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for all gas and electricity customers

RIIO-T1: Initial Proposals for National Grid Elecricity Transmission and National Grid Gas – Impact Assessment

Consultation

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Contact: Grant McEachran

Team: RIIO-T1

Tel: 0141 331 6008

Email: grant.mceachran@ofgem.gov.uk

Overview:

We are publishing this document alongside our Initial Proposals for the transmission price control for National Grid Electricity Transmission (NGET) and National Grid Gas (NGGT) 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. Under RIIO we are adopting a very different process for setting price controls. Companies are required to develop and submit well-justified business plans, supported by the views of stakeholders, setting out what they will deliver.

In a number of areas our Initial Proposals directly reflect the RIIO-T1 business plans put forward by NGET and NGGT. In other areas we are putting forward alternative proposals.

This impact assessment considers the benefits and risks that may result from implementation of our RIIO-T1 Initial Proposals for NGET and NGGT.

Associated documents

Overview Document

RIIO-T1: initial Proposals for NGET and NGGT - Overview Document

Supporting Documents

RIIO-T1: Initial Proposals for NGGT and NGET – Outputs, incentives and innovation

RIIO-T1: Initial Proposals for NGET and NGGT – Cost assessment and uncertainty

RIIO-T1: Initial Proposals for NGGT and NGET – Finance

Associated Documents

RIIO-T1/GD1: Initial Proposals – Real price effects and ongoing efficiency appendix

RIIO–T1/GD1: Financial model

RIIO-T1 Stage 4 - National Grid System Operator Electricity and Gas Capex and Opex Initial Assessment – Summary Report

RIIO-T1 SUMMARY REPORT – GAS A report to the Office of Gas and Electricity Markets July 2012

RIIO-T1 Stage 4 NGET Final Assessment – A report for Ofgem

Licence consultation documents

RIIO-T1 and RIIO-GD1: Draft licence conditions – First informal licence drafting consultation

Supporting Document 1: Draft RIIO-T1 Electricity Transmission licence changes

Supporting Document 2: Draft RIIO-T1 Gas Transmission licence changes

Supporting Document 4: Response template for RIIO-T1 & GD1-First licence drafting consultation

RIIO ET1 Price Control Financial Handbook

RIIO GT1 Price Control Financial Handbook

Other documents

RIIO-T1: Initial Proposals for National Grid Electricity Transmission plc and National Grid Gas plc - Headlines

Glossary for all the RIIO-T1 and RIIO-GD1 documents

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Executive summary

Background and context

RIIO-T1 is the first price control review that we are conducting in which we are applying the principles of the RIIO (Revenue = Incentives + Innovation + Outputs) model. Under RIIO, Revenues are set to deliver strong Incentives, Innovation and Outputs.[1]

We published an impact assessment (IA) to complement our December 2010 Strategy Consultation Document (Strategy Consultation Document).[2] That IA considered the impacts of the key changes that we proposed to be implemented under RIIO-T1. We also published an IA alongside our Initial Proposals for SP Transmission Ltd (SPTL) and Scottish Hydro Electric Transmission Ltd (SHETL) in February 2012.[3]

This new IA complements our Initial Proposals consultation (Initial Proposals) for National Grid Electricity Transmission (NGET) and National Grid Gas (NGGT). It provides an overview of the RIIO-T1 Initial Proposals for NGET and NGGT and the impact that these proposals will have in terms of both benefits and risks. It draws upon our assessment of NGET's and NGGT's March 2012 business plans and our Initial Proposals which this IA accompanies.

In this IA we first consider the impacts that we anticipate will result from the RIIO framework. We then consider the specific Initial Proposals for RIIO-T1 for NGET and NGGT. This IA closely follows the structure and content contained in the IA published for SPTL and SHETL.

Key aspects of the RIIO model

The overarching objective of RIIO is to encourage energy network companies to:

- play a full role in the delivery of a sustainable energy sector
- deliver long-term value for money network services for existing and future consumers.

NGET and NGGT are likely to be required to undertake significant investment in the coming years to facilitate the transition to a sustainable energy sector. The proposals set out in our Strategy Consultation Document were designed to ensure that companies can finance the required investment in a timely and efficient way, and are incentivised to deliver the required level of service at value for money for consumers.

[1] For more information on the RIIO framework, please see 'Handbook for implementing the RIIO model' available at: http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf
[2] Consultation on strategy for the next transmission and gas distribution price controls – RIIO-T1 and GD1 Impact Assessment http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1%20and%20GD1%20IA.pdf
[3] RIIO-T1: Initial Proposals for SPTL and SHETL for the next transmission price control – IA http://www.ofgem.gov.uk/NETWORKS/TRANS/PRICECONTROLS/RIIO-T1/CONRES/Documents1/SPT_SHETL_IA.pdf

Our Initial Proposals set out the way that NGET and NGGT will best achieve these objectives.

This impact assessment

In this IA, we assess the impacts and risks that could result from implementation of the price controls for NGET and NGGT, as set out in our Initial Proposals. Our assessment highlights potential positive impacts in a number of areas:

- **Impacts on consumers:** The biggest impact on consumers will be linked to the elements of the RIIO model that help to manage the increase in network charges likely to result from additional investment in the networks. In particular, the focus of the model on the longer term has already encouraged the transmission companies to consider the impacts of their investment decisions over a longer timeframe, which is likely to lead to more innovation and better value for money. We recognise that longer-term price controls could create additional uncertainty, but we are confident that the mid-period review and uncertainty mechanisms will largely address these concerns. The ability to take a proportionate approach to the assessment of business plans has had positive impacts by allowing us and network companies to focus our efforts in the areas where they are most likely to deliver benefits. We are realising further benefits from the regime as a result of the transparency that investors have had with respect to financeability arrangements.

- **Impacts on sustainable development:** We anticipate the outputs-led regime, which is linked to the objectives of the framework, will have significant benefits for sustainable development. We have developed, in consultation with industry parties, a suite of primary outputs against which network companies will be required to ensure delivery. Combined, these primary outputs should deliver a safe, reliable system, an efficient connections process, high levels of customer satisfaction as well as improved environmental performance. NGET and NGGT developed their business plans for meeting these primary outputs, and we believe that the Initial Proposals we are consulting on should lead to the anticipated benefits.

In our December 2010 IA we recognised that there could also be a number of risks associated with the RIIO model, which reduce the level of benefits achieved under RIIO-T1. These included overspends in delivery, non-delivery of outputs, and the possibility of increased regulatory risk due to the new financeability principles and the mid-period review. We have implemented a number of mechanisms to mitigate these risks. To some extent, the manner in which NGET and NGGT have largely adopted the suite of outputs and uncertainty mechanisms in our March 2011 Strategy Document (Strategy Document) for RIIO-T1 indicates there is agreement overall that the framework is broadly appropriate, and provides the right level of risk and reward. The Initial Proposals set out in detail our assessment of our Initial Proposals as against the proposals in NGET's and NGGT's business plans, including as regards their respective impacts on consumers, sustainable development and the other matters covered under our legal duties. We have not repeated the detail of that analysis here.

We welcome stakeholder views on the assessment in this document and whether this represents an appropriate analysis of the impacts and risks that could be observed through implementation of the RIIO-T1 Initial Proposals for NGET and NGGT.

1. Key issues and objectives

Chapter summary

This chapter outlines the role of this IA within the overall consultation on Initial Proposals for NGET and NGGT.

1.1. The next transmission price control, RIIO-T1, will be the first to reflect the new RIIO model. We are now consulting on the RIIO-T1 Initial Proposals for NGET and NGGT. We are publishing an Overview Document setting out a summary of the Initial Proposals and three Supporting Documents setting out more detail on the key elements of those proposals.[4,5] This document sets out our current thinking with respect to the potential impacts and risks associated with implementation of the Initial Proposals.[6]

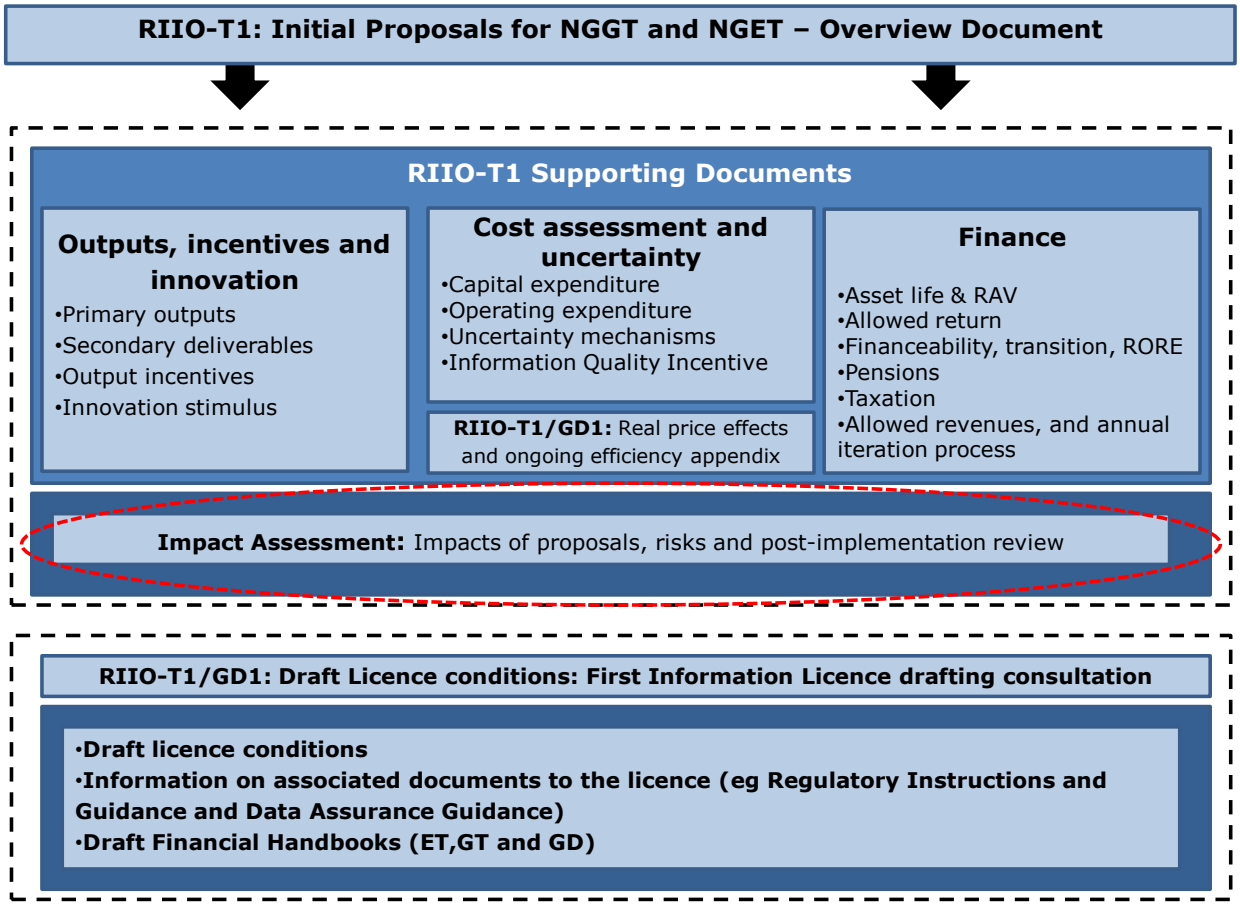
1.2. Figure 1.1 shows the suite of Initial Proposal documents for NGET and NGGT.

