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RIIO T1

Decision on strategy for the next transmission price control - RIIO-T1

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Target Audience: Consumers and their representatives, transmission companies, 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 and electricity transmission price control (RIIO-T1).

The price control will be set for an eight-year period from 1 April 2013 to 31 March 2021. This will be the first transmission 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-T1. 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 transmission 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 transmission 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. This document provides the information network companies need to develop those plans.

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Associated Documents

Links to supplementary annexes

- Decision on strategy for the next transmission price control - RIIO-T1 Outputs and incentives
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionoutput.pdf
- Decision on strategy for the next transmission price control - RIIO-T1 Tools for cost assessment
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisioncosts.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.pdf

Links to other associated documents

- Decision on strategy for the next gas distribution price control - RIIO-GD1 Overview paper
  http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decision.pdf
- Providing a greater role for third parties in electricity transmission: Early thinking and options
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/thirdpartyrole.pdf
- Consultation on strategy for the next transmission price control - RIIO-T1 Overview paper (and supporting documents)
  http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIOT1%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

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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 RIIO-T1. We are now setting out decisions on this strategy in light of respondents' views. We set out: the outputs that network companies will need to deliver and the associated incentive mechanisms; how we will go about assessing the network 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 and customer satisfaction and stakeholder engagement with strong incentives for efficient delivery. In aggregate transmission companies that perform well in these areas will be able to earn rewards of around £170m, whilst those that do not will face penalties over the price control period of around £220m.

The proposals in this paper will drive a step change in network companies' contribution to the UK's broader energy and 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, reduce the visual impact of the networks, and reduce the network companies' own business carbon footprints. These will be worth around £360m over the control period across the transmission sectors.
- **Greater encouragement for innovation** – We are extending our innovation funding over the price control period by £240m for electricity transmission and £160m for gas transmission and distribution. This will encourage network

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. For the electricity transmission companies we also intend to introduce a financial reward to facilitate a greater contribution to the UK's environmental objectives. We intend to consult further on the operation of this mechanism.

We remain committed to ensuring that efficient network 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** – New electricity assets will be depreciated over 45 years. Existing electricity assets will continue to be depreciated over current lives. This policy will also apply to electricity distribution from 2015, the beginning of the next price control period.
- **Cost of equity** – We are setting an indicative range of 6.0–7.2% 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 network 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 network 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. However, it should be noted that we now enter an extended period of analysis with the companies. We are scheduled to make our next public statement in October 2011.

1. Introduction

Chapter Summary
This chapter introduces the document. It summarises respondents' comments on the process and timetable for the review and sets out our decisions in these areas. It also explains how the document and the separate supplementary annex papers are organised.

Purpose of this document

1.1. This document sets out the basis on which we intend to set the next transmission price control, RIIO-T1. The next price control will apply to the one gas and three electricity Transmission Owners (TOs) and cover the eight-year period from 1 April 2013 to 31 March 2021.

1.2. This document also sets out respondents' views to our December consultation on RIIO strategy (the December document) and highlights the changes to our proposals we are making in light of these views. We provide high-level summaries of responses in the specific sections of each chapter and a more detailed summary in Appendix 1. As in the December document, we are publishing a number of supplementary annexes alongside this paper which summarise respondents' views on each of the specific policy areas. 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-T1 at the same time as the gas distribution price control review, RIIO-GD1.

Role of this document in the RIIO-T1 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 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 needed 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 network company is required to develop detailed plans which demonstrate how they will deliver in the interests of both existing 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 them 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 by 31 July 2011. We also provide the criteria and process we will use to assess the network companies' business plans and outline the rewards for providing us with good quality plans.

1.7. Under RIIO, we are locking down a number of elements of the regulatory framework at this stage in the process. This is different from previous reviews when most issues were only decided towards the end of the process. 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. They will also be able to propose a package of measures to ensure their plans are financeable, including a proposed cost of equity, transitional arrangements, the levels of notional gearing and notional equity injections, in some circumstances, an alternative approach to cost of debt indexation. The onus is on the companies to demonstrate why they are different and why they require different treatment.

Overview of the package

1.8. The strategy decisions set out in this paper have significant implications for gas and electricity customers and end consumers, the environment and for network companies and their investors. These impacts are discussed in this section.

Consumer impacts

1.9. The average domestic electricity bill is currently around £400 per annum and the average domestic gas bill is around £600 per annum. Network charges (transmission and distribution) account for around 20 per cent of these bills. Electricity and gas transmission charges currently comprise, respectively, around 4 per cent and 2 per cent of domestic electricity bills. This does not reflect the total costs associated with transmission reflected in bills. There are additional costs associated with operating the gas and electricity transmission systems. These are determined through separate system operation cost recovery mechanisms.

1.10. In order to respond to the challenge of decarbonising Britain's energy sector we estimate that over £200bn of investment will be required over the next decade, including over £30bn of investment in the gas and electricity networks. This means that increases in consumers' bills are inevitable.

1.11. 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.

1.12. We are setting a range of output measures and incentives specifically focussed on the delivery of outcomes that are in the interests of consumers. We are requiring each network company to undertake a survey of how their customers rate their performance. In addition, 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 the views of stakeholders. We are providing scope for a discretionary reward based on qualitative assessment of companies' performance in stakeholder engagement by an independent panel. Finally, we are setting outputs in areas that consumers have told us they strongly value, including safety and reliability. In aggregate, TOs who perform well across all of these areas will be able to earn around £170m in additional revenues over the price control period. Those that do not will face penalties of around £220m over the price control period. The actual sums available will depend on the final calibration of the incentive schemes, which will only be possible once we have received the companies' business plans.

1.13. The Impact Assessment we conducted during the RPI-X@20 project estimated 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 current RPI-X model.

Environmental impact

1.14. We are putting in place a set of arrangements to drive a step change in the contribution that network companies make to the UK's broader energy and environmental objectives. This includes environmental measures to drive TOs to play a full role in meeting the environmental challenges. These measures include:

- a requirement on each network company to develop a well-justified business plan that demonstrates how it will respond to environmental challenges
- a set of specific environmental outputs that relate to:
    - the broad environmental impacts to which network companies contribute reflecting their role in facilitating the transition to a low carbon economy
    - direct network emissions including electricity transmission losses, business carbon footprint, sulphur hexafluoride (SF_6) emissions, gas shrinkage and the venting of natural gas from the transmission network
    - their local environmental footprint reflected in factors such as visual amenity and noise pollution.
- the wider output framework which will include:
    - a connections output that will require companies to consider the requirements of renewable energy producers and other new customer types that may emerge in transitioning to a low carbon energy sector
    - an output on network reliability that will give companies incentives to consider using low carbon technologies to meet capacity requirements
    - customer satisfaction incentives that will encourage network companies to be more outward focused, and to be better at providing products and services that help customers adapt to the low carbon energy sector.

- extending our innovation funding[1] by £240m over the price control period for electricity transmission and £160m for gas transmission and gas distribution. We are also proving an innovation allowance of up to 1% of allowed revenue. This is discussed further in Chapter 7.

1.15. The set of outputs and associated incentive arrangements that we have set out will incentivise the companies to rise to the environmental challenges and could be worth up to £360m over the control period across all TOs. The actual sums available will depend on the final calibration of the incentive schemes which will only be possible once we have received the companies' business plans.

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 consumers. 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 our principal 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 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 the initial strategy consultation, 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 and the third referred to the comments that it had made on other areas of the proposed RIIO-T1 approach. 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 decisions that are different to the proposals set out in December document.

[1] This is in addition to the £64m per annum currently provided in the electricity distribution sector by the low carbon networks (LCN) fund.

Table 1.1: Key decision areas

Policy area	December document	Our decision/way forward
Outputs and incentives		
SO/TO interactions	Consider the options for greater alignment of SO and TO incentives.	Arrangements to ensure SOs and TOs work together to manage short-term constraints and reduce gas shrinkage and venting.
Environment (Broad measure)	We consulted on the merits of including a mechanism to reward the TOs for their contribution to the broader environmental objectives.	Reputational incentive on low carbon energy flows. We intend to introduce a financial reward in electricity transmission and will consult further on the mechanism.
Environment (visual amenity)	Consider the provision of guidance on reducing the visual impact of existing infrastructure.	Alongside this guidance, we will introduce an allowance for each company to reduce the visual impact of existing infrastructure.
Environment (Losses)	Set a financial incentive of the total level of losses.	Reputational only incentive. TOs business plans to outline approach.
Customer satisfaction	Incentive based on +/-0.5% of allowed revenue.	Increase incentive strength to +/-1% of allowed revenue.
Reliability (electricity)	Primary output based on energy not supplied (ENS) with no collar on exposure.	3% collar on financial penalties and licence condition on minimum performance standard.
Business plans		
Cost assessment	Place emphasis on international and totex benchmarking.	More weight on disaggregated techniques alongside international and totex benchmarking.
Fast-tracking	Consult on business plans suitable for fast-tracking.	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 40-50%.
Innovation		
Limits on funding	Provide funding up to £40m pa to stimulate innovation in gas and £25-35m pa in electricity transmission.	Provide funding of up to £20m pa to stimulate innovation in gas and £30m pa in electricity transmission.
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.	Increase maximum level of funding up to 90% of the project cost.
Financial		
Cost of equity	Indicative range: 4.0-7.2%.	Indicative range: 6.0-7.2%.
Cost of debt	Use proposed index based on a trailing average of Bloomberg indices.	Use the iBoxx non-financials 10+ maturity of broad A and BBB bonds - use trailing average of 10 years.
Asset lives	Straight-line depreciation of all electricity transmission assets over 45-55 years. All post-2002 gas transmission assets over 45 years.	All new gas and electricity network assets depreciated over 45 years. Existing electricity transmission asset lives will continue to be depreciated over 20 years.

Process and timetable

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

December document

1.22. In the December document, we set out the differences in the process between RIIO-T1 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. There was some support from respondents for the process and timetable that we presented. At the same time, there were a number of concerns about the tight time frames for producing business plans and the fact that the associated timetable for making fast-tracking decisions is relatively tight. A number of respondents expressed concerns about the impact of these tight timelines on the scope for the companies to carry out detailed stakeholder engagement and to develop well-justified business plans. Others noted the negative impact on the process to develop outputs. Some commented that we should allow the TOs the flexibility to develop output measures and incentive mechanisms following our March publication, in order for them to reflect their ongoing stakeholder engagement in this area.

1.27. One respondent noted the importance of the timeline being consistent with that for Project TransmiT, our comprehensive review of transmission charging, and associated connection arrangements.

Our decisions/further thoughts

1.28. Proportionate treatment is a key part of the RIIO recommendations. It 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.

1.29. Network companies have been aware of our expectations regarding well-justified business plans for some time. We set out our intention to require companies to develop their plans at an earlier stage as part of the RPI-X@20 review. We confirmed our intended timetable when we published an initial open letter on the price control reviews in July 2010. Indeed, most companies have had a programme of stakeholder engagement since last autumn. We have been working closely with the network companies since September last year, so that they had early notice of our proposals and how they are developing and can take this into account as they begin work on their plans. Some companies have expressed confidence in their ability to submit high quality plans within the stated timeframes.

1.30. In developing the RIIO-T1 timeframe, we have considered the timetables of other projects, including Project TransmiT. Where there is interaction, such as how connections should be reflected in the price control, we have taken it into account.

Structure of this document and associated documents

1.31. This document and the associated supporting documents broadly follow the same structure as our December document. This should enable readers to cross-reference the decisions in this paper with the issues in the December document.

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

- Chapter 2 sets out the context in which RIIO-T1 is being set.
- Chapter 3 provides an update on our stakeholder engagement and 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 outlines the outputs that we expect TOs to deliver and the incentive mechanisms to ensure efficient delivery.
- 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.

