Promoting choice and value
for all gas and electricity customers

Strategy decision for the RIIO-ED1 electricity distribution price control

Overview

Final decision

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Overview:

This document provides an accessible overview of our decision on the approach to the next electricity distribution price control (RIIO-ED1). The price control will set the outputs that the 14 electricity distribution companies (DNOs) need to deliver for their consumers and the associated revenues they are allowed to collect for the eight-year period from 1 April 2015 to 31 March 2023.

RIIO-ED1 is the first electricity distribution price control to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model. RIIO is designed to drive real benefits for consumers. It will provide the companies with strong incentives to step up and meet the challenges of delivering a low carbon, sustainable energy sector at a better value for money than would have been the case under our previous approach.

In September 2012 we consulted on the key elements of the regulatory framework ("strategy") that the DNOs will need to understand in order to develop their business plans. In this document we set out our decision on the strategy, including the outputs the DNOs will need to deliver and the incentives to encourage their delivery. We also set out our approach to assessing the business plans, including the role of proportionate treatment, and the role of innovation. Based on this decision, the DNOs can develop their well-justified business plans setting out how they will deliver for consumers. They must submit these plans to us by 1 July 2013.

Associated documents

Links to supplementary annexes

Strategy decision for RIIO-ED1 - Outputs, incentives and innovation
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecOutputsIncentives.pdf

Strategy decision for RIIO-ED1 - Business plans and proportionate treatment
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecBusinessPlans.pdf

Strategy decision for RIIO-ED1 - Uncertainty mechanisms
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecUncertaintyMechanisms.pdf

Strategy decision for RIIO-ED1 - Financial issues
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecFinancialIssues.pdf

Strategy decision for RIIO-ED1 - Tools for cost assessment
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecCostAssessment.pdf

Strategy decision for RIIO-ED1 – Reliability and safety
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1DecReliabilitySafety.pdf

RIIO-ED1 Glossary of terms
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1SConGlossary.pdf

Links to other associated documents

Strategy consultation for RIIO-ED1 - Overview
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1SConOverview.pdf

Open letter consultation on the way forward for RIIO-ED1
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/riio-ed1/consultations/Documents1/RIIOED1LaunchOpenLetter.pdf

Handbook for implementing the RIIO model
http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf

Electricity Distribution Price Control Review 5 (DPCR5) Final Proposals
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/DPCR5/Documents1/FP_1_Core%20document%20SS%20FINAL.pdf

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Executive Summary

Significant expenditure is needed in Britain's gas and electricity networks over the next decade. This investment is needed to ensure consumers continue to receive safe, reliable network services and to meet environmental challenges. It is therefore more important than ever that network companies can show consumers that they are getting value for money and that charges are contained.

The electricity distribution price control review (RIIO-ED1) is the first review in electricity distribution to use our new RIIO model (Revenue = Incentives + Innovation + Outputs). The objective of RIIO is to drive real benefits for consumers; providing companies with strong incentives to meet the challenges of delivering a sustainable energy sector at a lower cost. RIIO puts sustainability alongside consumers at the heart of what network companies do. It provides a transparent and predictable framework that rewards timely delivery.

Under the RIIO model the DNOs are responsible for developing and justifying a long-term strategy for delivering the network services that their customers value. To do this, they need to understand the key elements of the price control framework. In September 2012 we published a set of documents consulting on the outputs the DNOs should deliver and our thinking on core elements of the framework. We are now setting out decisions on this strategy, in light of respondents' views. We set out: the outputs that companies will need to deliver and the associated incentive mechanisms; how we will go about assessing the companies' business plans; proposed mechanisms for handling uncertainty and for encouraging innovation; and our approach to financeability.

We are rewarding efficient and timely delivery for consumers. We are setting outputs for safety, reliability, customer satisfaction and stakeholder engagement, with strong incentives for efficient delivery. We are also providing strong incentives for DNOs to provide a better service for connecting customers, including distribution connected generation customers, and to ensure DNOs play a full role in identifying and assisting vulnerable customers and the fuel poor. For an average DNO, both the rewards for good performance and the total value of penalties could be up to around £300m respectively over the RIIO-ED1 period.

We are promoting a step change in the way DNOs think about the future. DNOs will need to set out how they plan to accommodate uncertain levels of low carbon technologies onto their networks. The package of outputs and incentives will ensure they do this at efficient cost, using smart grids tools and techniques whilst providing good service to new and existing customers. They will also be incentivised to manage their carbon footprint and will have to report on how their actions have contributed to broader environmental objectives.

Innovation will play a key part in the DNOs delivering at efficient cost and dealing with uncertainty. In the current price control (DPCR5) we established the Low Carbon Network (LCN) Fund. We expect to see the learning from the LCN Fund trials embedded in the DNOs' business plans. We have already committed to replacing the LCN Fund with a competition to fund innovation across electricity transmission and

distribution. Up to £180m will be available in the competition across the first two years of RIIO-ED1.

In the interests of consumers, we are committed to ensuring that efficient companies are able to raise timely finance and are remunerated appropriately; and that we have a fair balance of costs between current and future consumers. The RIIO framework sets out the principles by which we will set the various financial elements of the price control settlement. We have already set out decisions to index the cost of debt assumption based on a long-term trailing average of interest rates and move to the use of economic asset lives for depreciation, which for electricity distribution we determined to be 45 years (from 20 years currently).[1] Whilst we do not intend to revisit these decisions in RIIO-ED1, we will consider representations from the DNOs regarding the need for tailored or transitional arrangements.

We have set out an indicative cost of equity range of 6.0-7.2 per cent (post-tax real) based on the expected future risk profile of the DNOs. It is for the DNOs to set out in their business plans their proposals for notional gearing and where we should land on the cost of equity, based on detailed evidence of their cash flow risk. It is only when we have received this information that we will be in a position to establish an appropriate range for the allowed return for the price control settlement.

The DNOs now need to deliver. They have until the start of July 2013 to develop well-justified business plans, demonstrating how they will meet the sustainability challenge, fund network expenditure and ensure continued safe and reliable operation of the networks and high levels of customer service. DNOs will need to provide evidence not only that they have engaged with a broad range of stakeholders but that their plans have been shaped by those views.

In the summer, we will begin a process of assessing the DNOs' plans. Our initial assessment will inform our view on how much regulatory scrutiny each plan requires and whether any company has submitted a plan of sufficient quality for us to be able to conclude its price control settlement early (ie to be 'fast-tracked'). We will set out the findings of our initial assessment at the end of September 2013 and consult on the regulatory treatment of each company.

Our decisions reflect considerable input from a range of stakeholders, including consumer and environmental groups, industry and government, as well as the DNOs. We have also benefited from feedback from our Consumer Challenge Group, which comprises consumer and environmental experts acting as a critical friend to Ofgem. The publication of this strategy decision does not signal the end of this process. We will continue to engage with interested parties and welcome the ongoing input from all stakeholders.

[1] Following a review of economic asset lives, on 31 March 2012 we published our 'Decision letter on the regulatory asset lives for electricity distribution assets' http://www.ofgem.gov.uk/Networks/Policy/Documents1/assetlivedecision.pdf

1. Introduction

Chapter Summary

This chapter sets out the purpose of this overview document and explains the relationship between this document and the supplementary annexes. It also sets out our high-level strategy for RIIO-ED1.

Purpose of this document

1.1. The existing price control period for the 14 distribution network operators (DNOs) ends on 31 March 2015. This document provides a high-level overview of our decisions on the regulatory framework for the next electricity distribution price control, RIIO-ED1. In this review we will set allowed revenues for the DNOs for the eight-year period (1 April 2015 to 31 March 2023) and the outputs they will be required to deliver.

1.2. This document is written with a view to giving a range of interested parties a comprehensive and accessible overview of the key elements of our decisions. We provide a more detailed description of our decisions in supplementary annexes published alongside this overview. (See Figure 1.1 at the end of this chapter.)

1.3. The decisions we set out have been developed taking into account the feedback from the strategy consultation we published in September 2012, and ongoing discussions with stakeholders both bilaterally and in policy working groups. This document provides a high-level overview of stakeholder responses to our proposals; whilst the supplementary annexes set out specific feedback, and how we have considered this in our decisions.

RIIO

1.4. RIIO-ED1 is the first price control in electricity distribution to use the RIIO model. The decisions that we set out in this document are designed to:

- encourage DNOs to deliver safe, reliable and sustainable network services at long-term value for money to consumers
- enable them to finance the required investment in a timely and efficient way
- remunerate them according to their delivery for consumers.

1.5. We are committed to ensuring that all stakeholders have appropriate opportunities to engage in the price control reviews. The proposals set out in this consultation reflect the input we have received from a wide variety of stakeholders since we launched the review in February 2012. We provide more detail on this is Chapter 3. We appreciate the considerable time and effort that a wide range of parties have provided in the process so far.

High-level strategy

1.6. The RIIO model encourages network companies to take responsibility for developing and justifying a long-term strategy for delivering the network services that their customers value. The DNOs will set out these strategies in their well-justified business plans, which they will submit to us in July 2013. This document sets out the aspects of RIIO-ED1 that DNOs need to understand in order to be able to determine their strategies and business plans.

1.7. Those DNOs that rise to the challenge of providing us with well-justified business plans will benefit under our proportionate regulatory approach.

1.8. As part of this decision we are publishing guidance on what is required in a well-justified business plan. We also set out our approach for deciding whether a DNO should be fast-tracked or should receive proportionate treatment. This is discussed briefly in Chapter 4 and in more detail in the 'Supplementary annex - Business plans and proportionate treatment'.

1.9. The process for RIIO-ED1 differs significantly from that of previous electricity distribution reviews. We have built on the process used for RIIO-T1 and GD1, the recent transmission and gas distribution price control reviews. In the September strategy consultation we proposed changes to our timetable to reflect learning from the RIIO-T1 fast-track experience. Chapter 4 sets our decisions in this area.

Impact assessment

1.10. We published a high-level impact assessment (IA) alongside our September strategy consultation. Only four stakeholders (all DNOs) responded to the questions set out in the IA.

1.11. Three agreed we had correctly identified the main potential impacts of RIIO-ED1, whilst one thought there could be some perverse impacts created. One noted that the IA did not recognise the impact on debt and equity investors. One thought we should better quantify low carbon uncertainty in a later IA.