[4] RIIO-T1: Initial Proposals for National Grid Electricity Transmission and National Grid Gas: Overview document
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIO%20T1%20Initial%20Proposals%20for%20NGGT%20and%20NGET%20Overview%202707212.pdf

[5] RIIO-T1: Initial Proposals for NGET and NGGT – Outputs, incentives and innovation
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIO%20T1%20NGGT%20and%20NGET%20Outputs%20and%20incentives.pdf
RIIO-T1: Initial Proposals for NGET and NGGT – Cost assessment and uncertainty
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIO%20T1%20NGGT%20and%20NGET%20Cost%20assessment%20and%20uncertainty.pdf
RIIO-T1: Initial Proposals for NGET and NGGT – Finance
http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIO%20T1I%20NGGT%20and%20NGET%20Finance.pdf

[6] We are also consulting informally on working drafts of licence conditions which set out current thinking on how the Initial Proposals might be translated into operators' licences. We recognise that these drafts require further development and will undertake a second informal consultation on the developed drafting alongside Final Proposals.

Figure 1.1 - Initial Proposals Supplementary Document map*



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

Development of the RIIO model

1.3. The main driver of the RPI-X@20 review was the need to ensure that the regulatory framework remained fit-for-purpose, particularly in light of the challenges that the network companies would face in facilitating the transition to a sustainable energy sector. During RPI-X@20 we undertook extensive engagement with a range of stakeholders to ensure that we had a solid understanding of the way that the RPI-X regime had performed since implementation. We also sought to identify potential challenges that the network companies would face in the future and to determine the form that the regulatory regime should take to allow them to effectively address these.

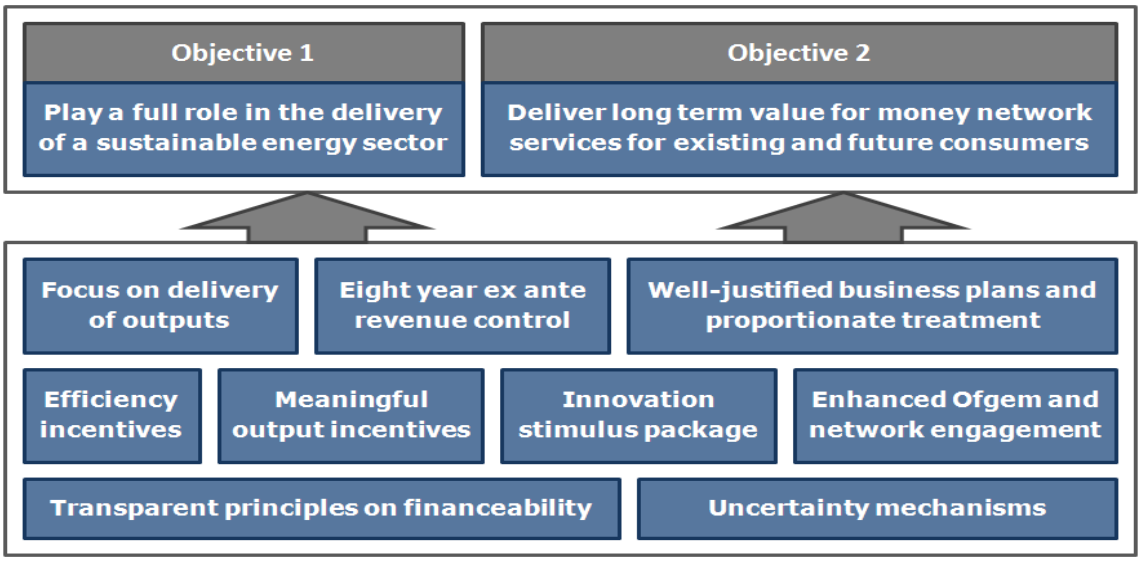
1.4. The outcome of this process was the development of the RIIO model, under which Revenue will be set to deliver strong Incentives, Innovation and Outputs. To

provide transparency regarding our expectations of the network companies we defined clear objectives for the framework. These objectives are aligned with our principal objective and wider statutory duties. As such, the objectives specify that the framework should be designed and implemented to encourage energy network companies to:

- play a full role in the delivery of a sustainable energy sector
- deliver long-term value for money network services for existing and future consumers.

1.5. The RIIO framework contains a number of mechanisms designed to facilitate the delivery of these objectives. As Figure 1.2 below illustrates, the RIIO framework is an evolution of the RPI-X regime and builds on the successful elements of this framework, particularly some of the innovative aspects that were implemented as part of the fifth distribution price control review (DPCR5).

Figure 1.2 - Overview of the key elements of the RIIO model



1.6. The RIIO framework maintains an ex ante approach that is informed by business plans and stakeholder engagement. It builds on the success of the low carbon networks fund (LCNF) developed during DPCR5 with the introduction of an innovation stimulus package across all four energy network sectors. The framework also takes further the development of outputs and, in this respect, can be considered outputs-led. The outputs-led regime is complemented by the application of strong incentives to mimic the effects of competitive markets and encourage efficient and innovative delivery. To ensure that the outputs developed under the regime reflect the needs of network users and consumers, the framework places a strong emphasis on stakeholder engagement, building on the progress made in these areas in the past.

1.7. RIIO includes a strong focus on the longer term to ensure value for money for existing and future consumers and this is underpinned by the use of long-term, well-justified business plans as well as the extension of the price control period from five to eight years. To provide clarity on the approach that we take to determining the financial package, the RIIO framework incorporates a set of transparent financeability principles. A more detailed explanation of the way that the RIIO model works is contained within the RIIO handbook.[7]

Implementation in RIIO-T1

1.8. The IA that we published alongside our Strategy Consultation Document examined the benefits, costs and risks that we anticipated might result from implementing the RIIO framework in RIIO-T1.[8] This IA takes the analysis one step further by looking at the impacts and risks that are expected to result from implementation of the specific proposals in the Initial Proposals for NGET and NGGT.

1.9. In undertaking this IA we have adhered to a number of additional principles to assess the impact of implementing these Initial Proposals.

- **Taking the package as a whole:** When considering the impact of implementing the Initial Proposals for NGET and NGGT, we have sought to focus on the package as a whole, taking account of interactions between the various elements of the business plans.
- **Specific assessments:** We have considered the qualitative impacts of implementing the Initial Proposals for NGET and NGGT. We have sought, where possible, to quantify the benefits and costs of the implementation.

Stakeholder views

1.10. As part of RIIO's enhanced engagement principles we have sought to actively engage with a range of stakeholders including network companies, network users, consumer representatives, environmental groups, and other interested parties during the development of the RIIO-T1 proposals.

1.11. We value the input of these stakeholder groups and would welcome further stakeholder views on the issues set out in this IA. We would welcome views on this IA by 21 September 2012.

[7] Handbook for implementing the RIIO model, available from: http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf

8 Consultation on strategy for the next transmission price control - RIIO-T1 Overview paper, December 2010: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=28&refer=NETWORKS/TRANS/PRICECONTROLS/RIIO-T1/CONRES

2. Impact of RIIO-T1 Initial Proposals for NGET and NGGT

Chapter Summary

This chapter provides an overview of what we consider are the key potential impacts of implementing the RIIO-T1 Initial Proposals for NGET and NGGT.

2.1. We consider that implementing the RIIO framework in the RIIO-T1 price controls for NGET and NGGT will provide numerous benefits for consumers. It will do so by facilitating the delivery of the objectives set out in Chapter 1. These objectives are ensuring long term value for money for consumers as well as facilitating the delivery of a sustainable energy sector. We have structured this chapter according to the impacts that would be observed in a number of key areas from the implementation of the Initial Proposals for NGET and NGGT. The potential impacts are grouped according to the following areas:

- impacts on consumers
- impacts on competition (including effects on small businesses)
- impacts on sustainable development
- impacts on health and safety.

2.2. In December 2010, we published an IA examining the benefits, costs and risks that could arise from the implementation of the RIIO framework to RIIO-T1. We consider that the benefits identified in that IA will be realised through the implementation of the Initial Proposals for NGET and NGGT. As such, some sections of this chapter begin with an overview of the benefits that we identified in our previous IA. The sections then go on to assess these impacts in more detail, based upon the specific proposals in the business plans of NGET and NGGT.

Impacts on consumers

2.3. We consider there are two main areas in which implementation of the Initial Proposals for NGET and NGGT will positively impact on consumers:

- The first is that these Initial Proposals should ensure the delivery of network services at value for money for consumers. Within the context of the increase in network charges consumers will see, given the level of network investment needed by NGET and NGGT over the RIIO-T1 period, it is important that the additional costs borne by consumers deliver tangible benefits in terms of sustainable and secure gas and electricity transmission systems. The RIIO framework is designed to achieve this.

- The second is that there have been greater opportunities for consumers to engage in the price control process and influence these Initial Proposals. This has helped to ensure that the price control better reflects their needs and therefore delivers in line with their expectations. This greater stakeholder engagement will continue up to, and throughout, the price control period, and will provide stakeholders with ongoing opportunities to influence the work of NGET and NGGT.

