be achieved through an adjustment term in the price control.

143. The benefits of funding in this manner are:

- Major change is funded appropriately,

- Customers benefit from xoserve providing value added services,
- There is a clear incentive on xoserve/GTs to offer value added services,
- The current incentive on xoserve/GTs to minimise change is removed,
- The existing UNC governance process is used to define whether the changes are User Pays or Core, and
- The speed of response to market/industry changes is not affected by disputes over funding.

144. With a model for classifying core services and user pays as outlined above, we believe that the following classification should be used to enable identification of which xoserve services should be funded via the price control, i.e. core services, and which should be user pays.

Core

- All xoserve services defined under existing ASA / UNC / Licence obligations,
- Any service where the User has little or no discretion as to the service or amount of usage or where the GT has little or no discretion as to whether it provides that service,
- Services where cost allocation by any other method than number of supply points would be disproportionate to the cost of providing the service, and
- New services that deliver wider industry benefit or that all users are party to such as AMR.

User Pays

145. User pays services should be classified as ones other than those defined as core provided that they are:

- Services that can simply be allocated on a usage/volume basis,
- Services with a high proportion of variable costs,
- User requested services above agreed UNC/ASA baseline standards, e.g. premier services,
- Services that only benefit a proportion of the shipper population,
- Services where the beneficiary can be clearly identified, and
- Bilateral services between xoserve and shipper(s)

Question 3: What costs/ benefits would your organisation incur in the event that we adopt Option 2?

146. We would expect the cost / benefits incurred by National Grid should option 2 proceed to be as follows;

Costs

- Providing different levels of service to different customers could ultimately drive up costs to everyone, due to increased complexity in systems and processes.
- If existing services are funded via user pays, GTs would face increased risk and less certainty of revenue for the services that they are contractually obliged to provide. This holds for volume driven services and services that have a large element of fixed costs.
- Potentially, each change or service would need to be charged and priced separately. This could lead to additional overhead costs for providing an individual service rather than a bundled transportation service. Therefore, cost to achieve could reduce overall efficiency.

Benefit

- Shippers are less likely to raise changes that do not have cost benefit, therefore better focused modifications will be raised and potentially inefficiencies within the current regime will be reduced.
- Opportunity for GTs and xoserve to offer enhanced services for additional revenue.
- Security of revenue if user pays only applies to change as funding can be agreed before the change is implemented.

Question 4: What questions do we need to ask GTs, xoserve, and shippers in order to accurately quantify the costs associated with Option 2?

147. The additional questions that Ofgem need to pose in order to accurately quantify the costs associated with option 2 should be to ascertain from shippers the likely scope of additional services for which they are prepared to pay and how any allocation under user pays might be achieved. Ofgem should also seek to ascertain what the additional administrative costs are that xoserve face in offering a large number of different services premised on a variety of charging methodologies.

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 independent 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)?**

148. The alternative arrangements currently in place were agreed at the time of disposal of the Independent Distribution Networks as part of Hive Down and these alternative arrangements, which are prescribed in the legal undertakings, expire on 31st March 2008.

149. Under paragraph 2A (a) of Standard Special Condition A27 (Disposal of Assets) of National Grid Gas's RDN Licence, we understand that the Secretary of State has the power to determine suitable alternative arrangements no later than at the date of disposal of any transportation asset that comprises a significant part of an independent system. Standard Special Condition A27 (Disposal of Assets) is triggered only upon disposal of the transportation asset comprising an independent system and does not enable a revision of the current legal undertakings by the Secretary of State in any other circumstance.

150. However, should Ofgem wish to propose amendments to the current alternative arrangements, we believe that Ofgem would need to undertake the appropriate consultation process regarding any proposed changes to the relevant gas distribution and/ or NTS Licences in this respect.

Appendix 1: Proposed Incentive Scheme for Exit/Interruption

Section 1

Introduction

151. This paper considers how to design a GDN incentive scheme to cover the current proposals for NTS Exit and GDN Interruption reform. It does this by identifying the essential/desirable features for such an incentive, and then seeks to achieve as many of these as possible.