1.12. Two thought we had correctly identified risks, whereas the others thought that the financial risks had not been fully considered. Several respondents thought the risk would be higher for RIIO-ED1 than for DPCR5, and gave examples of specific incentives. One wondered if we needed an aggregate uncertainty accumulator to mitigate risk across the suite of uncertainty mechanisms.

1.13. We consider that the benefits and impacts outlined in the September IA are still applicable to the decisions set out in this document. We will publish further IAs alongside the Draft Determinations to reflect the impacts of DNOs' business plans and our assessments.

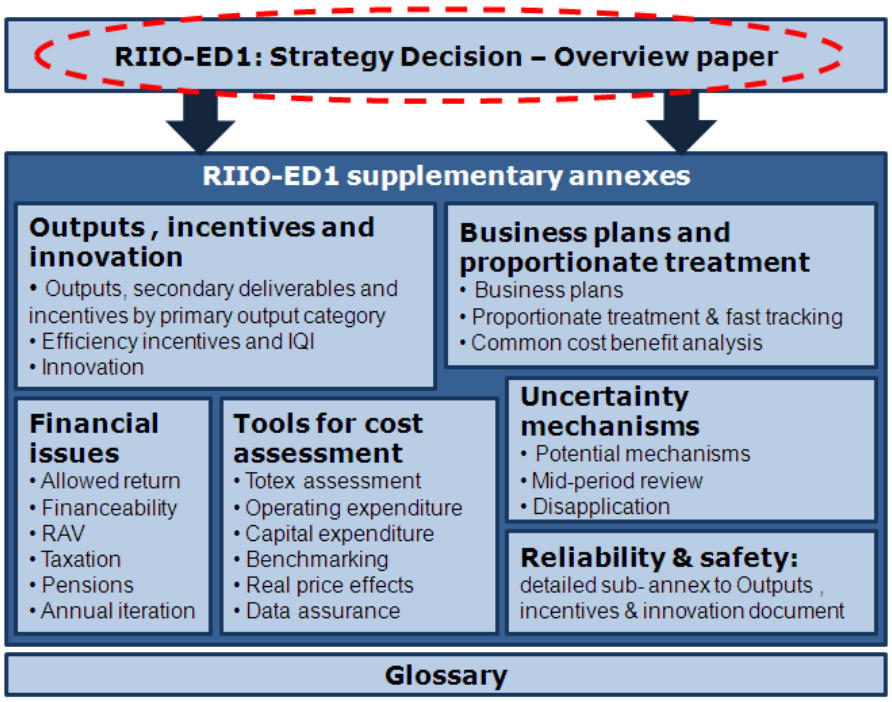
Structure of this document and associated documents

1.14. This document is structured as follows:

- Chapter 2 sets out how the RIIO-ED1 package is designed to address the key challenges facing the electricity distribution sector.
- Chapter 3 sets out the stakeholder engagement that we have undertaken to date, and stakeholders' views on how to improve the process.
- Chapter 4 presents the form and structure of the review, as well as our way forward in dealing with any potential volatility of charges.
- Chapter 5 sets out the outputs that we expect DNOs to deliver over the RIIO-ED1 period, and associated incentive mechanisms to ensure efficient delivery.
- Chapter 6 discusses the criteria we will use to assess companies' business plans and our approach to cost assessment.
- Chapter 7 describes our approach to innovation.
- Chapter 8 sets out our approach to dealing with uncertainty, and how risks should be shared between customers and the DNOs.
- Chapter 9 discusses our approach to financial issues, including efficient debt and equity financing costs, optimal gearing, capitalisation and depreciation policies.
- Chapter 10 sets out the next steps in this review.

1.15. We provide further detail on all of these issues in the supplementary annexes published alongside this document. Figure 1.1 below sets out a map of all the RIIO-ED1 documents we have published today. Links to these annexes are set out in the 'Associated Documents' section at the front of this document.

Figure 1.1: Map of RIIO-ED1 strategy decision documents



Links to these documents can be found in the 'Associated documents' section of this document

2. Key challenges and issues for RIIO-ED1

Chapter Summary

In this chapter we summarise the key challenges facing the electricity distribution sector, and our approach to addressing them in RIIO-ED1. As part of this we set out how we have considered responses to our September strategy consultation.

2.1. The electricity networks face a number of important challenges which we have taken into account in developing the strategy framework for RIIO-ED1. These include ensuring that the networks can connect and manage the new low carbon technologies and generation required for GB to meet its carbon targets; the need for the DNOs to manage their own environmental impact; and social issues, notably the need to address fuel poverty and the treatment of vulnerable customers.

2.2. Our individual proposals for RIIO-ED1 are described in the remaining chapters of this document. More detailed discussions of the development, and responses to our September strategy consultation in each area are set out in the relevant supplementary annexes.

2.3. In this chapter we focus on the cross cutting issue of how our RIIO-ED1 proposals will encourage the DNOs to address the challenges arising from the adoption of low carbon technologies. We also look at how the total package will better serve the needs of customers.

2.4. We have included the sector overview provided in the September strategy consultation as Appendix 2.

Managing the transition to a low carbon energy sector

2.5. DNOs need to manage the carbon footprint of their business and also consider the role they play in the country's achievement of broader environmental targets. One of the key issues for RIIO-ED1 is the network challenges presented by the transition to a low carbon future. DNOs will need to be able to accommodate potentially significant volumes of local generation (such as solar photovoltaic (pV) and wind) and low carbon demand (such as electric vehicles (EVs) and heat pumps) in a timely and efficient manner. Distribution networks are not currently designed to accommodate these loads and we expect this to be a key driver of future investment needs. Adding to the challenge is the considerable uncertainty around the take-up of these technologies, in terms of volume and location as well as the impact on the network.

2.6. The DNOs need to create a network that allows them to connect new customers without delays or service disruptions, but avoids investing in assets that may be redundant. Similarly they need to ensure that their networks can

accommodate the increasing loads from EVs and heat pumps without overloading the network and causing interruptions and without inefficient reinforcement. To do this they may need to move away from traditional investment to newer, more flexible solutions offered by smart grids technologies and contractual arrangements with demand and generation customers.

2.7. We see Ofgem playing a three-fold role in ensuring the DNOs address these challenges.

1. To help industry and stakeholders understand DNOs' role, and regulatory and policy implications.
2. To help facilitate an industry-wide understanding of the costs and benefits of smart grids solutions, potential barriers to their implementation and how to resolve them.
3. To create a package of outputs, incentives and financing for RIIO-ED1 that incentivises DNOs to accommodate these new loads efficiently.

2.8. We discuss each of these in detail below, and then follow with discussions on specific issues relating to low carbon technologies, smart meters and heat.

The role of DNOs

2.9. Many DNOs and stakeholders have raised questions about what networks will need to look like in the future, the potential structure of the industry and the impact of this on the regulatory framework for RIIO-ED1. If DNOs are to manage local levels of demand actively, whilst at the same time accommodating varying amounts of generation onto the network, they will start to behave like system operators (ie locally balancing demand and supply on their networks). This raises questions about whether this is possible under the current regulatory and commercial framework, and how they would interact with the overall system operator, National Grid.

2.10. There are also questions over the potential use of demand side response (DSR). Different entities (eg suppliers, transmission operators, DNOs and the system operator) may want to use DSR, creating the need to ensure the value of DSR is maximised across the entire value chain. There are also questions around what benefits customers would need to see in their contracts or bills to drive the desired response and the cost benefit of the overall approach.

2.11. Work undertaken by the Smart Grids Forum (see below) concluded that the existing regulatory framework should not act as a barrier to efficient and effective commercial arrangements in the market. This includes DNOs using third parties to help provide services such as storage or energy efficiency.

2.12. In parallel to RIIO-ED1 we are looking at options for the development of smart grids, particularly in terms of how customers will engage with smart grids. This engagement could take a number of different forms, ranging from customers being enabled to respond to price signals to a more automated response.

Smart grids solutions

2.13. Smart grids technology and associated contractual arrangements with customers and generators may offer DNOs a more cost effective way of resolving constraints on the network than investing in more assets. They may also provide the DNOs with more flexibility, especially where they are unsure of longer term demand.

2.14. The Smart Grid Forum (SGF), co-chaired by Ofgem and the Department of Energy and Climate Change (DECC), has continued to work to understand what drives the value of smarter solutions and address barriers to their adoption. More information on the SGF is provided in Appendix 3. The LCN Fund is funding trials to assess the potential operation and benefits of smart technologies (including storage) and DSR, amongst other things.

2.15. As part of the SGF, DECC have created and updated four scenarios on the potential take-up of low carbon technologies. All scenarios meet the 2030 4th Carbon Budget[2] but involve different relative contributions from the electrification of heat and transport and the use of carbon credits to offset emissions. These scenarios indicate that, other than pV, the take-up of technologies is unlikely to be significant until the latter half of RIIO-ED1. However, the take-up will vary geographically, and DNOs have translated the scenarios for their areas. It is important that the DNOs design business plans that can efficiently accommodate whatever pattern of demand ultimately emerges.

2.16. The SGF has looked at whether there might be benefits from rolling out smart grids solutions en masse in RIIO-ED1. Initial cost benefit assessments, combined with the fact that we currently do not fully understand smart grids and the uncertainty around low carbon technology take-up, appear to indicate that a more incremental approach to smart grids is appropriate during RIIO-ED1. However, assets installed in RIIO-ED1 will last 40 years or more, meaning that they need to be fit for purpose in the long term. DNOs will need to consider the following:

- what their networks will need to look like when low carbon technologies are commonplace, and their strategy for getting there
- how their customers will adopt and use the new technologies
- how to design a strategy for RIIO-ED1 such that it can efficiently accommodate any of the DECC scenarios
- a variety of network solutions, comparing whole life/long term costs and benefits
- whether solutions need to provide flexibility – for example using DSR to delay an investment until the understanding of future demand is clearer
- whether there are benefits from upfront investment – ie in RIIO-ED1
- how they will prepare for the requirements of RIIO-ED2 and beyond.

2.17. Some stakeholders have questioned whether DNOs will be sufficiently incentivised to undertake the cultural change this will require. We set out in the next section how we have designed RIIO-ED1 to ensure this will happen.