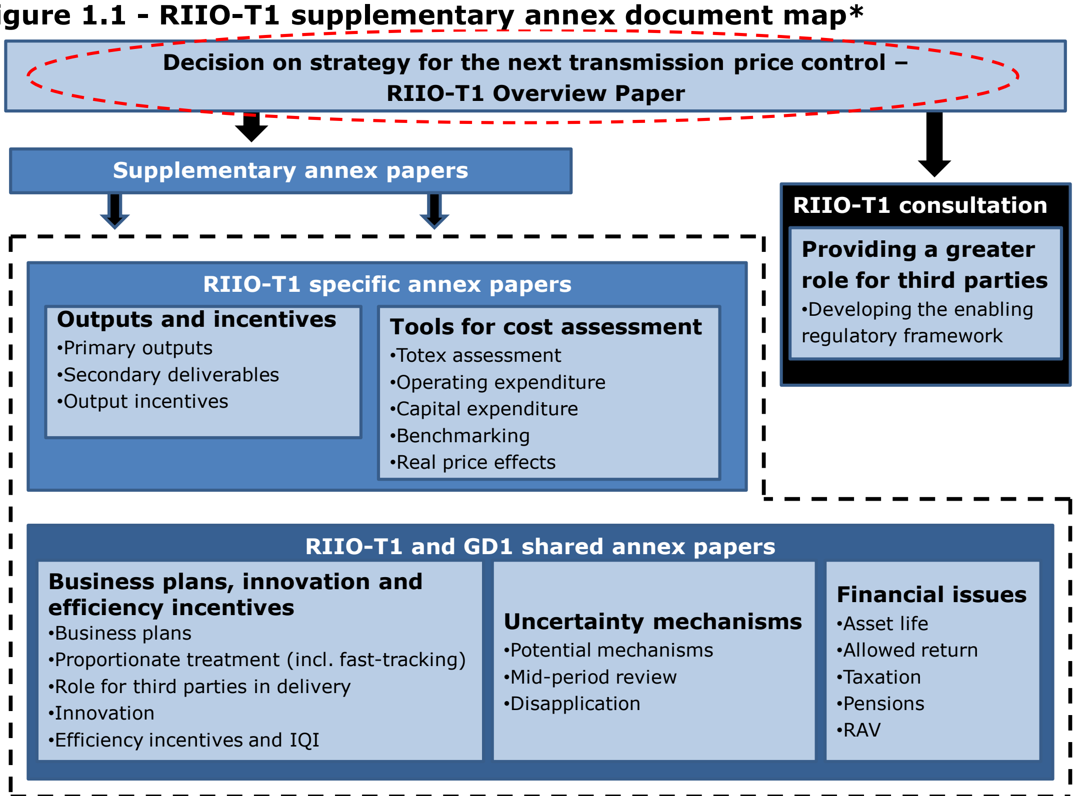
- Chapter 8 sets out our decisions on our approach to financial issues, including those related to efficient debt and equity financing costs, optimal gearing, capitalisation and depreciation policies.
- Chapter 9 sets out the next steps in this review.

1.33. In line with our approach for the December document, we provide further information on all of these issues in our series of detailed supplementary annexes. These are entitled: 'RIIO-T1 Outputs and incentives', 'RIIO-T1 and GD1 Business plans, innovation and efficiency incentives', 'RIIO-T1 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.

1.34. As before, the supplementary annexes are aimed primarily at network companies, investors and those who require a more in-depth understanding of our proposals. They are structured to allow the reader to dip into the parts of most interest to them. As we are undertaking RIIO-T1 and GD1 in parallel, we have published a similar suite of documents for RIIO-GD1 alongside those for RIIO-T1.

1.35. Figure 1.1 provides a map of the RIIO-T1 documents and indicates where these are common for RIIO-T1 and GD1. We have also published a consultation setting out our early thinking on a greater role for third parties in electricity transmission.

Figure 1.1 - RIIO-T1 supplementary annex document map*



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

2. Context

Chapter Summary
This chapter outlines the context in which we are undertaking this price control review. Further detail is provided in the December document. This chapter also summarises respondents' views and sets out our further thoughts on the interactions between RIIO-T1 and a number of other policy areas, including the next gas distribution price control - RIIO-GD1.

Transmission

2.1. The transmission network consists of the high voltage electricity wires and high pressure long distance gas pipelines which convey electricity from power stations and gas from offshore, storage and LNG facilities. They are owned and operated by privately owned companies who have territorial monopolies. To protect the interests of consumers, we regulate these companies using price controls.

2.2. There is one TO in gas and three in electricity:

- National Grid Gas plc (NGG), which owns the high pressure gas transportation system across Britain
- National Grid Electricity Transmission plc (NGET), which owns the high voltage electricity network in England and Wales
- SP Transmission Limited (SPTL), which owns the high voltage electricity network in the south of Scotland
- Scottish Hydro Electric Transmission Limited (SHETL), which owns the high voltage electricity network in the north of Scotland.

2.3. In addition to their TO responsibilities, NGG and NGET are the designated gas and electricity System Operators (SOs). They therefore have responsibility for day-to-day system operation, including balancing of the system and constraint management. The controls for NGG and NGET also include allowances for internal SO costs for NGG SO and NGET SO and some external costs (buy-back) for NGG SO. All other external SO cost allowances are determined via a separate process.[2]

2.4. The current price control period (TPCR4) was set for the period 1 April 2007 to 31 March 2012. It authorised funding for more than £5 billion of investment in Britain's gas and electricity transmission systems. At the time this represented an unprecedented 100 per cent increase in investment on the previous price control period. This investment was authorised to enable network companies to maintain high levels of performance on their networks by replacing ageing assets. A significant proportion of the investment was also directed towards helping the UK meet its climate change objectives by connecting and delivering more low carbon generation.

[2] We develop SO incentive schemes that are designed to encourage NGET and NGG to manage the costs of operating each system effectively. The SO incentive schemes establish cost targets that NGET and NGG are expected to achieve in performing their SO roles.

2.5. To accommodate fully the conclusions of the RIIO review in the next transmission price control, following consultation, we announced in December 2009 a one-year 'adapted rollover' of TPCR4 from 1 April 2012 until 31 March 2013.

2.6. Chapter 2 of our December document set out more detail on the role of transmission.

Interaction with related policy areas

2.7. The transmission price control interacts with a number of other policy areas. We are taking these interactions into account in setting the RIIO-T1 price control.

December document

2.8. In the December document, we listed the key interactions we envisaged with RIIO-T1. These included, but were not limited to:

- the one-year adapted rollover of TPCR4
- our transmission investment incentives (TII) work stream, which establishes approved funding for critical transmission investments
- Project TransmiT, which is our independent and comprehensive review of transmission charging arrangements and associated connection arrangements
- EU legislation, notably the Third Package of internal energy market legislation.

Respondents' views

2.9. The majority of respondents agreed that we had identified the relevant areas of interaction. Some respondents identified additional areas of interaction, including the Committee on Climate Change's 4th carbon budget, the gas flexibility capacity consultation and the Electricity Market Reform (EMR) process.

2.10. One respondent argued that the fundamental review of National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS), by defining how much expenditure is required to meet demand for transmission capacity, should be the starting point for the price control review.

Our decisions/further thoughts

2.11. We agree that the additional areas highlighted have relevant interactions with RIIO-T1. We also recognise the interaction with NETS SQSS but do not think that the outcome of this review should be the starting point for RIIO-T1. We are proposing arrangements that will provide flexibility in responding to the changing needs for transmission capacity. These mechanisms are based on boundary capability, within-period determinations based on a streamlined version of the existing Transmission Investment Incentive (TII) arrangements, and a volume driver agreed upfront. These arrangements are discussed in further detail in 'Supplementary Annex - Outputs and incentives'. We consider these arrangements should be flexible to any outcome from the NETS SQSS review.

2.12. On EMR we have worked, and will continue to work, with DECC to ensure that our RIIO price controls can help to facilitate any reforms. In relation to the Committee on Climate Change’s 4th carbon budget we note that we are putting in place a package of measures to ensure network companies play their full role in achieving the UK’s environmental objectives including, a broad environmental measure to incentivise progress towards decarbonisation milestones.

2.13. Further detail on these, and other policy area interactions, is set out in Appendix 3. Gas flexibility capacity is discussed in Chapter 4 and in more detail in ‘Supplementary annex - Outputs and incentives'.

Interaction with RIIO-GD1

December document

2.14. One key interaction we noted in December was with our parallel RIIO-GD1 price control. We noted that the intention was to set both controls for an eight-year period from 1 April 2013 to 31 March 2021. One implication of setting both controls for an eight-year period would be that they would be aligned for future review periods. We sought views on this outcome.

Respondents' views

2.15. Respondents were split on the merits of the alignment of the transmission and gas distribution reviews. Those who favoured alignment highlighted the benefits of optimising the gas investment incentives across the National Transmission System (NTS) and the Gas Distribution Networks (GDNs). Other respondents supported staggering future reviews to reduce the resourcing burden, to recognise the different drivers between the controls and to allow Ofgem to learn from experience more quickly. One respondent argued that if there were advantages to alignment, then the electricity distribution price control should also be aligned with RIIO-T1 and GD1.

Our decisions/further thoughts

2.16. Our provisional view is to retain the aligned control periods for RIIO-T1 and GD1. We consider that the benefits of alignment, including the ability to look at issues across the two controls, outweigh any downsides associated with resourcing issues. However, at the end of the RIIO-T1 and GD1 reviews, we will further consider this in light of our and stakeholders' experience.

2.17. The next electricity distribution price control is due to be set from 1 April 2015. The work on this review is due to commence in 2012 and we do not intend to change its process to align it with the next transmission and gas distribution price controls.

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-T1.

The key changes we have made since our December document 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 the price control review process. We envisage two elements to the engagement process:

- we expect network companies to engage proactively with consumers and other stakeholders 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-T1, we have adopted a multi-layered process to ensure that all affected parties have appropriate 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.[3]

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[4]
- a range of bilateral meetings with the companies and stakeholders.

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

[4] 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 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 issues discussed in these meeting have included:

- the general approach and overall direction of travel of the price control reviews in the context of being in the consumers' interest
- the role and requirement for a broad environmental output measure that reflects network companies' ability to facilitate a low carbon energy sector, and the merits of associated reputational and financial incentives
- the overall package of output measures and incentives, including the companies' degree of controllability of outputs
- the issue of aligning outputs and associated incentives for the TOs and SOs
- 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.

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

December document

3.8. In the December document, 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. The majority of respondents strongly welcomed the increased emphasis on stakeholder engagement and considered it had worked well. There was support for the approaches to engagement adopted by both ourselves and the network companies. Although a number of respondents highlighted concerns about the tight timescale for 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 on companies' business plans. The network companies commented on their mixed experiences of engagement to date, including the challenges of engaging with consumers given a lower level of direct interaction in transmission.

3.11. A number of respondents suggested potential improvements to the stakeholder engagement processes. Key points raised included:

- that a more coordinated approach to stakeholder engagement is needed
- there is a need to address information asymmetry between network companies and network users; it would be useful if the questionnaires used by network companies (such as those used by the companies for their initial stakeholder engagement) were discussed by a small stakeholder group before being launched
- more time is needed for open debate on outputs, and working group discussions should be extended to consider incentives and uncertainty mechanisms
- lessons should be learned from the DPCR5 process including that stakeholder views can assist in identifying relative priorities for non-core investments and that stakeholders are happy to defer to the company's experience for the core requirements of the network.

Our decisions/further thoughts

3.12. We welcome the strong support for the approach to stakeholder engagement that we and network companies have adopted. As noted previously, we recognise the tighter timescales for engagement but note that discussions have been taking place and indeed should continue after July 2011.

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 think the point about seeking to address information asymmetry is a valid one for the network companies to consider. Equally, we agree that there could be some merit in network companies seeking to test their questionnaires with small stakeholder groups. We encourage the network companies to take both of these points on board in taking forward their engagement processes.

- We will take on board the points raised about the potential greater use of the outputs working groups. We have sought to make extensive use of the working groups. Since December 2010, the scope of these meetings has been extended to discuss the package of incentives and outputs as a whole.
- We recognise there are lessons to be learned from DPCR5 and have sought to incorporate these in our process. We note the view that stakeholders' views are important in reflecting priorities for non-core issues, but that some parties may be happy to defer to the network companies on the core requirements of the network. We consider it important that stakeholders have the opportunity to input on all areas on which they have an interest. Network companies should demonstrate how they have considered stakeholders' views when formulating their business plans.

Appealing against price control decisions

3.14. As part of our RIIO decision document we published guidance to provide parties with a transparent framework for challenging the merits of our price control decisions.[5] 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 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 EU Third Package, was 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 on its proposals in this area.[6] 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

[5] 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
[6] http://www.decc.gov.uk/assets/decc/Consultations/eu-third-package/1163-eu-third-package-gov-response.pdf

website.[7] We will look to provide stakeholders with an update, later in the price control review, of how our price control decisions may be appealed.

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-T1. 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, during which time 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 by 31 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.

[7] 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 the views that were expressed in response to the December document with respect to the outputs and associated incentives for RIIO-T1. In light of these views, we present our decisions on the outputs the companies should deliver over the next price control period, and the incentive mechanisms that will be used.

In developing their business plans, companies have the ability to propose additional or alternative outputs and incentive arrangements where these address the specific needs of their stakeholders.

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

- ➔ we intend to introduce a financially incentivised broad environmental measure
- ➔ to introduce an allowance per company to reduce the visual impact of existing infrastructure
- ➔ to apply only a reputational incentive to losses in electricity transmission
- ➔ to apply a stronger financial incentive in relation to customer satisfaction of +/-1% of allowed revenue
- ➔ to put a 3% of allowed revenue collar on the financial penalties for Energy Not Supplied (ENS) across all TOs and to enforce a minimum standard of performance through a licence condition.

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

Introduction

4.1. The development of an outputs based regulatory framework is a core component of the RIIO framework. By prescribing a set of outputs to be delivered rather than a set of inputs, it provides powerful incentives for companies to innovate and seek least cost ways to provide network services. The approach provides a greater opportunity for stakeholders to determine what outputs network companies should deliver, and greater transparency with regard to companies' performance in delivering these outputs over the price control period.

Overall package of outputs

December document

4.2. In the December document we sought views on whether the combination of proposed outputs and associated incentives were proportionate and would ensure that network companies deliver value for money for consumers. We emphasised that this should be considered alongside the other elements of RIIO-T1.

