ofgem Promoting choice and value
for all gas and electricity customers

RIIO GD1

Decision on strategy for the next gas distribution price control - RIIO-GD1

Document Type: Decision Document

Ref: Insert Reference 47/11

Date of Publication: 31 March 2011

Target Audience: Consumers and their representatives, gas distribution network companies, transmission and electricity distribution network companies, generators, offshore gas producers/importers, suppliers, shippers, investors, environmental organisations, government policy makers, and other interested parties.

Overview:

This paper sets out the key elements of the regulatory framework for the next gas distribution price control (RIIO-GD1).

The price control will be set for an eight-year period from 1 April 2013 to 31 March 2021. This will be the first gas distribution price control to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model. RIIO is designed to drive real benefits for consumers; providing network companies with strong incentives to step up and meet the challenges of delivering a low carbon, sustainable energy sector at a lower cost than would have been the case under our previous approach.

In December 2010, we consulted on the regulatory framework for RIIO-GD1. This paper sets out our decisions on the key aspects of that framework. It reflects the announcements made by Ofgem on 18 March 2011. It includes decisions on the outputs that the gas distribution companies need to deliver and associated incentives mechanisms to address uncertainty during the price control and the key elements of the financial framework. It also sets out our intended approach to assessing network companies' business plans, including the role of proportionate treatment, and the greater role for innovation. It is now for the gas distribution companies to develop well-justified business plans setting out how they will deliver for consumers. They must submit these to us by 31 July 2011

Contact name and details: Rachel Fletcher, Partner - Distribution

Tel: 020 7901 7194

Email: RIIO.GD1@ofgem.gov.uk

Team: RIIO-GD1

Associated Documents

Links to supplementary annexes

- Decision on strategy for the next gas distribution price control - RIIO-GD1 Outputs and incentives
  http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionoutput.pdf
- Decision on strategy for the next gas distribution price control - RIIO-GD1 Tools for cost assessment
  http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisioncosts.pdf
- Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Business plans, innovation and efficiency incentives
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionbusplan.pdf
- Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionfinance.pdf
- Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Uncertainty mechanisms
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionuncert.pdfDecision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Impact assessment

Links to other associated documents

- Decision on strategy for the next transmission price control - RIIO-T1
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decision.pdf
- Consultation on strategy for the next gas distribution price control - RIIO-GD1 Overview paper (160/10)
  http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/RIIOGD1%20overview.pdf
- Handbook for implementing the RIIO model - Ofgem, October 2010
  http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf

- A glossary of terms for all the RIIO-T1 and GD1 documents is on our website:
  http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/Glossary.pdf

Table of Contents

Executive Summary **1**
1. Introduction **3**
Purpose of this document 3
Role of this document in the RIIO-GD1 price control review 3
Overview of the package 4
Key decisions 6
Process and timetable 8
Structure of this document and associated documents 9
2. Context **11**
Key Challenges for RIIO-GD1 11
3. Making sure stakeholders' views are heard **16**
Overall approach to stakeholder engagement 16
Appealing against our price control decisions 18
Way forward on stakeholder engagement 19
4. Determining outputs and incentivising delivery **20**
Introduction 20
Overall package of outputs 20
Balance of risks and rewards 26
5. Assessing business plans **28**
Well-justified business plans and proportionate treatment 28
Cost assessment 30
Efficiency incentives 31
Role for third parties in delivery 33
6. Managing uncertainty **35**
Uncertainty 35
Uncertainty mechanisms 35
Disapplication of the price control 37
Mid-period review of output requirements 38
7. Innovation **40**
Role of innovation 40
8. Financing efficient delivery **43**
Package of financial measures 43
Asset lives, depreciation and capitalisation 43
The allowed return 45
The allowed return - cost of equity 45
The allowed return - cost of debt 46
Transition 49
Other financial issues 49
9. Next steps **50**
Appendices **51**
Appendix 1 - Summary of responses **52**
List of Non Confidential Respondees 52
Summary of Responses 53
Appendix 2 –RIIO-GD1 timetable **62**
Appendix 3 – List of uncertainty mechanisms **63**
Appendix 4 - The Authority's Powers and Duties **65**
Appendix 5 - Feedback Questionnaire **68**

Executive Summary

Britain's gas and electricity network companies face unprecedented challenges. They will need to invest over £30 billion over the next decade to develop smarter networks, to meet environmental challenges and to secure energy supplies. Against this backdrop, it is more important than ever that network companies can show consumers they are getting value for money.

The transmission and gas distribution price controls (RIIO-T1 and RIIO-GD1) are the first price controls to be conducted under our new RIIO model (Revenue = Incentives + Innovation + Outputs). The objective of RIIO is to encourage network companies to play a full role in the delivery of a sustainable energy sector, and to do so in a way that delivers value for money for existing and future consumers. It does this by:

- rewarding those companies that demonstrably deliver the network services that consumers value, and that deliver the networks needed to drive a move to a low carbon energy sector; companies that do not deliver will be penalised
- underlining our commitment to ensuring efficient companies are able to attract equity and debt through a transparent and stable approach to financeability
- containing the impact on consumer bills of the significant investment needed in the energy networks. We estimate that RIIO will save consumers £1bn in the first price control period, compared with our previous regulatory regime.

This document represents the first major milestone in the implementation of RIIO. In December, we published a package of papers consulting on the strategy for the RIIO-GD1 price controls. We are now setting out decisions on this strategy, in light of respondents' views. We set out: the outputs that companies will need to deliver and the associated incentive mechanisms; how we will go about assessing the companies' business plans; proposed mechanisms for handling uncertainty and for encouraging innovation; and our approach to financeability.

We are rewarding delivery for consumers. We are setting output measures for safety, reliability, social objectives, customer satisfaction and stakeholder engagement, with strong incentives for efficient delivery. For the gas distribution sector as a whole, the total rewards for good performance will be up to around £130m over the price control period, whilst the total value of penalties will be up to around £240m.

The proposals in this paper will drive a step change in network companies' contribution to the UK's broader environmental objectives. We have listened to those who have asked us to pay particular attention to this RIIO objective. We have decided on a range of measures including:

- **Business planning** – Network companies will need to outline the strategy they will employ to play a full role in delivering a sustainable energy sector.
- **Environment focussed output measures** – We are proposing a suite of measures to promote timely connection of new sources of energy, reduce greenhouse gas emissions, and reduce the companies' own business carbon footprints. These will be worth up to around £380m over the control period for the GDNs.
- **Greater encouragement for innovation** – We are creating a new innovation fund worth £160m for gas distribution and transmission companies, to enable

companies to invest in new ideas and practices that drive value for consumers and the environment.

- **A broad environmental measure** – We are including a reputational incentive on promoting low carbon energy flows. We are also proposing a discretionary reward scheme (DRS) which will provide rewards (subject to an independent expert panel) for companies that deliver outputs that contribute to environmental and social objectives beyond those funded at the price control.

We remain committed to ensuring efficient companies are able to finance their regulated activities. We have listened to the views of the network companies, their investors, and wider stakeholders in response to our December document. We are establishing a strong financial package which will allow efficient companies to finance their activities using equity and debt. It will also ensure the costs of investment are spread appropriately across existing and future consumers. Specifically:

- **Asset lives, depreciation and capitalisation** – We will retain the current 45-year asset lives used for depreciating gas distribution networks but we will apply front-loaded depreciation to all assets to reflect the uncertainty with regard to future network use. We will also capitalise 100% of replacement expenditure (repex) to ensure current and future consumers bear their fair share of the costs of this programme.
- **Cost of equity** – We are setting an indicative range of 6.0–7.2 per cent which we expect to inform the network companies' business plans.
- **Cost of debt** – We are providing greater certainty by using an index for determining the assumed cost of debt. We are intending to use the iBoxx non-financials 10+ maturity index, which is more representative of the network companies' debt costs than our previous proposal.
- **Transitional arrangements** – Any company that considers transitional arrangements are justified will have the opportunity to present its arguments and propose suitable arrangements in its well-justified business plan.
- **Flexibility mechanisms** – We are proposing a combination of mechanisms to enable network companies to manage uncertainty.

The network companies now need to deliver. They have until the end of July 2011 to develop well-justified business plans, demonstrating how they will meet the sustainability challenge, fund network investment and ensure continued safe and reliable operation of the networks and high levels of customer service. Network companies will need to provide evidence not only that they have engaged with a broad range of stakeholders but that their plans have been shaped by those views.

In the summer, we will begin a process of assessing the network companies' plans. Our initial assessment will inform our view on how much regulatory scrutiny each plan requires and whether any company has submitted a plan of sufficient quality for us to be able to conclude its price control settlement earlier, under the 'fast-track' process. We will set out the findings of our initial assessment of all the companies' business plans in October 2011 and consult on the regulatory treatment of each company.

The publication of this paper does not signal the end of our stakeholder engagement process. We will continue to engage with interested parties and welcome the continued input from all stakeholders on all aspects of this process. We are scheduled to make our next public statement in October 2011.

1. Introduction

Chapter Summary
This chapter summarises respondents' comments on the process and timetable for the review and sets out our decisions in these areas. We also set out how the document and the supplementary annexes are organised.

Purpose of this document

1.1. This document provides an overview of our key decisions on the regulatory framework for the next gas distribution price control, RIIO-GD1. RIIO-GD1 will set allowed revenues for the eight GDNs for an eight-year period from 1 April 2013 to 31 March 2021.

1.2. This document summarises our December proposals, the respondents' views on our proposals, and our decisions in the light of these responses. Appendix 1 includes a summary of responses to our 'December Consultation on RIIO Strategy'. In the accompanying supplementary annexes to this paper, we provide a more detailed discussion of our December proposals, respondents' views, and our decisions. For the avoidance of doubt, while the decisions in the associated papers reflect all respondents' views, this paper only summarises responses directly to the overview paper.

1.3. We are undertaking RIIO-GD1 at the same time as the transmission price control review, RIIO-T1.

Role of this document in the RIIO-GD1 price control review

1.4. In October 2010, we announced a change in the way we will regulate the GB onshore network companies. The overriding objective of the new model, the RIIO model, is to encourage energy network companies to play a full role in the delivery of a sustainable energy sector and do so in a way that delivers value for money for existing and future consumers. It does this by rewarding those companies that demonstrably deliver the network services that consumers value and the networks need to drive the transition to a low carbon energy sector. Companies that do not deliver will be penalised. It also provides transparency and stability on our approach to financeability which is needed to attract the necessary equity and debt into the sector to support investment.

1.5. The price control process under RIIO is different to previous controls. In particular, the onus is on network companies to develop well-justified business plans. Each company is required to develop detailed plans which demonstrate how the company will deliver in the interests of both current and future consumers and how they will meet the challenges associated with facilitating the move to a low carbon economy. Companies are required to demonstrate that their proposals take account

of the various risks and uncertainties and, given these, provide a strategy to deal with these efficiently.

1.6. The purpose of this document is to set out what network companies need to deliver during the next price control period. This includes, explaining the incentive arrangements and other components of the regulatory framework that they need to understand, in order to submit well-justified business plans in July 2011. We also provide the criteria and process we will use to assess the companies' business plans and the rewards for companies that provide us with good quality plans.

1.7. Under RIIO, we are locking down a number of elements of the regulatory framework at this stage. This is different from previous reviews when most issues were only decided towards the end of the process. However, there are some areas where companies may make a case for different treatment from the approach set out in this document. Companies can, for example, propose additional output measures if they think there are company specific factors that suggest these output measures are needed. We are looking to them to propose a package of measures to ensure their plans are financeable, including the cost of equity, transitional arrangements where needed, the level of notional gearing and the level of equity injections.

Overview of the package

1.8. The proposals set out in this paper have significant implications for gas consumers, the environment, and gas companies and their investors.

Consumer impacts

1.9. The average gas household bill is around £600 per annum of which gas distribution network charges comprise around 15 per cent. Gas transmission charges, which will be re-set at RIIO-T1, comprise a further 2 per cent of the average household charge. The remaining elements of the charge predominantly comprise energy supply costs, including the gas commodity costs and the supply margin.

1.10. The arrangements we outline here provide strong incentives for network companies to meet the challenges of delivering sustainable network services. They are intended to enable companies to raise the finance they need for this investment, while containing cost increases and ensuring that consumers get the best possible value for money. Our proposals will reward companies according to their delivery for consumers and will penalise them if they fail to deliver.

1.11. We are setting a range of output measures specifically focussed on the interests of consumers and whether those interests are being met. We will introduce a broad measure of customer satisfaction, which will include a customer satisfaction survey, a complaints metric and stakeholder engagement, with a combined reward or penalty of +/-1% of companies' revenues. We will require companies to undertake a survey of customers satisfaction, with a financial incentive of +/-0.5% based on the company's performance relative to the industry upper-quartile performance. The

complaints metric will incentivise companies to resolve complaints expediently, with a potential penalty only of up to 0.5% of revenues. In addition, we will also introduce a discretionary reward in relation to customers stakeholder engagement, with a corresponding reward of up to 0.5% of revenues. We will also continue with the fuel poor network extensions scheme, which provides a gas connection to off-grid fuel poor households where this represents the least cost solution for customers. We also intend to require companies to introduce schemes to address carbon monoxide (CO) poisoning, and we will set out further details following the completion of current trials.

1.12. Finally, we are setting further outputs in areas that consumers have told us they strongly value including safety and reliability. For the gas distribution sector, the total reward for good performing companies will be around £130m, and a total penalty of around £240m.

1.13. The Impact Assessment we conducted during the RPI-X@20 project calculated that the RIIO framework could deliver savings of around £1bn for consumers over all four energy sectors over an eight-year period relative to the previous regulatory model.

Environmental impact

1.14. We are putting in place a set of arrangements that drive a step change in network companies' contribution to the UK's broader environmental objectives. We are putting forward a package of environmental measures which we consider will drive network companies to play their full role in meeting the environmental challenges. These measures include:

- each company is required to develop a well-justified business plan that demonstrates how it will respond to the environmental challenge
- specific environment outputs relating to:
    - policies to ensure that GDNs facilitate the connection of bio-methane, a low carbon source of energy, including the introduction of connection standards, requirement for timely provision of information, and through a "broad measure" of customer satisfaction
    - incentives for companies to reduce their own business carbon footprint, including a continuation and strengthening of the shrinkage allowance, which incentivises companies to reduce gas transport losses, and the environmental emissions incentive (EEI), which ensures that companies consider the environmental value of carbon abatement
- a discretionary reward scheme for companies that deliver environmental outputs beyond those funded at the price review. The creation of a new innovation fund of £160m over the price control period for gas transmission and distribution companies, which can be used to fund projects related to the environmental role the network companies must play such as in relation to connecting bio-methane.

1.15. We calculate that the incentive mechanisms that we are proposing for the delivery of environmental outputs could be worth up to £380m[1] over the control period for all GDNs.

Network companies and their investors

1.16. In performing our duties we are required to have regard to the need to secure that licence holders are able to finance their regulated activities. This is in the interests of existing and future customers. We have listened to the concerns raised by the network companies, investors and wider stakeholders in response to our initial thinking on financeability, as set out in our December document. We have considered those views in the context of our financing duty and also in the context of our principle objective to protect the interests of existing and future consumers. In this document we present a number of refinements to our financial proposals.

1.17. We consider that the resulting package of financial measures will provide a fair return for the network companies, will be attractive for investors and will deliver value for money for existing and future consumers.

Impact assessment

1.18. Alongside our December document, we also published a high level impact assessment (IA). Only three respondents commented specifically on the IA. Of these, two broadly agreed with our qualitative assessment. One respondent noted the impacts would only be fully understood once the package of measures had been implemented.

1.19. We consider that the benefits and impacts outlined in the December IA are still applicable to the updated proposals outlined in this document. We recognise the value of IAs. Where appropriate, we will undertake further IAs on specific policy areas later in the price control review.

Key decisions

1.20. Table 1.1 summarises our key proposals set out in December and our decision, having taken account of the responses received.