[2] http://www.decc.gov.uk/en/content/cms/emissions/carbon_budgets/carbon_budgets.aspx

RIIO-ED1 package

2.18. In Chapters 5 and 6 (and the 'Supplementary annex – Business plans and proportionate treatment') we describe our expectations for the DNOs to set out, in their business plans, how they will manage the uncertainty around low carbon technologies and the regulatory package they need to deliver this.

2.19. We also expect the business plans to reflect the adoption of smart solutions (including DSR) and the learning from LCN Fund projects where they are cost effective versus conventional solutions.

2.20. The package of outputs and incentives described in Chapter 4 will ensure that the DNOs both consider these issues up front, but also deliver during the RIIO-ED1 period. For example:

- The interruptions incentive (IIS) gives a strong incentive on the companies to anticipate the increased loads from low carbon technologies, and ensure that they do not overload the network assets.
- The efficiency incentive (see Chapter 6) ensures that the DNOs do not over-invest to avoid interruptions. It incentivises the companies to look for the most cost efficient solution, which will drive the DNOs to adopt smart solutions, including DSR, in many cases.
- The package of connections incentives (time to connect incentive, customer satisfaction and connection engagement) will encourage the DNOs to consider the needs of customers connecting low carbon technologies and distributed generation (DG). Our annual DG Forums have highlighted the need for DNOs to improve the information they provide, and the way they communicate with DG operators. We have designed the connections incentives with this in mind.

2.21. In Chapter 7 we set out how the RIIO framework will encourage the DNOs to innovate further, trial and roll-out solutions to accommodate the take-up of low carbon technologies and the connection of generation, particularly using smart grids solutions and customer response. We plan to review the level of funding available to DNOs in the Network Innovation Competition (NIC) in 2016. If DNOs do not demonstrate clear evidence of how emerging learning on smart solutions will be deployed as business as usual, then there may be a strong case for removing NIC funding for DNOs post 2016. In addition we are considering whether a qualifying criterion for the NIC should be that DNOs have to demonstrate how they are deploying smart grids solutions in their business.

Reinforcement for demand increases including low carbon technologies

2.22. As we noted in our September strategy consultation,[3] DNOs have the ability to charge customers directly for network reinforcement resulting from increases in their

[3] This issue was set out in Chapter 3, Driving sustainable networks, of the 'Supplementary annex - Outputs, incentives and innovation' of the September strategy consultation.

demand. However, whilst charging an electric vehicle or installing a heat pump may significantly increase a customer's demand, the DNO will not be able to tell whether the customer was using the equipment at peak (causing the need for reinforcement) or off-peak when there is no problem. For this reason, in practice many DNOs recover the costs of reinforcement triggered by load growth through distribution use of system (DUoS) charges, ie from the generality of consumers. We need to ensure that there is a consistent policy, without creating barriers – actual or perceived - to the take-up of low carbon technologies.

2.23. Once smart meters have been rolled out and customers understand the consequences of their actions and can be incentivised to reduce demand at times of network peak, it may be reasonable for DNOs to charge customers according to their contribution to network loading. However, this is not the position the industry is currently in (although we are working with industry to identify viable options to incentivise customers to manage their demand). In the meantime, following broad agreement to our proposals, we will allow DNOs to continue to socialise the costs of reinforcement triggered by load or generation increase from domestic customers.[4]

2.24. Some stakeholders have noted that customers who are not triggering reinforcement may in effect be paying for those who do. However, as stated above, this reflects current practice of funding reinforcement costs through DUoS charges where DNOs cannot identify the customers who triggered these costs.

Smart meters

2.25. Smart meters will play a key role in the DNOs' smart grids solutions. The majority of the government's mandated installation of smart meters in domestic and small non-domestic premises will take place well before the end of RIIO-ED1. DNOs need to maximise the benefits they can obtain from these meters – such as providing better outage and usage data which the DNOs can use to operate the networks in a smarter way. We have been liaising with DECC and the DNOs to ensure that the specification of the smart meters and the communications network provide the functionality the DNOs require to implement the smart grids solutions.

2.26. There will be costs to the DNOs associated with both the smart meter roll-out and the use of the data. We have set out in Chapter 2 of the 'Supplementary annex - Outputs, incentives and innovation', the 'Supplementary annex - Tools for cost assessment' and the 'Supplementary annex - Uncertainty mechanisms' the RIIO-ED1 mechanisms to ensure these costs are efficient.

2.27. We expect the DNOs to seek to maximise the benefits they can achieve from all forms of data that they have access to – including, but not limited to, data from smart meters. The benefits may be lower network costs and/or better customer service.

[4] This decision will apply to all equipment installed in existing domestic or profile class 3-4 properties, including where that equipment is part of multiple installations made by a landlord

Customers

2.28. One of customers' primary concerns is the reliability of their electricity supply. DNOs will continue to face strong incentives to manage interruptions. We are also reducing the time a customer is off supply before they get a compensation payment from 18 hours to 12. From the start of the price control, these payments will increase in line with inflation and be available to all customers, following the removal of the current exemptions for the Scottish Highlands and Islands areas. DNOs will make this payment automatically to vulnerable customers on the Priority Service Register (PSR). We are also maintaining the mechanism to encourage DNOs to address those customers deemed worst served in terms of network reliability. This is explained further in Chapter 5.

2.29. Ordinarily customers do not have direct contact with the DNO. Under RIIO-ED1 we are directing DNOs to take a more active approach with their customers, such as identifying vulnerable customers and providing more help, for example when a power cut occurs. The RIIO framework clearly sets out that we expect the network companies to improve their approach to stakeholder engagement and deliver a better customer experience at value for money. DNOs will need to demonstrate how they have tested their business strategy with stakeholders and reflected their views in their well-justified business plans. More information on the business plans is set out in Chapter 6.

2.30. In Chapter 5 we set out how we are strengthening the Broad Measure of Customer Satisfaction (BMCS) to encourage improvements in all aspects of DNOs' customer facing performance, including the service they provide to customers, how effective they are at managing complaints and how they engage with stakeholders.

2.31. The DNOs have a key role to play in identifying fuel poor and vulnerable customers, and partnering with others to deliver solutions. We expect DNOs to include their strategy for maximising the role that they can play in their business plans. We recognise that to fully realise their role DNOs will need to undertake a major cultural and behavioural shift. To encourage this we have increased the value of reward available under the stakeholder element of the BMCS so that we can specifically assess and reward the steps DNOs take in response to social challenges and the impact of their actions. This is explained further in Chapter 5.

2.32. The RIIO-ED1 framework contains a package of connections incentives aimed at encouraging the DNOs to provide a better service for connecting customers, including those connecting low carbon technologies and DG. These include a time to connect incentive and a customer satisfaction surveys for customers requiring a smaller connection, and the Incentive on Connections Engagement for those requiring a larger connection and DG customers. This is also explained in more detail in Chapter 5.

3. Incorporating stakeholders' views

Chapter Summary

This chapter outlines the role of stakeholder engagement in RIIO-ED1 and sets out the stakeholder engagement process in more detail.

Role of stakeholders in the price control review

3.1. If customers are to get the network services they require they need the opportunity to identify their requirements and understand the impacts. All stakeholders have a key role to play under RIIO, both in influencing our decisions and the business plans of the network companies. There are two main elements to the engagement process.

- DNOs engaging with their stakeholders both to inform their business plans and on an on-going basis. RIIO places strong incentives on companies to do this effectively, via the business plan assessment process (discussed in Chapter 6) and the stakeholder engagement element of the BMCS (discussed in Chapter 5).
- Ofgem's multi-layered stakeholder engagement process to ensure that all affected parties have appropriate opportunities to engage in the review.

Summary of Ofgem stakeholder engagement to date

3.2. The objectives of our stakeholder engagement for RIIO-ED1 are to:

- ensure that stakeholders are familiar with policy developments so that they are able to contribute effectively as the price control review progresses
- ensure that the views of consumers are fully reflected in the process.

3.3. We have adopted a multi-layered process to ensure that all affected parties have appropriate opportunities to engage in the review. A high-level summary of the issues raised by respondents to our September strategy consultation is set out as Appendix 1.

3.4. We have also conducted research into customers' views to help us understand consumer priorities for the DNOs over the next 10-15 years, including views of how future scenarios may impact on the network.

Summary of consultation responses

3.5. In September we set out the different types of engagement, both by DNOs and Ofgem, and asked for stakeholders' views. We also invited suggestions on how the engagement could be made more effective.

3.6. Most respondents supported our approach, and noted the effectiveness of our multi-layered approach. However some concerns were raised, particularly around whether all stakeholders are able to participate effectively in the process. A number of respondents expressed concern that the process was too DNO-focused and that steps should be taken to ensure that limited technical expertise does not act as a barrier to meaningful engagement from other stakeholders. Others felt that suppliers should have been better represented and that there should be more engagement with the investor community.

3.7. We agree that the policy working groups can be quite technical, since they are providing input on the detailed workings of specific outputs and incentives. We appreciate the non-DNO input to these groups, and aim to provide additional briefings to the non-DNO participants where this would be useful. We note that we have a number of other ways that non-DNOs can engage in the process, including the Price Control Review Forum (PCRF) and also bilateral discussions – and invite these stakeholders to contact us to discuss how best to incorporate their views.

Appealing against price control decisions

3.8. As we set out in the September strategy consultation, the Authority can now modify a licence without the licensee's consent. The licensee, other electricity licensees who may be affected, and certain other specified bodies representing licensees or consumers then have the right to appeal the licence modification decision to the Competition Commission if they are dissatisfied.