4.3. We noted that in the transmission sectors there is some interaction between the TO and SO activities and that these activities were either currently incentivised through SO incentives, or were not incentivised at all. We set out a number of options for incentives designed to encourage the parties undertaking SO and TO roles to work together to deliver efficient and economic outcomes and to provide greater alignment between the respective SO and TO activities.

4.4. We also set out the need to introduce new reporting requirements on companies to enable us to monitor and evaluate their performance against the set of output measures. This issue is discussed in more detailed in the 'Supplementary Annex - Outputs and incentives'.

Respondents' views

4.5. All respondents that commented supported an outputs-based framework and a number explicitly supported the proposed output categories. Two respondents expressed concerns that some of the incentives proposed were not fully controllable by the TOs.

4.6. There were differing views on whether the combination of proposed outputs and incentives represented value for money for consumers. Some respondents said that the form of the outputs, and thus the value to consumers, was unclear at this stage.

4.7. There were also differing views on whether the proposed outputs were proportionate. While some considered they were proportionate to the challenges facing the industry, others highlighted specific parameters of the proposals that they did not consider to be proportionate. One respondent noted the size of any incentive or penalty should be within a reasonable range, to ensure that the debt holders of a well capitalised business would not be undermined.

4.8. The CCG broadly welcomed the proposed output measures. They supported our proposal to do more to align outputs and associated incentives for the TOs and SOs.

Our decisions/further thoughts

4.9. We welcome the broad support for an outputs-based framework. We note there is some concern about the ability of the TOs to control fully some of the outputs. We have made some specific changes to the outputs to seek to address this.

4.10. We note that there are differing views on the extent to which the suite of outputs provide value for money for consumers. We agree that the actual impact will only become clear once we have assessed companies' business plans but retain the view that the establishment of output measures will, in itself, help to demonstrate the long-term value for money that network companies provide for their customers.

4.11. We have developed and intend to implement arrangements that will better align the incentives on the SOs and TOs. We anticipate that these arrangements will ensure that the SOs and TOs work together to deliver efficient and economic outcomes for areas in which their roles interact. This will include arrangements for the management of short-term constraints in electricity and in taking forward investment to reduce gas shrinkage and venting on the gas networks. We intend to develop these arrangements further through the forthcoming work on external SO incentives.[8] Detail on these arrangements is set out in the 'Supplementary annex - Outputs and Incentives'.

Proposed outputs

4.12. The RIIO process identified six key output categories for network companies. The output categories are: customer satisfaction; safety; reliability; conditions for connection; environmental impact; and social obligations.

4.13. With the exception of social obligations, we are setting outputs in each of these areas. We did not propose to place any social obligations on the TOs. This was because there are not currently any specific social obligations on the companies in transmission and we did not see any rationale for introducing new obligations. This was supported by respondents.

4.14. In addition to the six output categories, a key issue in electricity transmission is to ensure that the price control arrangements facilitate the significant requirement for investment in the networks in an efficient way. Delays in efficient network investment could undermine progress towards the UK's renewable energy targets, inhibit a competitive and efficient market, and threaten security of supply. Therefore, we consulted on setting secondary deliverables related to the outputs that network companies should deliver in the coming price control period, to ensure delivery of primary outputs in future periods. These are related to activities such as wider reinforcement works which will be required to facilitate the timely achievement of the Government's environmental objectives.

4.15. The remainder of this chapter addresses each of the output categories in turn.

Safety

4.16. In December, we proposed that the primary output for safety should be for the TOs to comply with their legal safety requirements. We proposed secondary deliverables relating to asset risk. We did not propose to attach financial incentives to the primary output related to safety.

4.17. There was broad support for the proposed output as a pragmatic approach. The Health and Safety Executive (HSE) noted that the legislative framework for electrical safety does not require the TOs to report on a set of metrics for measuring compliance against legal safety obligations and recommended considering a broader set of metrics.

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[8] In May 2011, we expect to publish a consultation paper on SO incentives that will consider this issue further.

4.18. We consider the HSE and Government are best placed to decide on the approach that should be taken to regulating safety in the electricity transmission sector. It is our view that our primary output should support, rather than duplicate, their functions. We are therefore setting the safety outputs in line with the December document proposals.

Environmental impact

December document

4.19. As outlined in our December document, the fundamental purpose of RIIO is to drive a step change in network companies' cost-effective contribution to the UK's broader energy and environmental objectives. We proposed a comprehensive package to drive network companies to play their full role. The package included:

- the requirement to develop a well-justified business plan that specifically responds to the environmental challenge
- specific environment outputs
- the wider output framework
- a time limited innovation stimulus.

4.20. We consulted on addressing the environmental impacts of networks through outputs on:

- broad environmental impacts related to the contribution of TOs to the transition to a low carbon economy and, in particular, RenewableUK's proposed model
- direct network emissions including losses in electricity transmission, business carbon footprint, sulphur hexafluoride (SF_6) emissions and gas shrinkage and venting
- local environmental footprint reflected in factors such as visual amenity and noise pollution.

Respondents' views

4.21. Respondents supported the broad scope of the proposed environmental outputs. Some respondents expressed concerns about the ability of TOs to control electricity transmission losses.

4.22. There were mixed views on the merits of incorporating a broad measure. Environmental groups, renewable industry lobby groups and some network companies said that a broad output would fit well within the RIIO performance model. Others expressed concerns about the output model proposed by RenewableUK and, in particular, the risks of possible financial windfall gains/losses to TOs, the potential for consumers to pay double for the same output and the costs of the transition. There were mixed views as to whether it should be a reputational or financial incentive.

4.23. Some respondents expressed disappointment that we did not suggest the need for explicit measures to require companies to consider visual amenity impacts when planning network developments.

Our decisions/further thoughts

Broad measure

4.24. There are strong reputational incentives associated with a network specific broad environmental measure, given the importance placed on these developments by stakeholders, including network users, and Government. We are including a reputational incentive for both the gas and electricity transmission sectors on promoting low carbon flows.

4.25. Subject to consultation, we intend to introduce an incentivised broad environmental measure for electricity transmission that would:

- embed RIIO's overarching sustainability objective in the output framework
- provide a direct link to progress against the low carbon objectives
- future proof the output framework for new opportunities arising over RIIO-T1.

4.26. Reflecting their significantly greater scope to contribute to the UK's renewable energy targets, we will consult on the potential to introduce a financial reward for the electricity transmission companies on the following basis:

- an automatic incentive potentially linked to a measure of the carbon intensity of energy flows as well as the annual increase in low carbon energy flows
- a discretionary reward if companies can demonstrate they have made a contribution that is in addition to those already rewarded under either the automatic incentive or the wider outputs framework.

4.27. If such a discretionary reward is introduced following consultation, our present view is that the value of any such award could be related to the benefits for consumers and/or the environment that TOs have delivered.

4.28. Key considerations here include the need for value for money for existing and future consumers and the interactions with: incentives on other primary outputs such as customer satisfaction; innovation funding available under RIIO-T1; and government support schemes for renewable and low carbon generation.

Visual amenity

4.29. On visual amenity we recommend two refinements to our December document:

- We have developed guidance for TOs requiring them to demonstrate a well-justified consideration of socio-environmental impacts in their business plans.

This is set out in 'Supplementary Annex - Business plans, innovation and efficiency incentives'.

- We intend to introduce an allowance per company to reduce the visual impact of existing infrastructure. This will be based on willingness to pay analysis, which we expect the network companies to conduct to inform their well-justified business plans.

Transmission losses

4.30. We intend to develop an output for the electricity TOs related to the modelled electricity transmission losses that are incurred on their network. Recognising the limited control that the TOs have on electricity transmission losses we intend to apply a reputational incentive to this output.

Customer satisfaction

December document

4.31. In December, we proposed a broad measure of customer satisfaction comprising a customer survey from which we would derive a customer satisfaction score. The companies would be incentivised by rewards/ penalties of up to 0.5% of revenues, and a discretionary reward of up to 0.5% for stakeholder engagement. We proposed that the assessment would be based on an absolute score in each year and the year on year change.

Respondents' views

4.32. There was broad recognition of the importance of a measure in this area and that this was central to RIIO. The TOs expressed some concerns about the use of a survey given the more limited nature of their contacts with stakeholders.

Our decisions/further thoughts

4.33. We retain the view that a customer survey and discretionary reward for stakeholder engagement should be the key components of the primary output on customer satisfaction. Recognising that respondents considered this was a crucial part of the incentive framework, we propose to provide a stronger financial incentive in this area of +/-1% of allowed revenue.

Reliability

December document

Electricity transmission

4.34. In December, we proposed that the primary output for reliability for all TOs should be ENS and that a symmetrical incentive should be set which was closely aligned with the value of loss load (VoLL). We set out our preliminary view that the current incentive strength of approximately £33,000 per MWh is above the value that customers place on being without supply and that a value in the order of half this strength would still be above VoLL in other jurisdictions.

4.35. We proposed to use a suite of secondary deliverables to ensure any risk to the long-term delivery of the primary output is managed. These secondary deliverables would be complemented by an incentive framework which would require the TOs to demonstrate how their expenditure is linked to managing network risk.

Gas transmission

4.36. We proposed the primary output would be for NGG to comply with its obligations to convey gas volumes in a reliable and efficient manner as required at system entry and exit points under the Uniform Network Code (UNC), NGG's Transporter Licence and the Gas Act. We proposed a similar suite of secondary deliverables to those in electricity transmission.

4.37. We also outlined our intention to require NGG to provide additional analysis of the need for increased investment in network flexibility and, where the case for funding could be made, to develop associated outputs and deliverables as part of its justification for any proposed investment to facilitate increased network flexibility.

Respondents' views

4.38. There was generally support for the proposal of using ENS as the basis for setting the primary output for electricity transmission. There was some concern about the proposals to remove the revenue neutral dead bands and the collar on the maximum penalty given the resultant potential revenue exposure in the case of significant loss of supply events.

4.39. In gas transmission, there was support for basing the primary output on the existing obligations. On network flexibility, stakeholders considered that there is currently limited evidence of scarcity or increased utilisation. They were supportive of the monitoring arrangements developed by NGG following the implementation of Exit

Reform.[9] They considered the need for investment or any changes to commercial arrangements still needs to be demonstrated by NGG and that the need for a mechanistic system flexibility funding regime had not been established.

Our decisions/further thoughts

4.40. Reflecting respondents' general support for the proposals, we are making the following changes to the treatment of reliability for electricity transmission. We will apply a common incentive strength in the range 4,300-22,000 £/MWh adjusted by the efficiency incentive rate. This incentive strength is more closely associated with the value customers place on electricity when they are without supply and lower than NGET’s current incentive strength (approximately 33,000 £/MWh). We will undertake further work during the price control review to decide on the exact value that will be applied during RIIO-T1, but consider a value of 16,000 £/MWh to be a reasonable level within this range for the TOs to develop their business plans.

4.41. We have also reconsidered our proposal to remove the collar on the financial penalties for ENS and will apply a common collar of 3% of allowed revenue across all TOs. We think it is important that the TOs continue to be incentivised to minimise the risks associated with high impact, but relatively infrequent events. In light of applying a collar on the incentive scheme, we have decided that we will enforce a minimum standard of performance through a licence condition. This means that in circumstances where a TO's performance triggers the floor, it would be required to take all reasonable preventative and mitigating actions both before and after loss of supply events to minimise unsupplied energy and then demonstrate that it has done so to Ofgem. In cases where we consider that the TO has not done this, we would have the option to commence licence investigation procedures and potential to apply a financial penalty.

4.42. In respect of gas network flexibility, we continue to hold the view that NGG must provide evidence of the need for additional funding, and that investment should be connected to user signals. The primary reliability output for NGG will be to comply with its obligations to convey gas volumes in a reliable and efficient manner as required at system entry and exit points. This is seen as sufficient to capture users’ capacity needs and therefore NGG’s investment needs. We expect NGG to continue to develop their system flexibility monitoring arrangements as part of the Exit Reform arrangements. This is particularly important if they consider that new funding for system flexibility may be necessary. We do not intend to replicate the requirement within RIIO-T1 or establish a mechanistic link between the indicators and funding arrangements.

[9] Exit Reform was the name given to the reform of the NTS exit capacity arrangements which was progressed following the Authority's decision in 2005 to approve the sale of four of NGG's distribution network businesses. Exit Reform concluded in January 2009 with the implementation of UNC0195AV 'Introduction of Enduring NTS Exit Capacity Arrangements'.

Connections

December document

4.43. In parallel with our December document, we published an open letter through Project TransmiT on setting primary outputs for timely connections for both gas and electricity transmission using current obligations. We also consulted on whether we should incentivise fixed time periods within the overall connection process.

Respondents' views

4.44. There was support for timely connections. However, respondents noted that no connection is typical and therefore the use of fixed average timescales for elements of, or the entirety of, the connection process would not be appropriate.