1 This excludes the value associated with the innovation fund for the gas distribution and transmission sectors, and the incentive allowance.

Table 1.1: Key decision areas

	December proposals	March decision
Outputs and incentives		
Environment (broad measure)	Proposal to require companies to report on the capacity of bio-methane connected to the networks. Proposals to facilitate the connection of bio-methane.	Confirmation of bio-methane reporting, and intention to introduce connection standards and timely provision of information. We will consider connection charging arrangements for bio-methane in a separate process. Discretionary reward scheme (DRS) to reward companies in relation to environmental and social objectives.
Environment (narrow measure)	Continuation (with modifications) of the current shrinkage allowance, and Environmental Emissions Incentive (EEI).	Decision to continue with shrinkage allowance and EEI; to align carbon value with DECC's non-traded carbon value, and to remove caps/collars on the EEI.
Customer service	Broad measure of customer service, ie customer satisfaction survey, complaints metric, and stakeholder engagement	Confirmation of the broad measure, and details of how the three elements will work in practice. Intention to set the baseline output for customer sat. and complaints metric equal to industry historic upper-quartile.
Social obligations	Proposals in relation to CO monoxide and fuel poor network extensions scheme.	Confirmation of how fuel poor network scheme will operate. We will confirm our policy proposals for CO once current trials are complete. DRS, as described above.
Safety	Replacement of the current approach to funding repex based on iron mains replaced, with an output measure based on risk-removed.	Confirmation of our intention to introduce a risk-removed output measure, and options on how this will work. Confirm preferred option following companies' business plan submissions.
Reliability	Development of capacity and asset health output measures.	Confirmation of these output measures, and details on the incentive arrangements.
Business plans		
Cost assessment	To apply a toolkit including totex and bottom-up assessment.	Confirmation of the toolkit approach. Further details regarding benchmarking methodology.
Fast-tracking	To consult on business plans suitable for fast-tracking.	To consult on all July business plans in October 2011.
Efficiency incentives	An efficiency incentive rate in a range of 40-60%.	An efficiency incentive rate of 50-60%.
Innovation		
Limits on funding	Establish a fund of £40m p.a. to stimulate innovation in gas.	Establish a fund of £20m p.a. to stimulate innovation in gas.
Scope of stimulus	To limit the scope of funding to low carbon projects.	To include projects meeting environmental objectives.
Maximum level of funding	Maximum level of funding up to 80% of project cost.	Maximum level of funding up to 90% of the project cost.
Financial		
Cost of equity	Indicative range of 4.0-7.2%.	Indicative range of 6.0-7.2%.
Cost of debt	Cost of debt index based on a 10-year trailing average of	Cost of debt index based on 10-year trailing average of iBoxx non-

	December proposals	March decision
	Bloomberg indices.	financials10+ maturity of broad A and BBB bonds
Asset lives, depreciation and capitalisation	Apply front-loaded depreciation to all new assets, ie post-2013. Capitalise repex at 100%.	Apply front-loaded depreciation to all assets. Capitalise repex at 100%.

Process and timetable

1.21. The detailed timetable for the review is set out in Appendix 2.

December paper

1.22. In the December document, we set out the differences in the process between RIIO-GD1 and previous reviews where the RPI-X framework was used.

1.23. These differences largely reflect the role of proportionate treatment in the process. Taking a proportionate approach to assessing the companies' business plans is an important part of RIIO. Under this approach the intensity and timescale of our assessment will reflect the quality of a company’s business plan and their record for efficient output delivery. Where a company produces a high quality business plan, we will focus less resource on them and their business plan will be subject to a lower level of scrutiny. Where a company produces a particularly high quality business plan, we will consider whether it would be appropriate to conclude that company’s price control process early, ie whether that company would be fast-tracked.

1.24. In the December document we set out a detailed timetable reflecting this new process. The key differences in process are:

- key price control parameters will be locked down earlier in the process
- the onus will be on network companies to provide more justification for the proposed approach set out in their business plans
- any companies that are fast-tracked will receive their final proposals approximately a year ahead of the implementation of the controls.

1.25. The initial and final proposals for non-fast-tracked parties will follow broadly the same timetable as previous controls.

Respondents' views

1.26. Most of the respondents were supportive of the overall process, and the level of stakeholder engagement. However, a number of respondents commented that the timetable for deciding upon the policy issues was too tight. One respondent suggested that fast-tracking should be dropped to allow for an extended period of time to address the policy issues. Network companies also commented that we should allow companies the flexibility to develop output measures and incentive

mechanisms following our March publication, in order for them to reflect their on-going stakeholder engagement in relation to output and incentive mechanisms.

Our decisions/further thoughts

1.27. Proportionate treatment is a key part of the RIIO recommendations and we have decided to continue with the timetable set out in December. The approach we are taking provides strong financial and reputational incentives on network companies to step up to the challenge of providing well thought out and well-justified business plans.

1.28. Network companies have been aware of our expectations regarding well-justified business plans since July 2010 when we published an initial open letter on the price control reviews. Some companies have expressed confidence in their ability to submit high-quality plans within the stated timeframes. We have been working closely with the network companies since September last year so that they have had early notice of our proposals and how they are developing and can take this into account as they begin work on their plans. We also note that most companies have had a programme of stakeholder engagement in train since last autumn.

Structure of this document and associated documents

1.29. This document and the associated supplementary annexes follow the same structure as the package of papers we published in December. This should enable readers to cross-reference the decisions in this paper with the issues we consulted on in December.

1.30. This document aims to provide an accessible overview of our decisions on the strategy for the review. This document is structured as follows:

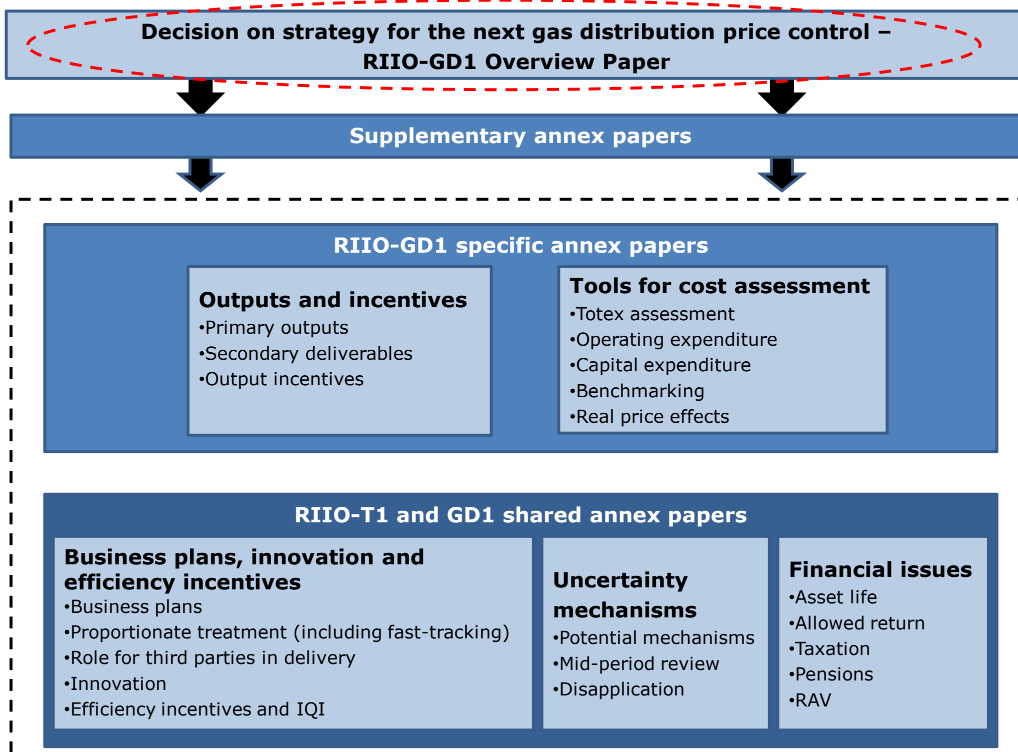
- Chapter 2 sets out the key strategic issues that we need to take into account at RIIO-GD1.
- Chapter 3 provides an update on our stakeholder engagement, sets out how we will respond to the views of respondents in taking forward stakeholder engagement in the next phase of the reviews.
- Chapter 4 sets out the outputs that we expect GDNs to deliver and associated incentive mechanisms.
- Chapter 5 sets out our decision on the criteria we propose to use to assess companies' business plans including the role of proportionate treatment and our approach to cost assessment.
- Chapter 6 sets out our approach to dealing with uncertainty including how risks should be shared between customers and the network companies.
- Chapter 7 sets out our decision on our approach to innovation.
- Chapter 8 set out our decisions on our approach to financial issues, including asset lives, depreciation and capitalisation policies; cost of debt; cost of equity; and transitional arrangements.
- Chapter 9 sets out next steps in this review.

1.31. In line with our approach to the December document, we provide further information on all of these issues in our series of detailed supplementary annexes. These are entitled: 'RIIO-GD1 Outputs and incentives', 'RIIO-T1 and GD1 Business plans, innovation and efficiency incentives', 'RIIO-GD1 Tools for cost assessment', ' RIIO-T1 and GD1 Uncertainty mechanisms' and 'RIIO-T1 and GD1 Financial issues'. Links to these, as well as other associated documents, are contained in the 'Associated Documents' section in this paper.

1.32. As before, the supplementary annexes are aimed primarily at network companies, investors and those who require a more in-depth understanding of our proposals. Further, as we are undertaking RIIO-GD1 in parallel with RIIO-T1, we have published a similar suite of documents for RIIO-T1 alongside those for RIIO-GD1.

1.33. Figure 1.1 below provides a map of the RIIO-GD1 documents published as part of the suite of decision documents.

Figure 1.1 RIIO-GD1 document map*



*Document links can be found in the 'Associated documents' section of this paper.

2. Context

Chapter Summary
In this Chapter, we summarise the key strategic issues facing the gas distribution sector that we set out in our December document and our approach to them, respondents' views on our December proposals, and our conclusions on how we propose to address the key strategic challenges at RIIO-GD1.

In summary, respondents considered that we had identified the key strategic issues for the review and agreed with our broad approach. In general, we confirm our intention to proceed with the policy proposals set out in December. (We provide more details in the 'Supplementary annex - Outputs and incentives'.)

Key Challenges for RIIO-GD1

December document

2.1. In our December document, we identified four key strategic challenges facing the gas distribution sector and set out our proposed approach to addressing these at RIIO-GD1. The challenges we identified comprised: the uncertain role of gas networks in a low carbon energy sector; the GDNs' role in promoting low carbon energy on the gas network and reducing their own carbon footprint; social issues, notably the need to address fuel poverty and the number of CO poisoning incidents; and the requirement to improve asset management to ensure least-cost service provision.

2.2. In Chapter 1, we have set out an overview of our decisions with regard to the GDNs' role in promoting environmental objectives, namely promoting low carbon energy on the gas network and reducing their own carbon footprint. We have also set out our decision with regard to incentivising improvements in customer services, the role of GDNs in reducing fuel poverty, and CO poisoning incidents. In this Chapter, we focus on our December proposals and decision in relation to the uncertain future role of gas networks, and the broad approach to asset management.

Uncertain future role of gas networks

2.3. The need to meet the government's objectives to reduce carbon emissions in the energy sector means that there is significant uncertainty surrounding the way that natural gas will be consumed and transported in the UK. In our December document, we observed that there were future scenarios where consumers' demand for heat and hot water energy needs were met through renewable electricity instead of natural gas leading to a decline in gas flows on the local gas networks. However,

equally we observed that there were future scenarios where natural gas, as well as biogas, could continue to play a major ongoing role in a low carbon energy sector.[2]

2.4. In order to address these challenges, we set out potential changes to our asset depreciation policies to mitigate the risk that network charges would need to increase in the future if flows on the gas distribution networks were to decline. We also set out proposed changes to the way GDNs meet capacity requirements on their networks to reflect uncertainty with regard to their future usage.[3] In particular, we proposed to unify the current incentive arrangements governing the way that GDNs provide new capacity, through NTS off-takes, own load-related capital expenditure, and through interruptible contracts. We also proposed changes to the pricing of interruptible contracts, to ensure that such demand-side measures were correctly considered in meeting future capacity needs.

Improve asset management to ensure least-cost service provision

2.5. As set out in our December document, we considered a key objective of the RIIO-GD1 price control was to ensure GDNs developed a thorough understanding of their asset base, to enable them to manage their assets efficiently, and ensure a safe and reliable network at least cost to consumers.

2.6. We noted that a key component of companies' expenditure is their iron mains replacement programme (‘repex’) which has been agreed with the Health and Safety Executive (HSE) and involves the replacement of all iron mains within 30 metres of a building over a 30 year period (from 2002-2031). At the time of our December document, the HSE had initiated a review of the programme to ensure that the programme continues to meet its original objectives, and provides value for money. We had agreed to co-sponsor the HSE review, and work with the HSE to ensure that going-forward the programme was proportionate. We also set out proposed changes to the way that we would fund the repex programme that the GDNs agree with the HSE, based on a risk-removed output measure. Our proposal was designed to incentivise GDNs to seek innovative ways to deliver a safe network at least cost to consumers.

2.7. With the exception of iron mains, we noted that the GDNs’ understanding of the risk associated with their other asset classes (eg above ground installations, governors, steel mains and services) has limitations. We were concerned that this would prevent them from developing an investment programme for RIIO-GD1 which delivers a safe and reliable network at least cost. We proposed to require the GDNs to develop a risk-based approach for all asset classes, and to develop investment plans based on optimising investment across all asset classes according to risk. In February 2011, we required GDNs to set out their strategy for developing a comprehensive risk based approach to asset management.

[2] See for example: Redpoint (October 2010) Gas Future Scenarios Project – Final report.
[3] See ‘Supplementary Annex - Outputs and incentives’.

Respondents' views

2.8. The respondents to our December document broadly agreed that we had identified the key contextual issues that we would need to address at RIIO-GD1. In addition to the strategic issues described above, the respondents also noted a number of other issues pertinent to the review, including the ageing asset base, and the impact of smart meters and future climate change on the provision of emergency services.[4]

2.9. In general, the respondents also supported our proposals for addressing the strategic issues identified in our December document. We address the respondents' detailed points on our proposals in the corresponding supplementary annexes to this paper.

Our decisions/further thoughts

2.10. In general, we consider that in our December document we identified the key strategic issues facing the gas sector which we need to address at GDPCR1.[5] We will introduce the policies we consulted on in December in order to address these issues. We set out the high-level policy decisions in this overview paper and more details with regard to our approach in the 'Supplementary Annex - Outputs and incentives.' Below, we provide an overview of the progress of the HSE review of repex, and our intended approach towards the funding of repex at RIIO-GD1, and our broader approach to asset management.

HSE review

2.11. Since our December document, the HSE and Ofgem's consultants (CEPA) have been continuing their study of the iron mains replacement programme. This work is due to be concluded shortly. The purpose of the study is to consider the effectiveness of the programme in removing iron mains risk, and to undertake a cost benefit analysis of the programme and other possible options. CEPA's early results highlight a number of concerns with the current programme, including whether the scheme properly encourages companies to focus on removing risk, rather than kilometres of iron mains, concerns about the risk-modelling of large diameter mains, and the robustness of the Mains Risk Prioritisation System (MRPS) when used to predict the number of incidents arising from cast iron pipe failures. CEPA's cost benefit analysis also indicates that other significant benefits of the programme relate to a reduction in leakage and harmful environmental emissions, and a reduction in emergency services and repairs as well as the maintenance of network safety set against the backdrop of a deteriorating iron mains population.

---

[4] One GDN also stated that we should consider the Meter Provider of Last Resort (MPOLR) obligation, which imposes a significant cost on GDNs, as part of the price control review process. We address this issue in the 'Supplementary Annex – Business plans, innovation, and efficiency incentives'.

[5] We consider that the additional issues highlighted by the respondents are pertinent to the review, and we address such issues in our detailed proposals.