4. Form and structure of the price control

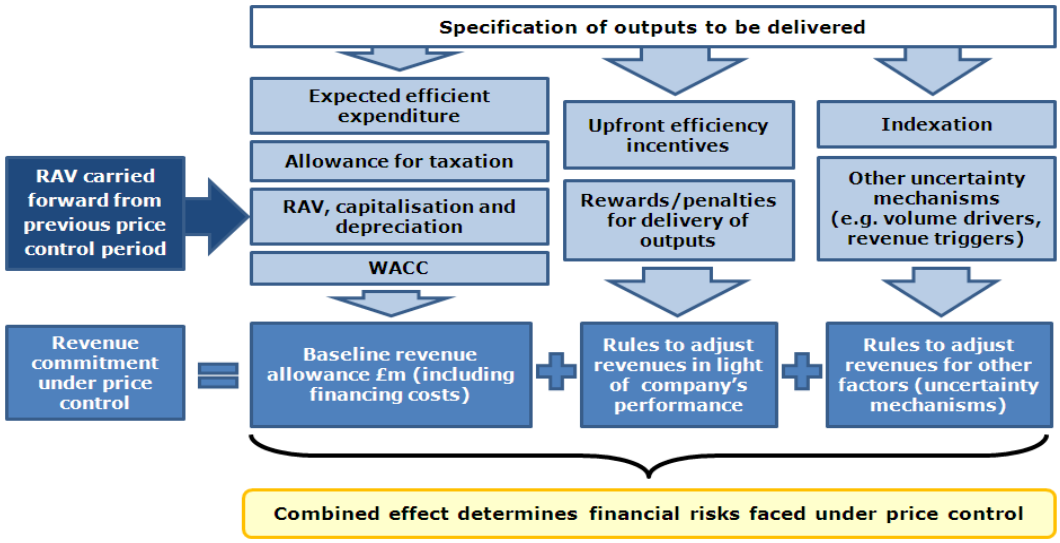
Chapter Summary

This chapter sets out the form and structure of the RIIO-ED1 price control including our decision on the price control process. It also sets out our views on any potential volatility of charges arising from the review.

Form of the price control

4.1. Under the RIIO model, we set the outputs that DNOs need to deliver and the revenues they are able to collect from consumers for delivery. The allowed revenues will be set using a building block approach, the core elements of which are illustrated in Figure 4.1 below. The way we set each of the building blocks is discussed in the remaining chapters of this document and the associated supplementary annexes. Respondents to the September strategy consultation agreed that this is an appropriate framework.

Figure 4.1: Price control building blocks



4.2. We will adjust the revenue cap annually for changes in the Retail Prices Index (RPI). In 'Supplementary Annex – Uncertainty mechanisms' we set out our decision to remove the lag present in the historical methodology.

4.3. In our September strategy consultation we noted the consultation by the Office for National Statistics' Consumer Prices Advisory Committee (CPAC) on the RPI

methodology. Their subsequent decision to continue to publish the current RPI measure of inflation means we will not change the RPI we use to index revenues.[5]

4.4. Other adjustments to revenue relate to output incentives, efficiency incentives, the innovation stimulus package and uncertainty mechanisms. More details on these elements are provided in Chapters 5, 6, 7 and 8 respectively and the related supporting annexes ('Supplementary annex – Outputs, incentives and innovation' and 'Supplementary annex – Uncertainty mechanisms').

Scope of the price control

4.5. The RIIO-ED1 price control review will apply to all 14 DNOs and culminate in licence conditions for each licensee to take effect on 1 April 2015. We will set allowed revenues to cover all aspects of a DNO's business except for services directly remunerated by customers including contestable connections, legacy metering, out of area services, de minimis activities,[6] and those services which have previously been referred to as excluded services.

4.6. Directly remunerated services are those which are paid for by customers' DUoS charges. They are not included in the calculations of allowed revenues. In setting the price control we will forecast expected revenues and costs from providing these services. If DNOs sell these services, then the revenues they receive should cover the additional costs incurred. Any costs and revenues associated with these services are not included in the calculations of allowed revenues.

4.7. We will work with the DNOs to clarify the arrangements for allocation of costs and revenues and the reporting arrangements for these services. We will ensure that there is a reasonable incentive for DNOs to work with others (eg broadband) to maximise the use of network assets, and that DUoS customers benefit from the contribution such assets make to these services.

Price control process

4.8. The key elements of the RIIO-ED1 process are set out below.

- Effective stakeholder engagement will inform the process throughout.
- The beginning of the process focuses on the development of outputs and the overall strategy for the review. This is to provide enough information about our price control framework for DNOs to develop their well-justified business plans.
- Following submission of the business plans in July 2013 we will assess the plans and consult on whether any warrant proportionate treatment or fast-tracking.

[5] ONS news release (Jan 2013): http://www.ons.gov.uk/ons/rel/mro/news-release/rpirecommendations/rpinewsrelease.html

[6] De minimis activities are any business conducted by a DNO (or affiliate or related business), other than its regular business, and any other business or activity to which the Authority has given its consent under standard condition 29 of the licence.

- For any DNO that is fast-tracked we aim to conclude their review nine months ahead of the other DNOs and a year ahead of the implementation of RIIO-ED1.
- We will begin the process of developing licence conditions after the publication of this document to help align the legal drafting with the policy development.

4.9. For RIIO-ED1 we will have a streamlined business plan assessment process. This will culminate in the publication of a single assessment which sets out which DNOs are being considered for fast-track, alongside their Draft Determinations. The two publications published for both fast-tracked and slow-tracked companies will be titled Draft Determination and Final Determination.

4.10. The latest timetable for RIIO-ED1 is set out in Appendix 5. This includes the reduced initial assessment time, later business plan submission date and reduced time between non-fast-tracked Draft and Final Determinations (versus our first plan for the review) and is as we set out in our September strategy proposals.

4.11. Consultation responses broadly supported our proposals, although in their responses to views on proportionate treatment (Chapter 6) some DNOs expressed concerns that they would not have the opportunity to fine tune their business plans after submission to make changes in response to Ofgem feedback. As we set out in the consultation, we have intentionally removed any opportunity for iteration after business plan submissions, in order to ensure that DNOs provide their best view in the business plan, and do not include elements that they would be willing to change.

4.12. Some concern was raised about the timetable, whether the timescales were too aggressive and whether they provided sufficient time for stakeholders to comment on the business plans. We consider that the timetable is demanding, but achievable. We note that many stakeholders should have already seen previous iterations of the business plans when the DNOs consulted on them. In addition, we expect that many stakeholders will be interested in the high-level elements of the plans (such as the Executive Summary). Our business plan guidance aims to ensure the business plans are easy to navigate and similarly laid out – which should make it easier and faster for stakeholders to review them.

Charging volatility

4.13. We have designed RIIO-ED1 in line with our decision on improving the predictability and reduce the volatility of charges arising from the price control settlement, which we published in October 2012.[7] RIIO-ED1 incentives operate with a two-year lag so that performance in one year will be reported in the next, and the reward or penalty will feed into allowed revenues (and therefore charges) the year after. Pass through items and volume drivers will be treated in the same way.

[7] Decision on measures to mitigate network charging volatility arising from the price control settlement; 17/10/2012 available at http://www.ofgem.gov.uk/Networks/Policy/Documents1/CV_Decision.pdf

4.14. With respect to the potential step change in allowed revenues, and therefore charges, from one price control to the next, we are not making any changes to RIIO-ED1 at this time. In our September strategy consultation we noted that this was not covered in our volatility consultation. We stated that the front-loaded nature of the RIIO framework, with business plans submitted nearly two years before the start of the new period, should provide more visibility of the materiality of inter-period changes.

4.15. A number of respondents expressed concerns. A DNO highlighted that suppliers want sufficient notice on the potential magnitude of any change, and proposed that decisions regarding allowed revenue are made as early in the RIIO process as possible. Suppliers responded that the materiality of potential changes is not yet known and that they need certainty on future allowed revenues. Two proposed agreeing first year allowed revenues based on July 2013 business plans, which could then be reconciled to any changes in later years of ED1. A consumer group also expressed concerns.

4.16. We do not think it is appropriate to base charges on the initial business plans, since for slow-tracked companies the base revenues could change considerably. This issue does not need to be resolved as part of the strategy decision, and we will establish a work stream to look at it further. As part of this work we will gather relevant stakeholders (particularly suppliers) and look at the potential impacts of intra-price control volatility and options to mitigate it.

4.17. We will consider whether any profiling or smoothing of base revenues is required once we have received DNOs' business plans. If reprofiling is considered, we propose to use the vanilla weighted average cost of capital as the discount rate to ensure that DNOs are neither penalised nor rewarded.

5. Ensuring output delivery

Chapter Summary

This chapter sets out the outputs the DNOs will be required to deliver over the RIIO-ED1 period and the associated incentives or requirements. We provide more details in the 'Supplementary annex - Outputs, incentives and innovation'. The relevant supplementary annex chapter is indicated next to the output heading.

Introduction

5.1. Under the RIIO model, we are committed to setting out clear, comprehensive outputs that the network companies will be required to deliver. We use a variety of incentive mechanisms to encourage the companies to deliver these outputs. The outputs and associated incentives, taken together, should ensure companies:

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

5.2. These objectives are interrelated. To meet the demands of moving to a low carbon economy there will need to be significant investment in the networks. In planning this investment DNOs will have to show consumers that they are getting value for money over the longer term. They will need to set out clearly what alternative (particularly smart) options they have considered, what is being delivered and at what cost. The DNOs will need to innovate and identify which solutions will deliver the low carbon economy while providing best value for consumers.

5.3. The RIIO framework has six primary output categories. Against the categories, the behaviours we want to encourage for RIIO-ED1 are:

- Safety: ensuring the provision of a safe network in compliance with Health and Safety Executive (HSE) safety standards.
- Environment: encouraging companies to play their role in achieving broader environmental objectives, namely the reduction in carbon emissions, as well as minimising the narrow environmental impact of the company's activities by managing their own carbon footprint, visual amenity and pollution.
- Customer satisfaction: maintaining high-levels of customer satisfaction and improving service where required. Undertaking effective stakeholder engagement and reflecting stakeholders' views in the day-to-day operation of their business.
- Connections: connecting customers in a timely and efficient way, including responding to different customers' specific needs, whilst facilitating competition.
- Social obligations: taking a strategic approach, adopting a coordinating and partnership role with other networks, suppliers and agencies to use data and knowledge more effectively to deliver benefits to vulnerable consumers.
- Reliability and availability: providing long-term reliability, minimising the number and duration of interruptions and ensuring adaptation to climate change.

5.4. The outputs framework comprises both primary outputs and secondary deliverables. Primary outputs make a material contribution to the outcomes we are seeking. Secondary deliverables enable us to monitor companies' performance and are leading indicators to ensure long-term delivery and value for money.

5.5. We expect the DNOs to include the costs of delivering outputs for RIIO-ED1 and beyond in their business plans. To ensure consumers do not pay unnecessarily high prices, the DNOs will need to justify their planned expenditures in the context of a long-term strategy for delivery.