2.4. Each of these impacts is discussed in turn in the following section.

Management of increases in network charges

2.5. There are significant challenges facing energy network companies and one of their biggest challenges will be to maintain security of supply whilst facilitating the transition to a low carbon economy. Due to these challenges both NGET and NGGT are planning to undertake large investment programmes. That investment is for different purposes. In NGET's case it is for a combination of replacing ageing assets, many of which were built in the 1950s and 1960s, and to build new assets to facilitate the connection of new sources of demand and generation, including new nuclear plants and wind farms. For NGGT it is largely for developing a flexible network to accommodate changing and largely uncertain flow patterns over the price control period.

2.6. Given the magnitude of investment needed in both networks, there will be an overall increase in consumer network charges, regardless of the regulatory regime in place and any actions we may take.

2.7. One way to highlight the impact on charges is to demonstrate the effect on the average gas and electricity bill of a domestic customer. We set out this impact separately for electricity and gas bills below.

Impact on electricity bills

2.8. Currently, the average domestic electricity bill[9] is around £470.[10] Transmission costs currently account for around 5 per cent of this bill, ie around £23.50 per annum. This represents the costs associated with the transmission networks of NGET, SPTL and SHETL. NGET currently accounts for around 81 per cent of that total.

2.9. The impact of the additional investment in NGET's network during the RIIO-T1 period will be to significantly increase NGET's annual allowed revenues by around 25

[9] This is based on the average electricity bill for a standard direct debit account. It reflects electricity prices in May 2012. Prices are based on average annual consumption figures, averaged across all the big six suppliers and averaged across Great Britain.

[10] This analysis has been updated from that used in our February 2012 IA for SPTL and SHETL. We have reflected more up to date information on bills. Further details are set out in Ofgem's factsheet on updated household energy bills published in May 2012.
http://www.ofgem.gov.uk/Media/FactSheets/Documents1/household-bills.pdf

per cent over the RIIO-T1 period from £1.33bn at present to around £1.67bn by 2020/21.

2.10. The impact of this is to increase the average domestic electricity bill by £4 per year over the RIIO-T1 period.

Impact on gas bills

2.11. Currently, the average domestic gas bill is around £704.[11] Transmission costs currently account for around 2 per cent of this bill, ie around £14 per annum. This represents the costs associated with the transmission network of NGGT.

2.12. The impact of the additional investment in NGGT's network during the RIIO-T1 period will be to significantly increase NGGT's annual allowed revenues by around 31.4 per cent over the RIIO-T1 period from £586m at present to around £770m by 2020/21.

2.13. The impact of this is to increase the average domestic electricity bill by £2 per year over the RIIO-T1 period.

Overall impact

2.14. If we include the gas distribution companies (GDNs) for whom we have also published Initial Proposals today, then the total RIIO package announced today is estimated to lead to an average increase on annual household bills across the eight years of the price control of £11 (or £15 if the transmission plans of SPTL and SHETL approved in April 2012 are included) compared to this year.

2.15. We note that a significant proportion of the increase in allowed revenues will be met by industrial and commercial customers. Charges vary significantly between those customers and therefore it is not possible to provide an indicative impact for those customers, but on average the percentage increase will be broadly the same assuming no changes to pricing methodology.

2.16. However, we are confident that the implementation of the Initial Proposals for NGET and NGGT will, over the long-term, deliver lower average network charges for consumers than if we continued to use RPI-X regulation. This is largely due to the stronger incentives that RIIO places on the network companies to deliver at long-term value for money for consumers. It is also because the RIIO framework is designed to encourage network companies to do more to deliver a sustainable energy sector. These value for money benefits can be grouped according to the following areas in which they arise:

[11] This is based on the average gas bill for a standard direct debit account. It reflects electricity prices in May 2012. Prices are based on average annual consumption figures, averaged across all the big six suppliers and averaged across Great Britain.

- focus on the longer term
    - uncertainty mechanisms
    - mid-period review

- IQI and efficiency incentive rate
- innovation
- option to give third parties greater role in delivery
- proportionate treatment and fast-tracking
- financeability proposals.

2.17. The following sections provide an overview of these areas, outlining those benefits that were included within the December 2010 IA and providing more detail about the specific impacts that are likely to arise from the implementation of the Initial Proposals for NGET and NGGT.

Focus on the longer term

2.18. The RIIO-T1 price control period will be eight years, as opposed to five years generally used in previous price controls. This has encouraged NGET and NGGT to think on a longer-term basis. As a result, NGET and NGGT have been encouraged to consider the implications of their proposed expenditure for the coming period on required investment and associated efficiency beyond this control period. Table 2.1 provides an overview of the areas that we have previously identified where we think the implementation of these Initial Proposals will contribute to lower network charges.

Table 2.1 - Benefits from longer term focus

Element of the regime	Benefit
Business plans	• Place a requirement on the network companies to complete business plans that consider expenditure needed beyond the coming control period.
Secondary deliverables	• Encourage network companies to take actions that bring benefits in future price control periods (eg enable future delivery at lower costs).
Efficiency incentives	• Encourage network companies to consider the likely lowest cost solutions over the longer term.

2.19. In our Initial Proposals we have set out NGET's and NGGT's proposed secondary deliverables (eg network output measures of asset health) and provided our views on the appropriateness of these, in light of the guidance that we provided in our Strategy Document. We expect the longer-term focus provided by the secondary deliverables to have a positive effect on the way the companies run their networks, making them more accountable, more cost efficient over a longer time period and potentially exposing efficiencies in delivery. Where these savings are passed onto consumers through the symmetric efficiency incentives, this would reduce the costs that they face.

2.20. A clear risk associated with the development of a longer-term control period for RIIO-T1 is that the level of uncertainty regarding expenditure requirements and outputs needed over the course of the control is likely to be greater given the potential for conditions to change during the price control period. We sought to address concerns regarding uncertainty by introducing a suite of uncertainty mechanisms to manage risk between network companies and consumers, including both general uncertainty mechanisms and a mid-period review of output requirements.

Uncertainty mechanisms

2.21. There is significant uncertainty for both NGET and NGGT during RIIO-T1. For NGET most uncertainty stems from the location and timing on new transmission users and how it develops its network given the role that it will have to play in facilitating the transition to a sustainable energy sector. For NGGT the uncertainty stems from changing flow patterns on its network.

2.22. To guard against these and other uncertainties we introduced options within RIIO-T1 to allow uncertainty mechanisms to be used in certain circumstances. These mechanisms can have a number of positive impacts in terms of delivering lower average network charges for consumers. For example, by reducing the risks associated with uncertainty that could be faced over the course of the price control, they could contribute to a lower cost of capital.

2.23. We recognise that uncertainty mechanisms within RIIO-T1 could also have risks. For example, they could undermine efficiency incentives and increase complexity. We outlined potential uncertainty mechanisms and the principles set out in the RIIO handbook as part of the Strategy Document. We also noted that, as part of their business plans, NGET and NGGT could propose additional uncertainty mechanisms.

2.24. NGET and NGGT has each proposed a range of uncertainty mechanisms in its business plan. When assessing these mechanisms within the proposed price control packages, we have considered whether they would be in the interests of consumers, taking account of both the potential downsides and the RIIO principles.

2.25. In a number of areas we have accepted the mechanisms proposed by NGET and NGGT. In other areas we have put forward modified proposals to those proposed by NGET and NGGT.

2.26. In some areas we are not proposing to put forward mechanisms proposed by NGET and NGGT. For example, both requested provision for an uncertainty mechanism to deal with volatility in metal prices. We are not proposing to provide an uncertainty mechanism in this area because we consider that both NGET and NGGT and their investors are better placed to manage the risk of price volatility than consumers.

2.27. Overall, we are only providing uncertainty mechanisms where a specific source of uncertainty has been identified and where that uncertainty would have a material impact on either the company, consumers or both. As a result, we consider that the package of uncertainty mechanisms we are proposing protect consumers' interests by providing strong efficiency incentives for the company to manage the risks and uncertainties it can reasonably be expected to manage.

Mid-period review

2.28. The RIIO framework includes provisions for a mid-period review of outputs to take place. The impact of having this mechanism is to ensure that the outputs agreed as part of the RIIO-T1 package remain applicable for the duration of the price control period.

2.29. As part of our Strategy Document we noted several stakeholders' concerns that the mid-period review of outputs may not be sufficiently tightly defined, which could lead us to carry out a full price control review at this mid-period point. If this were to happen, the benefits of the longer-term price control would be lost. To address this risk, we clarified that the scope of the mid-period review will be to consider:

- material changes to existing outputs that can be justified by clear changes in Government policy (eg if there was an increase in the 2020 carbon target)
- introducing new outputs that may be needed to meet the needs of consumers and other network users.

2.30. As part of our Strategy Document we also set out clear and transparent principles for the approach we would adopt at the mid-period review (including timescales). For RIIO-T1 the mid-period review would take place in 2016, with any change being implemented in March 2017. The review will involve an open consultation allowing stakeholders to contribute and comment on the proposals. In addition, we would undertake an IA of the need for a mid-period review to determine whether it was required rather than automatically progressing the process. This will prevent unnecessary resource being committed to the review in the event that it is not required.

2.31. If, following the mid-period review, we considered changes to outputs to be necessary we would only alter other elements of the control to the extent required to accommodate the change to outputs, eg incentive mechanisms or the allowed return.

IQI and efficiency incentive rate

2.32. The information quality incentive (IQI) was introduced in the fourth electricity distribution price control review (DPCR4) and refined as part of DPCR5. It was also implemented in the first gas distribution price control review (GDPCR1) and, during RPI-X@20, we decided to extend application of the IQI to all of the energy network sectors under the RIIO model.

2.33. The IQI is used to set the ex ante efficiency rate that network companies will face over the course of the price control. It is determined individually for each network company based on the expenditure requirements that they submit within their business plans and the extent to which these costs differ from our forecasts of 'efficient' expenditure that would be required over the course of the control period. In effect the efficiency incentive rate for a company is based on the ratio between its expenditure forecast and our assessment of its expenditure requirements as well as the specific parameters of the IQI.