4.45. Some respondents highlighted the importance that should be attached to the agreement reached between the promoter of the connection and the TO in terms of the timescale for the connection. They suggested that encouraging timely and consistent delivery of agreed deadlines should be considered as a primary output. Some stakeholders also highlighted the importance of taking account of the impact of exogenous influences, particularly those associated with the planning regime.

Our decisions/further thoughts

4.46. Timely connection of new sources of supply is important in both electricity and gas transmission. What timely means varies across different types of connection. In electricity, there has been a major change in the regulatory framework following the transmission access review (TAR)[10] and the implementation of connect and manage arrangements.[11] Even with this uncertainty we are setting a connections output based on existing legal requirements with a downside penalty for taking longer than the required timescales. The precise details will be developed during the review. In gas, industry reforms continue separately and we will amend the arrangements to reflect this as appropriate.

Wider works

December document

4.47. In December, we proposed that a combination of mechanisms should be used to facilitate the significant requirement for investment in the networks in an efficient way. These mechanisms should be based on boundary capability, within-period

[10] TAR was a joint Ofgem/Department of Energy and Climate Change (DECC) review which explored the case for changes to the transmission access arrangements.
[11] Last year DECC implemented Connect and Manage as the enduring transmission access model.

determinations based on a streamlined version of the existing Transmission Investment Incentive (TII) arrangements, and a volume driver agreed upfront.

Respondents' views

4.48. Some concerns were expressed about setting a secondary deliverable in terms of boundary capability or moving away from current funding arrangements provided by TII. Some respondents considered wider works should be reclassified as a primary output to provide it the same focus as the other primary outputs.

Our decisions/further thoughts

4.49. We retain the view that a combination of mechanisms is the approach most likely to support network investment and facilitate the UK’s renewable energy targets. In the 'Supplementary Annex - Outputs and incentives' we set out guidance on how the various components of a given project could be funded under different arrangements in the regulatory framework.

4.50. We note the arguments for treating wider works as a primary output. The use of the expression secondary deliverable should not be taken to imply that any area of the framework is less important than another. The timely completion of necessary investment is absolutely central to the RIIO-T1 package. The TOs will be required to demonstrate how they will facilitate network investment as part of their business. We consider that the most important issue is the substance of the arrangements and that they facilitate the required investment on the system. At this stage we do not consider it to necessary to reclassify wider works as a primary output.

Balance of risks and rewards

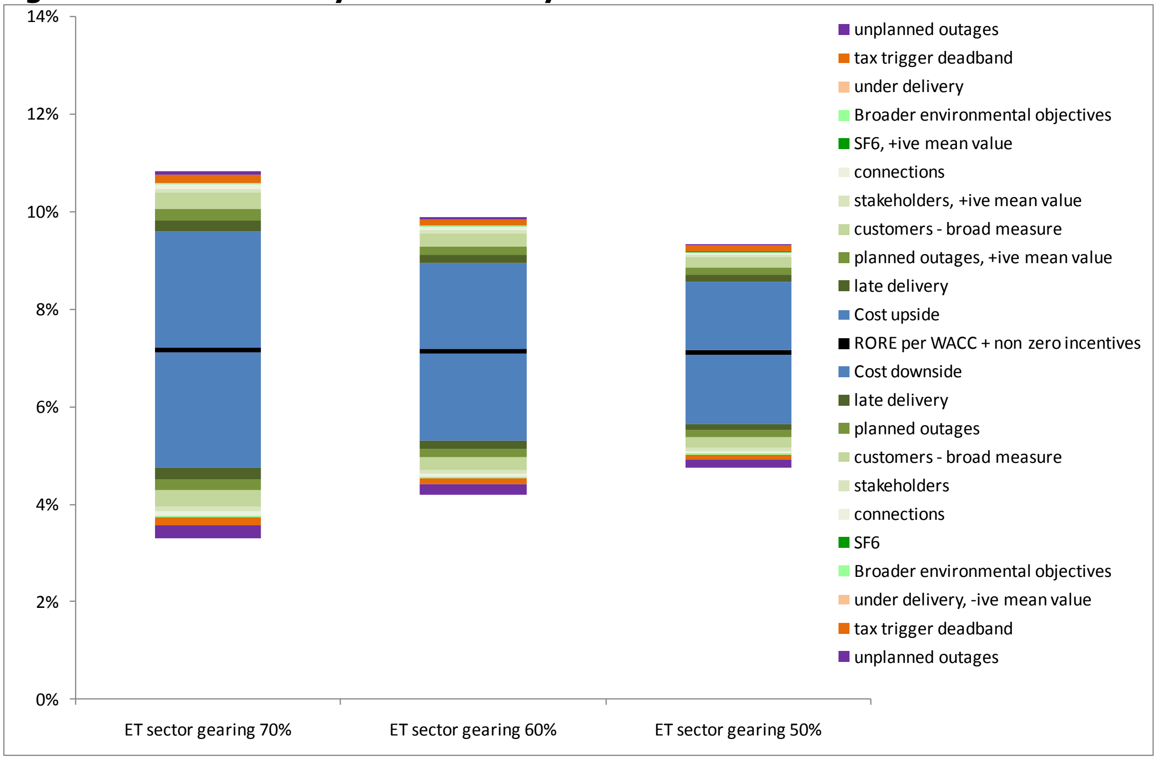
4.51. We have undertaken analysis of the overall balance of risk and reward for the price control package. We have used return on regulated equity (RoRE) analysis to assess the extent to which networks companies’ outperformance/underperformance across a range of incentives affects their baseline cost of equity assessment.[12]

4.52. Our initial assessment is that we have designed a package of incentives that provides opportunities for companies that perform well against the RIIO objectives to earn significantly above the baseline cost of equity. To the extent that companies do not rise to this challenge, there is a risk of earnings considerably below the baseline. Based on our current analysis, we estimate that if all the TOs perform well across all of the outputs, rewards could total around £530m. By contrast, if all the TOs perform badly they could face penalties totalling around £580m. The actual, and company specific figures, can only be calibrated once we have assessed the business plans.

4.53. Figure 4.1 illustrates the proposed incentives that will impact RoRE.

[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.

Figure 4.1 - RoRE analysis: electricity transmission



4.54. Figure 4.1 compares the RoRE for the electricity transmission sector as a whole at three different levels of notional gearing. It suggests that on these illustrative assessments a notional gearing level of 50% results in a very narrow range of returns suggesting that there is limited cash flow volatility and a higher level of notional gearing is appropriate. The level of notional gearing applicable for each company will be subject to their business plan assessment. Given these figures are illustrative we do not consider it is appropriate to provide figures for the individual electricity transmission companies at this stage. For the same reason we are not presenting RoRE analysis for the gas transmission sector.

4.55. In each case the cost performance is based on a +/-10% variation in total expenditure, which is broadly equivalent to the upside and downside cases we found to be available in DPCR5. The upside case was achieved by performing at the efficiency frontier and containing input costs to below RPI, through careful contracting, cost control and productivity enhancements. The downside case was the result of price or volume shocks compounded by poor cost control.

4.56. The numbers presented in Figure 4.1 are provisional. It will be for the 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 notional gearing. We would expect this analysis to form part of their overall financeability assessment and to inform their notional gearing and cost of equity. More detail on the assumptions underpinning this analysis is set out in the 'Supplementary Annex - Financial issues'.

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 assessing network 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 document are:

- ➔ to include more detail in the business plan guidance on the scope for, and limits on, departures from the decisions we produce 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 that might be suitable for fast-tracking
- ➔ to place more weight on disaggregated techniques as part of the cost assessment alongside available high-level benchmarking information
- ➔ to change the range for the fixed symmetrical efficiency incentive rate to 40-50% for electricity transmission and gas transmission.

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 - 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 is required to demonstrate that its plan will deliver in the interests of both existing and future consumers and how it will meet the challenges associated with facilitating the move to a low carbon economy. We set out our 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 network companies' business plans. Under this approach the intensity and timescale of the assessment we undertake will reflect the quality of a network company's business plan and their record for efficient output delivery. Where a company produces a high quality business plan we intend to focus less resource on them and their business plan will be subject to a lower level of scrutiny. Where a company produces a 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.

[13] Ofgem, open letter consultation on the transmission price control review (TPCR5), the way forward http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=1&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes (and companion letter on the gas distribution price control review)

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 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 network 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 supported the level of guidance we had provided to date. Some requested further clarity on elements of the business plan, specifically the link between uncertainty mechanisms and business plan forecasts and the extent to which network companies would be able to propose new outputs or incentives. Some respondents requested early sight of data templates while others welcomed our decision not to produce templates at this stage.

5.6. The majority of respondents supported the proposals for proportionate treatment as allowing regulatory effort to be focused where it is required. At the same time, a number of respondents expressed concerns over fast-tracking. The main concern was the pressure that the fast-tracking process would place on price control timescales and the associated impact on stakeholder engagement and the development of meaningful business plans. Some parties questioned whether fast-tracking was appropriate at this stage and whether it would be workable.

5.7. Respondents generally supported the proposed criteria identified for assessing a company's business plan and hence its suitability for lighter-touch scrutiny and fast-tracking. Some respondents sought clarity on how the criteria would be used and expressed views on the weighting of different criteria. Respondents welcomed our commitment to ensuring that a fast-tracked company is not worse off than non-fast-tracked companies.

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. We have also made a number of other small changes reflecting the development of policies, particularly related to:

- outputs related to SO/TO incentive alignment
- consideration of impacts of infrastructure upon visual amenity
- interaction with European and Offshore network development.

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 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 network 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 network company where we are not convinced that this would best serve consumers' interests.

Cost assessment

5.13. In line with the RIIO framework we intend to focus on the network 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 much more emphasis on the benchmarking of forecasts. 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

5.15. The majority of respondents supported the proposed toolkit approach. There was also broad support for undertaking benchmarking of forward-looking totex. However, there were some concerns about the limitations of forecast data, including the limited historical benchmarking or comparator information available and the difficulties of benchmarking future costs. In light of such concerns a number of respondents favoured the continued use of existing bottom–up approaches or the use of a range of models.

5.16. Some respondents expressed reservations around the nature and application of some of the other cost assessment tools. These concerns related to how bottom-up and top down approaches could be brought together, the ability of historical indices to deliver the information needed to assess future costs and the risk that our assessment may simply revert back to approaches that we have used previously.

Our decisions/further thoughts

5.17. We note the general support for a toolkit approach and intend to continue with it. We note both support for and concerns with totex benchmarking. We recognise the analytical challenges associated with totex benchmarking in transmission but consider that this approach has significant benefits. We intend to retain this as a key element of our cost assessment toolkit.

5.18. To address issues with the robustness of the associated analysis we intend to work with the TOs to develop this approach further. At the same time, reflecting respondents' views we intend to place more weight on disaggregated techniques.

5.19. We have made good progress in collecting international benchmarking data for both gas and electricity transmission and have carried out initial analysis on this data. This is outlined in our 'Supplementary Annex - Tools for cost assessment'. We intend to develop our international benchmarking further as we progress RIIO-T1.

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 adjustment would be made through the Regulated Asset Value (RAV) rather than through cash allowances.

5.22. We proposed to use the Information Quality Incentive (IQI) in RIIO-T1 and GD1 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. Fast-tracked network companies would face the maximum efficiency incentive rate available. For network companies that are not fast-tracked, we proposed to compare their 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 and complexity. One respondent thought that the implementation of annual adjustments could lead to increased complexity.

5.25. Several respondents thought our proposed range for the efficiency incentive rate was appropriate. However, some thought the efficiency incentive rate should be set higher, (with suggestions of 50 to 65%) while another thought the range was too high given the volume of capital projects expected in transmission.

5.26. Some respondents thought that it was important that the IQI was not applied to the first business plans as they would be developing their business plans further.

Our decisions/further thoughts

5.27. We will apply the same range for the efficiency incentive rates used in electricity and gas transmission. The revised range will be 40-50%. These ranges are intended to provide sufficiently strong incentives, while supporting greater alignment between TO and SO incentive schemes. In gas distribution, a higher efficiency incentive rate range will apply.

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 TOs. Our approach provides an incentive for companies to submit robust initial cost forecasts. For non-fast-tracked companies we will incorporate adjustments to their first business plan forecasts in our IQI assessment where they can provide a reasonable justification for such changes, for example 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, and then deliver on this, will earn positive financial rewards (ie above WACC). Companies that submit relatively high forecasts, or spend more than our view on efficient costs, may earn a lower return. All companies will have opportunities to earn positive financial rewards (ie above WACC) if, during the price control period, they can deliver outputs for less than our view of their efficient costs.

5.30. Respondents raised the issue regarding the potential for increased price volatility and complexity. We are investigating whether further mechanisms need to be put in place in order to manage this. 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. We further noted that the work to develop the regulatory framework, as well as the commercial and process arrangements to enable third parties to build, own and operate elements of the networks will need to be undertaken on a sector-specific basis and will involve considerable industry and regulatory commitment. Furthermore, we noted that the benefits associated with undertaking this work vary from sector to sector. We consulted on whether stakeholders across the sectors considered the development of the enabling regulatory framework to be a priority.