2.12. The HSE is considering the implications of the study's conclusions for the future repex programme. In the short-term, the HSE expect to continue with the current repex programme but they suggest there could be a moratorium on the replacement of large diameter mains until there is further evidence on the degree of risk and their failure modes. As a longer term objective, the HSE anticipate initiating a wider consultation with regard to the future of the repex programme. They intend to consult on whether they should remove the current legal framework governing iron mains, and instead, replace this with a broader requirement on GDNs to achieve a safe network "so far as reasonably practical". This would involve GDNs ensuring that they consider the risks across all asset classes in forming their investment programme. This would also consider whether the safety driven element of the programme should be focused on a limited quantity of the highest risk pipes, with other replacement work being driven through other price control incentives such as the shrinkage and EEI mechanism.

Our intended approach to funding repex and broader approach to asset management

2.13. We expect the HSE to make a decision on whether to exclude large diameter mains from the repex programme in April (including the definition of large diameter mains), in time for the companies to prepare their July business plan submissions. We will require the GDNs to submit repex plans consistent with the HSE's stated policy. We also intend to introduce an uncertainty mechanism to accommodate any future change to the HSE's policy arising from their proposed consultation.

2.14. We intend to fund the repex programme based on a risk-removed output measure instead of the length of mains replaced. We consider that the adoption of a risk-removed output measure will provide strong incentives for companies to seek innovative ways to reduce risk, and to deliver a safe network at least cost. Such an approach also constitutes an important step towards our wider objective of introducing a holistic risk-based approach to asset management, where the GDNs develop their investment programmes based on an assessment of risk across all asset classes. The HSE supports our proposed adoption of a risk-removed output measure and our broad approach to asset management. Our network risk measure will initially focus on iron mains and associated service replacement excluding large diameter mains, which form the core elements of the replacement programme.

2.15. We have been working with the GDNs to design a practicable mechanism and we describe the potential options in the 'Supplementary Annex - Outputs and incentives'. The key design issues include: how we take into account the dynamic nature of risk; whether we provide a fixed ex-ante allowance and/or revenue drivers, which will allow for flexibility in the allowed funding according to risk-removed; and, the requirement for caps/collars to limit risk. We will continue to work with the GDNs to design the funding mechanism, and we expect to finalise the mechanism once we have received companies' business plans in July.

2.16. Companies will also the have the opportunity in their July business plans to propose investment plans for asset classes outside of the core repex programme of mains replacement, eg large diameter mains, service governors or risers, and we will fund such investment programmes and potentially include them in the risk

mechanism if they are clearly justified in terms of risk-removed and the benefit to the consumer. We understand that companies will not have the data and systems to develop a risk-based approach for all asset classes prior to the agreement of business plans for RIIO-GD1. Therefore, we intend to introduce a mechanism which will allow the GDNs to substitute (with our approval) expenditure across asset categories outside of the core repex programme with investment in other assets classes where this brings equal or greater benefit for consumers and appropriate data is available on associated risk. We view such a mechanism as a precursor to our longer-term aim of setting an overall risk-removed output target for all asset classes, and for the GDNs to consider how best to achieve this based on a system-wide assessment of risk (ie a "broad approach").

2.17. To ensure the expedient development of a broad approach to asset management, we intend to introduce a new licence requirement on GDNs, commencing in the current price control period, to collect data on the asset health, criticality and risk associated with all asset classes, and to incorporate these data within their asset management systems. We expect to consult on such a licence condition later this year. We provide more details on the proposed development of a broad approach in the 'Supplementary Annex - Outputs and incentives'.

3. Making sure stakeholders' views are heard

Chapter Summary

This chapter provides a summary of respondents' views on the engagement that we and network companies have conducted to date. It also sets out how we will respond to these views in taking forward stakeholder engagement during RIIO-GD1.

The key changes we have made since our December proposals are:

- ➔ to provide an update on our stakeholder engagement processes
- ➔ to provide an update on the framework for companies to challenge our price control decisions.

Overall approach to stakeholder engagement

3.1. Under RIIO stakeholders have a greater opportunity to influence our and network companies' decisions during a price control review process. We envisage two elements to the engagement process:

- we expect network companies to engage proactively with consumers in developing their business plans and also on an ongoing basis to inform business decisions within the price control period
- we will undertake our own enhanced engagement for each price control review.

Overview of stakeholder engagement in the RIIO process to date

3.2. Since the start of RIIO-GD1 we have adopted a multi-layered process to ensure that all affected parties have opportunities to engage in the review. When we have engaged with stakeholders we have sought to adhere to our principles for effective enhanced engagement set out in the RIIO handbook.[6]

3.3. The key elements of our process have been:

- an open letter consultation on the proposed approach to the control in July 2010 and our December document on our initial strategy for the control
- a series of stakeholder working groups on outputs and incentives, sustainable development and on financial issues
- two meetings with the Price Control Review Forum (PCRF)
- an event designed for a City audience to capture the views of investors
- meetings for the network companies and the Consumer Challenge Group with our Committee of the Authority[7]
- a range of bilateral meetings with the companies and stakeholders.

[6] See page 13, Box 2 of the handbook: http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf

[7] The purpose of the Committee is to provide advice to the Transmission and Gas Distribution teams and directly to the Authority on key areas of the development of Ofgem's proposals for the RIIO-T1 and RIIO-GD1 price controls.

Consumer Challenge Group (CCG)

3.4. Separate from our stakeholder engagement processes, we have benefited from feedback from the CCG, which comprises consumer and environmental experts acting as a critical friend to Ofgem.

3.5. The CCG was first used during the last electricity distribution price control review (DPCR5) to trial a more intensive form of engagement with consumer advisors. The CCG has a critical role in ensuring that consumers' views are fully considered as part of the price control process. We have formed a single CCG for RIIO-T1 and RIIO-GD1 comprising eight members appointed by us on the basis of their expertise in the interests of existing and future consumers and energy sector knowledge.

3.6. In December, we outlined the areas the CCG had considered up to that point. We have since met the CCG again and they have also met with our Committee of the Authority. The additional issues discussed in these meeting have included:

- the general approach and overall direction of travel of the price reviews
- the role and requirement for a broad environmental output measure which reflects the extent to which network companies could actively contribute to facilitating a low carbon future network including the merits of reputational and financial incentives
- the overall package of output measures and incentives, including the companies' degree of controllability of outputs
- the importance of companies showing an improved understanding of stakeholders and consumers in developing their business plans
- the overall approach to financeability and its impact in terms of providing value for consumers
- the role of innovation and the scope of any innovation stimulus
- striking the right balance in terms of the number of uncertainty mechanisms, recognising the impact of risk on network companies and consumers
- the role and criteria for lighter-touch scrutiny and fast-tracking
- recognition that fast-tracking could be difficult to achieve but that proportionate treatment in itself, reflected in more tailored scrutiny, was a key incentive for companies to develop good quality business plans
- the HSE's iron mains replacement programme and the 'risk removed approach.

3.7. We will continue to meet with the CCG throughout the price control process.

December document

3.8. In the December consultation we summarised the different ways both we and the companies have sought to engage stakeholders in the early stages of this price control review process. In relation to our own engagement we also set out the issues we have addressed and the stakeholders involved. We sought respondents' views on the overall approach to engagement and how this could be made more effective.

Respondents' views

3.9. Most respondents welcomed the greater emphasis on stakeholder engagement at RIIO-GD1 and considered that it worked-well. There was support for the different forms of engagement, including the output and finance working groups and the PCRF However, a number of GDNs believed that the timetable was too compressed to allow for sufficient stakeholder engagement.

3.10. The CCG were concerned that stakeholder engagement should not focus on the process itself but the impact that improved understanding of stakeholders and consumers had in companies business plans.

3.11. A number of respondents suggested potential improvements to the stakeholder engagement processes. For example, a number of respondents commented that more time was required to develop the output measures and associated incentive mechanisms. One respondent suggested that the engagement process could have been improved by holding joint Ofgem-company stakeholder events.

Our decisions/further thoughts

3.12. We welcome the support for the approach to stakeholder engagement undertaken by both Ofgem and network companies. As noted previously, we recognise the tighter timescales for engagement but note that the engagement process started in July 2010, and we will continue to engage with stakeholders (eg through the working groups) throughout the price control review period.

3.13. In relation to the various suggestions for improvement:

- We recognise that coordinating engagement is challenging given the separate process adopted by us and network companies. We and the companies have sought to make improvements in this area by sharing information on forthcoming events. We will work with the companies to make further improvements.
- We will continue to use the working groups to resolve any outstanding issues with regard to output measures and associated incentive mechanisms, and to develop the reporting requirements.

Appealing against our price control decisions

3.14. As part of our RIIO decision document we published guidance to provide parties with a transparent framework for challenging our price control decisions.[8] The guidance document set out how third parties could make representations about a price control settlement and could request the Authority to exercise its power to make a modification reference to the Competition Commission. It also covered

[8] A Guide to Price Control Modification References to the Competition Commission - Licensee and Third Party Triggered Reference
http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/final%20mod%20guidance.pdf

modification references arising as a result of a licensee's rejection of price control final proposals.

December document

3.15. We noted that the Department of Energy and Climate Change (DECC), as part of the implementation of the Third Package of EU Energy Legislation, were looking to introduce a new process for licence modification decisions by the Authority with an associated right of appeal to the Competition Commission. We noted that we would provide an update on this once the new process has been settled by DECC. No respondents commented on this issue.

Our decisions/further thoughts

3.16. In January 2011, DECC issued the Government's conclusions[9] on its proposals in this area. Although the implementing regulations are yet to be published and laid before Parliament, we anticipate that the powers on which our guidance document is based will, in due course, be repealed and replaced as part of Third Package implementation. In these circumstances, our guidance document could cease to be valid. Further information on DECC's ongoing work in this area can be found on their website.[10] We will look to provide stakeholders with an update on how our price control decisions may be appealed later in the price control review.

Way forward on stakeholder engagement

3.17. The publication of this document signals the beginning of the next stage of the stakeholder engagement process for RIIO-GD1. During the next four month period we expect the network companies to take the lead in engaging with their stakeholders in order to inform the development of their business plans whilst we will continue our own programme of stakeholder engagement.

3.18. We have a number of events scheduled including the next meeting of the PCRF in May 2011 and further meetings of the output working groups, to focus on reporting requirements. We are also meeting with the CCG in May 2011.

3.19. Following the submission of the companies' business plans in July 2011, we will initiate a process of reviewing their plans. We will publish a consultation on the quality of companies' business plans before taking a decision on how much regulatory scrutiny each plan requires and whether any company has submitted a plan of sufficient quality for us to be able to conclude the price control settlement earlier, under the fast-track process.

[9] http://www.decc.gov.uk/assets/decc/Consultations/eu-third-package/1163-eu-third-package-gov-response.pdf
[10] http://www.decc.gov.uk/en/content/cms/consultations/resp_3rd_pack/resp_3rd_pack.aspx

4. Determining outputs and incentivising delivery

Chapter Summary
This Chapter summarises respondents' views on the outputs and associated incentive mechanisms set out in our December document, and an overview of our decisions.

In general, we confirm the output measures we set out in December and the associated incentive mechanisms. In this overview paper and the associated 'Supplementary Annex - Outputs and incentives' we set out more details with regard to the output definition and the structure of the incentive mechanisms.

Introduction

4.1. Prescribing a set of outputs to be delivered rather than a set of inputs provides powerful incentives for companies to innovate and seek least cost ways to providing network services. In turn, an outputs-based approach should provide material benefits to customers in terms of lower bills. The approach also provides a greater opportunity for stakeholders to determine what outputs companies should deliver, and greater transparency with regard to companies' performance and our ability to hold networks to account.

4.2. The RIIO model identifies six key output categories - or key areas of delivery for network companies. These are: environmental impact; customer satisfaction; safety; reliability; conditions for connection; environmental impact; and, social obligations.

4.3. We established working groups in July 2010 to identify output and incentive mechanisms for each of the six output categories. The working groups included the network companies, as well as other stakeholders, including environmental, social, and customer representative groups, as well as the HSE. We have continued with the series of working groups since our December document, as well as holding bilateral meetings, in order to develop our December proposals to a greater level of detail.

4.4. In the following section we briefly summarise our proposed outputs and incentive mechanisms, respondents' views and our decision.

Overall package of outputs

Overview

4.5. In general, respondents broadly agreed with the proposed set of outputs we set out in our December document. However, the network companies stated that for a small number of outputs we needed to provide more detail with regard to the output definition, and the structure of the incentive mechanisms. Since our December document, we have continued to hold working group meetings, and we have developed our output measures to a finer level of detail in consultation with the industry and other stakeholders. We set out detailed definitions for each output in

the 'Supplementary Annex - Outputs and incentives', and we set out our high-level decision by output category below.

4.6. The GDNs considered that the incentive package was weaker than at previous reviews, and some incentive mechanisms provided only downside risk. We have accepted some of the GDNs proposed changes but retained our original proposals in other areas. In general, we have sought to ensure that any incentive mechanisms reflect the value that consumers place on the output, and that incentivised output measures fulfil the requisite criteria (ie controllable, material etc.) to ensure companies and consumers do not face windfall gains or losses.

4.7. In the remainder of this section, we set out stakeholders' responses to our December document, and our decision by output category.

Broad environmental measure

December document

4.8. As set out in our December document, our overall objective is to create an enabling regulatory environment to ensure that GDNs play their role in delivering a low carbon energy sector. For GDNs at the moment, this most notably involves facilitating the injection of renewable gas (ie bio-methane plant). In our December document, we consulted on a number of policies to facilitate bio-methane injection to the grid, including developing connection standards for entry capacity, potential changes to the connection charging methodology and whether to socialise production (or 'entry') assets within network charges.

4.9. As our direct broad environmental output measure, we also proposed to ask companies to report on the capacity of bio-methane connected to their network. We did not propose to attach a financial incentive to their performance given the range of factors that will influence this output that are outside companies' control (notably, the government's proposals for the renewable heat incentive or RHI).

Respondents' views

4.10. The respondents broadly agreed with our overall approach. A number of GDNs proposed changes to the current connection arrangements for bio-methane and the socialisation of downstream connection assets. One GDN stated that it will bring-forward a charging methodology modification to the uniform network code (UNC) in relation to entry capacity. Environmental groups supported the socialisation of connection costs. By contrast, one network user emphasised the need to avoid hidden subsidies and to ensure a level-playing field for competing renewable technologies. This sentiment was repeated by the PCRF.

Our decision

4.11. We propose to require companies to report bio-methane connected to the gas distribution network but not to attach a financial incentive to do so. This output measure will help us monitor companies' performance with regard to the broad environmental objectives, and we will require companies to address any under-performance which we will enforce through Licence Conditions as well as relevant agreed output measures and incentive mechanisms.

4.12. As set out in our December document, we will also provide incentives for companies to contribute to the broad environmental objective through a suite of other output measures, such as the introduction of connection standards for bio-methane, customer satisfaction measures, stakeholder engagement, as well as providing funding for trials that contribute to environmental objectives through the innovation stimulus (now NIC).

4.13. In addition, we propose to continue with the discretionary reward scheme (DRS) established at GDPCR1. The DRS will reward companies that can demonstrate that they have delivered additional outputs that contribute to environmental and social objectives beyond those funded at the price review.[11] This will ensure that the GDNs continue to engage with relevant stakeholders, and identify additional output measures that contribute to environmental and social objectives. For example, in relation to social objectives, the DRS will provide an incentive for companies to consider what role they can play in providing non-network renewable heat solutions where such solutions (as opposed to grid connections) represent the least cost way to assist the fuel poor.

4.14. There are also a wide-range of bio-methane issues for us to address that fall outside of the price control, eg in relation to standards for connection equipment, charging arrangements and socialisation of costs. We propose to address these issues through processes running in parallel to the price review process, and in time for RIIO-GD1.