Setting future performance levels and incentives

5.6. For many of the outputs we are setting the level (or baseline) to be delivered, taking into account stakeholder views. However, for some outputs and secondary deliverables (such as the asset health and loading indices), DNOs will need to set out their proposed level of delivery in their business plans. This level should be justified in terms of the costs and benefits to network users and should be informed by their stakeholder engagement.

5.7. For each output category, we have considered a range of incentive mechanisms to encourage DNOs to deliver. For some we have set upper and/or lower limits on the revenue adjustment. These limits will be set as fixed £m, derived from a consistent potential DNO shareholder return from the incentive. We term this shareholder return as the return on regulatory equity (RORE), and will set the £m limits based on the same number of basis points for each company. However, in our decisions for customer satisfaction and connections we have also stated the equivalent percentage base revenue[8] for comparison with our September strategy consultation and DPCR5.

5.8. We do not have financial incentives for all outputs. For example, the safety output does not have a reward or penalty because absolute standards are in place and HSE is able to take enforcement action in the event of non-compliance.

Monitoring delivery of outputs

5.9. We plan to develop our approach to monitoring DNOs' delivery under RIIO, building on the existing regulatory instructions and guidance (RIGs) and the electricity distribution Annual Report. We will say more about this in due course.

5.10. The DNOs will be required to adopt the data assurance process which we are implementing as part of RIIO-T1 and GD1. The DNOs have been involved in the development of this process. It requires companies to demonstrate the risk of reporting errors associated with different data elements and the assurance

[8] Historically we have used the term allowed revenues, however allowed revenues includes incentives – effectively making the calculation of caps and collars circular.

mechanisms they have in place (more information on this is provided in Chapter 2 of the 'Supplementary annex – Outputs, incentives and innovation').

Outputs and incentives

5.11. Our key decisions in each output category are set out below. The DNOs can set out alternative or additional output measures within their business plans along with their justifications.

5.12. A number of respondents to our September strategy consultation agreed that our overall approach was appropriate but stated it was too early to say whether or not it will deliver value for money for consumers and help to deliver a sustainable energy sector. DNOs agreed that the proposed outputs and incentive arrangements were proportionate. One highlighted that the small number of outputs in each category allowed stakeholders to better understand the process and another stated that the proposals allow for DNOs to adapt to emerging stakeholder priorities.

5.13. Two respondents expressed concern that the reward package was too limited, and thought it should reflect the level of risk or maintain the reward levels available in the current price control (DPCR5). We consider that the package provides a similar ability to outperform as DPCR5, and is appropriate.

5.14. We briefly summarise responses to individual proposals below. More detailed discussions on the decisions, consultation responses and further developments can be found in the 'Supplementary annex – Outputs, incentives and innovation'.

Safety (Chapter 4)

5.15. We have decided that the appropriate primary output for health and safety is compliance with the safety requirements set out in legislation and enforced and regulated by the Health and Safety Executive (HSE). We have decided not to introduce any financial incentive as we do not want to duplicate the HSE's functions.

5.16. Secondary deliverables on asset health, criticality and composite risk also include elements of safety performance. These will ensure that the DNOs do not risk their compliance with future safety requirements by decisions made in RIIO-ED1.

5.17. Our decision is the same as the proposal we set out in the September strategy consultation. The majority of respondents agreed with our proposal, although one DNO advocated a financial reward for higher levels of safety.

Customer satisfaction (Chapter 6)

5.18. Our decisions are designed to incentivise DNOs to think about their customers' needs and how to best engage with them.

5.19. We will continue the Broad Measure of Customer Satisfaction (BMCS), introduced in DPCR5 and increase the associated incentive. The BMCS comprises three elements: an assessment of the company's ongoing stakeholder engagement; a measure of the effectiveness of the DNO in resolving complaints; and a survey of customer satisfaction that incorporates the views of customers who have made a general enquiry, experienced an interruption or required a connection.

5.20. A DNO's performance in each component of the BMCS is subject to a separate financial incentive. We are increasing the overall strength of the incentive (from +/- 1 per cent to +/- 1.5 per cent of base revenue[9]) to ensure DNOs improve the service they provide to customers over a longer-term price control period, particularly those seeking to connect to the network.

5.21. We have increased the overall size of the incentive to reflect our enhanced understanding of the effectiveness of the mechanism in delivering benefits to consumers. Part of the increase is due to the increased reward exposure under the stakeholder engagement element of the BMCS. By strengthening this incentive we will encourage DNOs to maximise their role in addressing consumer vulnerability and deliver significant benefits for key groups of stakeholders.

5.22. The BMCS will be based on absolute, rather than relative, targets which will be set prior to the start of RIIO-ED1. The scope of the survey will be changed so that customers who interact with the DNO through a range of different communication channels are included alongside telephone contacts.

5.23. Our decision is largely the same as our consultation proposals, except that in our consultation the connections element of the customer satisfaction survey applied to all connections customers. As a result of feedback on the applicability of our proposals for large customers we will now only carry out the customer survey with minor connections customers. The Incentive on Connections Engagement (ICE), described in the Conditions for Connections section below, will apply instead for larger and DG connections customers and the -0.5 per cent of allowed revenue allocated to BMCS in September will shift to this incentive.

Environment (Chapter 5)

5.24. Our decisions aim to ensure DNOs play their role in achieving broader environmental objectives and reduce their own carbon footprint. This is part of our overall objective to create an enabling regulatory environment to ensure that companies play their role in delivering a low carbon energy sector. This is in addition to the decisions set out under customer service and connections which should improve the service received by renewable generators connecting to the distribution network and the way in which the RIIO-ED1 package will ensure DNOs anticipate the low carbon technologies potentially connecting to their networks.

[9] This will be set as a £m figure, based on +/-86 basis points of RORE.

Losses

5.25. System losses are the largest component of a DNO's carbon footprint, and are an inevitable consequence of transferring electricity across the distribution networks. They can be reduced through various actions by the DNOs and other stakeholders.

5.26. Unfortunately we have experienced significant problems with the DPCR5 losses output and incentive mechanism due to major fluctuations in the relevant data. This has resulted in us removing the DPCR5 mechanism. We expect these data problems to continue during RIIO-ED1 as the roll-out of smart meters uncovers unknown problems with meter readings.

5.27. Until smart meters are rolled out, there is no way to assess consumption objectively and therefore to measure the losses on the network. Instead of an output measure we will place a licence obligation on the DNOs to reduce losses, combined with the facility for DNOs to justify expenditures in their business plans on the basis of carbon reduction. The DNOs will be required to set out how they will reduce losses in their business plans, and then publish annual reports on what loss reductions they planned versus what they have achieved.

5.28. There will also be a discretionary reward of up to £32m available over the RIIO-ED1 period, for efficient and innovative loss reduction initiatives.

5.29. We propose to review the losses mechanism at RIIO-ED2 at which point we will be able to assess whether smart meters and other smart grids technologies are providing a reliable measure of losses.

5.30. Our decision is in line with our September strategy consultation. Consultation responses were largely supportive - although some had concerns that the mechanism was overly complex. One respondent wanted the DPCR5 mechanism re-activated, while another suggested penalties for not managing losses.

Other environmental impacts

5.31. We are retaining the current requirement on DNOs to report their business carbon footprint (BCF) annually, with the publication of an annual league table of percentage change as a reputational incentive. We will enhance the league table by publishing the actions DNOs have undertaken to reduce their BCF. We will also improve the consistency of reporting between the DNOs to ensure that they are all making the same assumptions and categorising emissions in the same way.

5.32. The DPCR5 allowance for undergrounding of overhead lines in Areas of Outstanding Natural Beauty and National Parks, with activities prioritised by local groups, has strong stakeholder support and we are retaining it with few changes.

5.33. We will develop a reputational environmental reporting requirement to address concerns around public accountability and integration of broad

environmental learning and performance. We think reporting will be more appropriate than a discretionary reward which could duplicate other incentives and outputs. We consider that our package of outputs and incentives for RIIO-ED1 will adequately incentivise DNOs to integrate carbon and other environmental considerations within their day-to-day business.

5.34. Whilst most respondents thought there may be some merit in a reward scheme, few provided concrete proposals of what it should cover. Concerns were raised regarding the public accountability and transparency of DNOs' progress and approach to meeting their environmental obligations. These informed our decision.

Conditions for connections (Chapter 8)

5.35. Under the Electricity Act, DNOs are obliged to offer a connection to any customer that wishes to connect to the network. A customer seeking connection has to pay for the cost of the connection and expects to be provided with an efficient service. When customers are not connected in the timescales they require this can result in significant consequences, both to individual customers and to society more generally; new businesses are unable to open their doors, new housing is not made available and low carbon generators are unable to export to the market.

5.36. Despite introducing a range of incentives to improve performance in DPCR5, we remain concerned that for many customers the experience of connecting to the network falls well below expectations. In the September strategy consultation we consulted on changing the nature of the outputs and increasing the strength of the incentives on DNOs to focus on this aspect of their business.

5.37. Respondents agreed with our proposals for smaller connections customers[10] and we will increase the financial exposure of the connection element of the BMCS versus DPCR5. DNOs will be exposed to rewards/penalties of up to +/- 0.5 per cent of base revenue per licensee depending on their performance. We will also introduce a 'time to connect' incentive. This incentive will measure the time taken from initial application to connection quotation and the time taken from quotation acceptance to connection completion. Performance will be assessed against a target (which will increase over the period) and DNOs will be able to earn a reward of up to 0.4 per cent of base revenue per annum.[11]

5.38. There was debate over our consultation proposals to apply an average time to connect and customer satisfaction survey for larger connections customers (including DG, large demand and unmetered). We have therefore developed our proposals further in conjunction with DNOs and interested stakeholders. For these larger connections, in market segments where we have not seen evidence of effective competition, we are introducing a new Incentive on Connection Engagement (ICE).

[10] typically at low voltages and up to no more than four properties
[11] This will be set as a £m figure, based on +23 basis points of RORE.

This will drive the DNOs to understand and satisfy the particular requirements of different types of customers.