Respondents' views

5.34. Most of the comments received were on the option for third parties to develop, own and operate network assets. Several respondents welcomed the proposals and considered these would deliver value for money to consumers. Others highlighted the limitations of the approach, suggesting the option should only be considered in certain cases and not where projects are complex, have potential safety impacts or could compromise security of supply.

5.35. Some respondents agreed that the nature and magnitude of the investment required in electricity transmission marked this sector out as a priority for enabling the framework for third party delivery. At the same time respondents did not consider the establishment of the enabling framework to be a priority for gas transmission. Some respondents explicitly argued that the case for third party delivery of assets was unclear. One respondent argued that an evidence-based impact assessment should be undertaken.

Our decisions/further thoughts

5.36. We retain the view that requiring network companies to undertake and demonstrate market testing could have significant potential benefits. We agree with respondents that the existence of competition puts pressure on TOs to forecast realistic costs and thereby helps to provide value for money for consumers. In light of this, companies will be required to provide evidence of efficient procurement in their business plans. Where they do not, companies will be required to provide further evidence of market testing.

5.37. We consider the development of the option to enable third party delivery, ownership and operation of assets within electricity transmission to be a priority and, alongside this paper, we have published our initial consultation on this topic.[14] We recognise and agree with respondents' views that providing a role for third parties in delivery, operation and ownership should only be used selectively and only where the project meets certain criteria. Potential impacts on safety and security of supply would be relevant considerations for these criteria. We will undertake impact assessments on a case by case basis.

5.38. In gas transmission, in light of the changes to the planning process, NGG have recently entered into discussions with industry over the possibility of extending the timelines to deliver additional capacity. We consider that third party delivery may have the potential to deliver new infrastructure in a timelier manner and intend to monitor these discussions and potentially consult further on the role of third parties in the sector in the future.

[14] Providing a greater role for third parties in electricity transmission: Early thinking and options http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/thirdpartyrole.pdf

6. Managing uncertainty

Chapter Summary
This chapter sets out respondents' views on uncertainty mechanisms and, in light of these, our decisions on the mechanisms we intend to include in the RIIO-T1 control to help companies manage uncertainty. In developing their business plans, companies will have the ability to propose additional uncertainty mechanisms to address specific issues for their company.

The key changes we have made since our December document 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)
➔ 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 on 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 arrangements to help deal with uncertainty:

- uncertainty mechanisms (eg revenue drivers, specific reopeners)
- 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 earn in response to specified changes during the price control period. These mechanisms include volume drivers, revenue drivers, specific re-openers and pass-through items.

December document

6.4. In December we presented a summary of the mechanisms that we proposed to include in RIIO-T1. We noted that some mechanisms would apply in both electricity and gas transmission sectors whereas others would be specific to each sector. We also noted that network companies would have an opportunity, as part of their business plans, to identify additional mechanisms, but that the companies would need to justify why additional mechanisms would be appropriate and to identify 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 who agreed that the need for any additional mechanisms should 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:

- provisions to allow for real price effects (RPEs) in the operating and capital allowances over that set by the ex ante allowance
- mechanisms to reduce the potential volatility of network charges
- mechanisms needed to meet climate change and renewable energy targets.

Our decisions/further thoughts

6.8. In line with respondents' views we intend to retain many of the mechanisms which were applied in TPCR4. We have also made a number of changes to the mechanisms outlined in the December document to reflect respondents' views. These include:

- 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 the cost of debt and tax trigger. These issues are set out in the 'Supplementary Annex - Financial issues'.
- Our proposals on wider works have been developed to reflect the lessons from the current Transmission Investment Incentives (TII) process and to provide mechanisms which are flexible in responding to the investment challenges. These issues were discussed in Chapter 4 of this paper and are set out in more detail in the 'Supplementary Annex - Outputs and Incentives'.

6.9. In addition, we are investigating whether any further mechanisms need to be implemented to manage charging volatility during 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 such as output and efficiency incentives.

6.10. A full list of the uncertainty mechanisms that we intend to apply in RIIO-T1 is outlined in Appendix 4 and in the 'Supplementary Annex - Uncertainty mechanisms'.

6.11. In developing their business plans, network companies will have the ability to propose additional uncertainty mechanisms to address issues specific to their company. We will assess the merits of 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.[15] 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 to retain, without change, the existing disapplication licence provisions and our guidance for responding to financial distress of a network company for RIIO-T1.

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.

[15] 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. There is a risk that a mid-period review could undermine the purpose of setting a longer control period. Consequently, the scope of the 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-T1 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 mid-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 (an effort involving both us and the network companies)
- three 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:

- twelve months was excessive and it should be reduced to three 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-T1 and that the review would take place in 2016. In light of respondents' views we intend to leave the scope of the review unchanged. We do agree that there is a need for clearer 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-T1.

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

- ➔ what we previously referred to as innovation stimulus is now called the Network Innovation Competition (NIC)
- ➔ to reduce the limit on the total annual funding available 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 the NIC up to 90 per cent of the cost of the project.

More detail on the issues discussed in this chapter is set out in the 'Supplementary Annex - 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 we would expect companies to include innovative solutions in their business plans where they had evidence that a proposed project could deliver outputs at lower cost to customers. The benefits could be delivered 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 intended to deliver the low carbon future 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 majority of respondents supported the proposals for the innovation stimulus (now the NIC) and innovation allowance. 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 under the main price control arrangements. 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, including its potential benefits. 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	Flat funding profile (inflated annually 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[16] 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 are setting a limit on the total level of funding in electricity transmission of £30m - consistent with our December proposals. The scale of the challenge is greater in electricity, than gas, and we have evidence to support this value.

7.13. In relation to the scope of funding we are proposing it includes projects which meet environmental objectives. We note that environmental objectives could include innovation which benefits visual amenity. For example, this could include research and development aimed at reducing the costs of undergrounding or other uses of technology to reduce the visual impact of network assets.

7.14. We also propose an annual Innovation Allowance provided direct to the companies for small scale innovation. The allowance will be between 0.5% and 1% of allowed revenue, depending on the quality of the supporting innovation strategy.

7.15. 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.

7.16. Finally, 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.

[16] 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 respondents' views and our decisions on the main financial issues affecting RIIO-T1. These are the basis for using economic asset lives to set depreciation allowances as well as the approaches for calculating the assumed cost of debt and the assumed cost of equity for setting the allowed return.

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

- ➔ all new assets will be depreciated over 45 years but existing electricity transmission assets will continue to be depreciated over 20 years
- ➔ we are setting an indicative cost of equity range of 6.0-7.2%
- ➔ we are using an index for the allowed cost of debt using the iBoxx non-financials 10+ maturity of broad A and BBB bonds, using a trailing average of 10 years
- ➔ we are providing more guidance on what might be an acceptable/ unacceptable transition path to implementing these decisions.

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 and evidence 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 life and depreciation

December document

8.3. The December document set out technical and economic asset lives based on a review undertaken for us by a consortium of advisors led by CEPA. The table below summarises our December proposals for transmission, which represent maintenance of the existing gas transmission depreciation period and a significant increase in the depreciation period for electricity.

	Economic Asset Life (years)	Depreciation profile
Electricity	45-55	Straight-line
Gas (post-2002 assets)	45	Straight-line

Respondents' views

8.4. In general, responses focussed on our electricity transmission proposals. Consumer groups and suppliers were supportive of our approach. Network companies and investors were concerned about the potential impact on cash flows in particular. In addition, the network companies suggested that we had not made the case for changing asset lives and that regulatory depreciation should not be based on economic asset lives alone. Other factors such as financeability, the asset life of the generation causing the investment and consumer charges were cited as factors that we should take into consideration.

8.5. Several respondents highlighted the importance of establishing transitional arrangements given the potential that an immediate change in asset lives could cause a sudden reduction in cash flow. There were concerns that applying new asset lives to existing assets would adversely affect investors' legitimate expectations and worsen inter-generational equity.

8.6. There was limited comment on the proposal to retain gas transmission’s 45-year asset life and depreciation profile; although NGG suggested that the front-end loading of depreciation proposed for gas distribution should apply to transmission.

Our decisions/further thoughts

8.7. We developed our views on using economic asset lives during the two-year RPI-X@20 project. We remain of the view that the application of economic asset lives is an important element in providing a more stable, sustainable and predictable basis for financeability over the long term. In addition, it will ensure that companies and consumers face the appropriate price signals and will provide, over the longer term, a fairer spread of the cost of investment between existing and future consumers.

8.8. Our principal objective is the protection of existing and future consumers. This requires that the companies are able to finance their regulatory activities. This is reinforced by our duty to have regard to the need to secure that licence holders are able to finance their activities. We take this very seriously. We have considered our policy changes in the light of these duties.

8.9. In electricity transmission we will use a 45-year economic asset life for new investment. To minimise regulatory uncertainty, we will retain the 20-year asset life for existing assets and expenditure in Transmission Investment in Renewable Generation (TIRG).

8.10. We have taken into account several factors in determining the appropriate economic asset life. These include the responses to the consultation, the technical life of the assets (54-60 years), which were not disputed by companies, and the clear expectation of increased electricity usage in the plausible scenarios of future energy demand. In determining the economic asset life we have also allowed for a reasonable increase in shorter life assets as networks become smarter and for some early retirement of assets as generation locations change.

8.11. We have also considered whether the substantial investment in new assets, relative to the existing RAV, for SPTL and SHETL, which primarily results from the growth in wind power offshore in Scotland, means that they should have a different economic asset life and consequently a shorter depreciation period. This is because the design life for an offshore wind plant is typically 20-25 years. We asked CEPA supported by Sinclair Knight Merz consulting (SKM) to review this particular issue. Their recommendation is that we do not need to make any adjustment, primarily because all the plausible scenarios assume continued use of renewables and the strong likelihood that the wind farms will be replanted. Having taken account of these findings we consider a 45-year asset life is appropriate for all electricity TOs.

8.12. We recognise that this change in asset life is significant and, if made in one step, would have a significant impact on cash flow and revenues. We are also mindful of the potential for a change of this nature to increase perceived risks and create short-term instability. We intend that the new asset lives will apply to new investment only. Existing electricity transmission assets will continue to be depreciated over their existing asset life of 20 years.

8.13. We have been clear that if any changes to the regulatory framework would have an impact on financeability or would create disruption if introduced in one step, we would introduce transition arrangements. Applying the change in asset life to new investment only will significantly reduce the impact on cash flow and hence the need for transitional arrangements. However, we recognise that for SPTL and SHETL the benefit of this is not as great as for NGET, as their existing RAV is small relative to future expected investment. Hence, we are open to transmission operators suggesting transitional arrangements if they can provide evidence in their business plans that it is required for financeability reasons.

8.14. For gas transmission, we think it is appropriate to maintain the existing 45-year asset life. However, we recognise that this will need to be reassessed for RIIO-T2, by which time it should be much clearer how the government's 2050 carbon targets will be achieved and the role for gas in the energy mix. At this stage we do not think it is appropriate to introduce any additional front-end loading of depreciation for gas transmission given the likely continued significant role of gas in electricity generation in the medium term.

8.15. We have issued a separate decision letter on electricity distribution asset lives.[17]

The allowed return

8.16. 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

8.17. In December, we set an indicative range for the cost of equity assumption of 4.0-7.2% (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.

Respondents' views

8.18. All network companies and investors were of the view that the bottom of the cost of equity 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.

8.19. 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.

[17] Decision letter on the regulatory asset lives for electricity distribution assets - 30 March 2011 http://www.ofgem.gov.uk/Networks/Policy/Documents1/assetlivedecision.pdf

8.20. 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

8.21. 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.

8.22. 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-T1 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

8.23. We set out in December our preference to introduce annual indexation of the cost of debt and a proposed an 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.