2.34. Where the IQI operates effectively, it would provide incentives to the network companies to submit more accurate expenditure forecasts within their business plans due to the potential to achieve a more favourable efficiency incentive rate. This could ultimately deliver benefits for consumers by ensuring the allowances approved for network companies represent value for money.

2.35. In our Strategy Document we set out a range for the initial efficiency incentive rate that network companies would face of between 40 and 60 per cent. This would mean network companies would be able to retain between 40 and 60 per cent of any efficiency savings achieved, but would be exposed to an equivalent proportion of any over-expenditure. We have used our IQI matrix to calculate the appropriate efficiency incentive rate for NGET and NGGT. This has given values of 48 per cent for NGET and 45 per cent for NGGT. We consider these values represent an appropriate incentive rate for the companies' price control packages.

2.36. Efficiency incentive rates of these levels should create strong incentives for network companies to expose efficiency savings given the positive impact that this could have on their revenues. Consumers could also gain given that a portion of the resulting savings will be passed through to them. In addition, the strong efficiency incentive rate should create incentives on the network companies to avoid overspend given the significant proportion of these costs that they would face.

2.37. Under RIIO-T1 we will implement the efficiency rate through annual revenue adjustments which would be made two years after the expenditure is incurred, reflecting the availability of data. As a result, the efficiency incentive rate would impact revenues more quickly and this should provide stronger incentives to network companies to seek out efficiencies. Any adjustments to the regulatory asset value (RAV) will also be influenced by the level of the efficiency incentive rate. As such, 48 per cent of any over/under-spend in the case of NGET and 45 per cent in the case of NGGT will be treated as totex. A portion of this will be added to/ deducted from 'fast money' allowances and the remainder added to/deducted from the RAV.

Innovation

2.38. There are likely to be a number of 'value for money' benefits as a result of the elements of the RIIO regime that help to encourage innovation.

2.39. Gas and electricity network companies will play an important role in facilitating the delivery of the government's low carbon targets and the transition to

the low carbon economy. To do this, they will need to address issues such as connecting increasing volumes of intermittent generation and renewable gas sources, and incorporating demand side management into their businesses.

2.40. To achieve this transition, network companies will need to innovate at an unprecedented rate to facilitate changes in the way networks are used. However, innovative activities such as research, development, trials and demonstration projects are speculative in nature and yield uncertain commercial returns. Consequently, network company shareholders may not be willing to put significant funds at risk for these activities.

2.41. In response to this challenge, we have proposed a package of measures aimed to encourage the investment in innovation required to deliver this low carbon transition and encourage the development of more effective technology and practice. These measures, which form the innovation stimulus, are designed to develop new technologies and commercial practices, and to ensure that learning from innovation projects is disseminated widely across the GB energy sector.

2.42. Both NGET and NGGT have proposed to utilise the mechanisms available through the innovation stimulus. Both developed innovation strategies which set out each company's approach to innovation, their motivation and objectives.

Option to give third parties a greater role in delivery

2.43. In the December 2010 IA we noted the option to involve third parties, through a competitive process, in the delivery of network assets. This could lower the costs that consumers face. Table 2.2 below, outlines the key areas in which we envisage that these benefits may be observed.

Table 2.2 - Benefits of a greater third party role

Element of the regime	Benefit
Allowing third parties to take responsibility for delivery	• If we were to use this option, new entrants could present innovative solutions with lower operating and financing costs.
Having the option of third party delivery available	• Having the option available would encourage existing network companies to seek out efficient solutions.

2.44. Enabling this option will require significant industry and regulatory commitment and potential benefits will vary across the network sectors. Our December 2011 consultation document outlined the potential sources of these

benefits which could be through increased innovation, more timely or efficient construction, and lower financing and operating costs.[12]

2.45. We are developing a potential framework to enable third parties to bid to build, own and operate parts of the onshore electricity transmission system. We anticipate that, where appropriate, the framework would build on the principles set out within the offshore regime. In continuing to develop this framework we intend to prioritise our further work on what benefits such competition could bring. This will inform any subsequent development of the detailed framework. We intend to publish further work on the benefits of competition later this year, and will provide more information on our timetable for potential implementation at that time. Please see the open letter on our website for further details.[13]

Proportionate treatment and fast-tracking

2.46. A key tool in the implementation of the RIIO framework is the use of proportionate treatment. This means applying regulatory focus and scrutiny proportionately to the quality of the submitted business plan. This tool helps us deliver benefits for consumers.

2.47. Proportionate treatment allows us to focus our regulatory scrutiny where it is likely to add most value. Where a network company produces a high quality business plan we will focus less resource on them, with their business plans subject to a lower level of scrutiny.

2.48. Where network companies submit high-quality well-justified business plans, it is possible for the price control to be settled early ("fast-tracked"). To reduce any potential risk of allowing network companies to proceed with a significantly inefficient proposal, all business plans have been subject to a challenging and material minimum level of scrutiny.

2.49. Following consultation on Initial Proposals in February 2012, we published our fast-track Final Proposals for both SPTL and SHETL in April 2012. In the case of NGET and NGGT we concluded that the scale of the work required to address the outstanding issues in their plans was too great to enable these to be resolved in a timetable consistent with fast-tracking.

2.50. In our assessment of NGET's and NGGT's updated business plans we have assessed all areas but focused greatest scrutiny on the areas where this was required to obtain greatest benefit for consumers.

[12] RIIO-T1 Implementing competition in onshore electricity transmission http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/111216_Consultation_Competition.pdf

[13] RIIO-T1: Implementing competition in onshore electricity transmission – update, April 2012: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=192&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes

Financeability proposals

2.51. Our financeability proposals are an important part of the overall RIIO model. Under these proposals we have specified a set of long term financeability principles which will provide investors with clarity over our intended approach. This should allow investors to provide the capital required to fund the estimated new investment in network assets required in the period to 2021. There are various elements of the financeability proposals upon which we have sought to provide clarity and these are discussed in the following sections.

Cost of debt

2.52. In our Strategy Document we confirmed that we would be introducing indexation to the cost of debt. We considered this change to be particularly relevant given that we are extending the length of the price controls under RIIO. If the cost of debt were set using the traditional method, employed in TPCR4, we would need to provide headroom due to uncertainty regarding debt costs over a price control period. This headroom would result in additional costs for consumers. Moving to a longer price control would result in a larger headroom requirement due to the additional uncertainty that would be faced over a longer period. Indexation will allow the cost of debt to be set more closely to actual debt costs over time. It will also allow consumers to benefit in the event that debt costs fall and protect investors in the event that debt costs rise. It should therefore reduce costs for consumers and risk for investors. As the network companies use more debt finance than equity, the benefits for consumers could be substantial.

2.53. Both NGET and NGGT included our approach to indexing cost of debt as part of their financial packages. The benefits of the use of debt indexation can already be seen by consumers as the starting level of the cost of debt allowance is currently at 3 per cent compared to the 3.6 per cent we used in our most recent electricity price control, DPCR5. The market cost of debt could rise over RIIO-T1 in which case shareholders will be protected as the allowance adjusts through the indexation mechanism.

Cost of equity and notional gearing

2.54. In our Strategy Document we set out a range of 6.0-7.2 per cent for the cost of equity. We consider that this range remains appropriate for RIIO-T1. Under RIIO principles the allowed return should reflect cash flow risk. Having assessed cash flow risk in our Initial Proposals package, we consider that NGET faces a higher cash flow risk than NGGT (in part due to having a higher investment rate relative to RAV) but slightly lower cash flow volatility compared to SPTL and SHETL. On that basis, we consider the appropriate packages to be as follows:

- NGET - a 7 per cent cost of equity and 60 per cent notional gearing

- NGGT - a 6.8 per cent cost of equity and 62.5 per cent notional gearing.[14]

2.55. We believe these values strike an appropriate balance in the context of the investment programme and other elements of the financial package and uncertainty mechanisms.

Asset life and depreciation

2.56. In the RIIO handbook, we set out that regulatory depreciation would be based on economic asset lives. We engaged consultants to advise us on appropriate average technical and economic asset lives and have set 45 years as the appropriate economic asset life for regulatory depreciation over RIIO-T1. In gas transmission the asset lives are currently 45 years.

2.57. The use of economic asset lives in transmission will improve intergenerational equity by ensuring that consumers pay the appropriate charge for the use they make of the assets and provide more stability for investors. As this is a substantial change in the basis of regulatory depreciation for electricity transmission we set out in our Strategy Document that we would only apply the new asset life to new investment in RIIO-T1 as a transitional measure and may allow additional transition if warranted on financeability grounds.

2.58. In its business plans NGET used 45 years as the basis for regulatory depreciation on new investment but proposed a transition period of 16 years. We consider transition to be conditional on the financeability need and propose 8 years transition as appropriate for NGET to achieve financeability given our Initial Proposals package.

Greater opportunities for stakeholder involvement in the price control

2.59. As part of the RIIO model, we have included opportunities for stakeholders to play a greater role in the development of the price control through enhanced engagement opportunities with us.

2.60. Under RIIO-T1 we have also included greater incentives on network companies to more effectively engage with their stakeholders as compared with the RPI-X regime. Demonstration of effective stakeholder engagement by the network companies has been a key area of focus and an area where both NGET and NGGT have generally performed very well. Further information on our assessment of NGET's and NGGT's performance in this area can be found in our Overview Document.

[14] Details of all financial parameters for NGET and NGGT are set out in the Finance Supporting Document.

2.61. Relative to previous price controls we have seen markedly more (and a higher quality of) stakeholder engagement by network companies, as well as robust explanations in the business plans as to how and why they have accommodated various parties' views.

2.62. We consider that the increased focus on effective stakeholder engagement under RIIO, has had a positive impact on consumers. We believe companies have produced business plans that more closely reflects their views and preferences and therefore deliver value for money in line with their expectations. It has also provided us with greater confidence in the companies' plans, and the investment programme over RIIO-T1 has been stakeholder tested.

Impacts on competition

2.63. Our principal objective is to protect the interests of existing and future consumers, wherever appropriate, by promoting competition. It is therefore important that we consider the impact that implementation of RIIO-T1 could have on competition. We note that the energy network companies are not currently subject to competitive pressures, except where independent companies compete for the opportunity to extend the network and connect new customers, eg new housing developments. During RPI-X@20 we recognised that the extent for competition to develop further would be somewhat limited but highlighted that there may be benefits for consumers from extending these competitive pressures more broadly.