Narrow environmental measure

4.15. In our December document, we proposed to continue with the shrinkage and environmental emissions incentive (EEI) mechanisms established at GDPCR1, although we consulted on a number of potential revisions, eg changes to the carbon value, the requirement for caps/collars and a rolling-incentive mechanism. We also proposed to publish a comparative assessment of companies' business carbon footprint (BCF), although we did not propose to attach a financial incentive to avoid duplicating existing incentive mechanisms, eg the government's Carbon Reduction Commitment.

[11] We propose a total level of funding for the DRS of £14million, awarded in three tranches in years 3, 6 and 9 following the start of RIIO-GD1. The reward will be based on an assessment of GDNs submissions by an expert panel, drawing on the existing DRS governance arrangements.

4.16. In general, the respondents were supportive of the proposals, although there were different views with regard to the need for caps and collars, and rolling incentive mechanisms. We have decided not to have caps and collars for the EEI, and to introduce a rolling incentive mechanism. This will provide strong incentives for GDNs to reduce gas transport losses.

Social objectives

4.17. In our December proposals, we proposed to fund schemes to address carbon monoxide (CO) poisoning incidents once we have the results of companies' on-going trials of CO schemes. We also proposed to continue with the network extension programme to address fuel poverty, although we proposed to work with other stakeholders to undertake a review of the scheme in 2014 to ensure that network connections remained a cost effective way to address fuel poverty in the light of other government policy developments, namely the introduction of the renewable heat incentive (RHI). We also consulted on whether the GDNs had a potential role in providing non-network solutions to fuel poor households (eg working with other entities to provide renewable heat solutions).

4.18. In general, the respondents were supportive of our proposals for both CO and the fuel poor network extensions. However, one respondent asked whether the GDNs should play a significant role in these areas given that they did not have the primary interface with customers.

4.19. In relation to the network extension programme, the GDNs and one of the fuel poor network partner organisations proposed possible revisions to the eligibility criteria for the scheme and the calculation of the 'economic test', which determines the proportion of costs recovered from connecting households up-front and over time through transportation charges.

4.20. We will continue with the fuel poor network extension scheme for RIIO-GD1. We will also consider changes to the eligibility criteria proposed by the respondents. For the CO output, we expect to consult on our proposals later in the year following the completion of existing trials.

4.21. Although there was support for GDNs playing a role in providing non-network solutions to address fuel-poverty, the respondents did not identify any firm proposals. As noted above, we propose to introduce a discretionary reward scheme, which will provide rewards for companies that can demonstrate they have delivered outputs in relation to social objectives beyond those funded at the price review. For example, the DRS will provide an incentive for GDNs to consider how they can work with other network companies, energy suppliers and providers of energy solutions to deliver non-network solutions where these are least cost. In addition, we also propose to consider any requirement for additional outputs in relation to GDNs' role in non-network solutions at the mid-period review, in the light of our review of the network extensions programme and the implementation of the RHI.

Customer satisfaction

4.22. In December, we set out proposals for a financially incentivised broad measure of customer satisfaction, comprising a customer satisfaction survey, a complaints handing mechanism, and, a stakeholder engagement metric. For the overall broad measure, we proposed a financial incentive rate of +/-1 per cent of company revenues.

4.23. Respondents supported the proposed output but there were differing views on the structure and the size of the overall financial incentive. The GDNs generally argued for a higher incentive payment and for greater upside reward. For example, a number of the GDNs considered that the financial rewards/penalties should be based on companies' performance relative to their own historic performance, rather than how they perform relative to other GDNs. A consumer group considered that the financial incentive associated with the stakeholder engagement process should be lower and provide downside risk.

4.24. We do not consider that there is a compelling reason to change the overall structure or size of the financial incentives, although we have made some detailed changes to the way we propose to calculate the rewards/penalties. We do not consider that the financial rewards/penalties should be based on how each companies' performance compares with its historic performance in this area. In setting allowed revenues, we will provide the same cost allowances for companies in relation to the customer output categories and therefore we should expect companies to have similar levels of performance. We therefore consider a comparative performance measure is correct. However, we will fix the baseline or target levels for the customer satisfaction survey and complaints metric for the entire RIIO-GD1 period based on the upper quartile industry performance in 2011/12 rather than on a rolling basis (ie based on industry performance in the year of the price control). We have adopted this approach in response to GDNs concerns that unless we set a fixed target then the associated reward from an incremental improvement would be unclear, which would undermine their incentives to improve performance.

4.25. We will continue to work with stakeholders as we draw up the detailed elements of the broad measure, eg design of the customer satisfaction survey and complaints metric.

Connections

4.26. In our December document, we consulted on potential changes to the penalties associated with existing connection standards, and the requirement for new or revised standards. We also asked whether we should remove existing connection standards for market segment where competition was effective, and whether we should allow regulated margins for potentially contestable markets where competition has been slow to develop. This would mirror our approach at DPCR5, where we allow distribution network owners (DNOs) to charge regulated margins in contestable markets to facilitate new entry. We also consulted on whether we should introduce connection standards for distributed gas.

4.27. In general, the respondents considered that the existing arrangements for gas connections, namely the connection standards, as well as regulated/unregulated margins worked well. The environment industry groups supported the introduction of new standards. The GDNs proposed introducing standards during the price control period when they expected to have more clarity in relation to bio-methane producers' needs.

4.28. We intend to introduce standards for distributed gas once their requirements are known. We will work with the GDNs and the bio-gas industry to establish the required connection standards at the earliest opportunity.

Ensuring a safe network

4.29. We proposed to change the current means of financing the iron mains replacement programme ('repex') from a revenue driver based on mains abandoned to a measure of risk removed. We considered that such an approach would incentivise companies to innovate and deliver a safe gas network at least cost to consumers.

4.30. In general the respondents supported our proposals, although the GDNs requested further details as to how the risk-removed driver would work, eg how we would calibrate the allowance (ie £ per risk-removed), and deal with the dynamic nature of risk in setting the output baseline. The HSE supported the proposed approach, although noted that we should ensure our proposed change to funding arrangements results in a similar level of risk removed as under the current funding arrangements.

4.31. We confirm our proposal to adopt a risk-removed measure. Since our December document, we have working with the GDNs to design a practicable mechanism and we describe the potential options in the 'Supplementary Annex – Outputs and incentives'. The key design issues include: how we take into account the dynamic nature of risk; whether we provide a fixed ex-ante allowance and/or revenue drivers, which will allow for flexibility in the allowed funding according to risk-removed; and, the requirement for caps/collars to limit risk. We will continue to work with the GDNs to design the funding mechanism, and we expect to finalise the mechanism once we have received companies' business plans in July.

Ensuring a reliable network

4.32. We set out proposals for the development of network capacity metrics (eg network load factors), as well as the development of asset health and risk metrics. We also set out proposals to introduce a single funding arrangement and incentive mechanism for delivering new capacity, ie unified incentives in relation to own network expenditure; NTS off-take; and, interruptible contracts. We also proposed to require GDNs to incorporate a real option value within the interruptible contract (IC) price to ensure GDNs correctly take into account demand-side options in meeting future capacity needs.

4.33. The respondents' generally welcomed the introduction of network capacity metrics, as well as asset risk measures. A number of companies stated that they had well-developed asset health and risk metrics for a range of asset classes, and welcomed the potential broad approach to asset management. However, the GDNs considered that any incentive mechanism associated with capacity or asset health measures should be symmetric (eg we should recognise both shortfalls and over-delivery in setting output targets at the subsequent review) rather than asymmetric (where we would only recognise shortfalls).

4.34. We confirm our intention to set capacity health and output measures. Since December, we have worked with the industry to develop a detailed definition of the relevant output measures, and the incentive mechanisms. In response to the companies' views, the incentive arrangements will recognise both shortfalls and over-delivery in setting output targets at the subsequent review (ie the arrangements will be symmetric). Since our December document, we have also requested and received companies' strategies for introducing a broad approach to asset management, and we will require companies to develop such an approach through RIIO-GD1. We will also seek to introduce a new licence condition requiring companies to improve their asset management. We will look to introduce this ahead of the start of RIIO-GD1 to ensure there is no delay in this process.

4.35. We also confirm our decision to unify the incentive arrangements around funding incremental capacity, as well as our intention to develop a methodology for introducing the real option value within interruptible contracts. We will expect the companies to reflect the option value in future interruptible contract auctions.

Balance of risks and rewards

4.36. We have undertaken analysis of the overall balance of risk and reward for the price control package. We have used our return on regulated equity (RoRE) framework to assess the extent to which the range of incentive mechanisms provide companies with the potential to outperform and the risk of underperforming the baseline cost of equity in the settlement.[12]

4.37. We consider that we have put forward an incentive framework that provides opportunities for companies that perform well to earn a double-digit return on equity, materially higher than the baseline cost of equity. For those companies that under-perform, our analysis suggests that they will incur significant penalties (in terms of a return below the cost of equity).

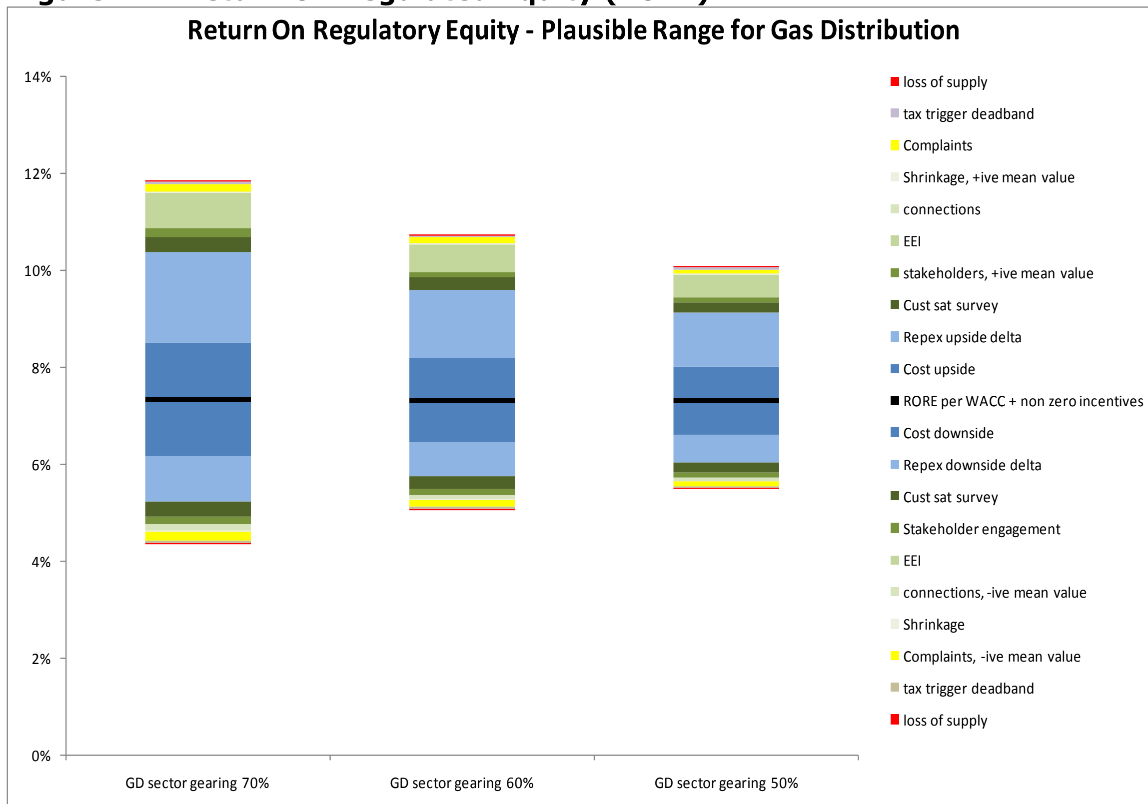
4.38. We set out the expected variation in companies performance for different gearing levels in Figure 4.1. This shows the expected upside and downside return on equity relative to a baseline cost of equity of 7.25% (the cost of equity allowance at GDPCR1). With the exception of repex, we assume that companies expected cost performance lies in the range of +/-10% as a percentage of total costs, based on

[12] Return on Regulatory Equity is a regulatory metric that we have developed to understand the returns available to shareholders in regulated networks from our price control packages.

historic network companies' performance. For repex, we have assumed a potential cost performance of +20%/-10% of the repex programme costs, with the greater upside potential based on the potential scope for companies to innovate under the proposed risk-removed output mechanism (eg spray-lining), and to prioritise high-risk mains. We acknowledge that the scope to outperform will depend on the design of the repex funding mechanism, and the HSE review of repex. We will re-consider this assumption post-March. We also expect companies to undertake their own analysis of the overall risk of the package and to assess the cash-flow volatility and the appropriate level of gearing. We expect this analysis to form part of their overall financeability assessment and to inform their notional gearing and cost of equity.

4.39. Overall, our analysis shows that the expected variation in returns on equity lies in the range of around 5% to 11% for a gearing level of 60%. At a gearing level of 70%, the corresponding range is around 4-12%. We will re-consider the assumptions underlying the RORE analysis once we have received companies' July business plans.

Figure 4.1: Return on Regulated Equity (RoRE)



5. Assessing business plans

Chapter Summary
This chapter sets out our decisions on a number of elements including the scope of the business plan guidance, the role of proportionate treatment, including fast-tracking, the role of efficiency incentives and the tools we will use for the cost assessment of companies' plans. This chapter also provides an update on our work to facilitate a greater role for third parties in delivery.

The key changes we have made since our December consultation are:

- ➔ to include more detail in the business plan guidance on the scope, and limits on, companies to put forward different proposals from the positions we have set out in this document
- ➔ to set out our intention to consult on our initial assessment of all July business plans in October 2011, not just those which might be suitable for fast-tracking
- ➔ to change the range for the symmetrical IQI efficiency incentive rate from 40-50% to 50-60% for GDNs.

More detail on the issues discussed in this chapter is set out in the 'Supplementary Annex - Business plans, innovation and efficiency incentives' and 'Supplementary Annex - RIIO-GD1 Tools for cost assessment'.

Well-justified business plans and proportionate treatment

5.1. Under RIIO, the onus is on network companies to develop well-justified business plans. Each company will be required to demonstrate that its plan will deliver in the interests of both existing and future customers and how it will meet the challenges associated with facilitating the move to a low carbon economy. We set out initial draft business plan guidance in our July open letter.[13]

5.2. An important part of RIIO involves us taking a proportionate approach to assessing the companies' business plans. Under this approach the intensity and timescale of the assessment we undertake will reflect the quality of a company's business plan and the company's record for efficient output delivery. Where a company produces a high quality business plan we propose to focus less resource on them and their business plan will be subject to a lower level of scrutiny. Where a company produces a particularly high quality business plan we will consider whether it would be appropriate to conclude that company's price control process early, ie whether that company would be fast-tracked.

December document

5.3. We summarised the key components of our business plan guidance in our December document. We outlined the view that the scope for lighter-touch scrutiny

[13] Ofgem, open letter consultation on the gas distribution price control review, the way forward http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=232&refer=Networks/GasDistr/RIIO-GD1/ConRes

and, to a greater degree, fast-tracking, provides network companies with incentives to step up to the challenge of submitting realistic and well-justified business plans.

5.4. We outlined the key features of fast-tracking which would allow a company's price control to be finalised (including licence conditions) approximately 12 months ahead of non-fast-tracked companies. We set out that the arrangements will ensure that a fast-tracked company does not secure a worse settlement than if they had remained in the non-fast-tracked process. We outlined the process and criteria we proposed to use for assessing the degree of scrutiny a network company received.

Respondents' views

5.5. Respondents were supportive of the business plan guidance. Some requested further clarity on the elements of the business plan where the network companies had scope to propose their own policies. In particular, the respondents requested the flexibility to propose their own outputs and incentive mechanisms.

5.6. The majority of respondents supported the proposals for proportionate treatment. However, a number of network companies expressed the concern that to facilitate the fast-tracking process we had compressed the timetable for developing the policy framework, notably in relation to outputs and incentives. They also considered that the timetable did not allow sufficient time for their own stakeholder engagement process to inform policy development. Some respondents suggested that we should remove the fast-tracking process for the first review.