Respondents' views

8.24. 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 in favour of our proposal. We received several 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

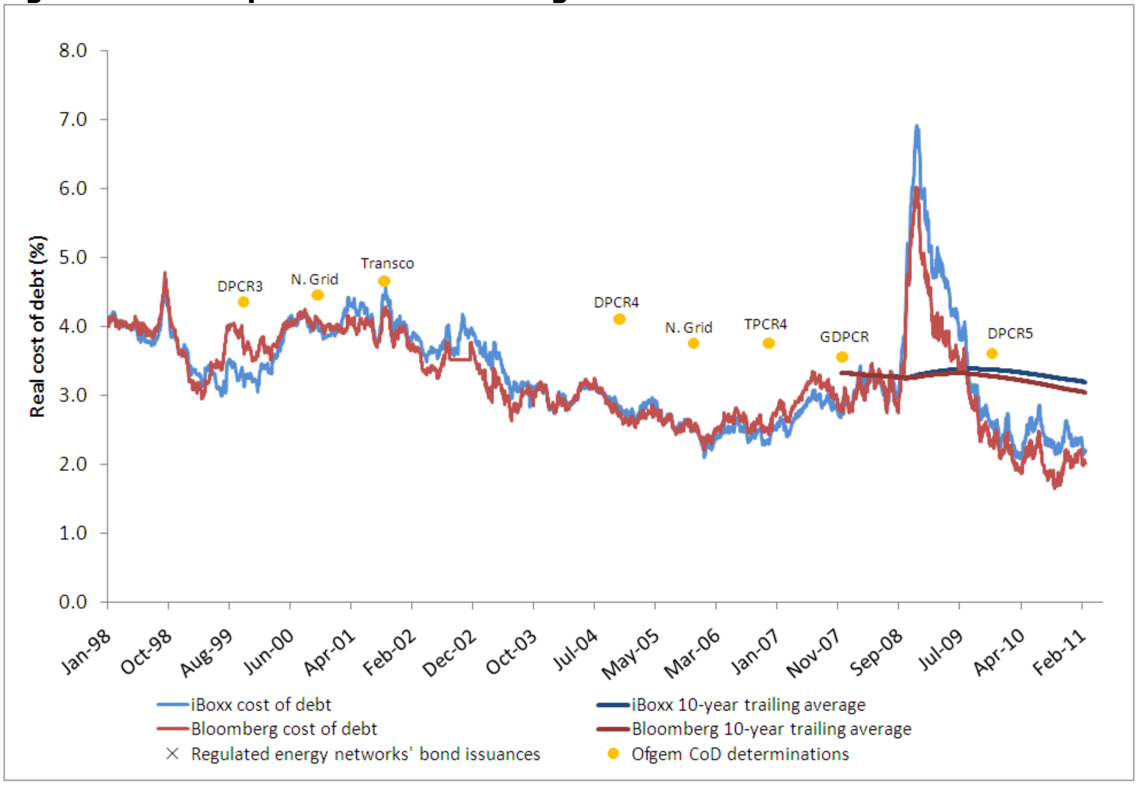
8.25. We remain of the view that, over an eight-year price control, an uncertainty mechanism is required for the cost of debt. This is especially true given the current historically low levels of the cost of debt and the expectations that interest rates will rise significantly over the medium term. Other factors such as Basel III [18] and Solvency II[19] 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.

8.26. 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.

8.27. 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.

8.28. Figure 8.1 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% compared to 3.0% for the original index.

Figure 8.1 - Comparison of Bloomberg and iBoxx methods



[18] 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.
[19] Solvency II is a fundamental review of the capital adequacy regime for the European insurance industry.

8.29. 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.

8.30. We found in our scenario analysis that in some exceptional circumstances the simple trailing average did not provide a 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 are circumstances that may apply to only one or two network companies. We will therefore allow companies to make the case in their business plans for the use of a weighted index for specific circumstances.

8.31. 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

8.32. 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, applying the revised asset lives to new investment only will significantly reduce the immediate cash flow impact of the change to electricity transmission asset lives. However, we recognise that further transition over one or more price controls may be required for some network companies for financeability reasons. 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.

8.33. 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

8.34. 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.

8.35. 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-T1.

Next steps

9.1. During the next stage of RIIO-T1, TOs are required to develop their well-justified business plans. We expect the TOs to continue their stakeholder engagement during this period. The companies are required to submit their business plans to us 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 scrutiny 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 that these are finalised 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 2 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 network 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 thinking on reporting requirements
- the TOs will have a further opportunity to meet with our Committee of the Authority in late September 2011.

Appendices

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Appendix 1 - Summary of responses

1.1. In its consultation document (Consultation on strategy for the next transmission price control - RIIO-T1 Overview paper 159/10) Ofgem sought the views of respondents about a number of questions. The questions along with respondents' views are set out below.

List of non-confidential respondees

List	Name
1	AMP Capital
2	Anthony Legg
3	Bank of America Merrill Lynch
4	CE Electric
5	Centrica
6	Centrica Storage
7	Consumer Focus
8	EDF Energy
9	Electricity North West
10	Energy Networks Association
11	Health and Safety Executive
12	Invesco Perpetual
13	Liberum Capital
14	National Grid Transmission
15	Renewable Energy Association
16	RenewableUK/ Scottish Renewables
17	RWE npower
18	Scottish Environmental Protection Agency
19	Scottish Hydro Electric Transmission Ltd
20	SP Transmission Ltd
21	Teachers Infrastructure Group
22	UK Power Networks
23	Wales and West Utilities

Summary of responses

1.2. Responses received by Ofgem which were not marked as being confidential have been published on Ofgem's website www.ofgem.gov.uk. Copies of non-confidential responses are also available from Ofgem's library.

1.3. The following is a summary of those responses which were received by question.

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

1.4. Twelve respondents commented on the process and timetable for the review. One respondent noted that the process and timetable appeared broadly reasonable but that we must ensure that an appropriate process is followed given the challenging timeframe. Another was fully supportive of the principles but noted that it was a very resource intensive process.

1.5. Three respondents expressed concerns that the timeframes for key decisions were being compressed to facilitate fast-tracking while four further respondents expressed concerns about the tight timetable for developing business plans. Three of those respondents expressed concern about the impact that these tight timelines would have in terms of reducing opportunities for stakeholder engagement. One respondent noted that a well-managed company should be able to develop business plans within the timetable requirements but highlighted that they would need to re-engage with stakeholders after the March strategy decision document.

1.6. One respondent considered that the timetable to develop outputs had been rushed. Another noted that they would have preferred more time to discuss RIIO in the round outside of the price control review process. A third respondent argued that the timeline should be consistent with that for Project TransmiT.

CHAPTER: Two
Question 1: Do respondents consider there are any interactions with other policy areas that have not been highlighted in this chapter?

1.7. Six respondents commented on the interactions with related policy areas. The majority of these respondents agreed that we had identified the relevant areas of interaction although some additional areas were highlighted including:

- the Committee on Climate Change's 4th carbon budget
- the flexibility capacity consultation
- the Electricity Market Reform (EMR) process
- Gas Security of Supply Significant Code Review
- overall cost and affordability by the consumer.

1.8. One respondent highlighted the interaction with the fundamental review of National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS). The respondent highlighted that the NETS SQSS will define how much expenditure is required to meet demand for transmission capacity and considered that this should be the starting point for the price control review.

1.9. Another respondent also noted that there will be additional policy areas debated through stakeholder engagement which may impact a network company's proposals.

CHAPTER: Two
Question 2: Do respondents consider that the transmission and gas distribution price control periods should remain aligned for future review periods?

1.10. Six respondents commented on the interactions with RIIO-GD1. Two respondents supported alignment of this and future reviews, with one highlighting that this would optimise the gas investment incentives across the NTS and GDN networks. One respondent supported alignment at this stage but given increasing regulatory burden suggested that the reviews should be staggered going forward. A further three respondents considered that future reviews should be staggered at this stage. The reasons highlighted included:

- to reduce the resourcing burden
- to recognise the different drivers and uncertainties with respect to the gas and electricity networks and levels of demand
- to avoid the engagement processes for both taking place simultaneously
- to allow Ofgem to learn from experience more quickly, ie not wait for eight years for next review.

1.11. One respondent argued that if there were advantages to alignment then the electricity distribution price control should also be aligned with RIIO-T1 and GD1.

CHAPTER: Three
Question 1: Do you have any comments of the overall approach to stakeholder engagement?

1.12. Twelve respondents commented on stakeholder engagement. The majority of respondents strongly welcomed the increased emphasis on stakeholder engagement and considered it had worked well. A number of respondents highlighted the tight timescale for engagement particularly given the wide range of areas for discussion and some linked time limitations to the potential for network companies to be fast-tracked. One respondent noted that the extension of the price control period and the mid-period review were at odds with encouraging ongoing stakeholder engagement.

1.13. There was support for the approaches to engagement adopted by both Ofgem and the network companies. The PCRF was welcomed as having an important role in the process. With respect to network company engagement, one respondent noted that the effectiveness of their approaches has been mixed and National Grid was highlighted as being particularly proactive. One respondent noted that companies have been open to bilateral discussions under previous price control arrangements.

1.14. Three network companies commented on their experiences of engagement to date. One noted that interest from stakeholders had been poor, possibly reflecting the wide range of issues in which parties are already engaged and the limited interaction between TOs and customers. Another supported the view that it was difficult to engage with consumers given a lower level of direct interaction.

1.15. A number of respondents suggested potential improvements to the stakeholder engagement processes. The key points raised were:

- a more coordinated approach to stakeholder engagement is needed
- there is a need to address information asymmetry between network companies and network users
- there is a requirement for more background on the financial operation of the price control to assist with the development of output measures and incentives
- it would be useful if the questionnaires used by TOs were discussed by a small stakeholder group before being launched
- more time is needed for open debate on outputs and working group discussions should be extended to consider incentives and uncertainty mechanisms
- lessons should be learned from the DPCR5 process including:
  - stakeholder engagement provides wider benefits to network companies
  - stakeholder views can assist in identifying relative priorities for non-core investments
  - stakeholders are happy to defer to the company's experience for the core requirements of the network
  - stakeholders do not always agree because they have specific interests - network companies must always make the ultimate decision as to what is right for their network.

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?

1.16. There were differing views on whether the combination of proposed outputs and incentives represented value for money for customers. Two respondents considered that value for money would only be delivered if there was sufficient time for the TOs to exclude/include or modify outputs and incentives beyond the March paper.

1.17. Another respondent supported the ongoing work on outputs as they considered that the establishment of output measures would help to demonstrate the long-term value for money that network companies provide for their customers. One respondent considered the form of the outputs to be unclear at this time and that value for money would ultimately be driven by network companies' confidence that any investments will be remunerated over the asset life. One respondent noted that the independent reporter proposal would not lead to better quality assurance of the relevant submissions or more consistency of interpretation.

CHAPTER: Four
Question 2: Do you consider that the proposed outputs and incentive arrangements are proportionate?

1.18. There were differing views on whether the proposed outputs were proportionate. Two respondents considered that they were proportionate to the challenges facing the industry although, of these, one noted that they could not comment on the proportionality of incentives in the absence of information on the scale of the outputs.

1.19. One respondent argued that the proposed arrangements were not proportionate and highlighted the specific proposal to remove the collar on the maximum penalty that network companies would face for under performance on reliability outputs. Another respondent noted that the key issue was investment and that if anticipatory investments were permitted there would need to be an appropriate balance between the risk and reward faced by network companies and consumers.

1.20. A further respondent noted that the size of any incentive or penalty should be within a reasonable range to ensure that the debt holders of a well capitalised business would not be undermined.

CHAPTER: Four
Question 3: Do you have any views on the proposed outputs or incentive mechanisms?

1.21. Sixteen respondents commented on the overall package of outputs and incentive mechanisms.

1.22. All respondents that commented supported an outputs-based framework. A number of those respondents expressed the view that the six output categories proposed covered the appropriate dimensions of service. A number also supported the criteria for the development of primary outputs which required that they must be material, proportionate, controllable and measurable. Two respondents expressed concerns that a number of the incentives proposed were not controllable by the TOs.

1.23. More detailed comments on the specific outputs categories are outlined in the 'Supplementary Annex – Outputs and incentives'.

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

1.24. Eleven respondents commented on the proposed approach to cost assessment. The majority of respondents supported the proposed toolkit approach.

1.25. Six respondents expressed support for undertaking benchmarking of forward-looking Totex. One respondent noted that using forecast information would be important given that historical information was likely to be a poor indicator of future requirements in light of the changing challenges that the network companies would face, including de-carbonisation, an aging network and the increasing emphasis on innovation. There were also concerns about the limitations of forecast data including the limited historical benchmarking or comparator information available, the difficulties of benchmarking future costs and the absence of suitable comparators in transmission. In light of such concerns a number of respondents favoured the continued use of existing bottom–up approaches or the use of a range of models.

1.26. Other than benchmarking, a number of respondents expressed reservations around the nature and application of some of the other cost assessment tools. These concerns related to how bottom-up and top-down approaches could be bought together, the ability of historical indices to deliver the information needed to assess future costs and the risk that our assessment may simply revert back to approaches that we have used in previous price controls.

1.27. Five respondents expressed support for the level of guidance we had provided to date with respect to completion of network company business plans. Some emphasised that the guidance should not be overly prescriptive, with flexibility used where necessary. Two respondents requested further clarity on elements of the business plan, specifically the link between uncertainty mechanisms and business plan forecasts and the extent to which network companies would be able to propose new outputs or incentives.

1.28. Two respondents requested early sight of proposed data templates while two further respondents welcomed our decision not to produce such templates.

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

1.29. Twelve respondents commented on the proposals for proportionate treatment. Three respondents supported proportionate treatment as it will allow regulatory effort to be focused where it is required. Two respondents noted that it was important that we be as transparent as possible in explaining how it had arrived at different levels of scrutiny following evaluation of a company's business plan.

1.30. The majority of comments related to the proposals for fast-tracking. Five 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. Two respondents expressed a preference to delay the fast-tracking option until RIIO-T2. Two respondents questioned whether we would have appropriately comparative models to determine which companies should be fast-tracked. One respondent considered it unlikely that any company will be in the position to take advantage of the option.

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?

1.31. Six respondents supported the criteria identified for assessing a company's suitability for proportionate treatment and fast-tracking with one respondent supportive of their subjective nature. Another suggested that there may be value in having plans assessed by a third party to ensure they are reasonable and appropriate. One respondent argued that we should clarify whether we intend to apply any weighting to the criteria. They noted that if we adopted this approach, most weight should be given to the quality of the business plans given the limitations of international benchmarking and the limited data on past performance. Specific comments on the individual criteria for assessing business plans are set out in the 'Supplementary Annex - Business plans, innovation and efficiency incentives'.