2.64. In this regard, we developed proposals in two areas where we thought competitive pressures could be drawn upon to deliver potential benefits for consumers. These areas are as follows:

- **Proportionate treatment:** As outlined above, our proposals on proportionate treatment will allow us to focus our assessment of network company business plans in the areas where it is likely to deliver most benefits for consumers.
- **Third party delivery of network assets:** As part of RIIO, we are developing a potential framework to enable third parties to bid to build, own and operate parts of the onshore electricity transmission system. We anticipate that, where appropriate, the framework would build on the principles set out within the offshore regime. In continuing to develop this framework we are prioritising further work on identifying what benefits such competition could bring. This will inform any subsequent development of the detailed framework.

2.65. Although there are not substantial elements of these Initial Proposals specifically devoted to the development of competition, there are elements that will draw on competition. Taken alongside the framework for competition, we anticipate that there should be a positive impact on competition.

Impacts on sustainable development

2.66. One of the key drivers of RIIO is to encourage network companies to play a full role in facilitating the transition to a sustainable energy sector.

2.67. To translate this high level objective into meaningful outcomes against which companies would deliver, we have developed an outputs-led regime. This regime is intended to highlight all of the areas in which the network companies would need to ensure delivery to play a full role in facilitating the transition to a sustainable energy sector. The regime is discussed in more detail in the following sections and we anticipate that it will deliver significant benefits for sustainable development.

Overview of the outputs-led regime

2.68. The key drivers of the RIIO framework are the objectives that we outlined in Chapter 1. These objectives provide guidance to the network companies on our expectations with respect to their performance. They are translated into an outputs led-regime through the development of the following elements.

- **A set of output categories:** The output categories capture the key areas within which consumers expect the delivery of high quality services in line with the objectives set out in Chapter 1. The output categories for RIIO-T1 are: customer satisfaction, safety, reliability and availability, conditions for connections and environmental impacts.
- **Primary outputs within these categories:** These provide measures against which we can monitor performance in each of the output categories during the price control.
- **Secondary deliverables (where needed):** These provide a means for network companies to flag up areas (as part of their business plans) where expenditure may be needed in the current price control period to ensure delivery of primary outputs in future periods. For example, where investment may be required to ensure reliability and availability of the transmission system in future periods.

Key benefits identified in the RPI-X@20 IA

2.69. One of the clear benefits that we identified within the RPI-X@20 IA was that the objectives of the regime would ensure that the network companies remained focused on the delivery of value for money to consumers whilst also facilitating the delivery of a sustainable energy sector. Where these objectives were effectively translated into outputs we considered that a number of benefits would be achieved. The key benefits are outlined in Table 2.3 below.

Table 2.3 - Benefits from delivery of outputs identified in the RPI-X@20 IA

Element of the regime	Benefit
Output categories	• Provides transparency about the areas in which companies should ensure delivery.
Primary outputs	• Allows us to monitor delivery within each of the output categories. • Can be developed to reflect consumer views therefore helping to deliver value for money network services.

The RIIO-T1 primary outputs

2.70. Our Strategy Document set out the key elements of the price control that the TOs would need to understand in order to develop their business plans. The suite of primary output measures and regulatory framework was derived in consultation with stakeholders including through the Price Control Review Forum (PCRF), the outputs Working Groups and the Consumer Challenge Group (CCG). Given that the outputs have been developed using the RIIO principles of enhanced stakeholder engagement we are confident that they will ultimately deliver the benefits identified in the high level RIIO model, outlined in Table 2.3 above. The following sections provide an overview of NGET's and NGGT's proposals to deliver against the suite of output measures and our views on the impact that these proposals may have.

Customer satisfaction and social obligations

2.71. During RPI-X@20, we identified customer service and social obligations as two areas in which network companies should ensure delivery. Output categories were therefore included for each of these areas in RIIO-T1. The following sections provide an overview of the primary outputs that have been developed and the impacts they will have for sustainable development.

Customer satisfaction

2.72. At present, there are not any regulatory requirements on TOs in electricity to monitor levels of customer satisfaction. As part of RIIO-T1 we are introducing a customer satisfaction output, which will provide a clearer picture of network performance in terms of customer satisfaction. The output is made up of two parts and has the following impact on network companies' allowed revenue:

- a customer satisfaction survey with a symmetric incentive rate of up to +/- 1 per cent of network companies' allowed base revenue
- a stakeholder engagement reward (via a discretionary reward scheme), worth up to 0.5 per cent of network companies' allowed base revenue for each year.

2.73. We consider that the output will have a positive impact in terms of ensuring that all customers and stakeholders receive a service, over the price control, that is aligned with their expectations.

2.74. In implementing this output, we continue to recognise the risk that the network companies could be unduly rewarded or penalised for their performance in terms of customer satisfaction survey, due to the limited historical information in this area. To mitigate the risk that NGET and NGGT may be unduly rewarded or penalised for their survey performance, our Initial Proposals document sets out that the network companies will need to further develop and refine their customer satisfaction surveys before the start of RIIO-T1. This will include trialling the survey, identifying useful information and working with us and their stakeholders to ensure that the survey approach, supporting information and specific questions are appropriate.

2.75. Work to date on implementation (see Appendix 1 of the Outputs, incentives and innovation Supporting Document) has demonstrated that the greater risk is around surveying stakeholder views. NGET and NGGT have greater confidence in survey results from direct customers. This is based on their greater experience in this area and because it links in to established customer relations work ie NGET and NGGT have experience not just about the likely range of responses but also how those responses change following management action to resolve specific consumer issues.

2.76. We expect to have a survey implemented for NGET and NGGT by 1 April 2013 and also currently expect to implement a financial incentive around the survey at the same time. Based on work to date the full incentive is likely to apply to the customer element of the survey. Ongoing work suggests that a similar degree of experience will need to be established for the stakeholder part of NGET's and NGGT's survey. Therefore, while we expect arrangements to be in place by 1 April 2013 these are likely to be reliant on other supporting information, initially subject to reduced incentives and subject to later modification.

Social obligations

2.77. At an earlier stage in the RIIO process we engaged with stakeholders to determine whether there are any social obligations for which NGET and NGGT have a role in delivery. Neither we, nor stakeholders, identified any relevant obligations and, as such, we did not propose any primary outputs under the social obligation category. If relevant obligations are subsequently implemented during the course of the price control, we would seek to reflect these through the mid-period review of output requirements.

Reliability, availability and safety

2.78. During RPI-X@20, we recognised that an important element in the delivery of a sustainable energy sector was the maintenance of a reliable system that would allow a high quality service to be provided to consumers as well as incorporating sufficient capacity to allow network users to utilise the system as needed. Linked

closely to this, we also clearly understood the need for the system to be operated safely. Although both of these aspects of delivery are linked, we note that we have greater discretion in developing arrangements related to reliability and availability. In this respect, primary responsibility for the development of safety standards sits with the Health and Safety Executive (HSE). We recognise, however, that safety is an important factor in determining the costs that network companies will incur over the course of the price control.

Reliability and availability – NGET

2.79. We consider it important to include arrangements to encourage effective joint work between the electricity TOs and the system operator (SO) to minimise overall costs across network constraints and TO costs. Each of the TOs is required to develop a Network Access Policy (NAP) clarifying what the SO, and other stakeholders, can expect from the TOs insofar as its actions affect the availability of the transmission network. NGET are involved in an ongoing work stream with SPTL and SHETL with the purpose of coordinating the companies' NAPs. We are expecting the TOs and SO to agree an action plan for developing the final set of NAPs. This should start as soon as possible. These policies should support effective co-operation between the SO and TOs. This could mean a move to a more efficient level of constraints on the network and reduce overall consumer costs. Part of this is dependent on further work between the TOs and SOs and the work on the SO incentives post 2013, therefore a full assessment of impact in this area is not possible at this stage.

2.80. To accommodate new generation flows and comply with the necessary security standards NGET has to develop and reinforce its transmission network. In general, these network reinforcements, known in RIIO-T1 as Wider Works (WW) outputs, should be taken forward when the expected saving in operational cost exceeds the cost of delivering the additional capacity. As part of our Initial Proposals we have proposed the WW outputs NGET would need to deliver to accommodate the additional generation flows associated with UK's renewable energy targets. Given these are dependent upon the quantity and location of new customers, particularly new generation customers and changes in demand for existing customers, there is a relatively large amount of uncertainty around the exact timing and volume of WW outputs that will be needed. To help manage this uncertainty we have proposed in Initial Proposals a suite of uncertainty mechanisms, including a WW volume driver with a Network Development Policy, and a within period determination for large WW outputs (ie outputs that cost more than £500m). Under these arrangements most of the WW outputs delivered during RIIO-T1 would be subject to further cost-benefit assessment and will only proceed if the overall benefits to consumers of delivering the WW output are positive.

2.81. Our Initial Proposals are intended to ensure there is enough flexibility and certainty in the price control settlement to allow NGET to meet any changes in the generation and demand background. At the same time our proposals will also protect consumers by ensuring they only pay for new infrastructure that is needed (ie reduced risk of stranded assets) and that NGET faces strong incentives to deliver WW

outputs efficiently and innovatively. We believe these arrangements for WW outputs represent an appropriate balance of risk sharing between NGET and consumers.

2.82. We have also introduced a suite of secondary deliverables to monitor overall network risk, building on the framework implemented as part of DPCR5. Given the role that TOs have in network planning and stewardship of their assets, this will provide incentives for them to take action in upcoming price control periods to ensure the ongoing delivery of outputs in future periods at value for money. As far as possible, we have sought to ensure that the measures are objective and take account of the various decisions taken by TOs that impact on network risk. Performance against specified levels of network risk will be assessed at the end of the price control period and financial rewards/penalties may apply where there is material over/under-delivery. A secondary deliverable in this area allows us to evaluate TO investment plans over the short and longer term and therefore provides us with greater certainty that they could continue to provide a secure and reliable service in both periods. This should positively impact sustainable development by ensuring the ongoing reliability of the system.

Reliability and availability – NGGT

2.83. In our Initial Proposals, we proposed that NGGT should be required to provide a network to a level of reliability and availability consistent and sufficient to meet its obligations to convey gas volumes at system entry and exit points in line with existing requirements under the UNC, its GT Licence and ultimately, the Gas Act.