5.7. Respondents generally supported the proposed criteria for assessing companies' business plans. Some respondents sought clarity on the application and the weighting of the criteria. Respondents welcomed our commitment to ensuring that a fast-tracked company would not be worse off than if it were not fast-tracked.

Our decisions/further thoughts

5.8. We welcome stakeholders' support for the guidance we have provided to date. We propose to retain the business plan guidance we published in December with some changes reflecting comments. In particular, we have included more detail on the scope for, and limits on, companies putting forward different proposals from the positions we have set out in this document.

5.9. We will also issue the network companies with data templates to facilitate our cost assessment process and ensure the consistency of data. The companies must complete data templates as part of their well-justified business plans. We will also provide the network companies with guidance on what we expect them to provide in terms of additional supporting narrative while avoiding prescribing the form that a well-justified business plan should take.

5.10. We recognise the concerns respondents have outlined with regard to fast-tracking but we remain of the view that fast-tracking has important incentive

properties. It is important that we incentivise all companies to come forward with their best attempt at a well-justified business plan. Where a company is fast-tracked it will be able to get on with running its business during the price control review process without being subjected to additional detailed scrutiny from the regulator. From a customer perspective, early access to good information will allow us to perform a strategic assessment of each company's plans and determine where we need to focus our analysis over the remainder of the control. This should give us early access to good benchmarking data and help us run a smarter price control review process.

5.11. As noted in Chapter 1, we recognise that fast-tracking results in a tighter timetable. We do not consider that this will adversely impact stakeholder engagement. A business plan that does not sufficiently demonstrate stakeholder engagement will not be eligible for fast-tracking therefore allowing further scope for companies to engage with their stakeholders in developing their plans.

5.12. We also note respondents' concerns about our ability to assess whether companies should be fast-tracked. We note the broad support expressed for the criteria identified to assess a company's suitability for proportionate treatment and fast-tracking and consider these will provide a solid basis on which to make a judgement. More importantly, we note that our primary duty is to protect the interests of consumers. We will consider the case for fast-tracking in the light of this duty and we will not fast-track a company where we are not convinced that as a result consumers' interests will be best served.

Cost assessment

5.13. In line with the RIIO framework we intend to focus on the companies' forecasts and on our own use of benchmarking as a means of informing our assessment of the companies' costs rather than as a mechanistic means of setting allowances.

December document

5.14. We set out our intention to place more emphasis on the benchmarking of forecasts as these are likely to be more relevant in the context of our sustainable development duties and the introduction of new output measures.

5.15. We proposed a toolkit approach to cost assessment comprising both total expenditure (totex) analysis and disaggregated approaches (ie separate reviews of operating and capital expenditure).

Respondents' views

5.16. Most respondents supported the proposed toolkit approach. However, respondents also expressed a range of concerns about the robustness of the proposed benchmarking techniques, including whether simple econometric models

could capture the complex output-cost relationships; the functional form of the proposed models; the need to adjust for company special factors, eg Traffic Management Act (TMA); data quality issues; and, the lumpiness of capex (in relation to totex models). One GDN stated that it considered the relative efficiency ranking of GDNs was a function of equally viable econometric models, with no objective basis to choose between them. It also considered that the modelling approach was not sufficiently robust to set cost allowances equal to the upper-quartile.

5.17. One respondent noted that we should take into account the benefits assumed at DN sales in setting cost allowances.

5.18. The network companies also questioned how we would reconcile results from competing bottom-up and top-down models.

Our decisions/ further thoughts

5.19. We note the general support for a toolkit approach and we intend to implement this approach. We are aware of the companies concerns with regard to the robustness of both bottom-up and top-down approaches, and how we will reconcile the models' results. Since our December publications, we have been working with the companies on the development of the cost models. In the supplementary annex 'RIIO-GD1 Cost assessment', we have set out historic benchmarking results to inform further discussions on the methodologies and to assist the companies focus on addressing their areas of relative inefficiency. We also expect to hold discussions on the models ahead of July business plans in order to finalise our modelling approach; we do not expect further detailed discussions on our methodology post July business plan submissions.

Efficiency incentives

5.20. We want to ensure that network companies face strong financial incentives to control their costs and to seek out and implement delivery approaches that provide better value for money for existing and future consumers. The RIIO model includes a fixed and symmetric efficiency incentive rate for each company. This will give network companies a clear and strong financial stake in restraining and, where possible, reducing the costs of delivering outputs over the price control period.

December document

5.21. We proposed to make two adjustments to the way that the efficiency incentive rate was implemented as compared with previous price controls. First, it would be implemented through annual revenue adjustments rather than an adjustment at the end of the price control. Second, we proposed that the efficiency incentive rate affects the way the RAV is updated in the light of actual expenditure rather than through a separate adjustment outside of the RAV.

5.22. We proposed to use the Information Quality Incentive (IQI) in RIIO-GD1 and T1 on the basis that this would provide incentives to network companies to develop robust business plans that include the best available information about future efficient expenditure requirements. We proposed that the exact efficiency incentive rate for each company be set as part of the IQI, in a range of 40-60%.

5.23. We set out that fast track companies would face the maximum efficiency incentive rate available. For companies that are not fast tracked, we proposed to compare the companies first forecast of costs submitted in July 2011, against our last assessment of efficient expenditure for that company.

Respondents' views

5.24. Respondents generally welcomed the broad approach. Some respondents welcomed our proposals to adjust revenues as soon as practically possible. A number had concerns about the impacts that this could have, including the potential for increased price volatility. One respondent thought that the implementation of annual adjustments could lead to increased complexity.

5.25. The GDNs expressed concern about the perceived reduction in the marginal incentive rate or cost-sharing factor within the IQI to 40-60% relative to the current marginal incentive rate (for GDPCR1) of around 60%.

5.26. The network companies also expressed concern that the IQI matrix was calibrated such that the companies' cost forecast will need to be below our assessment for them to earn a positive financial reward. They considered that given the uncertainty with regards to our approach to cost assessment, the IQI matrix should be structured to reward companies with forecasts above our assessment (eg as at DPCR5). They also expressed concern about comparing the companies first business plan cost forecast with our last forecast in applying the IQI as this could lead to relatively lower rewards/higher penalties.

Our decisions/further thoughts

5.27. We retain our commitment to a fixed symmetrical incentive rate. However, we propose to alter the range. We propose to set a range of 40-50% for electricity and gas transmission, and a higher range of 50-60% for gas distribution. These ranges are intended to provide sufficiently strong incentives in both sectors to reduce costs, whilst supporting greater alignment between TO and SO incentive schemes and avoiding excessive deviations from the current incentive arrangements in each sector.

5.28. We intend to use the company's first business plan cost forecast and our final cost assessment in our IQI assessment to determine the efficiency incentive rate for each of the GDNs. Our approach provides an incentive for companies to submit robust initial cost forecasts. For non fast-tracked companies we will incorporate adjustments to companies' first business plan forecasts in our IQI assessment where

the company can provide a reasonable justification for such changes, eg based on agreed changes in outputs.

5.29. We intend to calibrate the IQI such that companies who submit a cost forecast equal to our view of their efficient costs will earn their WACC. We will define efficient costs in such a way that some companies' cost forecasts will be below our benchmark costs, ie they will earn a positive financial reward. We will use a range of benchmarking techniques to determine efficient costs, as we discuss in the 'Supplementary Annex - Tools for cost assessment'.

5.30. We note the issue raised by respondents regarding the potential for increased price volatility and complexity. Once we have received the companies' business plans and understand better the materiality of potential volatility, we will investigate whether any further mechanisms need to be put in place in order to manage charging volatility through the price control. This is discussed in Chapter 6 and in further detail in the 'Supplementary Annex - Uncertainty mechanisms'.

Role for third parties in delivery

5.31. Increasing the role that competition plays in the delivery, ownership and operation of network assets in defined circumstances is an important element of RIIO. We consider that an increased role for competition is likely to impose discipline on existing network companies and to encourage them to strive for timely delivery, be more innovative and seek out lower long-term cost delivery solutions.

December document

5.32. In December, we recapped the RIIO decision to adopt three ways of using competitive pressure to realise benefits for the consumer. These were:

- companies are expected to provide, as part of a well-justified business plan, evidence of efficient procurement by testing their plans using a range of techniques potentially including market testing and activity benchmarking
- where we feel a network company has failed to provide robust evidence to support its business plan, we may ask them to supply more evidence, including (potentially) market testing evidence
- we would have the option to grant a third party licensee funding for ownership and potentially delivery of selected projects, where this could deliver long-term benefits to consumers, without creating delays which worked to the disadvantage of security of supply or the timely reduction of carbon emissions.

5.33. For the gas distribution sector, we invited views on whether third-party provision of network assets would be desirable given the level of competition for the provision of new connection assets by independent gas transporters (IGTs). We also acknowledged that it might be impractical for any entity other than the host GDN to undertake and own project developments where they were integrated within the network of the existing licensee.

Respondents' views

5.34. In relation to the gas distribution sector, the respondents generally restricted their views to the scope for third-party provision of assets. The respondents generally considered that there was effective competition in the market for connections and construction. One GDN also noted that it was impractical to introduce competition in the provision of network assets in the absence of discrete, separable projects.

5.35. There was support for companies providing evidence of efficient procurement as part of a well-justified business plan.

Our decision/ further thoughts

5.36. Respondents did not express any support for providing a greater role for competition in the delivery of gas distribution network assets. We recognise that competition already plays role in the sector through IGTs and consider it would be impractical for third parties to compete to develop new projects where they are integrated within the existing licensees' network. Therefore, we do not intend to consult further on competition to develop and own assets in gas distribution.

5.37. As part of their business plans, we expect companies to provide evidence of efficient tendering processes. We will also require companies to provide market-testing evidence where we consider their business plan cost submissions are not robust.

6. Managing uncertainty

Chapter Summary
This chapter sets out respondents' views on uncertainty mechanisms and, in light of these, our decisions on the mechanisms that we intend to include in the RIIO-GD1 control to help companies manage uncertainty. In developing their business plans, companies will have the ability to propose additional uncertainty mechanisms in addition to address specific issues for their company.

The key changes we have made since our December proposals are:

- widening of the scope of the proposed Traffic Management Act (TMA) reopener to include a broader set of costs, eg costs associated with the levying of lane rental charges, the costs reinstatement and additional costs due to changes to, or introduction of, codes of practice. To reflect the broader scope, we refer to this as the "street works regime" mechanism.
- allowing for two reopener windows during the price control to capture changes to costs from developments to the street works regime and costs as a result of requirements by the Centre for the Protection of National Infrastructure (CPNI)
- we are investigating whether any further mechanisms need to be put in place in order to manage charging volatility through the price control.

More detail on the issues discussed in this chapter is set out in the 'Supplementary Annex - Uncertainty mechanisms'.

Uncertainty

6.1. There are always uncertainties about what will happen during the course of a price control period. During the control period factors will change which can impact a company's outputs and expenditure requirements. The risks are arguably greater under an eight-year price control than under a five-year one. Under RIIO, our underlying principles in this area are that risks should be borne by the party best able to manage them and the number of uncertainty mechanisms should be limited.

6.2. In the December document, we identified three types of mechanism to help deal with uncertainty:

- specific uncertainty mechanisms (eg revenue drivers; specific re-openers etc.)
- disapplication of the price control
- a tightly-defined mid-period review of output requirements.

Uncertainty mechanisms

6.3. We use the term 'uncertainty mechanisms' to cover a range of tools that enable us to make changes to the revenues a network company is allowed to collect in response to changes that occur during the price control period. These mechanisms include volume drivers, revenue drivers, specific re-openers, pass-through items.

December document

6.4. In December we presented a summary of the mechanisms that we proposed to include in RIIO-GD1. We set out mechanisms common to both transmission and distribution network companies, as well as mechanisms specific to gas distribution. We also noted that companies would have an opportunity, as part of their business plans, to justify why additional mechanisms would be appropriate and the benefits these would bring for consumers.

Respondents' views

6.5. The majority of respondents considered that the overall principles for dealing with uncertainty are appropriate. This view was echoed by the CCG, in particular the need for any additional mechanisms to be justified in terms of consumer benefit.

6.6. Respondents largely agreed with retaining the mechanisms applicable under the existing price control and agreed that companies should be able to propose additional mechanisms within their well-justified business plans based upon their individual circumstances.

6.7. Respondents argued for a number of additional mechanisms. These included:

- a mechanism to adjust revenue for increases in real price effects (RPEs) beyond the allowance set at the price review
- mechanisms to reduce the potential volatility of network charges.

Our decisions/further thoughts

6.8. In line with respondents views we intend to retain many of the mechanisms which were applied in GDPCR1. We have also made a number of changes to the mechanisms outlined in the December document to reflect respondents' views. These include:

- We have widened the scope of the proposed Traffic Management Act (TMA) reopener to include a broader set of costs, eg costs associated with the levying of lane rental charges, the cost of full and half width reinstatement and additional costs due to changes to, or introduction of, codes of practice. To reflect the broader scope, we refer to this as the “street works regime” mechanism.
- We are allowing for two reopener windows during the price control to capture changes to costs from developments to the street works regime and costs as a result of requirements by the Centre for the Protection of National Infrastructure (CPNI).
- We have made a number of specific changes to the financial uncertainty mechanism including cost of debt and the tax trigger. These issues are set out in the ‘Supplementary Annex - Financial issues'

6.9. In addition we are investigating whether any further mechanisms need to be put in place in order to manage charging volatility through the price control. In considering any mechanism to control for volatility we will take into account not only

uncertainty mechanisms but the other elements of the price control that have the potential to create volatility, eg output and efficiency incentives.

6.10. A full list of the uncertainty mechanisms that we intend to apply in RIIO-GD1 is outlined in Appendix 3 and the 'Supplementary Annex - Uncertainty mechanisms'.

6.11. We note that, in developing their business plans, companies will have the ability to propose additional uncertainty mechanisms in addition to address specific issues for their company. We will assess the merits of this and any additional or alternative mechanisms included in the business plans when these are received.

Disapplication of the price control

6.12. If circumstances arise during the control period that mean that the revenue allowance set at the price control review is insufficient to enable an efficiently managed company to finance its regulated activities, then we will consider requests from that company for amendments to its price control.

6.13. We issued a guidance document in October 2009 setting out the arrangements for responding in the event that a network company experiences deteriorating financial health.[14] This document provides greater clarity on the types of circumstances under which we will reopen a price control and the associated process.

December document

6.14. In the December document, we proposed retaining without change the existing disapplication licence provisions and our guidance for responding to financial distress of a network company for RIIO-GD1.

Respondents' views

6.15. One respondent argued that the wording of the disapplication licence condition provides little assurance to companies around the process that would be followed in the event of financial distress. Another respondent argued for no change to the arrangements.

Our decisions/further thoughts

6.16. We retain the view that these combined arrangements remain fit for purpose and do not intend to change the current policy.

[14] Arrangements for responding in the event that an energy network company experiences deteriorating financial health - Decision document, Ofgem - October 2009 http://www.ofgem.gov.uk/Networks/Policy/Documents1/GUIDANCE%20DOC%20(DECISION%20DOC)%20-%20FINAL.pdf

Mid-period review of output requirements

6.17. Recognising the scope for significant changes in outputs during an eight-year price control period, the RIIO framework includes provision for a mid-period review of output requirements. In setting a mid-period review there is a risk that it could undermine the purpose of setting a longer control period. Consequently, the scope for a mid-period review will be restricted to changes to outputs that can be justified by clear changes in Government policy and the introduction of new outputs that are needed to meet the needs of consumers and other network users. For RIIO-GD1 the mid-period review would take place in 2016, with any changes being implemented in March 2017.

December document

6.18. In December, we set out our proposal for a lmid-period review of output requirements. We also set out a proposed twelve-month process for the mid-period review. This included:

- three months to consult, understand the issues and decide whether to progress a mid-period review
- six months to develop policy (Ofgem and the network companies)
- three/four months to consult on proposals and make any amendments.