1.32. Three respondents welcomed the commitment to ensuring that a fast-tracked company is not worse off than others. One of those respondents considered that its application needed further thought.

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

1.33. Twelve respondents commented on the scope for competition in third party delivery. Four welcomed the proposals on the basis that they may facilitate more effective delivery of network capacity and deliver value for money to consumers. One respondent argued that the arrangements should be extended to all procurement activities including the provision of IT services.

1.34. Some respondents considered there were limitations with respect to the value of competition in the delivery of network assets. One respondent noted that outcomes would be dictated by circumstance and that it would be necessary to weigh up the potential benefits against a centralised approach as well as the impact of experience and knowledge. Another respondent noted that the benefits of a greater role for third parties in delivery would vary between the sectors.

1.35. Three respondents argued that greater competition in the delivery of network assets should not be applicable to all projects. Of these, one argued that this option should not be considered in relation to projects that are more complex, have potential safety impacts or could compromise security of supply.

1.36. Another three respondents explicitly argued that the case for third party delivery of assets was unclear. One of these respondents argued that an evidence-based impact assessment should be undertaken and that, if adopted, there should be clear rules for when a competitive process may be run. Another argued that we need to explain why such an approach would further benefit consumers, without detracting from the safe and secure provision of supplies. The third respondent was not convinced that third parties were better placed to deliver network assets than network businesses operating under financial incentives and licence obligations.

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?

1.37. Thirteen respondents commented on the setting of uncertainty mechanisms. The majority of respondents considered that the overall principle for uncertainty was appropriate.

1.38. Respondents largely agreed with retaining the mechanisms applicable under TPCR4 and agreed that companies should be able to propose additional mechanisms within their well-justified business plans based upon their individual circumstances.

1.39. Respondents argued for a number of additional mechanisms. Three supported provisions to allow for real price effects (RPEs) in the operating and capital allowances. Two respondents argued there should be mechanisms to reduce the potential volatility of network charges. Four respondents noted that some mechanism may be required to meet the uncertainty associated with the investment required to meet climate change and renewable energy targets including any changes in UK energy policy. Another respondent considered that mechanisms should also be included to allow for instances in which costs are unexpectedly lower.

Disapplication provisions

1.40. Two respondents commented on the disapplication arrangements. One argued that the wording in Special Condition A4 provides little assurance to companies around the process that would be followed in the event of financial distress and that we need to review our position to ensure the framework is transparent and fit for purpose. Another respondent argued that the arrangements do not need to change.

Mid-period review

1.41. Six respondents commented on the issues associated with the proposed mid-period review. Two respondents expressed support for the review given the longer eight year price control period under RIIO. One respondent considered that the mid-period review would dilute the incentive to take a longer-term planning perspective and would reduce the risks associated with the decisions that TOs take.

1.42. Three respondents considered that clear rules would be needed for the operation and scope of a mid-period review so as to not create any new uncertainty or to avoid the risk of effectively creating four year price controls.

1.43. There were differing views as to what should be within scope of the mid-period review. Three respondents considered it should include outputs while a further respondent considered outputs should be excluded as it would be hard to believe these could not be seen at the time of the review. Two respondents considered it should include changes due to Government policy.

1.44. Three respondents commented on the process for the reviews. One respondent considered that the proposed twelve month process was excessive and that it should be reduced to three months. Another respondent noted that both the Authority and licensees should have the right to trigger the review based on transparent high level criteria that was underpinned by a materiality threshold. The same respondent also considered that any mid-period settlement should be referable to the Competition Commission. The third respondent considered that a disapplication mechanism should be included at the mid-period review.

CHAPTER: Seven
Question 1: Do you have any views on the role of innovation in RIIO-TI?

1.45. Ten respondents commented on the role of innovation in RIIO-T1. All welcomed the emphasis on innovation. One respondent considered this emphasis was important given the scale of the changes required in the move to the future low carbon economy. Two respondents welcomed the requirement on network companies to consider the potential for innovation as part of their business plans. One respondent noted that the primary consideration in any innovation project should be for licensees to maintain a safe and secure network.

1.46. Three respondents noted the importance of flexibility in assessing the success of innovation. One noted that the regulatory framework and associated funding arrangements should be flexible. Similarly a second respondent argued that projects should be encouraged and permitted to go beyond regulatory restrictions. The third respondent noted that the arrangements should provide the flexibility for transmission and distribution to work together.

CHAPTER: Seven
Question 2: Do you have any views on the time limited innovation stimulus?

1.47. Eleven respondents commented on the proposals for the innovation stimulus and innovation allowance. Ten respondents supported the proposed arrangements. One respondent did not agree that a strong case had been made to implement an innovation stimulus for transmission companies where any innovation can demonstrably deliver long-term benefits. They argued that such innovation should be funded under the main price control arrangements. Two respondents questioned why the proposed arrangements were time limited. Another respondent sought confirmation of how long the innovation stimulus will be provided for given that innovation activity is not a step change but will be an ongoing process.

1.48. A number of respondents made additional proposals for the development of the arrangements. These included:

- all energy companies should have full access to innovation funding

- there should be clear and transparent funding criteria
- additionality should be rewarded, ie to support projects that would not have been funded in the absence of the stimulus
- there should not be any restrictions on size or on who may participate.
- there should be two overriding rules for participation: (1) the lead party in each bid should be a licensees; and (2) no customer should experience a significant or sustained reduction in their level of service as a result on a research and development project
- the size of the proposed innovation allowance should be based on the quality of business plans and a company's track record but should recognise the difficulty of identifying all innovation 8-10 years in advance
- Ofgem should avoid micro managing innovation projects.

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

1.49. Eleven respondents considered that Ofgem’s financial proposals may have a negative impact on investment. One respondent explicitly noted that the proposals were anti-investment and, if implemented, have the potential to seriously damage the transition to the low carbon economy. Another respondent considered there was a fundamental mismatch between Ofgem's pro-investment message and the reality of the proposals. Three respondents noted that the proposals introduce a significant increase in risk while lowering returns for both debt and equity investors. Two respondents argued that Ofgem risked taking shareholders for granted. Another respondent noted that the increased duration of cash flows significantly increases equity risk in transmission and requires higher return.

1.50. Three respondents noted that other jurisdictions offer premium returns when they require large new investment and that the proposed risk/return looked unattractive relative to history, relative to non-utility opportunities in the UK and relative to opportunities elsewhere in the world. A message from a number of respondents was that investment in the UK was driven by perception of a well defined regulatory landscape and stable returns, and that the proposed changes would adversely impact UK's reputation as having a stable regulatory environment, ultimately pushing up the cost of capital.

1.51. A number of respondents noted the potentially negative impact of the proposals on consumers if the sector is not able to finance itself. Respondents questioned whether relatively short-term issues such as controlling prices were being given too much precedence over ensuring that a sufficient network is in place to delivery energy to future customers.

1.52. Several respondents argued that a longer price control period was beneficial as it allowed the company and its shareholders to focus on running the business. However, three respondents noted that you could make argument that longer price control increases risk for companies and, in the context of capital scarcity, should be reflected in a higher return.

1.53. One respondent considered that investors who seek a more aggressive financial structure should be offered no protection as they actively house a different risk/reward profile than those investing in a conservatively capitalised company. One respondent considered that investors should be willing to forego dividends in the short term in return for capital growth but this would not be sustainable in long-term. One respondent considered the proposed package would allow networks to be effectively financed.

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

1.54. The majority of respondents expressed concerns with the proposed approach to depreciation and in particular the proposed change in asset lives.

1.55. A number of respondents questioned the rationale for any change in asset lives as well as querying the use of economic asset lives as the basis of any change. One respondent noted that there was no proven case that asset lives have doubled Two respondents noted that the proposed approach was more motivated by theory rather than pragmatism. Four of the respondents noted that there was an issue of intergenerational fairness as the proposals would increase costs to future consumers. One respondent recognised that current regulatory asset lives do not currently reflect the expected economic lives of network assets but that neither does RAV. One respondent agreed that depreciation should reflect the anticipated economic life of the assets. Another respondent considered that the decision to extend electricity while keeping gas unchanged appeared one-sided.

1.56. Five respondents noted that the proposals would negatively impact cashflows and gave some specific examples of that impact. One respondent noted that if a case could be made for changing asset lives then it must explicitly consider the impact of cash flows and be cash-neutral compared to the current position.

1.57. A number of respondents queried the asset life range we proposed. One respondent cited a number of factors that skewed the results ignored the 132kV assets in Scotland and that MEAV weights give undue weight to tower foundations. Another respondent considered that we should assume an average economic life of no more than 40 years.

1.58. A number of respondents highlight that the proposed asset lives did not reflect future changes in shorter life higher technology, eg high duty circuit breakers. One respondent agreed that the advent of 'smart grids' may lead to the widespread uses of equipment that have a shorter technical life but considered that this should not be used as an argument for general shortening of the depreciation period. One respondent noted that Ofgem should consider the option of having different depreciation periods for different types of equipment as better reflecting reality.

1.59. A number of respondents highlighted other factors impacting the certainty of future assets lives. One respondent noted that the proposals failed to take into account the uncertainty surrounding future use, especially of individual assets in a particular location. Two respondents highlighted the extreme uncertainty surrounding energy market developments and future government policies.

1.60. Five respondents noted the impact of the proposals on consumers. One respondent considered that the proposed approach was appropriate as it would reduce costs to consumers. One respondent agreed with the case for reforming networks financing to share the burden between new and existing customers.

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?

1.61. One respondent considered the proposed approach seemed reasonable. Another respondent noted that any transitional rules should be fully justified.

1.62. Two respondents noted that, as they did not support the asset life proposals, there was no need for transitional relief. If the change was progressed one respondent considered that there must be sufficient adjustment to cash flows to enable an efficient business to attract financing to plug the cash shortfall caused by the change. The other argued not to limit the options in the March document.

1.63. A number of respondents' commented on the length of any transition period. Four respondents considered that the transition to 45 year asset lives should be over minimum of two control periods. One of these respondent considered that this should be coupled with additional investment incentives. One respondent considered that transition would be required in addition to the retention of 20 year asset lives for existing investments.

1.64. Two respondents considered the proposed arrangements were unclear. One argued that a detailed schedule on any upcoming change should be made publicly available at the same time as discussion around any such changes. The other considered that the expectations of equity injections and dividend holidays make them cautious. One respondent considered it was not acceptable for Ofgem to place the onus on companies to justify transitional arrangements.

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

1.65. Four respondents supported the proposals for cost of debt indexation. They noted that indexation:

- ensures networks face real market price for debt financing and should deliver significant cost savings to consumers while also protecting companies from increases in the cost of debt

- would remove uncontrollable risk faced by companies and the need for "headroom"
- could reduce risk for network companies risk, thus lowering their cost of capital.

1.66. One respondent supported the proposal to index the cost of debt but expressed concern about the implications for the companies of short-term deviations in the market cost of debt from the long-term trailing average.

1.67. Thirteen respondents expressed some concerns with the use of indexation. Their key objections to indexation in principle were that:

- a mechanistic approach would give no flexibility to reflect prevailing and forecast market conditions
- would be inconsistent with Ofgem's financing duty as it would only adjust to increase in interest rates over a 10 year period and leaves a company facing a shortfall in revenues to cover the increase in interest payments
- indexation makes it all but impossible to outperform the cost of debt and requires a higher cost of equity by way of compensation
- indexation would transfer risks to consumers
- indexation introduces unnecessary regulatory complexity which would impact the attractiveness of the sector in investors' eyes
- a fixed allowance would be preferable given companies' hedging practices

1.68. In addition, respondents raised concerns with technical elements of our proposed index:

- 10-year maturity is at odds with the long-term nature of networks
- a one-size-fits-all approach is inappropriate where capex programmes and debt issuance profiles vary across companies
- a trailing index would be distorted by historical events (credit crisis, central bank decisions)
- the use of Bloomberg data (as opposed, for example, to iBoxx)
- the omission of debt issuance and liquidity management costs and the failure to fund the inflation risk premium

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%?

1.69. Three respondents agreed with the general approach to calculating the cost of equity but two of those respondents considered the upper bound to be high in comparison to benchmarks and recent regulatory precedents.

1.70. A number of respondents argued that the risk was greater under RIIO and that this should be reflected in the level of the cost of equity. A number of respondent highlighted the need for significant capital investment as the key driver of the risk and consequently that this was an inappropriate time to adopt the minimum possible level of return. The other drivers of risk highlighted included the regulatory environment, equity issuances, pressure on dividends and an uncertain economy.

1.71. Eleven respondents considered that the cost of equity should be at the top of the range or higher. One respondent noted that private investors expected returns of 9-12%. Another respondent suggested the cost of equity should be 7% at the minimum, 10% to be attractive to investors. There was strong opposition to the lower end of the range.