Essential Features:

- GDNs should have an incentive to minimise the aggregate cost of investment, interruption, flat capacity and flow flex. (Thus removing any incentive to overbook/hoard) This will be achieved provided the incentives are equal and the scheme remains within the incentivised range – see comments below.
- The incentive regime needs to be able to function with just exit reform, just interruption reform or both.
- A key element in delivering savings in total costs through exit reform and interruption reform lies in making more efficient investment decisions. Hence, it is essential that the regime rewards GDNs for making efficient decisions between the purchase of interruption rights/NTS exit capacity and investment within the distribution network. This implies:
 - Reflecting differing NTS costs accurately (the cost of NTS exit capacity varies with location, hence a scheme based on a single, average value cannot drive efficient investment)
 - The scheme must reward GDNs who optimise their opex/capex decisions to deliver the lowest charges to end customers
 - GDNs must be incentivised to adjust their capital plan within the PCR in response to changing circumstances

Desirable Features:

- The scheme should minimise the risk of perverse incentives being caused by the interaction of multiple incentive schemes where one scheme is on the cap or collar and the other is still in the incentivised range. This points towards a single incentive scheme covering all aspects of exit/interruption reform.
- The incentive scheme should optimise the incentivised range for a given level of risk to the GDN. This can be achieved by the use of a single incentive scheme operating with sharing factors used to calculate the GDN's penalty/reward

- A multi year scheme will provide a better basis for making a 45 year investment than a single year scheme
- No involvement for Ofgem between price control reviews.

Modelling of Investment Decisions

152. Two models have been considered for the modelling investment decisions. In Option A, the GDN funds the investment for the remainder of the price control period from increased incentive scheme rewards before the investment enters the RAV at the next price control review. In Option B, the value of the investment is deemed to enter the RAV immediately with an automatic adjustment to the GDNs allowed revenue and a corresponding alteration to the incentive target.

153. Section 2 contains worked examples of how each scheme would function.

Option A: GDN funds investment for duration of Price Control

154. The appendix demonstrates that such a scheme is inefficient as it would penalise the GDN for investing schemes that deliver a return of less than 48%, whilst the customer would benefit from any scheme that delivers a return exceeding 8%. The factors leading to this inefficiency are the incentive sharing factor, the need for the GDN to start funding the investment in advance of the savings flowing through the incentive scheme and the risk of hitting the cap/collar.

155. Exposing GDNs to 100% of the costs would reduce the threshold for the GDN to benefit from an investment, but only from 48% to 24%, thus leaving many beneficial schemes unattractive to the GDN. A 100% sharing factor would also result in either the GDN facing an unacceptable level of risk or a very narrow incentivised band.

Option B: Investment enters RAV immediately and Target is adjusted

156. This proposal aligns the interests of the GDN and end customer as both derive a benefit if the scheme payback exceeds the cost of capital plus depreciation and both lose if it does not. The GDN is not incentivised to propose capex that it does not believe to be viable as it will simply damage its incentive scheme performance.

Conclusion on Modelling of Investment Decisions

157. It is clear that option B provides better alignment between the interests of the GDN and the end customer than option A. It should be noted that option B does involve Ofgem in allowing the investment to enter the RAV and altering the allowed revenue/incentive scheme target.

Determining the Correction to the Scheme Target

158. In a world where capex rolling incentives are in operation, it is envisaged that investment resulting from an optimisation of capex against opex, as per this proposal, would be exempt from any capex roller in that it would be funded immediately, but the GDN would be exposed if the expected savings in NTS Flat/Flow Flex and/or interruption were not delivered. To obtain this treatment, the GDN would be obliged to demonstrate that the scheme was delivering incremental benefits over and above those identified as being delivered by the capex agreed at the price control review. Whilst this will be a significant challenge, we cannot see another means of aligning the interests of the GDN with those of end customers.

Proposed Scheme

159. National Grid propose the use of a single, sliding scale incentive scheme that will compare the total GDN expenditure on GDN interruption, NTS Flat Capacity and NTS Flow Flex Capacity with a target value. The target will be defined as:

$$\text{Target} = T_{\text{Interrupt}} + T_{\text{Flat}} + T_{\text{Flex}} - \text{Capex}_{\text{Correction}}$$

Where: $T_{\text{Interrupt}}$ is the target set for interruption costs

T_{Flat} is the target set for NTS Flat capacity

T_{Flex} is the target set for NTS Flex capacity

$\text{Capex}_{\text{Correction}}$ is the (change in level of Capex) x (Annuity factor)

The Annuity factor will reflect the cost of capital plus depreciation.