2.84. This output would require NGGT to deliver, subject to Section 9 of the Gas Act, on its Standard Special Condition A9 obligation to plan and develop its pipeline system capable of meeting 1 in 20 peak aggregate daily demand. It would also require NGGT, subject to the provision of other conditions within the licence, to meet its baseline entry and exit capacity obligations.

2.85. This provides continued benefits from the requirement to continue to deliver the existing reliability and availability levels.

Safety

2.86. As part of our Strategy Document, we recognised that the HSE is the principal regulator of safety and consider it to be important to support but not to duplicate the functions that they perform. We therefore proposed that the primary output for gas and electricity TOs with respect to safety should be to ensure compliance with legal safety requirements. Both NGET and NGGT have produced plans which set out to achieve this primary output.

Conditions for connection

2.87. During RPI-X@20 we recognised that network companies should be required to provide an efficient connections service on both the demand and supply side. On

the supply side, this would ensure they could connect generators, interconnectors and storage facilities and this would have important impacts on security of supply. Performance on connections, particularly in electricity transmission, could also have crucial impacts in meeting the 2020 and 2050 targets through connecting renewables and other low carbon sources of energy. Where network companies demonstrate high levels of performance in this area it could have positive impacts on the environment and the development of a low carbon energy sector.

2.88. The following sections provide an overview of our current thinking in these areas for both electricity transmission and gas transmission. It outlines the impacts that our proposed approach would have on sustainable development.

Electricity transmission – NGET

2.89. The timely connection of generation needs to be reflected in RIIO-T1 outputs. A number of changes have been made in electricity and we are mindful of both these changes and further possible changes under Project TransmiT. As part of Project TransmiT we have consulted on the commercial arrangements for connections and the general performance of TOs in the delivery of timely connections.[15]

2.90. Given the particular importance of timely connections in electricity transmission, we will apply a penalty of up to 0.5 per cent of revenue per year for failure to meet timing requirements. We are confident that the benefits for sustainable development will outweigh any potentially negative impacts that this could have on prices and therefore consumers.

2.91. Our proposed output is consistent with existing licence obligations on timescales for different phases of connection but contains an additional penalty up to 0.5 per cent of allowed annual revenue. This should provide an added incentive not to overrun in delivering the various stages of connections. We are designing the detail so that the greater proportion of the penalty applies to those most material to the connectee. This is subject to discussion around the specific licence modifications. There is a danger that focusing the output on timing in isolation is not the sole source of quality and indeed that meeting connection timescales might detract from the quality of the work. However, the wider obligations remain and we hope to enhance our measurement and wider reward for quality via the stakeholder survey that the TOs are required to deliver as part of meeting their customer satisfaction output.

2.92. NGET has proposed a connections output based on complying with their obligations relating to connections activity as set out in its licence. It has included scope for a penalty of up to 0.5 per cent of allowed revenue per year for failure to meet timing requirements, consistent with our Strategy Document.

[15] For more information see Project TransmiT: conclusions on connections issues and statutory consultation on timely connections reporting obligation http://www.ofgem.gov.uk/Networks/Trans/PT/Documents1/Timely%20connections.pdf

Gas transmission – NGGT

2.93. Our Initial Proposals for connections are that we propose that NGGT should have a primary output to meet the new obligations set out in UNC modification 373. This establishes a formal process for connections to the gas transmission network for the first time.

2.94. There is no financial incentive for failure to deliver, however the formal process provides transparency about the process which provides a reputational incentive to meet the process. We will also consider whether this output needs to be complemented by licence obligations on NGG in relation to connections

Environmental impacts

2.95. One of the key driving forces of RIIO is the desire to ensure that the regulatory regime remains fit-for-purpose within the context of the 2020 and 2050 targets on renewable deployment and carbon abatement. This provided a clear rationale for the inclusion of a specific output category related to environmental impacts. The following sections set out the impact that we consider NGET's and NGGT's proposed outputs on environmental impacts will have with respect to sustainable development.

2.96. Over the course of the coming price control, network companies will have a significant role to play in facilitating the transition to a low carbon energy sector. In this respect, they will not only have a role to play in seeking to reduce the level of their own greenhouse gas emissions but will also have a pivotal role in connecting renewable and other low carbon energy sources. Both NGET and NGGT have proposed a number of ways that they intend to reduce their (and others') impacts on the environment in the following areas.

Contribution to environmental and energy targets

2.97. Our Initial Proposals set out a price control package for NGET to connect up to 33GW of new generation, including new nuclear and new wind. This is consistent with the amount of new generation needed to meet the UK's renewable energy targets. It would also facilitate the reduction of carbon dioxide intensity of the electricity sector from around 500g/kWh to around 300g/kWh by 2020 in line with the decarbonisation path recommended by the Committee on Climate Change.

2.98. In combination with the Environmental Discretionary Reward discussed below, our Initial Proposals should provide NGET with sufficient certainty and incentives to plan ahead and develop its strategies to deliver efficient connections to meet users' requirements. Given the potential volume of new connections, this could lead to efficiency savings for generators in terms of connection costs, which could also be reflected in lower levels of subsidy and wholesale energy prices faced by consumers.

2.99. NGGT expects to contribute to the UK's low carbon and renewable energy targets by supporting the flexible operation of gas fired generation plants necessary to provide reserve for wind generation as the electricity sector decarbonises.

2.100. **Environmental Discretionary Reward (EDR) – electricity only:** In our March 2011 Strategy Document we noted our intention to include a reputational incentive on promoting low carbon energy flows. We further noted that, subject to consultation, we would introduce an incentivised financial reward which would future proof the output framework for new opportunities arising over RIIO-T1.

2.101. In February 2012, alongside our Initial Proposals for SPTL and SHETL, we published a consultation on the form of an Environmental Discretionary Reward (EDR) to complement the existing RIIO-T1 price control package.[16] We noted that the purpose of the EDR would be to facilitate electricity transmission's role in the transition to a low carbon energy sector.

2.102. Consultation responses indicated comprehensive support for our broad concept for the implementation of the EDR. As well as providing useful feedback on the elements of the EDR, which will assist us in the development of the scheme, a majority of the respondents noted that key areas of performance in the proposed scorecard involve the electricity system operator. Following that consultation, we made the decision on the concept for the implementation of the EDR, which will now incorporate the electricity system operator, as we set out in our July 2012 EDR decision letter.[17] This is consistent with views expressed in the consultation. We will finalise the detail of the EDR in the autumn, in line with RIIO-T1 timescales.

2.103. The EDR is expected to encourage NGET to embed environmental goals in its overall business strategy; to consider whole of system impacts, and potential synergies, when planning their network; to improve customer facing aspects of connection processes; and to align operational processes with environmental considerations.

2.104. The potential impacts could include more efficient and customer friendly processes resulting in lower connection costs for new generators; displacement of the least efficient carbon intense generation; an increase in the diversity of energy sources through the increased deployment of low carbon energy generation and an increase in competitive pressure on wholesale market price by encouraging new entrants. The negative impacts include a small increase in consumers' bills to cover the cost of the incentive, and a potential that new low carbon generation, which tends to be intermittent, displaces more firm sources of generation.

[16]Environmental discretionary reward under the RIIO-T1 price control – February 2012 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/EDR_consult.pdf

[17] Decision on the concept for the implementation of the Environmental Discretionary Reward for the electricity transmission owners and system operator http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=210&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes

2.105. Overall, we consider the impact of the Initial Proposals we are consulting on to be very positive for sustainability and for highlighting the role NGET as a transmission owner can play in facilitating the transition to a low carbon energy system.

Mitigation of impacts on visual amenity – electricity only

2.106. In our Strategy Document we included a provision for setting an expenditure cap, informed by consumer willingness to pay, for the TOs to mitigate the visual impact of existing infrastructure in national parks and areas of outstanding natural beauty ('designated areas').

2.107. NGET submitted its consumer WTP analysis in June 2012 with a consumer WTP estimate that implied consumers' valued the benefits of some mitigation options in excess of £1bn. Based on our assessment, we do not consider NGET's analysis provides sufficient information at this time (due to limitations discussed in the Outputs, incentives and innovation Supporting Document) to inform the level at which the expenditure cap should be set for the whole of the price control. However, the analysis provides clear evidence that consumers consider there would be significant benefits from improving the visual amenity in designated areas. At the same time we are mindful of our principle objective to protect the interests of existing and future consumers and are cautious about committing substantial consumer funds in the absence of better information about consumer WTP.

2.108. In order that the TOs can work on delivering visual amenity improvements from the start of RIIO-T1 we propose to set an initial expenditure cap of £100m. We will review the level of the expenditure cap if they complete further WTP analysis to inform the level of the enduring expenditure cap for the remainder of RIIO-T1.

2.109. In terms of mitigating the impacts of new transmission infrastructure, we propose to adopt NGET's proposal for a baseline allowance equivalent to the efficient costs of deploying undergrounding technologies for 10 per cent of the new lines proposed for delivery in RIIO-T1. We recognise that this amount could be too large or too little. Therefore, in light of this uncertainty we also propose to include a mechanism known as a volume driver to adjust NGET's revenues for the level of mitigation technologies actually needed over the course of the price control to obtain development consent.

2.110. We believe this approach is more efficient and consistent with sustainable development principles than setting a fixed funding rule through the price control. It also will ensure that the impacts of each new transmission route are considered on a case by case basis with stakeholders and that appropriate mitigation measures are included in the development proposal to address any environmental issues where necessary.

Network emissions

2.111. **Business Carbon Footprint (BCF):** NGET and NGGT are subject to financial incentives to reduce carbon emissions through the government's carbon reduction commitment (CRC). As part of their overall commitment to improve environmental performance of their networks, NGET and NGGT propose to report annually on the level of scope 1 and scope 2 greenhouse gas (GHG) emissions (or the carbon dioxide equivalent) arising from the day-to-day running of the transmission businesses during RIIO-T1.[18]

2.112. At current levels this will have only marginal impact on the level of carbon emissions from the energy sector overall. Nonetheless it will have a small positive impact.