5.39. Under the ICE, DNOs will have to demonstrate how they are meeting the needs of a broad range of their customers. This will include identifying the actions that need to be undertaken to improve performance, a timetable for delivery and key performance targets. If we consider that a DNO has not satisfied minimum requirements, then it will incur a penalty of up to 0.9 per cent of base revenue.[12] This penalty exposure will reduce as the number of segments of the market that we decide are open to effective competition increases. We will retain the requirement for DNOs to maintain a common user-friendly DG connection guide.

5.40. Whilst we currently have an incentive mechanism to encourage the DNOs to connect uncertain volumes of DG at efficient cost, we think this mechanism is no longer required given the overall RIIO-ED1 package. The RIIO-ED1 package will encourage appropriate behaviour, such as information provision, customer service, and speed and cost of connection across both low carbon technologies and DG. We discuss this further in the Chapter 2 of the 'Supplementary annex - Outputs, incentives and innovation'.

5.41. At the end of RIIO-ED1 we will true up the difference between the value of relevant expenditure forecast to be funded by connection customers and the actual amount that is contributed. This true up will be carried out across the load-related expenditure as a whole, rather than just the connection cost categories.

Social obligations (Chapter 7)

5.42. DNOs have an important role to play in helping consumers in vulnerable situations. Our Consumer Vulnerability Strategy, which will be published in spring 2013, highlights the need for DNOs to maximise their role in this respect.

5.43. We expect DNOs to include their strategy for realising this objective in their business plans. In particular, they need to set out how they will:

- improve the quality of their information on vulnerable consumers
- engage with a wide range of stakeholders to identify how to best use this information
- explain how they will publicise the benefits and assistance that are offered through the PSR and ensure it captures all of those that should be included
- utilise relationships and build partnerships with other stakeholders to identify and deliver solutions (both energy and non-energy) for affordable energy
- embed the strategy in their business, including customer services.

5.44. This should include the type of activities they plan to undertake to assist vulnerable customers and the associated costs (if any) and the outputs or benefits

[12] This will be set as a £m figure, based on -52 basis points of RORE.

that will be delivered. It should not result in a DNO assuming responsibility for solving issues that extend beyond the scope of its business. We will assess the DNOs' strategy and planned activities as part of our decision on proportionate treatment.

5.45. Respondents generally agreed that DNOs should focus on improving information and assistance provided to vulnerable customers and working better with other agencies.

5.46. For DNOs to deliver a fully realised strategy they will need to change their approach significantly. To ensure there is sufficient incentive for DNOs to make this change, we are increasing the maximum level of reward under the Stakeholder Engagement element of the BMCS from +0.2 per cent of base revenue in DPCR5 to +0.5 per cent in RIIO-ED1. The reward provided will be based on an assessment of the DNOs' use of data and customer insight to identify solutions for vulnerable consumers, as well as their ability to integrate this into core business activities. We will use a balanced scorecard approach to inform the allocation of the reward. We are working with stakeholders to develop this before the start of the RIIO-ED1 period.

Reliability and availability (Chapter 4)

5.47. A key requirement for customers is the reliability of their supply. We are therefore retaining the existing interruptions incentive scheme (IIS). Under the IIS a DNO's performance on the number of customer minutes lost and the number of customer interruptions is incentivised against DNO-specific targets.[13] We are aligning the IIS incentive rates with those of the RIIO-T1 Energy Not Supplied incentive,[14] and will apply the efficiency incentive to these rates. These changes better reflect the value that customers put on supply interruptions. However if a DNO can justify a value more appropriate for its customers it can set this out in its business plan. We will apply a symmetrical cap and collar to the IIS amount that can be earned by a DNO in any given year.

5.48. We will continue the secondary deliverables for reliability; the health index and load index. The health index is a DNO specific composite measure of age, asset condition and fault history amongst other things. The load index is a DNO specific measure of comparative loading. There will be a more consistent methodology for assessment across the DNOs. We have decided to modify the existing health index by stripping out the criticality element and creating a separate criticality index. The health and criticality scores will be combined and consolidated into a new composite risk index. We believe this will allow DNOs to more clearly demonstrate that actions taken by them during RIIO-ED1 to reduce network risk take account not only the probability that an asset fails, but also the expected impact of such failures.

[13] There are separate targets for planned and unplanned interruptions
[14] Decision on strategy for the next transmission price control - RIIO-T1 Ref: 46/11 31 March 2011 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decision.pdf

5.49. We will retain the DPCR5 'use it or lose it' allowance to address customers deemed to be 'worst served' in terms of reliability but provide more flexibility for DNOs to identify which customers should be eligible.

5.50. Statutory regulations set out guaranteed standards of performance on reliability, under which a customer is entitled to a fixed payment from the DNO if their supply has been interrupted for a certain period.[15] We are reducing this period to 12 hours (from 18 hours currently) and are removing exemptions so that all customers receive payments for being off supply. Our consultation proposals on this received strong support. We are also requiring DNOs to make payments automatically to PSR customers, but recognise that, in advance of smart meters, it would not be viable to provide automatic payments to all customers.

5.51. In our consultation we recognised the risk of flooding and the potential impact on supply. The UK's climate is changing and this is likely to affect average conditions as well as the frequency and severity of extreme weather and flooding. Without appropriate risk management this could have a negative impact on the operation of DNO networks. DNOs will need to show how these risks have been assessed using the latest evidence. They should explain how they plan to manage climate risks to make sure that new and existing schemes are sustainable. This is particularly relevant for network investment where new assets will be in operation for several decades. We will also monitor and publish performance against specific secondary deliverables relating to network resilience.[16]

[15] The guaranteed standard penalties are paid by the DNOs. Therefore the increase in penalties arising from this change in standard will not affect customer charges.
[16] Flooding, Black Start and overhead lines

6. Assessing business plans

Chapter Summary

This chapter sets out our process for assessing the DNOs business plans. This includes our proportionate approach to assessing the price control package and the conditions under which we will consider fast-tracking a DNO. It also sets out how we will assess the costs and incentives in place for efficient forecasting and delivery.

More details on the issues in this chapter are set out in the 'Business plans and proportionate treatment' and 'Tools for cost assessment' supplementary annexes.

RIIO model for assessing business plans

6.1. Under RIIO the onus is on network companies to determine and justify how best to deliver outputs over time, reflecting on the results of their stakeholder engagement. This should be set out in their well-justified business plans. We will use the plans and other available information, including past performance, to form a view of the expected efficient costs of delivering outputs and long-term value for money.

6.2. As with RIIO-T1 and GD1, in RIIO-ED1 we will adopt a proportionate approach to assessing business plans. We will focus attention and effort where it is expected to generate most value. In doing so we will provide those DNOs that submit high quality, well-justified business plans the opportunity for a proportionate regulatory approach. We may offer some DNOs a fast-track settlement where we agree the terms of their price control up to nine months earlier than for the other DNOs. No objections were raised to our consultation on this approach. Where respondents made detailed suggestions we have reflected them in the supplementary annexes.

Well-justified business plans

6.3. Each DNO is required to set out in its well-justified business plan how its strategy will deliver in the interests of both current and future customers and how it will meet the challenges associated with facilitating the transition to a low carbon economy. DNOs need to demonstrate that their proposals take account of, and effectively deal with, the various risks and uncertainties while maintaining delivery.

6.4. We set out in our September strategy consultation that the DNOs should have learned from RIIO-T1 and GD1 and should have a good understanding of what comprises a well-justified plan. We provided additional guidance on how the DNOs should structure their plans in order to make them more accessible and comparable. In response to feedback we have further developed elements of this guidance, including the requirement for DNOs to include a one page summary of their plans to enable any reader to easily reference and compare high-level elements of the plans.

6.5. We have decided that the DNOs should use a common cost benefit analysis (CBA) methodology to justify their proposals, based on that developed as part of RIIO-GD1. In addition, the 'Transform' model developed as part of the SGF will provide a useful basis for assessing smart grid solutions alongside the CBAs.

6.6. We expect all business plans to contain the following key elements.

- Justification of the DNO's proposed strategy for delivering their outputs against a thorough understanding of the long-term trends (and risks and uncertainties) they face. In addition, a demonstration that they understand their role, and are looking to be proactive, in contributing to the UK's carbon targets.
- Clear links between expenditures, outputs and secondary deliverables.
- Demonstration that the DNO has considered the views of stakeholders, and the opportunities to use innovative technologies, techniques or commercial arrangements to deliver their outputs at long-term value for money.
- A holistic view of the package the DNO believes to be appropriate, including their view on financeability metrics (with evidence), against their view on expenditure and outputs.

6.7. Further details are set out in the 'Supplementary annex - Business plans and proportionate treatment'.

Proportionate treatment

6.8. The RIIO model includes a proportionate approach to assessing the price control package. This means that the intensity and timescale of our assessment will reflect the quality of a company's business plan and the company's record for efficient output delivery. This approach is consistent with better regulation principles as it allows us to focus our attention where it is likely to produce greatest value.

6.9. In cases where a DNO produces a particularly high quality business plan which reflects its track record, we will consider whether it is appropriate to conclude the DNO's review early, ie fast-track. This is discussed in further detail below. Respondents broadly agreed with our September strategy consultation proposals for proportionate treatment. One stressed the need for adequate guidance to ensure consistency across business plan submissions, while another stressed the need for transparency in the assessment process. We consider that we are providing this in our decision. We set out the criteria for proportionate treatment in Appendix 4.

Incentives associated with proportionate treatment

6.10. The scope for proportionate treatment and, to a greater degree fast-tracking, incentivises companies to submit realistic and well-justified business plans. This is because these approaches will allow DNOs to:

- get on with business as usual without focussing as much resource on the price control process
- plan with greater certainty earlier in the process
- be a significant driver of its own review outcome

- gain reputational advantage.

6.11. As a result DNOs may reveal information that would not be available otherwise that assists with the assessment of other companies.

Fast-tracking

6.12. As noted above, fast-tracking describes a process whereby the price control for a company that develops a well-justified business plan may be concluded early. The key features of fast-tracking are:

- DNO's price control will be finalised approximately nine months ahead of non fast-tracked companies although implementation will still be on the same date for all companies – 1 April 2015
- we will consult on whether any company should be fast-tracked before taking a final decision
- we will ensure that a company that is fast-tracked does not secure a settlement that means they were worse off than had they remained in the process.