1.72. One respondent noted that whether or not the range of cost of equity would be acceptable would depend on the package of risk and reward. The respondent argued that the cost of equity would need to be at least at the top of Ofgem's range.

1.73. A number of respondents questioned the approach used to calculate the costs of equity. One respondent argued that Ofgem need to cross-check the range with alternative approaches. The same respondent noted that CAPM estimates do not allow for a forward looking risk premium higher than the historic average. Another respondent noted that the work undertaken by Europe Economics is predominantly backward-looking, theoretical and is based on a small evidence base.

1.74. A number of respondents highlighted other regulatory and international examples of higher returns.

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

1.75. Three respondents broadly supported the tax proposals in line with the DPCR5 principles. One respondent had some concerns with the modelling of tax based on the proposals in the June 2010 budget.

1.76. One respondent expressed some concerns with tax proposals specifically regarding the tax trigger. The same respondent argued that the proposal to calculate incentives using the vanilla WACC could be appropriate for new incentives although complex, but that, to avoid regulatory risk, any move to change the tax treatment of incentives should only be considered for implementation on a prospective basis.

1.77. Two respondents broadly supported the ongoing application of the pensions principles established during DPCR5 and the subsequent June 2010 Pension paper. Four respondents expressed some concerns with proposed treatment of pension deficits. One respondent considered the approach would lead to volatility and inefficiency. Another respondent argued that the proposals for recovery of pension deficits should not exclude deficits relating to activities that are part of the licensed business but happen to be remunerated by non-price controlled revenue. The third respondent noted that energy companies are exposed to greater costs and risks than other regulated industries. The fourth respondents noted that past commitment to fund regulated pensions costs were weakened by proposal to fund pension deficits based on updated valuations at as 31 March 2011 or 30 September 2012.

Appendix 2 – RIIO-T1 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**	Sunday 31st 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 – Updated interactions with related policy areas

1.1. In setting a price control a number of interactions with other areas of transmission policy need to be taken into account. The key interactions are set out below.

Adapted rollover of TPCR4

1.2. To accommodate fully the conclusions of the RIIO review in the next transmission price control we announced, following consultation, on 21 December 2009 that we intended to delay implementation of the next transmission price control until 1 April 2013. We announced a one-year adapted rollover of TPCR4 ("the adapted rollover") from 1 April 2012 until 31 March 2013.

1.3. Following consultation, we published our decision on the scope of the adapted roll-over in June 2010. The document concluded, amongst other things, that the scope of the TPCR4 roll-over would be proportionate to a one-year review and that we would not be adopting the RIIO model in determining the TPCR4 roll-over parameters. Consequently, RIIO-T1 will be the first time the RIIO framework is fully reflected in a transmission price control.

1.4. We intend to publish a preliminary analysis consultation on the TPCR4 roll-over in April 2011.

SO incentives

1.5. Some outputs that we are looking to develop in both transmission sectors include activities that interact with those of the SO. Some of these activities are currently incentivised in some way through the SO incentives, others are not currently being incentivised. As part of RIIO-T1 and in combination with the ongoing SO incentives work, we are looking at options for aligning the SO incentives with the incentives in RIIO-T1.

1.6. Where there is overlap between the roles of the SO and TO activities we are considering the appropriate incentive arrangements for the overall benefit of consumers. We are also considering whether there is the need for any developments to the relationship between the two roles to ensure that they work together to deliver efficient and economic outcomes. We intend to publish a consultation document in May 2011 setting out our initial views with respect to the incentivisation of the SOs from 1 April 2013.

Project TransmiT

1.7. In September 2010 we launched ‘Project TransmiT’ - our independent and comprehensive review of transmission charging arrangements and associated connection arrangements. We published an open letter in January 2011[20] which, amongst other things, confirmed that electricity connection issues (such as user commitment and delivering timely connections in the context of the Connect and Manage regime) and electricity transmission charging are an immediate priority for Project TransmiT.

1.8. There is a clear interaction between our work in Project TransmiT and the price control work on connections. Our price control work will seek to establish incentive arrangements and connection outputs, which should ultimately help address the issue of timely connections. The joint work on this is described in more detail in the 'Supplementary Annex - Outputs and incentives'.

1.9. We recently published an update letter discussing the next steps on the electricity connection issues we are considering under Project TransmiT. In the letter we set out the high level issues that we think are relevant to the development of new enduring electricity user commitment arrangements. It also seeks view on the new TO reporting obligation that we propose to introduce, to gather further information in support of arrangements to facilitate timely connections.

TAR

1.10. The joint Ofgem/Department of Energy and Climate Change (DECC) Transmission Access Review (TAR) explored the case for change to the transmission access arrangements. The review culminated in the TAR final report[21], published in July 2008, which identified a range of options for enduring access reform. In 2010 DECC implemented Connect and Manage as the enduring transmission access model.

Transmission Investment Incentives

1.11. Following completion of TAR, we have taken forward work to identify the critical system reinforcements that the electricity TOs identified as likely to be required by 2020, and to provide appropriate funding arrangements to facilitate this programme of investment within the current price control period.

1.12. In January 2010 we published our final proposals on our framework and process for funding critical investments in tranches within TPCR4, under our Transmission Investment Incentives (TII) work stream. We subsequently announced our intention to extend our TII framework to 2012-13 under the TPCR4 rollover, while future funding arrangements, from 2013-14, will be addressed through RIIO-T1. We are currently assessing a number of requests for funding from 2011-12 under TII and we have recently published a proposed approach to dealing with these

[20] Scope of Project TransmiT and summary of responses to our call for evidence http://www.ofgem.gov.uk/Networks/Trans/PT/Documents1/110125_TransmiT_Scope_Letter_Final.pdf

[21] Transmission Access Review - Final Report, 26 June 2008, Ofgem/BERR http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Documents1/080626_TAR%20Final%20Report_FINAL.pdf

requests and on our detailed policy recommendations for the arrangements to apply in 2012-13.[22]

Liquefied Natural Gas (LNG) price control

1.13. NGG owns three LNG facilities that provide a combination of commercial and regulated services. These are Avonmouth, Glenmavis and Partington. All of these sites are subject to price control in relation to the regulated services they provide. These regulated services are provided to NGG to help them operate and manage the gas transmission system and to Scotia Gas Networks (SGN) who use the tanker loading facilities to load road tankers which transport gas to four remote towns in Scotland, known as the Scottish Independent Undertakings (SIUs).

1.14. Regulated LNG prices were last reviewed in 2008. Since 2008, there have been a number of significant changes affecting NGG's LNG business. We were approached by NGG LNG to reconsider the level of the regulated prices, as it considered that the facilities were no longer commercially viable at the prevailing price levels.

1.15. We agreed to review the regulated prices for LNG storage and published our final proposals for Avonmouth and Partington in February 2011.[23] As there have been significant operational issues at the Glenmavis site, its capability in the next couple of years is subject to a number of uncertainties. As a result, we did not publish final proposals for Glenmavis. In our final proposals, we proposed a two-year duration for the control, to take it to 2013. As a result the next control will coincide with the start of RIIO-T1 and GD1.

1.16. Consequently, we have proposed that the next control should be developed concurrent with RIIO-T1 and GD1 for implementation in 2013. One option is for the LNG assets to be brought under the remit of the main transmission price control.

Electricity Market Reform

1.17. The Electricity Market Reform (EMR), was published for consultation[24] by DECC in December 2010 and closed for responses earlier this month. The package is designed to ensure that low carbon technologies become a more attractive choice for investors, and adequately reward back up capacity to ensure the lights stay on. The Government will publish a White Paper later in 2011, incorporating a response to this consultation, and setting out legislative and administrative proposals to support these reforms.

[22] Transmission Investment Incentives: funding requests and extension of funding framework http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/CriticalInvestments/InvestmentIncentives/Documents1/Dec10_TII_FINAL.pdf
[23] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=46&refer=Networks/Trans/GasTransPolicy/LNGPriceControl
[24] For more information on DECC's work in this area see - http://www.decc.gov.uk/assets/decc/consultations/emr/1041-electricity-market-reform-condoc.pdf

1.18. We have, and will continue to, work with DECC to ensure that our RIIO price controls can help to facilitate, and do not act as a barrier, to any reforms.

EU legislation - third package of legislative measures concerning the internal energy market

1.19. Article 9 of the Electricity Directive, which forms part of the 'Third Package' of internal energy market legislation, sets out the framework for the unbundling of transmission interests from generation, production and supply interests.[25]

1.20. Both the Scottish TOs are vertically integrated, ie they own generation assets and supply businesses, as well as network assets. They have already indicated that they wish to apply for a derogation from Article 9 of the Directive. It is the Authority's decision to grant a derogation, though this must be subsequently approved (or vetoed) by the European Commission. If the applications are not successful and they are required to fully ownership unbundle, then this may have significant implications for the Scottish TOs. Further details are outlined in our consultation on certification of transmission system operators (TSO) under the Third Package.[26]

1.21. DECC are expected to implement the Third Package soon. As part its implementation they will introduce a new process for appealing licence modifications.[27] This is discussed further in chapter 3 of this document.

Committee on Climate Change's 4th Carbon Budget Report

1.22. The Committee on Climate Change's 4th Carbon Budget Report[28] recommends that the most cost-effective way to meet the UK's 2050 reduction target is the decarbonisation of the power sector by 2030 followed by the electrification of heat and transport. The Committee's analysis shows that over the next two price controls, we could see a step change in the amount of low carbon generation connecting to the system.

1.23. In our price controls we recognise that network companies' contribution to our broad environmental objectives is vital. The things network companies do, and do not do, over the next price control period will have an impact on our ability to meet our energy goals. We are proposing a package of measures to ensure network companies play their 'full role' in achieving the UK's environmental objectives. For example, through our broad environmental output we will reward TOs that seek out

[25] The Third Package requires greater separation of transmission interests from generation, production and supply. In the European Commission's view, without effective separation of transmission networks from the activities of generation, production and supply, there is an inherent risk of discrimination not only in the operation of the network but also in the incentives for vertically integrated undertakings to invest adequately in their networks.
[26] Consultation on the certification of transmission system operators under the Third Package, Ofgem, July 2010 http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=30&refer=Europe

[28] http://www.theccc.org.uk/reports/fourth-carbon-budget

new areas and opportunities to facilitate a move towards a low carbon economy. We have also put in place reporting requirements to help monitor progress towards decarbonisation milestones, including measuring the carbon intensity of electricity flows over the network.

Security and Quality of Supply Standards

1.24. The transmission companies – both onshore and offshore – are required by their licences to comply with the National Electricity Transmission System Security and Quality of Supply Standards (NETS SQSS). The NETS SQSS sets out criteria and methodologies for planning and operating the GB Transmission System.

1.25. A key issue for the energy industry is integrating new generation technologies, such as wind and other renewable generation, into the electricity networks. The NETS SQSS has a pivotal role in facilitating demand and generation and efficient market operation. Consequently, the SQSS Review Group is currently progressing a number of proposals aimed at ensuring the SQSS remains appropriate and fit for purpose.

1.26. In undertaking the next phase of the review, the industry review group recognised the importance of the transmission price control in influencing the review work. They recognised that RIIO-T1 stakeholder engagement would among other things inform a range of issues relevant to the review.

1.27. The design of the outputs discussed in this paper and in more detail in the 'Supplementary Annex - Outputs and Incentives' will inform the work on the SQSS review with parallel development of these workstreams. Further we expect TOs, in developing their well-justified business plans, to put forward plans for delivering outputs which not only reflect the NETS SQSS but which seek to anticipate potential changes which may come forward as part of the outcomes of the current review.

Appendix 4 – List of uncertainty mechanisms

1.1. The tables below summarise our final proposals for uncertainty mechanisms for the electricity transmission and gas transmission sectors.

Table 1: Uncertainty mechanisms applying to all sectors

Mechanism	Decision
Pass-through of Ofgem licence 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 an 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 - Financial issues'.
Pension deficit repair mechanism	No change. Further details available in the 'Supplementary Annex - 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 Annex - 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 electricity transmission

Issue and purpose	Decision
Volume driver (and potentially other mechanisms) for connections expenditure relating to enabling works	No change. Volume driver with possible separate determinations for high cost projects. Further details available in the 'Supplementary Annex - Uncertainty mechanism'.
Arrangements to manage uncertainty over required increases in boundary capacities associated with wider works	No change. We are providing additional guidance on the use of the three options identified. Further details available in the 'Supplementary Annex - Uncertainty mechanism' and 'Supplementary Annex - Outputs and incentives'.
Pass-through of EU Inter TSO compensation scheme costs	No change. Pass through EU Inter TSO costs.

Table 3: Uncertainty mechanisms applying to gas transmission

Issue and purpose	Proposals and further work
Revenue drivers for incremental entry and exit capacity	No change. Continue to use revenue drivers for entry and exit.

Appendix 5 - 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.[29] 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.[30]

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.

[29] Entitled "Gas Supply" and "Electricity Supply" respectively.
[30] 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[31]; 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.[32]

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[33] 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.

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[31] 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.
[32] The Authority may have regard to other descriptions of consumers.
[33] 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[34] 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.

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

Appendix 6 - 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:

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