Respondents' views

6.19. A number of respondents supported the mid-period review given the longer eight-year price control period under RIIO. Some respondents considered clear rules would be needed for the operation and scope of a mid-period review so as not to create any new uncertainty or to avoid effectively creating four-year price controls.

6.20. There were differing views as to what should be within scope of the mid-period review. Some considered it should include outputs. One respondent considered outputs should be excluded as it would be hard to believe these could not be seen at the time of the review and instead believed the mid-period review should be limited to changes in Government policy. A number of other respondents also considered that the mid-period review should include changes due to Government policy.

6.21. The comments on the process for the review included that:

- 12-months was excessive and should be reduced to 3 months
- both the Authority and licensees should have the right to trigger the review
- any mid-period settlement should be referable to the Competition Commission
- a disapplication mechanism should be included at the mid-period review.

Our decisions/further thoughts

6.22. We retain the view that it is appropriate to include provision for a mid-period review of output requirements in RIIO-GD1 and that the review would take place in 2016. In light of respondents' views we intend to leave the scope of the review unchanged. However, we agree that there is a need for clear rules for the operation and scope of a mid-period review. We intend that the following rules should apply:

- the review will only be used to adjust output measures or introduce or amend incentives linked to new or modified outputs where changes in circumstance meet the tightly defined scope of the mid-period review
- if changes to outputs are necessary, we will not alter key price control parameters (for example incentive mechanisms and the allowed return) other than as required to accommodate the change to outputs
- we will not make retrospective adjustments at the mid-period review
- we will look to apply the latest information available to set the level of incremental revenue
- we will consult with stakeholders before making any changes.

6.23. In light of respondents' views we do not intend to make any significant changes to the process and timetable that we laid out in our December document. We consider that the length of the review is appropriate, given the likely importance of any changes to outputs needed at the review, particularly once the necessary stakeholder engagement and consultations are factored in. It is also important to re-emphasise that twelve months is an upper bound for the mid-period review process. The review could be as short as three months. For example, if following the 'open letter consultation', there is deemed to be no grounds to progress the review. Furthermore, once the issue(s) that need addressing at the review have been established as part of the 'open letter consultation', we would have the flexibility to reduce the timetable of the process - if appropriate.

7. Innovation

Chapter Summary

This chapter summarises respondents' views on our proposed innovation stimulus and sets out our decisions on the role of innovation in RIIO-GD1 and RIIO-T1.

The key changes we have made since our December proposals are:

- ➔ what was referred to as innovation stimulus is now called the Network Innovation Competition (NIC)
- ➔ to reduce the limit on the total annual funding under the gas NIC from £40m to £20m
- ➔ to extend the scope of the funding under the NIC to include projects which meet environmental objectives
- ➔ to increase the maximum level of funding under NIC up to 90 per cent of cost of the project.

More detail on the issues discussed in this chapter is set out in the 'Supplementary Annex entitled - Business plans, innovation and efficiency incentives'.

Role of innovation

7.1. The RIIO model has a number of elements which will encourage innovation, including the longer price control period, the outputs focus and strong efficiency incentives. Another important aspect of our approach is to consider efficiency over the longer-term which will allow companies to propose in their business plans the roll out of innovative technology, techniques or commercial strategies which may pose higher costs in the price control period than the 'business as usual' approach but that are justified by the longer-term delivery of outputs at lower cost to customers.

7.2. Where the commercial benefit of innovation is not clear, network companies may not have a strong motivation to pursue innovation in a timely way. The RIIO model includes a time-limited innovation stimulus package, to supplement the incentives inherent in the RIIO price control framework. This package will encourage companies to undertake innovation with low carbon or environmental benefits, where the learning generated can be disseminated across the industry.

December document

7.3. In the December document, we noted that would expect companies to include innovative solutions in their business plans where they had the evidence required to justify the project as delivering outputs at lower cost to customers. The benefits of the projects could accrue within the price control or over a longer period.

7.4. We also set out the key elements of the innovation stimulus (now the NIC) that would inform the network operators in developing their business plans:

- *Amount of funding available under each innovation stimulus.* We proposed that £25-£35m per year should be available for electricity transmission, bringing total funding in electricity (transmission and distribution) to between £90m and £100m a year. We considered setting the level of funding for the gas innovation stimulus (transmission and distribution) at £45-£50m per year.
- *Scope of the fund.* We sought views on whether the stimulus should be focussed on projects that aimed at delivering low carbon outputs or whether it should have a broader objective of contribution to long-term network sustainability.
- *Partial funding of projects*. We proposed to set a maximum level of project funding for the stimulus of 80 per cent.

7.5. We also proposed the introduction of a limited amount of direct innovation funding (the Innovation Allowance) for each network company. Similar in principle to the current Innovation Funding Incentive (IFI) and First Tier funding available under the Low Carbon Networks (LCN) Fund, this would provide innovation funding for small projects with companies self-certifying against set criteria.

7.6. We also consulted on a revenue adjustment mechanism to enable innovative solutions to be rolled out within the price control period.

Respondents' views

7.7. All respondents welcomed the emphasis on innovation. One respondent noted that the primary consideration in any innovation project should be for network companies to maintain a safe and secure network. A number of respondents noted the importance of flexibility in the innovation arrangements. This included flexibility in terms of the regulatory framework and associated funding arrangements and in relation to the scope for transmission and distribution to work together.

7.8. The vast majority of respondents supported the proposals for the innovation stimulus (now the NIC) and innovation allowance. Only one respondent did not agree that a strong case had been made to implement an innovation stimulus package and consequently that such innovation should be funded through direct ex ante allowances to each company. Some respondents questioned why the proposed arrangements were time limited.

7.9. The CCG was supportive of an emphasis on innovation and further development of the LCN Fund approach. They considered the opportunities to innovate to deliver a sustainable energy sector could be broader than the low carbon agenda.

Our decisions/further thoughts

7.10. We note the broad support for the NIC and the potentially significant benefits it can provide to consumers and the industry as a whole. We intend that the NIC should have the characteristics outlined in Table 7.1.

Table 7.1 – NIC parameters

Parameter	Characteristics
Limit on total annual funding awarded	Electricity Transmission - £30m Gas (Distribution and Transmission)- £20m
Profile of funding	A flat profile for the funding over the period (inflated by RPI).
Scope of the funding	Projects which meet environmental objectives not just those related to the low carbon agenda.
Maximum level of funding	Funding up to 90 per cent of cost of the project.

7.11. The rationale for a lower level of funding in gas than set out in the December document is that we have received no evidence from stakeholders on the scale or cost of potential projects. We consider that £20m may be a more appropriate value based on example projects[15] of innovation in gas networks and an assessment of the scope for future low carbon/environmental innovation. If there is sufficient evidence that consumers may benefit from additional funding, then the independent expert panel (which will recommend projects to us for funding) can recommend a review of this funding limit. If the panel consider the quality of submissions warrants additional funding, this would have affect in the following year.

7.12. We also propose to provide an annual Innovation Allowance direct to the companies for small scale innovation. The allowance will be between 0.5 per cent and one per cent of companies' revenues, depending on the quality of the supporting innovation strategy. We have set out guidance on the innovation strategy in the 'Supplementary Annex - Business plans, innovation and efficiency incentives'.

7.13. We intend to introduce a revenue adjustment mechanism that will enable companies to apply, on an annual basis, for funding for material innovation roll out (against set criteria) during the price control.

7.14. We are also committed to undertaking a review of the LCN Fund for electricity distribution, after it has been in operation for two years. This will take into account the lessons learned from its operation and the development of the NIC as part of RIIO. If this raises any significant issues we will consider the requirement to reflect these in the NIC arrangements.

[15] KEMA, 'RPI-X@20: Technological change in electricity and gas networks, a sample survey of international innovation projects.' Available at http://www.ofgem.gov.uk/NETWORKS/RPIX20/CONSULTREPORTS/Documents1/KEMA%20Technology%20changes%20Final%20Report.pdf

8. Financing efficient delivery

Chapter Summary
This chapter summarises our December proposals, respondents' views and, and our decisions on the key financial issues. The issues covered in this overview chapter include: asset lives, depreciation and capitalisation; cost of debt indexation; the cost of equity, and transitional arrangements. In this chapter, we set out the following key conclusions:

- front loaded depreciation to all post 2002 assets, and not just new assets
- capitalise repex at 100%
- an indicative cost of equity range of 6.0-7.2%
- cost of debt indexation based on a 10-year trailing average of the iBoxx 10+ non-financials maturity of broad A and BBB bonds
- more detailed guidance on transitional arrangements.

More detail on the issues discussed in this chapter is set out in the 'Supplementary annex - Financial issues'.

Package of financial measures

8.1. Ensuring that efficient companies are able to finance themselves (through both debt and equity) and are remunerated appropriately lies at the heart of the RIIO approach to financeability. The RIIO decision document set out a number of principles to establish a sustainable longer-term package of financeability parameters designed to support the considerable investment required by the network companies over the next few years, including:

- a capitalisation policy based on equalising incentives and closely aligned with the actual split between operating and capital expenditure
- asset lives based on the average expected economic life
- the use of the capital asset pricing model (CAPM) supported by other approaches to determine the assumed cost of equity
- an assumed cost of debt allowance that is indexed to a long-term trailing average
- notional gearing based on a company's risk exposure
- the onus on companies to manage short-term requirements within their overall corporate structure and to provide equity as appropriate.

8.2. This package of measures is aimed at ensuring that the network investment required by 2020 can be effectively financed.

Asset lives, depreciation and capitalisation

December document

8.3. The December document, we set out for consultation technical and economic asset lives based on a review undertaken for us by a consortium of advisors led by CEPA. For gas distribution, drawing on our consultants' studies, we proposed to

retain the current 45 year asset life for depreciation purposes but introduce a front end loaded depreciation profile for new assets. We also proposed to capitalise 100 per cent of replacement expenditure (repex) instead of the current policy where we capitalise 50 per cent and 50 per cent is expensed in the year it is incurred.

Respondents' views

8.4. We received a large number of responses from the investor community as well as other stakeholders to our December document. Consumer groups and suppliers were generally supportive of our approach whereas GDNs and investors expressed concern about the cash flow implications of capitalising repex. In general, they suggested that we should either retain the current approach to repex (ie expensing 50 per cent) or that we should off-set the negative cash-flow effect through reducing depreciation asset lives, or extending front-loaded depreciation to all assets (ie not just new investment).

8.5. A number of GDNs also stated that we had established a legitimate expectation at previous reviews with regard to expensing 50 per cent of repex, and therefore we should not change the current policy.

8.6. No respondents suggested that our estimate of the technical life for gas distribution assets of 45 years was incorrect, and most respondents (with the exception of some GDNs) agreed that we should retain the current depreciation asset life given the uncertainty with regard to future network use. However, a number of respondents suggested that we should extend front-loaded depreciation to all assets as a way of dealing with future uncertainty with regard to gas network use.

Our decisions/further thoughts

8.7. As set out in our December document, there is uncertainty with regard to the future role of gas distribution in a low carbon energy sector. There are scenarios where electrification of domestic heat and water presupposes a decline in natural gas use and flows on the gas distribution network. Equally, there are scenarios where natural gas, including bio-methane, continues to play an important role in a low carbon energy sector. Given this uncertainty, we propose to retain the current asset life of 45 years as set out in our December document but we will adopt a front-loaded depreciation profile for all assets, including those constructed in the period 2002-2013. In our December document we proposed to apply front-loaded depreciation to new assets only, excluding assets for the years 2002-2013. (For pre-2002 assets, we have an established policy of a front-loaded depreciation charge based on the sum-of-the-years' digits, and a 56-year asset life, which we did not propose to change.)

8.8. We have decided to apply a front-end loaded depreciation charge to all assets as we consider that this could result in a better alignment of depreciation charges and network use, and hence strike a better balance between current and future network charges. Our approach also ensures a common accounting depreciation profile for all asset vintages.

8.9. The future of gas distribution networks in a low carbon energy sector should be clearer by the end of RIIO-GD1. We therefore propose to reconsider the asset life and depreciation profile during the RIIO-GD2 price review.

8.10. With regard to the proposed change in capitalisation we do not consider that we have established legitimate expectations that we would continue with the policy of expensing 50 per cent of repex indefinitely. At previous reviews, we have explicitly considered changes to the current repex capitalisation policy. Our previous decisions to retain the current policy of expensing 50 per cent of repex were based on the need to ensure financeability. However, as set out in the RIIO model, we propose to address financeability through policy levers other than through (unsustainable) capitalisation policies. We have therefore decided to retain our December proposal to fully-capitalise repex, consistent with the RIIO objective to ensure long-term financial sustainability and to ensure current and future consumers bear their fair share of costs.

8.11. As set out in the RIIO documents, we are committed to introducing transitional arrangements where any changes to current depreciation or capitalisation policies result in financeability issues. Although the change in capitalisation of repex has a material impact on company's cash-flows in isolation, the effect is largely off-set by our decision to apply a front-end loaded depreciation profile to all assets. Notwithstanding this point, companies have the opportunity within their business plans to propose transitional arrangements, eg a phasing of the change in the capitalisation rate, to address any short-term cash-flow effects arising from the change in policy, and we will consider any proposals where companies can demonstrate that such transitional arrangements are required to ensure financeability. (We discuss our approach to transitional arrangements in more detail below.)

The allowed return

8.12. As in our December document, we do not think it is appropriate for us to set out a level for notional gearing in advance of receiving the companies' business plans. The level of gearing will be based on the cash flow risk inherent in each company's business plans. At this stage in the process, our approach is to set out a narrower range for the cost of equity. This is a guideline range that companies should take into account in formulating their business plans and, if appropriate, they can make a case for a value outside of this range, which is based on a traditional level of regulatory risk and gearing. We also provide more detail on the cost of debt indexation.

The allowed return - cost of equity

December document

8.13. In December, we set out an indicative range for the cost of equity assumption of 4.0-7.2 per cent (real post-tax) based on the CAPM approach and supported by

other evidence. We stated that companies would have the ability to justify a value outside of the range in their business plans consistent with their overall risk assessment and financing package.

Stakeholders' views

8.14. All network companies and investors were of the view that the bottom of the range was implausible given the increased level of investment required over the period and that a return towards the top end of the range, with upside potential through incentives, was appropriate.

8.15. The Energy Networks Association (ENA) commissioned a report from Oxera which showed a range of 5.2-7.5%, with a preference for the top end of the range. A number of companies and investors suggested that the increased duration of cash flows arising from the change in asset life merited a higher cost of equity.

8.16. In contrast, consumer groups and suppliers suggested that the appropriate cost of equity was towards the lower half of the range with Centrica providing a report from CEPA that indicated a range of 3.5-5.3%.

Our decisions/further thoughts

8.17. Based on the feedback we have received to the December document, we do not think it would be in the interests of consumers to de-risk companies to the extent necessary to justify a cost of equity towards the bottom of the consultation range. The RIIO framework is about providing incentives to encourage companies to deliver their outputs at minimum cost. This requires a level of opportunity and risk that does not align with a low cost of equity.

8.18. Taking these factors into consideration and the initial RORE analysis we have undertaken, we think an appropriate range for the cost of equity is 6.0-7.2% on the assumption that the risk profile of the network companies under RIIO-GD1 is similar to that currently in place. We invite the companies to present business plans consistent with this range unless they have compelling arguments for a cost of equity outside this range linked to the specific risk profile of their business.

The allowed return - cost of debt

December document

8.19. We set out in December our preference to introduce annual indexation of the cost of debt and a proposed index based on a trailing average of Bloomberg indices. We see indexation as a mechanism to deal with the uncertainty over the movement in future interest rates.