6.13. Since we will not set an information quality incentive (IQI) for a fast-tracked company we will provide a fast-tracked company with upfront additional revenues of 2.5 per cent of totex in lieu of the IQI settlement (this approach is in line with RIIO-T1 and GD1). The IQI is designed to encourage DNOs to provide business plans that reflect best available information. We believe it is important to recognise any DNO that has supplied information of such a high standard that it can be fast-tracked. The IQI is explained further below. We will ensure that a fast-track company is not worse off than if they had stayed in the process and received an IQI incentive.

Cost assessment

6.14. Under the RIIO framework the onus is on companies to demonstrate the cost-efficiency and long-term value for money of their business plans. We plan to use benchmarking of historical and forecast data as a means of informing our assessment of the DNOs' forecasts rather than as a mechanistic means of setting allowances.

6.15. We are developing a toolkit approach to cost assessment, based on the approach we used for RIIO-T1 and GD1. The toolkit comprises both total expenditure (totex) analysis and the use of disaggregated approaches. Totex analysis captures the key trade-offs between different areas of costs in establishing the overall levels of efficiency of network operators while disaggregated assessment involves separate reviews of operating and capital expenditure.

Efficiency incentives and IQI

6.16. We want to ensure that DNOs face strong financial incentives to control costs and implement approaches that provide good value for money for existing and future

consumers. We will therefore continue to use an efficiency incentive and the IQI, similar to those used in DPCR5, RIIO-T1 and GD1.

6.17. The efficiency incentive is a fixed and symmetric incentive for each DNO which gives the DNOs a clear and strong financial stake in restraining and, where possible, reducing, the costs of delivering outputs over the price control period. It also shares risk. Investors and consumers share the benefits when the company delivers outputs for less money than we envisaged when setting the price control. Similarly, investors and consumers share the additional costs if the company spends more money than envisaged. The higher the efficiency incentive rate, the more investors are exposed to the DNO delivering at higher cost than expected and the more they stand to gain if the DNO can deliver at lower cost.

6.18. We are making two changes to the way that the efficiency incentive rate is implemented compared to DPCR5:

- the efficiency incentive rate will be implemented through revenue adjustments made annually during the price control period
- the level of the efficiency incentive rate will determine the extent to which total expenditure (totex) is adjusted in light of a given over-spend or under-spend.

6.19. By applying the efficiency incentive rate to totex (ie operating and capital expenditure) we reduce the risk that DNOs may favour capital expenditure solutions. In addition our cost assessment will look across all areas of costs so that it does not skew companies' strategies towards certain categories of expenditure.

6.20. The aim of the IQI is to encourage companies to submit more accurate expenditure forecasts in their business plans. A necessary feature of the IQI is that the efficiency incentive rate for each company depends on the difference between its expenditure forecast and Ofgem's assessment of its efficient expenditure requirements. The smaller the difference, the higher the incentive rate. We will set the efficiency incentive rate for each company as part of the IQI.

6.21. Any DNO that is fast tracked will receive an efficiency incentive rate of 70 per cent. Non-fast tracked companies will receive an efficiency sharing rate between 50 and 65 per cent (compared with 53 to 59 per cent in DPCR5), depending on the efficiency of their business plans.

6.22. We will set the break-even point in the IQI so that a DNO that forecasts in line with our view of the upper quartile and achieves that forecast would earn their cost of capital but not receive any additional reward under the IQI. Respondents to our September strategy consultation were concerned about this tightening of the break-even point. However we do not consider that it is appropriate to relax the IQI matrix. To do so would increase the reward/reduce the penalties for all companies, including those who provide less challenging forecasts, without changing the incentives.

6.23. The application of efficiency incentives and IQI are discussed in detail in the 'Supplementary annex - Outputs, incentives and innovation'.

7. Innovation

Chapter Summary

This chapter considers the role of innovation in achieving the RIIO objectives and specifically the adoption of a time-limited innovation stimulus that builds on, and replaces, the LCN Fund. Further details can be found in the 'Supplementary annex - Outputs, incentives and innovation'.

7.1. The DNOs are likely to need to innovate if they are to ensure the delivery of a sustainable electricity sector and that their services represent long-term value for money for existing and future consumers. In DPCR5 we introduced the LCN Fund to encourage the DNOs to sponsor projects which trial innovative technological, operating and commercial arrangements to facilitate the transition to a low carbon future. It is widely considered to have significantly improved the DNOs' attitude to innovation, knowledge sharing and collaborative working with third parties. We expect to see the results of learning from LCN Fund projects embedded in DNOs' business plans.

7.2. The RIIO model has a number of elements that are designed to drive innovation, including the longer price control period, the outputs focus and strong efficiency incentives. Companies may also highlight in their business plans where they propose to roll out innovative technology, techniques or commercial strategies but which pose higher costs in the price control period than the business as usual approach. In these cases we would expect DNOs to set out the longer-term business case for the innovation and to commit to outputs relating to this expenditure.

7.3. We will also take account of the level of past and future innovation funding provided to the DNOs in setting the efficiency frontier for the period (ie we would expect the innovation to drive more efficient costs).

7.4. However, where the commercial benefit of innovation is unclear, network companies may not have a strong motivation to pursue innovation in a timely way. The RIIO model therefore includes a time-limited innovation stimulus package that builds on the LCN Fund, to supplement the incentives inherent in the framework.

Time-limited innovation stimulus

7.5. In RIIO-ED1 (as with RIIO-T1 and GD1) we are introducing a time-limited innovation stimulus package consisting of an annual competition (NIC), a limited funding allowance (NIA) and a mechanism to fund the roll-out of successful innovation trials. A key requirement of these mechanisms is that the projects funded generate learning for all the companies and that this learning is shared. NIC and NIA projects will be part-funded, with the DNOs and partners providing at least 10 per cent of the funding.

Network innovation competition (NIC)

7.6. At the beginning of RIIO-ED1 the LCN Fund and the Innovation Funding Incentive will be replaced[17] by a single annual competition in the electricity sector (the NIC) covering distribution and transmission. As part of the RIIO-T1 and GD1 reviews we have worked with a variety of stakeholders (including DNOs) to develop the NIC, and have consulted on key elements in separately from the main RIIO process.[18]

7.7. The NIC is an annual competition for funding larger-scale innovative projects that have the potential to deliver carbon or other environmental benefits to consumers. It adopts many of the principles established in the LCN Fund, such as partnership working and shared learning. It will also be open to other network licensees[19] to apply for project funding.

7.8. The electricity NIC will start in April 2013 with the commencement of the transmission price control period, RIIO-T1. The DNOs will join the NIC at the start of RIIO-ED1. The total amount in the combined electricity NIC for 2015-16 and 2016-17 will be £90m pa which will be available to fund projects proposed by electricity transmission and distribution licensees. This includes the £28m pa already set for the duration of RIIO-T1.

7.9. We will set the NIC funding for 2017-18 onwards based on a review of value for money from completed LCN Fund projects. This revised amount, which could be profiled, will be at least £28m (the amount set in RIIO-T1). Importantly, any of this funding would only be disbursed through the NIC if there are projects of sufficient quality and consumer benefit. Most respondents to our September strategy consultation stressed the need for ongoing innovation by the DNOs, and advocated the £90m limit. However some respondents were concerned about potential inefficiencies in the use of innovation funding – we will consider this as part of the LCN Fund review.

7.10. The funding for the selected NIC projects will be recovered through Transmission Use of System Charges, in line with our March 2012 decision.[20]

Network innovation allowance (NIA)

7.11. We have decided to fund a limited amount of innovation within DNOs' revenue allowance on a use-it-or-lose-it basis (the NIA). This will provide innovation funding for small projects with DNOs self-certifying against published criteria. DNOs have to set out an innovation strategy as part of their business plans. We will assess the

[17] The last LCN Fund competition will be run in 2014, with projects funded in 2015-16.
[18] http://www.ofgem.gov.uk/Networks/nic/Pages/nic.aspx
[19] Offshore transmission operators from 2013 and independent network operators, IDNOs, from 2015.
[20] http://www.ofgem.gov.uk/Networks/nic/Documents1/March%20decision%20document%20Final.pdf

quality of these strategies, and based on the assessment set the NIA for each DNO at between 0.5 and 1 per cent of base revenue, depending on the quality of their strategy. The 'Encouraging innovation' chapter of 'Supplementary annex – Outputs, incentives and innovation' sets out more detail on what the information strategy should contain.

Innovation Roll-out Mechanism (IRM)

7.12. We consider that there are strong incentives for DNOs to roll-out successful innovation projects. They can base their ex ante funding request in their business plans on utilising innovative approaches and techniques. Within the price control period, where innovation projects prove that a new technique or practice can lower costs or help the DNO better meet its outputs, the DNO will be incentivised to realise those savings through the efficiency incentive which allows the DNO to share the benefits with consumers.

7.13. However, we recognise that there may be occasions where successful innovation does not provide sufficient benefits for the company to fund its roll-out, even though it would provide wider environmental benefits. We will therefore adopt the Innovation Rollout Mechanism (IRM) (as in RIIO-T1 and GD1) to enable companies to apply for additional funding within the price control to roll-out a proven innovation where the innovation meets defined environmental criteria.

7.14. DNOs will be able to apply for funding in two windows during the price control period. Projects will need to demonstrate carbon or other environmental benefits and long-term value for money. The funding requirement will also need to be material and result in outputs or other end products against which the roll-out will be assessed.

8. Managing uncertainty

Chapter Summary

Reflecting the principles outlined in the RIIO framework, this chapter outlines the specific mechanisms that we are including in the RIIO-ED1 control. It also sets out the scope of the mid-period review.

Uncertainty in setting price controls

8.1. There are always uncertainties about what will happen during the course of a price control period. During the control period factors will change which can impact a company's outputs and expenditure requirements. These risks are arguably greater under an eight-year price control than under a five-year one. Under RIIO, risks should be borne by the party best able to manage them efficiently. In some cases this will be the network company. In other cases it may be that risks are best borne by the consumer, or shared.

8.2. The RIIO framework includes a number of elements to help deal with uncertainty. The elements, which are discussed in this chapter, are:

- uncertainty mechanisms
- the potential for disapplication of the price control
- a tightly-defined mid-period review of output requirements.

8.3. The efficiency incentive, which shares any variations between actual and forecast expenditure between the DNOs and consumers, also helps to reduce the impact of uncertainty. (The efficiency incentive is discussed in Chapter 6.)