2.113. **Sulphur hexafluoride (SF_6) – electricity only:** We propose to adopt NGET's business plan proposition that all new assets using SF_6 gas such as switchgear are commissioned with a target leakage rate of 0.5 per cent per annum. This leakage rate is consistent with the best practice set by the International Electrotechnology Commission for high voltage switchgear. As there is no substitute for SF_6 at present, NGET's commitment to reducing the overall leakage rate of SF_6 holdings is positive for slowing the leakage of this potent greenhouse gas.

2.114. **Losses – electricity only:** We propose to set reputational incentives on NGET in relation to its overall approach to contributing to fewer transmission losses where it can do so and provide long term value to consumers. Under our proposals NGET will be required to publish its strategy for transmission losses and report to stakeholders annually on its progress in implementing its strategy. By adopting asset appraisal processes that look at lifetime costs, including losses, NGET will contribute to fewer technical losses on the network. This should lead to more efficient transmission networks by the end of RIIO-T1 and some containment of the cost to consumers associated with energy losses, including carbon prices.

2.115. **Venting – gas only:** NGGT has committed to reducing venting through the development of innovative techniques to optimise maintenance scheduling, compressor operation and decompression techniques. We are not proposing putting in place a formal incentive in this area as part of RIIO as separate arrangements are being proposed as part of the setting of SO external incentives. However, we will be requiring NGGT to report annually on its progress in reducing venting.

Other benefits from the outputs regime

2.116. In our December 2010 IA we predicted wider gains from the new approach to producing business plans. These included thinking about different ways of delivery and placing greater weight on longer-term delivery. While none of the July business plans were strong across the board, each had some strong areas and represented a

[18] Scope 1 are direct GHG emissions that occur from sources that are owned and controlled by the company. Scope 2 are indirect GHG emissions from the generation of purchased energy consumed by the company. Scope 3 includes other indirect GHG emissions that result from the activities of the company, but are not owned or controlled by the company.

step change. We expect these benefits to continue to be developed for the remainder of RIIO-T1 and beyond.

Impacts on health and safety

2.117. The maintenance of safety standards is clearly of utmost importance when it comes to the energy networks. As outlined above, responsibility for regulation of this area of network operation primarily rests with the HSE and they have arrangements in place with the network companies to ensure the delivery of network services in line with predefined safety standards. However, we do recognise that investment in assets to ensure the ongoing safety of the network is exceptionally important and this is why we have a specific output category regarding safety. We think that inclusion of this output category ensures that the appropriate focus on safety is retained under the RIIO-T1 Initial Proposals for NGET and NGGT.

3. Potential risks

Chapter Summary

This chapter provides an overview of potential risks of implementing the RIIO-T1 Initial Proposals for NGET and NGGT and explains the mitigating actions that have been incorporated into the framework to manage these risks.

3.1. In this chapter we set out some of the perceived risks associated with implementing the RIIO-T1 Initial Proposals for NGET and NGGT. If these risks were realised they could lead to costs for consumers and ultimately reduce the benefits of the implementation outlined in Chapter 2.

3.2. Where possible, we have sought to implement protections to guard against these risks and, in the event that they were to materialise, we would have tools at our disposal to manage their impact. We think the benefits of implementing these Initial Proposals, set out in Chapter 2, significantly outweigh any potential risks that may arise. This is particularly the case when these risks are considered within the context of the protections that we have put in place to mitigate them.

3.3. As part of the December 2010 IA, we noted a number of risks that could result from implementation of the RIIO framework to RIIO-T1. This chapter looks in turn at the issues identified in the IA in the context of implementing these Initial Proposals. This includes the following potential issues:

- NGET and NGGT do not deliver their primary outputs
- we over/underestimate the allowances required by NGET and NGGT
- the Initial Proposals include increased regulatory risk due to the presence of the mid-period review of outputs, concerns that the financeability proposals may deter investment and the potential risk that the needs of future consumers may not be anticipated.

Potential non-delivery of the primary outputs

3.4. In the RPI-X@20 IA we noted stakeholder comments that, where network companies sought to adopt new and innovative approaches, this could potentially lead to the non-delivery of outputs. We have summarised the main points raised in Table 3.1 below.

Table 3.1 Risks associated with the non-delivery of primary outputs

Risk	Mitigation under RIIO
Adopting innovative approaches that are not consistent with business as usual could lead to non-delivery of outputs.	• Thorough assessment of business plans with a high hurdle for companies to demonstrate their ability to deliver against the outputs. • Non-delivery of outputs will be penalised.

3.5. As set out in Table 3.1 above we consider that the potential risk of non-delivery of outputs is mitigated through a thorough ex ante assessment of the business plans and the implementation of rewards/penalties that are, where possible, specified upfront. These incentives will encourage the network companies to efficiently deliver through the potential to achieve rewards and dissuade non-delivery through the application of meaningful penalties. In a similar way to the efficiency incentives, the output incentives will be applied transparently on a yearly basis and therefore this should strengthen the incentives to deliver outputs. We also intend to monitor delivery of outputs over the course of the price control period using a balanced scorecard approach. This will provide a clear and simple way to convey information on the performance of the network companies and will highlight any potential problems with respect to output delivery should they arise.

3.6. We note that during the development of proposals for RIIO-T1 we have given substantial consideration to the form that the business plans and associated assessment should take. The clarity and guidance that we provided regarding what we expect from network company business plans should have helped to ensure that business plans are well-justified and will deliver against required outputs. If we were to have concerns about a business plan submitted by a particular network company, the transparent provisions associated with proportionate treatment would allow us to subject these business plans to greater scrutiny. This should ensure a more favourable outcome is delivered for consumers.

Over/under estimation of allowances

3.7. Stakeholders have previously stated that under the RIIO model there is a potential risk that network companies may be able to include overinflated costs for the delivery of outputs in their business plans. They suggested that information asymmetry, combined with the greater focus on outputs under RIIO, would mean that we may not have clarity on the likely costs that network companies would incur. In addition, the extension of the price control period could lead to a greater risk of network companies over/underestimating the costs that they could face over the coming period. We have summarised the main points in Table 3.2 below.

Table 3.2 Potential risks of over/underestimation of allowances

Risk	Mitigation under RIIO
We may agree to overestimated costs submitted by the company	• Outputs will provide visibility on what network companies propose to deliver and associated costs. • Longer-term business plans will allow us to assess network companies against a longer-term strategy. • We will use a variety of tools to assess the business plans to ensure reasonableness. • The IQI will help protect against inflated costs.
Increasing the price control from five to eight years could lead to base revenues being set too high/low due to forecasting difficulties	• We will calibrate the strength of the upfront efficiency incentives in light of this uncertainty. • We will develop uncertainty mechanisms to manage these risks without undermining the benefits of a longer-term control.

3.8. We have confidence that the outputs-led nature of the RIIO model will provide visibility on what the network companies intend to deliver in the coming period and, combined with the longer term business plans and secondary deliverables, will provide an understanding of their plans for the future. In our Strategy Document, we provided transparency on our expectations of the business plans and on our approach to assessing these as part of RIIO-T1. We have used the range of tools at our disposal, including the IQI, to assess network company business plans.

3.9. We recognise that predicting the costs that network companies will face over a longer-term price control is likely to be difficult due to potential uncertainties about the way circumstances may change over a longer time period. In general, we expect network companies to manage the uncertainty they face but we recognise that there may be circumstances where changes to the regulatory settlement are needed. To allow for these cases, we have proposed a range of uncertainty mechanisms for each NGET and NGGT. These are set out in our Cost assessment and uncertainty Supporting Document.

3.10. In our Strategy Document we clarified that the scope of the mid-period review will be to consider:

- material changes to existing outputs that can be justified by clear changes in government policy, for example if the carbon target increases
- introducing new outputs that may be needed to meet the needs of consumers and other network users.

3.11. Both the uncertainty mechanisms and the mid-period review will allow us to make amendments to network company allowances where circumstances change, either due to changes in general industry conditions or due to the need to establish new outputs or amend existing ones. We also note the significant consumer benefits that could be achieved through the combination of factors intended to encourage network companies to take a longer-term perspective. The extended price control period is just one of a number of important elements that will facilitate this outcome, but we consider it to be an important aspect of the RIIO-T1 packages.

Potential regulatory risk

3.12. In the December 2010 IA, we noted a number of areas of the RIIO model that could potentially lead to increased regulatory risk. These included potential risks associated with the mid-period review of outputs, the financeability proposals and anticipating the needs of future consumers. We address each of these in turn below.

Mid-period review of output requirements

3.13. The reason for, and design of, the mid-period review of outputs requirements has been discussed throughout the RPI-X@20 and RIIO-T1 project. In general, stakeholders have agreed that having a mid-period review of outputs would help to address uncertainties regarding the requirements of the networks during an eight-

year price control period. However, some concerns included that the review would not be sufficiently tightly defined and may therefore lead to a full price control review after four years, and undermine the benefits of having an eight-year price control.

3.14. To mitigate the perceived risks associated with the mid-period review, throughout RPI-X@20 and RIIO-T1 we have been clear that it is important for us to be transparent about the issues that could be addressed and the process we will follow. In our Strategy Document we set out a tightly defined scope for the mid-period review.[19] We also set out clear and transparent principles for the approach that we would adopt in undertaking the review. In addition, we confirmed areas of the price control that the review would not consider. The proposed scope of the mid-period review has not been changed by the companies' business plans.

Potential risk of financeability proposals

3.15. In the RPI-X@20 IA we recognised stakeholder views with respect to our proposed approach to financeability and the impacts that this could potentially have on investor decisions. The issues are summarised in Table 3.3 below.

Table 3.3 Potential risks associated with the financeability package

Risk	Mitigation under RIIO
The financeability principles could deter investors from the sector	• The package provides commitment to investors. • The package provides a transparent set of principles that will increase predictability and reduce risk. • We will implement appropriate transition arrangements to ensure investors are not deterred from the sector.

3.16. We believe that our approach to financeability, rather than deterring investors, will encourage investment through the provision of a commitment to a set of transparent principles that we will use in determining the financeability package. We are also currently assessing our options for the development of appropriate transition arrangements to ensure that the cash flows of the network companies are not unduly impacted by the transition to these new arrangements. Our preference is to implement these transition arrangements over one price control period if possible.