Stakeholders' views

8.20. In response to our consultation, network companies and investors tended to focus on the potential downside of the proposal and suggested it may increase risk, although a number appreciated the conceptual advantage of the approach and some were in favour. Consumer groups and suppliers tended to be more in favour of our proposal. We received a number of useful suggestions for improvements in the technical design of the index covering the source of data, maturity, credit ratings and length of the trailing average. Network companies and investors were concerned that the index would not cover the cost of debt issuance and other associated costs and so sought an uplift to the index.

Our decisions/further thoughts

8.21. We remain of the view that, over an eight-year price control, an uncertainty mechanism is required for the cost of debt. This is especially true given the current historically low levels of the cost of debt and the expectations that interest rates will rise significantly over the medium term. Other factors such as Basel III[16] and Solvency II[17] make predictions of future interest costs even more uncertain. We also consider that most of the risks highlighted by network companies and investors apply equally, if not more so, to the main alternative of providing a fixed cost of debt assumption throughout the price control.

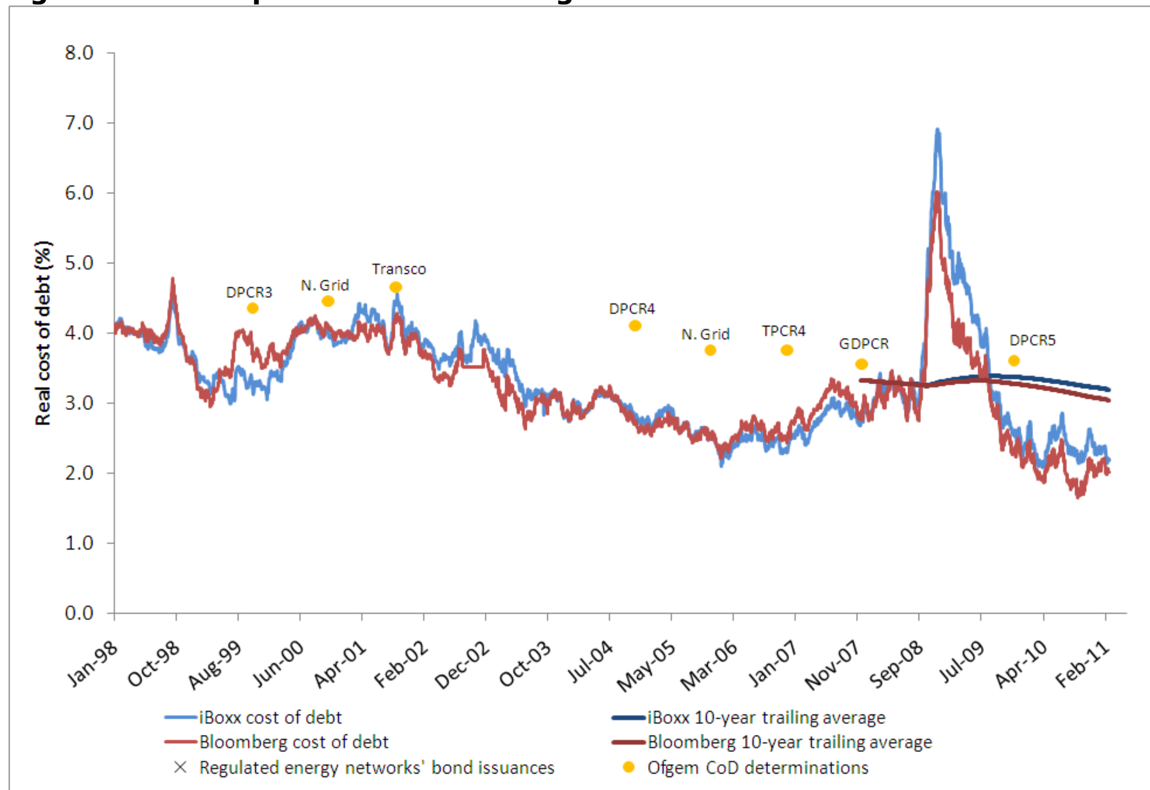
8.22. We therefore consider that for the RIIO controls we should introduce indexation of the cost of debt assumption. We have reflected on the comments on the technical features and have revised our proposed design of the index.

8.23. We have taken on board comments concerning the robustness and transparency of the Bloomberg methodology compared to the iBoxx methodology and our selection of the appropriate credit ratings and maturity. We now intend to use the iBoxx non-financials 10+ maturity series for an average of broad A and broad BBB credit ratings. This selection also addresses some concerns raised over our choice of Bloomberg credit ratings and the period of maturity.

8.24. Figure 8.1 below shows the difference between the revised index and the original suggested in December. As at 11 March 2011 the revised index has a cost of debt of 3.2 per cent compared to 3.0 per cent for the original index.

[16] Basel III is a comprehensive set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector.
[17] Solvency II is a fundamental review of the capital adequacy regime for the European insurance industry.

Figure 8.1 - Comparison of Bloomberg and iBoxx methods



8.25. Some respondents suggested we should use a longer trailing average, some a shorter trailing average and some a weighted average of actual debt raised or net investment. Although a weighted approach has some appeal, it would significantly increase complexity and reduce predictability for investors and other stakeholders as each network company would have an individual cost of debt assumption. We have undertaken some scenario analysis of expected changes in companies' cost of debt over the price control period, making different assumptions about future interest rates and requirements for new borrowing. This suggests that a simple 10-year trailing average will, in nearly all circumstances, provide a sufficient allowance to cover debt costs. Consequently we propose to retain our simple 10-year average.

8.26. We found in our scenario analysis that in some exceptional circumstances the simple trailing average did not provide sufficient allowance. This was where there were significant levels of new borrowing relative to the RAV at a time of rapidly increasing debt costs. These circumstances may apply to only one or two network companies and we have seen no evidence to suggest that any of the GDNs will face these circumstances in the coming period. However, companies can make the case in their business plans for the use of a weighted index if they have evidence that they face these specific circumstances.

8.27. A number of respondents suggested that the index did not account for certain costs associated with issuing debt. This is not correct. We acknowledge that there are costs of issuance and we have allowed for these through our selection of the index. Network companies have generally been able to obtain their debt financing at

a rate 30-40 bps below the constituent elements of the iBoxx index. While not providing an explicit allowance, the index is sufficiently high to cover the all-in cost of debt for network companies, including issuance and other associated costs. It also provides an incentive on companies to minimise these and related costs, to the extent that they have control over them.

Transition

8.28. Our requirement, in performing our duties to have regard to the need to secure that licence holders are able to finance their regulated activities, has not changed with RIIO and we still take this very seriously. As set out above, the impact on cash-flows of our decision to capitalise repex at 100 per cent is largely off-set by our decision to introduce front-loaded depreciation for all assets. However, companies will have the option to present their views as to what is required to achieve a financeable situation in their particular circumstances as part of their business plan. Companies who propose transition arrangements will need to satisfy us that the transition is as short as possible, necessary to secure the financeability of the company and in the interest of existing and future consumers.

8.29. A key input into the assessment of transition arrangements will be maintenance of credit ratios compatible with a comfortable investment grade rating and consideration of equity metrics. As with any other business undertaking a significant investment programme, we expect the companies to take the appropriate action to ensure that appropriate credit metrics are achieved, which may include equity injection.

Other financial issues

8.30. We set out in our December document a range of other financial issues covering tax, pensions and RAV. Our proposals were largely following established policies and procedures. These were largely supported by respondents and our decisions largely reflect our proposals. The most significant change is to assume that EU International Financial Reporting Standards (EU-IFRS) will be adopted from 2014 in our financial modelling.

8.31. Further details on these issues, respondents' views and our decisions are set out in the 'Supplementary Annex - Financial issues'.

9. Next steps

Chapter Summary
This chapter sets out the next steps in RIIO-GD1.

Next steps

9.1. During the next stage of RIIO-GD1, GDNs will be required to develop their well-justified business plans. We expect the GDNs will continue their stakeholder engagement during this period. The companies will be required to submit their business plans by 31 July 2011.

9.2. Following the submission of their plans we will begin the process of assessing those plans to determine whether any company is suitable for lighter touch treatment or fast-tracking. We will publish our initial assessment of all companies' plans in October 2011. We will undertake a more detailed assessment and publish our proposals for proportionate treatment for consultation in December 2011.

9.3. We will also be taking forward a number of work-streams from April 2011. We will form working groups with the companies to draft new Licence Conditions with the aim of finalising these in time for our consultation on fast-tracking in December 2011. We will also be taking forward the development of the regulatory information guidelines (RIGs). In our December document, we set out the need to introduce new reporting requirements on companies to enable us to monitor and evaluate companies' performance against the set of output measures. We have engaged consultants to help us with this work-stream, and we intend to consult on our proposed approach later this year. We discuss respondents' views and our latest thinking on reporting requirements in detail in Chapter 1 of the 'Supplementary Annex - Outputs and incentives'.

9.4. We will continue our stakeholder engagement both between now and the submission of the company's plans and then during the process of assessing those plans. The focus of the next stage of engagement will be understanding views that will assist us in the assessment of the companies well-justified business plans. Our main stakeholder events will include:

- the next meeting of the PCRF in May 2011
- further meetings of our working groups to develop further thinking on reporting requirements
- the GDNs will have a further opportunity to meet with our Committee of the Authority in late September 2011

Appendices

Appendix	Name of Appendix	Page Number
1	Summary of responses to December initial strategy consultation	52
2	RIIO-GD1 timetable	62
3	List of uncertainty mechanisms	63
4	The Authority’s Powers and Duties	65
5	Feedback questionnaire	68

Appendix 1 - Summary of responses

9.5. In our consultation document (Consultation on strategy for the next gas distribution price control - RIIO-GD1 Overview paper 160/10) we sought the views of respondents about a number of questions. In this section, we set out the list of non confidential respondees, and provide a summary of their responses.

List of Non Confidential Respondees

List	Name
1	AMP Capital
2	Anthony Legg
3	Bank of America Merrill Lynch
4	Balfour Beatty
5	BioGroup
6	CE Electric
7	Centrica
8	Centrica Storage
9	Consumer Focus
10	Council of Gas Detection and Environmental Monitoring
11	EDF Energy
12	Electricity North West
13	E.ON UK
14	Energy Networks Association
15	Health and Safety Executive
16	Invesco Perpetual
17	National Energy Action
18	National Grid Affordable Warmth Solutions
19	National Grid Gas
20	Northern Gas Networks
21	Renewable Energy Association
22	SBGI
23	Scotia Gas Networks
24	Scottish Environmental Protection Agency
25	Southeast Power Engineering
26	Teachers' Infrastructure Group
27	The Anaerobic Digestion and Biogas Association
28	UK Power Networks
29	Wales and West Utilities
30	xoserve

Summary of Responses

9.6. Responses received by Ofgem which were not marked as being confidential have been published on Ofgem's website.[18] Copies of non-confidential responses are also available from Ofgem's library.

9.7. We set out a summary of the responses we received to the questions set out in our December GD1 Overview paper. The supplementary annexes that we are publishing along with this Overview Paper set out respondents' views in more detail.

CHAPTER: One
Question 1: Do you have any comments on the proposed process and timetable for the review?

9.8. Most of the respondents welcomed the level of stakeholder engagement, and the overall review process. However, a number of respondents commented that the timetable for the review was too compressed given the number of policy issues that need to be resolved. One respondent suggested that fast-tracking should be dropped to allow for greater time to focus on policy issues.

9.9. One GDN commented that we should allow companies the flexibility to develop output measures and incentive mechanisms following our March publication, in order for them to reflect their on-going stakeholder engagement in relation to output and incentive mechanisms.

CHAPTER: Two
Question 1: Do you agree that we have identified the key challenges facing the gas sector, and our approach to accommodating these challenges within the price review?

9.10. The respondents broadly agreed that we had identified the key contextual issues that we would need to address at RIIO-GD1. In addition to the strategic issues we identified, the respondents' also noted a number of other issues pertinent to the review, including: the ageing asset base; TMA and NRSWA (which will have a significant cost impact for RIIO-GD1); and, the impact of smart meters and future climate change on the provision of emergency services.

9.11. One GDN also considered that we should review the Meter Provider of Last Resort (MPOLR) obligation, which imposes a significant cost on GDNs, as part of the price control review process.

[18] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=251&refer=Networks/GasDistr/RIIO-GD1/ConRes

CHAPTER: Three
Question 1: Do you have any comments of the overall approach to stakeholder engagement?
Question 2: Do you have any views on how our engagement process and that of the network companies could be made more effective?

9.12. Most respondents welcomed the greater emphasis on stakeholder engagement at RIIO-GD1. However, a number of GDNs believed that the timetable was too short, leading to a compressed and sub-optimal timescale. One GDN also noted that the HSE review of repex introduces a significant element of uncertainty into the review process.

9.13. One respondent suggested that the engagement process could have been improved by holding joint Ofgem-company stakeholder events.

CHAPTER: Four
Question 1: Do you consider the proposed outputs and associated incentives, along with the other elements of the proposals, will ensure companies deliver value-for-money for consumers and play their role in delivering a sustainable energy sector?
Question 2: Do you consider that the proposed outputs and incentive arrangements are proportionate?
Question 3: Do you have any views on the proposed outputs or incentive mechanisms?

9.14. In general, the respondents broadly agreed with the proposed set of outputs we set out in our December document. However, the GDNs stated that for a number of outputs we needed to provide more detail with regard to the output definition, and the structure of the incentive mechanisms. The GDNs considered that the incentive package was weaker than at previous reviews, and some incentive mechanisms provided only downside risk. One GDN noted that the value of the incentives should not be a substitute for the allowed rate of return.

9.15. In addition, the respondents provided a range of detailed comments on the proposed outputs and incentive mechanisms.

9.16. For the broad environment output measures, a number of GDNs proposed changes to the current connection arrangements for bio-methane and the socialisation of downstream connection assets. One GDN stated that it will bring-forward a charging methodology modification to the uniform network code (UNC) in relation to entry capacity. Environmental groups supported the socialisation of connection costs; they also stated that Ofgem should ensure the specification of entry assets does not lead to prohibitive cost. By contrast, one respondent emphasised the need to avoid socialising costs in network charges to avoid hidden subsidies and to ensure a level-playing field for competing renewable technologies.

9.17. For the narrow environmental outputs, the respondents supported the continuation of the environmental emissions incentive (EEI) and shrinkage allowance adopted at GDPCR1, although the GDNs expressed differing views on the specific details, such as the requirement to have caps and collars, and a rolling-incentive mechanism. One respondent stated that we should not introduce a Licence Condition to require GDNs to collect real losses data when this becomes available (as part of the smart metering roll-out), as this will not be possible prior to 2020/21. Instead, they suggested we should introduce an obligation to assess the accuracy of smart meter data.

9.18. The network companies also considered that we should adopt an incentivised cost pass-through arrangement for bio-methane connections, akin to the mechanism for funding distributed generation (DG) at DPCR5.

9.19. With regard to social objectives, the respondents were generally supportive of our proposals for both CO and the fuel poor network extensions. However, one respondent asked whether the GDNs should play a significant role in these areas given that they did not have the primary interface with suppliers. The GDNs and one of the fuel poor network partner organisations proposed possible revisions to the eligibility criteria for the scheme and the calculation of the 'economic test', which determines the proportion of costs recovered from connecting households up-front and over time through transportation charges. One respondent stated that our proposals did not go far enough to assist the fuel poor. Another respondent stated that we needed to resolve the appropriate role of GDNs given the number of parties with interests in this area.

9.20. For the customer satisfaction broad measure, respondents supported the proposed output but there were differing views on the structure and the size of the overall financial incentive. The GDNs generally argued for a higher incentive payment and for greater upside reward. For example, a number of the GDNs considered that the financial rewards/penalties should be based on companies' absolute performance, that is, relative to historic performance, rather than companies' comparative performance. A consumer group considered that the financial incentive associated with the stakeholder engagement process should be lower and provide downside risk.