160. The resultant incentive penalty/reward would then be subject to a sharing factor. This sharing factor can be chosen to optimise the incentive range – the trade off between Capex and Opex does not depend upon a particular value of sharing factor being chosen.

161. It can be seen that if either interruption or exit reform does not progress, the incentive scheme will still function if the appropriate elements of the target are switched off.

Conclusion

162. The proposed scheme meets the essential features by rewarding low total costs, accurately modelling investment decisions and being able to function with exit reform alone, interruption reform alone or both. As a consequence of delivering accurate modelling of investment decisions, it will be necessary to reflect changes in GDN investment plans in the RAV and to alter the incentive scheme targets accordingly. In terms of the other desirable features, the

proposal provides the maximum incentivised range for a given level of exposure to the GDN and minimises the risk of caps and collars leading to perverse incentives.

Section 2: Modelling outcomes

163. The table overleaf demonstrates the operation of the models under Options A and B for a one year scheme (2010/11). Two examples are shown for Option A; Example A1 showing the effect of an opex saving equivalent to the value of the capex for one year, and Example A2 showing the return that would be required to achieve a neutral position for the GDN under Option A.
164. In all of the examples, the scheme commences in 2007/8 with opex incurred 3 years later in 2010/11 with a 50% sharing factor used for the incentive sharing scheme. Capex (£10m) for investment is assumed to be incurred in year 2008/9. A notional opex target (£5m) is included for all examples that is revised downward in Option B from £5m in 2008/9 to £4.2m in 2010/11 as a result of the investment costs incurred in 2008/9.
165. Under Option A1, the scheme results in a net loss to the Transporter with an equivalent benefit being returned to the customer. Whilst the customer would seem to benefit, this skewed outcome means that the Transporter would be unlikely to undertake such an investment. This is further demonstrated in Example A2, which shows that a return > 48% would be required to achieve a net benefit to the GDN – an extremely onerous task. Finally, if the incentive scheme is operating at the cap/collar, then the GDN will receive no return on its investment until the next price control review.
166. Under Option B, a net benefit can be achieved by delivering a return of > 8%, half of which (50% sharing factor) would be returned to the customer. Whilst this option does involve a target adjustment mechanism, it offers symmetry between the capex and opex schemes and incentivises both efficient investment and opex.

	2008/9	2009/10	2010/11	Total		2008/9	2009/10	2010/11	Total
Option A					Option A				
Example A1					Example A2				
Capex (£m) funded by:					Capex (£m) funded by:				
RAB change	-10				RAB change	-10			
NG (until next PCR)	0				NG (until next PCR)	0			
	-10					-10			
Cost of Capex	-0.8	-0.8	-0.8	-2.4	Cost of Capex	-0.8	-0.8	-0.8	-2.4
Initial (2008/9) Opex Target (£m)			5		Initial (2008/9) Opex Target (£m)			5	
Revised (2010/11) Opex Target (£m)			5		Revised (2010/11) Opex Target (£m)			5	
Opex (e.g. interruption)			4.2		Opex (e.g. interruption)			0.2	
Saving against target (based on 8% of investment)			0.8		Saving against target (based on 8% of investment)			4.8	
Incentive benefit to DN				0.4	Incentive benefit to DN				2.4
Net Benefit(+)/Loss(-) to DN				-2.0	Net Benefit(+)/Loss(-)				0.0
Net Benefit(+)/Loss(-) to Customer				2.0					
Option B					Assumptions				
Capex (£m) funded by:					Cost of Investment (Cost of Capital + depreciation)				8%
RAB change	-10				Sharing Factor				50%
NG (until next PCR)	10				Length of scheme				1 year
	0								
Cost of Capex	0	0	0	0					
Initial (2008/9) Opex Target (£m)			5						
Revised (2010/11) Opex Target (£m)			4.2						
Opex (e.g. interruption)			4.2						
Saving against target (based on 8% of investment)			0						
Incentive benefit to DN				0					
Net Benefit(+)/Loss(-)				0.0					