Anticipating the needs of future consumers

3.17. Some stakeholders consider that the needs of future consumers may not be adequately represented when determining the price control settlements in RIIO-T1, particularly as part of the enhanced engagement conducted by ourselves and network companies. The issues are set out in Table 3.4 below.

[19] Consultation on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Uncertainty mechanisms, December 2010: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1%20and%20GD1%20uncert.pdf

Table 3.4 Potential risks associated with representation of future consumer needs

Risk	Mitigation under RIIO
Enhanced engagement could give insufficient weight to the views of future consumers	The Authority will continue to take a balanced approach to assessing the price control and the way it has considered the needs of existing and future consumers.

3.18. We note that this is a risk that would be encountered under any regulatory regime given that future consumers will not be able to take part in any process of stakeholder engagement. However, the Authority will consider future consumers' interests as part of its role in protecting future consumers as set out in its principal objective. We recognise that the Authority may not have absolute clarity regarding what the needs of these consumers will be in the future, but consideration of future consumer interests will ensure their needs are assessed as part of decisions taken. Increased engagement with current stakeholders may itself help the Authority better to be able to identify and take account of the needs of future consumers.

Potential risk of interpretation and application of certain elements of the regime

3.19. In response to the RPI-X@20 recommendations document many stakeholders expressed support for the rationale underpinning a number of aspects of the RIIO model. However, they noted that achieving benefits from this new regime was not linked to the principles developed for the RIIO model but rather was dependent on the way these principles were interpreted and applied in practice. We recognise that there are potential risks associated with the way that the regime is applied and the detail of the framework developed, eg with respect to the way outputs are defined.

3.20. To guard against this potential risk, we have engaged extensively with a range of stakeholders to understand their views and perspectives on the way we should implement the regime.

3.21. Since the start of RIIO-T1, we have adopted a multi-layered process of engagement 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.

3.22. The key elements of our process have been:

- consultations on the approach to the review and our strategy for implementing RIIO
- a series of stakeholder working groups on outputs and incentives, sustainable development and on financial issues
- a number of meetings with the Price Control Review Forum (PCRF)
- events designed for a City audience to capture the views of investors

- meetings for the network companies and the Consumer Challenge Group (CCG) with our Committee of the Authority
- a range of bilateral meetings with the companies and stakeholders.

3.23. Furthermore, as part of RIIO, significant onus has been placed on the network companies to demonstrate, through their business plans, that they have effectively engaged and considered the views of their stakeholders in setting out what they will deliver.

4. Post implementation review

Chapter Summary

This chapter sets out our current thinking on the costs that will be associated with implementation of the RIIO-T1 Initial Proposals for NGET and NGGT. It also provides an overview of the approach that we intend to take to reviewing price control settlements that are ultimately implemented for RIIO-T1.

4.1. We note that it is not only important to think about the impacts and potential risks that would result from implementation of these RIIO-T1 Initial Proposals. We also need to consider the direct costs that would be incurred in implementing this package of measures and whether application of these Initial Proposals would be prohibitively expensive. In addition, to ensure that the benefits identified in Chapter 2 are achieved and the risks highlighted in Chapter 3 are minimised, we will need to undertake a post-implementation review of the proposals at an appropriate point in the future.

4.2. This chapter discusses both the costs that may be incurred in implementation of the RIIO-T1 Initial Proposals for NGET and NGGT, as well as the approach that we will take in carrying out a post implementation review and learning lessons from our experiences of the implementation.

Other impacts, costs and benefits

4.3. As with any new regime, there are likely to be costs associated with the implementation of the RIIO-T1 Initial Proposals for NGET and NGGT. We do not anticipate that significant direct costs will be incurred in terms of the need to develop new IT programmes or invest in new technologies, but costs may be incurred as a result of the need to transition to a new regime. In this respect, we think that costs could arise in the following areas:

- **Enhanced engagement:** Under the RIIO framework there are provisions for both network companies and Ofgem to take forward enhanced engagement with a range of stakeholders. NGET and NGGT have undertaken increased stakeholder engagement in the development of their RIIO-T1 business plans (much of which has been joint), and this should continue in advance of (and throughout) RIIO-T1. Effectively taking forward and continuing this type of engagement involves increased resource and cost from us and National Grid, and other interested stakeholders. This increased resource is needed to prepare materials, assimilate views and attend meetings. The outcome of these processes thus far has been the development of Initial Proposals that more closely reflect the views of stakeholders. Therefore, this extra resource has been justified.

- **New requirements to undertake customer surveys:** As outlined in Chapter 2, under RIIO-T1, NGET and NGGT will have new obligations to carry out customer satisfaction surveys. As such, they will incur costs associated with the development of the surveys, completion of the surveys and assessment of the results obtained. The network companies are not subject to normal competitive forces and therefore do not have natural incentives to regularly consider the needs of their consumers. Given the importance of customer satisfaction in any market, we think the costs incurred in this area would be outweighed by benefits.

- **Potential costs associated with the outputs regime:** We note that additional costs will be incurred by NGET and NGGT in order to deliver the outputs that they have proposed. We have considered these additional costs and are satisfied that where costs are incurred these will be offset by benefits delivered.

4.4. We recognise that direct costs of implementing the RIIO-T1 Initial Proposals for NGET and NGGT may arise in a number of areas. We do not think that these costs will be significant as compared with the benefits that are likely to be achieved from the implementation of these Initial Proposals. We would also note that a large proportion of these costs would have been incurred in the event that the price controls were developed using the RPI-X regime. In addition, there are elements of these Initial Proposals that are likely to mean lower direct costs are incurred which will ultimately deliver benefits for consumers.

Post-implementation review

Monitoring delivery of the objectives

4.5. We will publish Final Proposals for NGET and NGGT in December 2012. The controls will be implemented from 1 April 2013. Following implementation of the RIIO-T1 Final Proposals for NGET and NGGT we will need to ensure that we fully understand the extent to which the objectives of the framework are being met. To achieve this, after implementation we would:

- monitor the performance of NGET and NGGT in delivering against the primary outputs, and the extent to which this facilitated delivery of the objectives
- analyse the extent to which NGET and NGGT have acted in response to longer-term issues by various elements of the price control settlements
- understand NGET's and NGGT's performance in delivering well-justified business plans and the role this had played in exposing innovative operational solutions
- assess the development and application of uncertainty mechanisms and the role they play in providing flexibility within the price control
- assess the extent to which the principles on financeability ensure that NGET and NGGT are able to finance their activities at a reasonable cost to consumers.

4.6. The role that we will take in monitoring the outcomes of the proposed RIIO-T1 price control settlements would allow us to better understand the extent to which they are delivering the benefits anticipated in this IA. It would also allow us to make any amendments to the framework in the future (eg for RIIO-ED1 in electricity

distribution), where this may be needed to better facilitate delivery against the objectives of the RIIO framework.

Adapting the framework over time

4.7. Given uncertainty about the best way to develop the networks to facilitate the transition to a sustainable energy sector, it is important that the RIIO model is able to adapt to changing circumstances. This would enable us to refine regulatory arrangements over time, learning lessons from previous control periods, adapting to changing government policy and learning lessons from other sectors.

4.8. While we expect the overriding objectives and associated principles underpinning the RIIO model to be long-lived, and adaptable to changing circumstances, the way the principles are implemented may need to be amended to reflect changing industry conditions. There are likely to be significant benefits where the regulatory regime is adaptable and these could be more effectively delivered where there is transparency about how this adaptation could take place. The following list outlines the principles with which we always seek to conform, and with which we would seek to conform in adapting the regulatory framework over time. In particular, we would:

- consider the principles of better regulation[20]
- ensure our decision making was open and transparent
- ensure accountability to stakeholders
- take decisions based on robust and auditable evidence
- provide clear and reasoned explanations for changes that we made
- consider the impact of changes on regulatory commitment and credibility
- ensure the proportionality of any changes made.

4.9. We anticipate that where we adhere to these principles this should provide transparency to stakeholders with respect to the areas in which changes may be made and the rationale for these changes. It would also allow stakeholders to identify, and propose, areas in which adaptation of the regulatory regime may be appropriate in the future.

[20] The principles of better regulation are: transparent, accountable, proportionate, consistent, and targeted. Adhering to these principles is consistent with our duties under Section 3A (5A) of the Electricity Act 1989 and Section 4AA (5A) of the Gas Act 1986.

5. Conclusions

Chapter Summary

This chapter sets out our conclusions regarding the impact that implementation of the RIIO-T1 Initial Proposals for NGET and NGGT could have on consumers, competition and sustainable development.

5.1. In this IA we have discussed the potential impacts that may be observed as a result of the implementation of the RIIO-T1 Initial Proposals for NGET and NGGT.

5.2. There are likely to be positive impacts in a number of areas as a result of the implementation of the Initial Proposals. In particular, we anticipate significant benefits for consumers resulting from the minimisation of the costs that they face associated with the transition to a sustainable energy sector. These benefits may stem from a number of elements of these Initial Proposals, including the longer-term focus, the suite of incentives that will be implemented, the use of proportionate treatment and the transparent financeability package. We also note that the implementation of RIIO to the RIIO-T1 price control has provided greater opportunities for consumers to engage in the development of RIIO-T1. This has provided a route for consumers to influence the package and seek to ensure that it represents value for money.

5.3. We anticipate that implementation of these Initial Proposals will also have a number of positive impacts in terms of sustainable development. The outputs-led regime places emphasis on the delivery of outputs that are consistent with the transition to a sustainable energy sector. These outputs cover social, environmental and economic issues as well as recognising the importance of the ongoing safety of the networks. NGET and NGGT have proposed outputs in these areas; where they effectively deliver these outputs it should facilitate the effective transition to a sustainable energy sector.

5.4. We recognise that there are a number of identifiable risks which could threaten the achievement of these benefits. These include, amongst other things, the risk that allowances are set inaccurately and the risk of output non-delivery. However, we note that many of these risks would also be observed if a price control were being progressed in accordance with the principles of the RPI-X regime. In addition, we have put a number of mechanisms in place to mitigate these potential risks, as discussed in Chapter 3 of this IA.

5.5. With any framework, there is real merit in adapting and evolving the regime over time to reflect past experience and changing circumstances and this is an approach we are seeking to take with respect to the RIIO model, and with this first application of its principles in the RIIO-T1 price control.