9.21. With regard to connections outputs, the respondents considered that the existing arrangements for gas connections, namely the connection standards, as well as regulated/unregulated margins worked well. A number of GDNs considered that we should withdraw the guaranteed standards where competitive was effective, and allow companies to earn unregulated margins. With regard to standards for distributed gas, the GDNs proposed introducing standards at a later stage when they expected to have more clarity in relation to bio-methane producers' needs.

9.22. For the proposed repex risk-removed output measure, in general the respondents supported our proposals, although the GDNs requested further details as to how the risk-removed driver would work, eg how we would calibrate the allowance (ie £ per risk-removed), and deal with the dynamic nature of risk in setting the output baseline. The HSE supported the proposed approach, although

noted that we should ensure our proposed change to funding arrangements results in a similar level of risk removed as under the current funding arrangements.

9.23. The respondents' supported the introduction of network capacity metrics, as well as asset risk measures. The GDNs considered that any incentive mechanism associated with capacity or asset health measures should be symmetric (eg we should recognise both shortfalls and over-delivery in setting output targets at the subsequent review) rather than asymmetric (where we would only recognise shortfalls).

9.24. A number of shippers requested a financial incentive associated with off-take meter errors.

CHAPTER: Five
Question 1: Is our proposed approach to cost assessment appropriate?

9.25. In general, the GDNs supported the toolkit approach. However, they also expressed a range of concerns about the econometric modelling, including appropriateness of drivers, robustness of totex regression, adjustment for special factors, eg TMA, and concerns about specific capex/repex models. One GDN stated that it considered the relative efficiency ranking of GDNs was a function of equally viable model functional forms, and they considered that the modelling approach was not sufficiently robust to set cost allowances equal to the upper-quartile.

9.26. One respondent noted that we should take into account the benefits assumed at DN sales in setting cost allowances.

9.27. The network companies also expressed concern about the proposed reduction in the marginal incentive rate or cost-sharing factor associated with the information quality incentive (IQI).

CHAPTER: Five
Question 2: Do you have any views on our proposed process for proportionate treatment?

9.28. The majority of comments related to our proposals for fast-tracking. A number of respondents expressed concerns over the pressure that fast-tracking process would place on price control timescales and the associated impact on stakeholder engagement and the development of meaningful business plans. One respondent expressed a preference to delay the fast-tracking option until the next price control.

CHAPTER: Five
Question 3: Do you have any views on the criteria for assessing business plans? Are any of the criteria highlighted inappropriate? Should any additional criteria be added?

9.29. One GDN suggested that we should provide benchmarking data that GDNs do not have access to. One GDN agreed with the criteria. One respondent noted that companies' approach to social objectives should form a key assessment criterion. Most respondents provided detailed comments in their responses to the detailed supplementary annexes.

CHAPTER: Five
Question 4: Do you have any views on the proposed role for competition in third party delivery?

9.30. The GDNs noted that there was effective competition in the market for connections and construction. One GDN also noted that it was impractical to introduce competition in the provision of network assets in the absence of discrete, separable projects.

CHAPTER: Six
Question 1: Do you have any views on the uncertainty mechanisms identified?
Question 2: Are there any additional uncertainty mechanisms required that we have not identified?
Question 3: Are there any mechanisms that we have included that are not necessary and, if so, why?

9.31. There was general support for changing the approach to RPI indexation from using a six-month average to using 12 months. Respondents preferred using data from January to December over data from April to March when constructing the average. This was because it avoids the need to forecast January to March data when setting charges and removes the resulting increased possibility of under- or over-recoveries. A number of NWOs highlighted the need for transitional arrangements.

9.32. The GDNs expressed a number of concerns about the proposed uncertainty mechanisms. For example, they were concerned about the cash-flow risk associated with a logging mechanism for bio-methane, and proposed either ex-ante allowance with re-opener, and/or incentivised cost pass-through (eg in line with the distributed generation mechanism introduced at DPCR5). The GDNs proposed changes to the TMA re-opener, including wider scope and a more frequent re-consideration of the costs (not limited to a single window). A number of GDNs also believed that we should retain an uncertainty mechanism with regard to the loss of meter work.

9.33. The GDNs generally supported our proposed re-opener for change to the iron mains replacement programme (repex).

9.34. The network owners provided detailed comments on the proposed financial incentive mechanisms. The primary issue related to the proposed cost of debt indexation mechanism. In general, the network owners preferred a fixed debt cost allowance to an index. They also set out proposed alternative indices which they considered would better reflect the characteristics of their debt issuance.

9.35. The majority of respondents were supportive of the scope, process and timetable that we set out for the mid-period review of output requirements.

9.36. Network user respondents raised concerns over the volatility to charges created by uncertainty mechanisms. One shipper/supplier suggested the following possible mechanisms: (i) a cap and collar on any changes to allowed revenue; (ii) applying a smoothing algorithm; and (iii) logging up of all revenue adjustments.

CHAPTER: Seven
Question 1: Do you have any views on the role of innovation in RIIO-GD1?
Question 2: Do you have any views on the time limited innovation stimulus?

9.37. The respondents were supportive of the proposed innovation stimulus, and the innovation allowance. The network owners were concerned with the reduction in funding from 90 per cent (under the LCN Fund) to 80 per cent; one respondent supported the reduction.

9.38. The respondents supported the proposed wider scope of the stimulus. One respondent considered that its scope should include proposals that address fuel poverty, including schemes involving community wide demand-side response.

CHAPTER: Eight
Question 1: Do you consider that the package of financial measures identified will enable required network expenditure to be effectively financed?

9.39. Most network companies highlighted their key concerns around the cost of equity, debt indexation, and changes to repex capitalisation (as set out in the subsequent questions below). Network companies also highlighted a number of additional risks associated with the RIIO model, including: (i) longer review period; (ii) stronger financial exposure to output performance; (iii) increased regulatory/stranding risk. They considered that we need to reflect these factors in the allowed return.

9.40. A number of respondents also considered that there was a negative investor response to our proposals.

9.41. By contrast, a network user and consumer group welcomed the overall package.

CHAPTER: Eight
Question 2: Do you have any views on our proposed approach to capitalisation and depreciation?

Repex

9.42. There were some comments that changing the treatment of repex would run counter to investors legitimate expectations and that it would defer substantial amounts of cash into later price controls.

9.43. One network operator observed that the 50/50 split on repex had been introduced for financeability reasons. They also stated that Ofgem had acknowledged that the primary purpose of the programme was for current customers as it was introduced for safety reasons. They argued that they could see no justification for placing a greater cost burden on future customers.

9.44. Network companies and investors tended to focus on the cash flow implications of the change in replacement expenditure (repex) treatment with a focus on restoring their cash position through a combination of reducing asset life - 20 years, 30 years and 40 years and/or extending the use of a front-end loaded depreciation profile.

Depreciation

9.45. One network operator agreed with the basic tenet of our proposal that gas distribution network has an asset life of at least 45 years whilst recognising that there remained some uncertainty over the utilisation of the networks in the longer-term.

9.46. A number of the network operators suggested lower asset lives, ranging from 20 to 40 years based on restoring cashflows lost by the repex proposals.

9.47. One network company suggested that the absence of certainty was precisely the reason why asset lives should be reduced. In deferring this decision the current proposals increased the risk to future customers (who will be reduced in numbers) of higher per unit charges. Front loading depreciation was also offered as a way of mitigating these risks.

9.48. One network company suggested exactly the opposite noting that all credible forecast models currently anticipate significant usage of gas until 2050 so agreed to continue with asset lives of 45 years

CHAPTER: Eight
Question 3: Do you have any views on our preferred approach to implement any transition arrangements over one price control period where possible?

9.49. Non network companies generally welcomed the proposals for transitional arrangements. The GDNs put forward a number of different proposals to accommodate any adverse cash-flow effects arising from the proposed policy changes, including applying the new asset lives to all assets; transition periods of

more than one price control; and, changing the fast/slow money split to increase the level of fast money.

CHAPTER: Eight
Question 4: Do you have any views on our preferred approach to remunerating the cost of debt?

9.50. The network respondents and investors were generally against indexation and preferred a fixed allowance. The main concerns were that:

- it increases risk by reducing companies' ability to hedge against the index in order to ensure that they do not underperform it
- it substantially reduces the scope for outperformance on the cost of debt, which should be compensated for elsewhere in the settlement
- it could encourage sub-optimal company behaviour, such as tracking the index, or issuing bonds of a specific tenor
- the proposed Bloomberg data series is unrepresentative of the networks and is based on a non-transparent methodology that makes it difficult to predict
- the proposed 10-year maturity index does not reflect the long-term nature of bonds issued by network companies and is inconsistent with the move to extend regulatory asset lives
- the proposed index does not account for debt issuance and liquidity management costs
- As proposed, the index design fails to account for new issue premia on bond coupons, and for the inflation risk premium on non index-linked bonds.

9.51. In addition, some network companies argued for longer or shorter trailing averages, while some also argued for weighted averages to be used.

9.52. Consumer representatives and suppliers were strongly in favour of indexation.

CHAPTER: Eight
Question 5: Do you have any views on our proposed approach to assessing the cost of equity and the associated range of 4.0-7.2 per cent?

9.53. Both network companies and investors strongly criticised the bottom end of our cost of equity range (4.0-7.2 %). In general, network companies and investors sought a cost of equity set at the top of our proposed range or above it. Investors in particular sought the opportunity to earn double-digit returns on equity and some questioned whether this would be possible even with the cost of equity set at the top end of our range. Network companies presented analysis by Oxera that estimated the cost of equity range at 5.1-7.5%, with focus on the upper end.

9.54. Network companies also questioned the assumptions regarding the CAPM components of the cost of equity. They argued that Europe Economics' analysis relied on recent market data that has been distorted as a result of the financial crisis and, thus, would not be representative of the next price control period.

9.55. A consumer representative argued that Europe Economics presented a more robust range (4.2-5.6 per cent) that was consistent with the Competition Commission's approach. Both the consumer representative and one supplier claimed that the upper end of our equity risk premium range (4.0-5.5 per cent) was not supported by regulatory precedent and or the claim of economic uncertainty.

CHAPTER: Eight
Question 6: Do you have any views on other elements of our financial proposals?

Network companies focussed on issues in relation to tax and pensions. We address these issues in detail in the 'Supplementary Annex – Financial issues.'

Appendix 2 –RIIO-GD1 timetable

Phase	Year	Month	Milestone
Strategy Development	2010	December	Thursday 16th - **GEMA** - Decision on Strategy Consultation Friday 17th - Strategy Consultation Published
	2011	January	Thursday 27th - Committee Session with GDNs
		February	Thursday 3rd - Committee Sessions with TO's & Consumer Challenge Friday 4th - Consultation Closes
		March	Thursday 3rd - Committee Session - Strategy Decisions Thursday 17th - **GEMA** - Strategy Decision Late March - Strategy Decision Published
Fast Tracking		July	Friday 29th - Business Plans Received
		September	Late September - Committee Sessions with GDNs and TOs
		October	Early October - Committee Session - Fast Track First Sweep
		November	Late November - Committee Session - Fast Track Recommendation
		December	Thursday 15th - **GEMA** - Fast Track Recommendation Friday 16th - Fast Track Consultation Published
	2012	February	Thursday 16th - **GEMA** - Fast Track Decision Friday 17th - Fast Track Decision Published Late February - Statutory Consultation on Licence Changes
Initial Proposals		March	Early March - Final Business Plan Updates Received
		June	Late June - Committee Session - Initial Proposals
		July	Thursday 19th - **GEMA** - Initial Proposals Late July - Initial Proposals Published
Final Proposals		November	Mid November - Committee Session - Final Proposals
		December	Thursday 13th - **GEMA** - Final Proposals Monday 17th - Final Proposals Published
Launch	2013	January	Early January- Statutory Consultation on Licence Changes
		April	Monday 1st - New Price Controls Commence

Appendix 3 – List of uncertainty mechanisms

1.1. The tables below summarise our final proposals for uncertainty mechanisms for the gas distribution sector.

Table 1: Uncertainty mechanisms applying to all sectors

Mechanism	Decision
Pass-through of Ofgem license fees and business rates	No change
RPI indexation of allowed revenue	Change to a 12-month average, with data from January to December.
Cost of debt indexation	Move to using a index for determining the cost of debt using the iboxx 10+ maturity of broad A and BBB bonds, using a trailing average of 10 years. Further details available in the 'Supplementary Annex - RIIO-T1 and GD1 Financial issues'.
Pension deficit repair mechanism	No change. Further details available in the supplementary paper entitled 'RIIO-T1 and GD1 Financial issues'.
Tax Trigger	We are introducing the DPCR5-style tax trigger mechanism. This will deal with future changes in the tax regime. Further details available in the supplementary paper entitled 'RIIO-T1 and GD1 Financial issues'.
Street works reopener	Change to timing and number of reopener windows.
Critical national infrastructure	Change to timing and number of reopener windows.

Table 2: Uncertainty mechanisms applying to gas distribution

Issue and purpose	Decision
Mains replacement incentive	Develop mechanism which links allowed revenue to the level of risk removed. Further discussions with HSE and GDNs on implementation. For further details see 'Supplementary Annex - Outputs and Incentives'.
Repex policy	Mechanism to allow GDNs to substitute non-iron mains asset investment into risk-removed mechanism if demonstrate equivalent risk removal. If unable to demonstrate equivalence of risk across asset classes, a reopener can be triggered.

Issue and purpose	Decision
	Changes to Mains Replacement Prioritisation System (MPRS). Re-opener for change to HSE policy. For further details see Outputs and Incentives paper.
Reopener for change in connection charging boundary	In the even of a change to connection charging boundary, companies can recover efficient costs during review subject to materiality threshold of 1% of total expenditure. Re-opener restricted to two periods: 2015 and 2018

Appendix 4 - 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 (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3. References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts.[19] 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.[20]

1.4. The Authority's principal objective is to protect the interests of existing and future consumers in relation to gas conveyed through pipes and electricity conveyed by distribution or transmission systems. The interests of such consumers are their interests taken as a whole, including their interests in the reduction of greenhouse gases and in the security of the supply of gas and electricity to them.

1.5. The Authority is generally required to carry out its functions in the manner it considers is best calculated to further the principal objective, wherever appropriate by promoting effective competition between persons engaged in, or commercial activities connected with,

- the shipping, transportation or supply of gas conveyed through pipes;
- the generation, transmission, distribution or supply of electricity;
- the provision or use of electricity interconnectors.

1.6. Before deciding to carry out its functions in a particular manner with a view to promoting competition, the Authority will have to consider the extent to which the interests of consumers would be protected by that manner of carrying out those functions and whether there is any other manner (whether or not it would promote competition) in which the Authority could carry out those functions which would better protect those interests.

[19] Entitled "Gas Supply" and "Electricity Supply" respectively.
[20] 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.

1.7. In performing these duties, the Authority must 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[21]; and
- the need to contribute to the achievement of sustainable development.

1.8. In performing these duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[22]

1.9. 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:

- promote efficiency and economy on the part of those licensed[23] 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; and
- secure a diverse and viable long-term energy supply,

and shall, in carrying out those functions, have regard to the effect on the environment.

1.10. In carrying out these functions the Authority must also have regard to:

- the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and
- certain statutory guidance on social and environmental matters issued by the Secretary of State.

1.11. The Authority may, in carrying out a function under the Gas Act and the Electricity Act, have regard to any interests of consumers in relation to communications services and electronic communications apparatus or to water or sewerage services (within the meaning of the Water Industry Act 1991), which are affected by the carrying out of that function.

[21] 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 Acts in the case of Electricity Act functions.
[22] The Authority may have regard to other descriptions of consumers.
[23] Or persons authorised by exemptions to carry on any activity.

1.12. 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[24] 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.

[24] Council Regulation (EC) 1/2003.

Appendix 5 - 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:

- Does the report adequately reflect your views? If not, why not?
- Does the report offer a clear explanation as to why not all the views offered had been taken forward?
- Did the report offer a clear explanation and justification for the decision? If not, how could this information have been better presented?
- Do you have any comments about the overall tone and content of the report?
- Was the report easy to read and understand, could it have been better written?
- 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