What are uncertainty mechanisms?

8.4. We use the term 'uncertainty mechanisms' to cover a range of mechanisms which allow changes to the revenues a network company is allowed to collect in light of what happens during the price control period. These include:

- volume drivers - which link revenue allowances to a significant change in volumes
- revenue drivers - which link revenue allowances to specific measurable events which are considered to influence costs
- specific re-openers - provisions to re-set the revenue allowances (or the parameters that give rise to revenue allowances) at a specific date and/or upon crossing a specified threshold
- pass-through items - elements where any changes in costs are recovered fully from customers
- indexation - the adjustment of an economic variable so that the variable rises or falls in accordance with the rate of inflation

- logging-up - a provision under which a company will be compensated for all, or part, of its actual expenditure on a particular activity or area, through the revenue allowance set at the next price control review
- rolling average - an average of a specified number of data points which is updated continuously to reflect the most recent data.

Uncertainty mechanisms under RIIO

8.5. The use of uncertainty mechanisms may benefit consumers in a number of different ways. For example, contributing to a lower cost of capital and reducing consumers' exposure to forecasting uncertainty at the price control review. However, they may also bring downsides, such as undermining efficiency incentives, introducing complexity and risks of unintended consequences, as well as price-volatility for network users and consumers.

8.6. The overarching principle for uncertainty mechanisms under the RIIO model is that we expect network companies to manage the uncertainty they face. The regulatory regime should not protect network companies against all forms of uncertainty. The use of uncertainty mechanisms should be limited to instances in which they will deliver value for money for existing and future consumers while also protecting the ability of networks to finance efficient delivery.

8.7. The RIIO framework calls for:

- a clear justification of the need for each uncertainty mechanism
- design of each mechanism to mitigate the potential downsides
- a coherent approach across uncertainty mechanisms.

Proposed uncertainty mechanisms

8.8. DNOs can, as part of their business plans, set out which uncertainty mechanisms they are seeking to use to help them manage risk and what benefits these would bring for consumers (eg enabling a lower cost of capital). Ultimately we will decide whether to accept the companies' proposals.

8.9. Our 'Supplementary annex - Uncertainty mechanisms' sets out a detailed explanation of the mechanisms that we believe are in the interests of consumers for RIIO-ED1. Some are retained from DPCR5, since we judge that the particular uncertainty still exists and the mechanisms are still appropriate.

8.10. Others are new, three of which (cost of debt, innovation roll-out and pension deficit) match mechanisms in RIIO-T1 and GD1. The remaining mechanisms are to cover any unanticipated DNO costs of the smart meter roll-out and the costs of smart meter data (up to the point at which DNOs can generate benefits).

8.11. The mechanisms for RIIO-ED1 are set out in Table 8.1 below.

Table 8.1: Summary of proposed uncertainty mechanisms for RIIO-ED1

type	area covered	frequency
mechanistic		
indexation	RPI indexation of allowed revenues Cost of debt	annual
pass through	Business rates Ofgem licence fees DCC fixed costs	annual
volume driver	Smart meter roll-out costs	annual (above a defined threshold)
assessed		
reopener	Street works Enhanced physical site security High-value projects	Single window - 2019
	Load related expenditure	2017, 2019
	Innovation roll-out mechanism	2017, 2019
	Pension deficit repair mechanism	2016, 2019, 2022
trigger	Tax	at any time

8.12. In September we consulted on options for a volume driver to mitigate the uncertainty around the volumes of low carbon technologies that will connect in RIIO-ED1, and their impact on the networks. We set out in the consultation that we had reservations about the proposals, and these reservations were echoed by consultation respondents.

8.13. Following further investigation of options, and also considering the risk of boundary issues between different uncertainty mechanisms all dealing with aspects of load related cost uncertainty, we have decided to remove the DPCR5 high-volume low-cost connections volume driver and not to implement a low carbon technologies connections driver. Instead we are increasing the scope of the load related expenditure re-opener to cover these areas. This will avoid a DNO being able to gain if projects move from one category to another. For example, if a project moved from general reinforcement to connections the DNO would keep their share of the unspent reinforcement allowance whilst getting additional funding via the connections volume driver.

Disapplication of the price control

8.14. During a price control review we seek to provide a licensee with a revenue stream that is expected to be sufficient to enable it to finance efficient delivery of its obligations. This is in the interests of consumers. If circumstances arise during the control period meaning that the revenue allowance set at the price control review is insufficient to enable an efficiently managed company to finance its regulated activities, then we will consider requests from that company for amendments to its price control. This process is a way of managing the impact of highly significant, but

unpredictable, events which could occur during the price control period. We expect the use of this mechanism to be rare.

8.15. In our 'Arrangements for responding in the event that an energy network company experiences deteriorating financial health' document[21] we set out the types of circumstances under which we will reopen a price control and the associated process.

Mid-period review of outputs

8.16. Recognising the scope for significant changes in outputs during an eight-year price control period, we will carry out a mid-period review of output requirements for RIIO-ED1 in 2018. The scope of this review will be restricted to material changes to outputs that can be justified by clear changes in government policy, and the introduction of new outputs that are needed to meet the needs of consumers and other network users. This is the same scope that we adopted for RIIO-T1 and GD1.

8.17. We will use a qualitative assessment to decide whether there is a material change that requires a mid-period adjustment to outputs. In making our decision, we will consider the risks and downsides of potential changes. For example instability of the outputs, reducing incentives to improve output performance and administrative costs.

8.18. The review process will be initiated with an open letter consultation in January 2018. Any changes arising from the mid-period review will be implemented from 1 April 2019. We will ensure that our decision on proposed changes, if any, to output requirements, is published in sufficient time so that the DNOs can provide adequate notice of changes to their charges.

8.19. The majority of responses agreed with our proposals on the mid period review as set out in our September strategy consultation. Some respondents suggested using the mid-period review to look at the effectiveness of RIIO-ED1 outputs. However, as noted above, the mid-period review is intended to cover external factors affecting the operation of the RIIO-ED1 price control. It is not an opportunity for either us or the DNOs to conduct a mini price review or re-open decisions taken in the RIIO-ED1 review.

8.20. We provide further details on the mid-period review in the 'Supplementary annex - Uncertainty mechanisms'.

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

9. Financing efficient delivery

Chapter Summary

This chapter sets out the main financial issues affecting RIIO-ED1. These are the basis for using economic asset lives to set depreciation allowances, the approaches for calculating the cost of debt, the cost of equity and for setting the allowed return.

Financeability under RIIO

9.1. We are committed to ensuring that efficient companies are able to finance themselves (both through debt and equity). The RIIO decision document sets out a number of principles to establish a sustainable longer term package of financeability parameters aimed at ensuring that the required network expenditure can be effectively financed:

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

9.2. The 'Supplementary annex - Financial issues' provides more details on our decisions on these issues and the financial methodologies including tax, pensions and the regulatory asset value (RAV).

Capitalisation policy

9.3. Under the RIIO framework, we add a fixed proportion of costs to the RAV in order to ensure companies face equal incentives in choosing between operating and capital solutions. The percentage of costs capitalised reflects the expected share of companies' capital expenditure in total costs, to ensure that current and future consumers bear a fair share of costs.

9.4. This policy is already in place for DPCR5. However, not all costs are subject to this capitalisation. For RIIO-ED1 we are removing any outstanding boundary issues and including all costs in the capitalisation process. DNOs will need to set out what they think the appropriate capitalisation proportion is in their business plans.

Asset life and depreciation

9.5. In the RIIO decision document we stated that we would use economic asset lives to set depreciation allowances. This is designed to ensure a fair spread of costs between current and future customers. The economic life takes into consideration both the technical life of the assets and the estimated period over which the assets will be usefully employed. During RIIO-T1 we commissioned a review of economic asset lives, and consulted on appropriate periods for all sectors, including electricity distribution. On March 2011 we published our decision[22] that we will use an average expected economic asset life of 45 years for new assets, with straight-line depreciation.

9.6. We stated that the new asset life will only apply to new expenditure from the commencement of RIIO-ED1 on 1 April 2015 and that existing assets will continue to use the existing 20-year asset life.

9.7. We also recognised that, even with the policy of applying the change in asset lives to new assets only, transitional arrangements may be required and that these may need to be over more than one price control period. Therefore DNOs can demonstrate in their business plans any transitional arrangements that they believe are necessary to ensure financeability.

The allowed return

9.8. Under the RIIO framework we are using an indexation of the cost of debt and will set the notional gearing on an assessment of the volatility of the cashflows faced by each business. We will need to balance a number of items in coming to a view on the appropriate notional gearing including the riskiness of the cashflows, equity and credit metrics, transitional arrangements and the cost of equity. These are described further below.

Notional gearing

9.9. Under the RIIO model we continue to use a notional gearing assumption. This will be based on an assessment of the risk of DNOs' cash flows. We will not be able to determine the appropriate level of notional gearing until we have seen and assessed DNOs' business plans. Indeed, the DNOs themselves will need to set out what they think the appropriate level of gearing is in their business plans.

9.10. At this point we are therefore focussing on setting out the approach we propose to use to determine appropriate notional gearing. This approach is set out in more detail in the 'Supplementary annex – Financial issues'.

[22] Following a review of economic asset lives, on 31 March 2012 we published our 'Decision letter on the regulatory asset lives for electricity distribution assets' http://www.ofgem.gov.uk/Networks/Policy/Documents1/assetlivedecision.pdf

Cost of debt

9.11. Under the RIIO model, the cost of debt assumption included in the allowed return is based on the trailing average of a cost of debt index, with revenues updated annually to reflect changes in the index. As for RIIO-T1 and GD1 we will introduce an uncertainty mechanism to enable the cost of debt to be adjusted each year based on the iBoxx non-financials 10+ maturity series for a range of broad 'A' and broad 'BBB' credit ratings. Further details of the index are set out in the 'Supplementary annex – Financial issues'.

9.12. DNOs raised concerns in response to our September strategy consultation that the length of the simple trailing average does not reflect the actual maturity of network company debt and consequently the index does not account for embedded debt that was efficiently incurred more than 10 years ago. They also argued for the inclusion of an allowance for debt issuance and other auxiliary costs in the cost of debt index. At this stage we are not convinced by DNOs' arguments that they are different to the GDNs or transmission companies. We are therefore continuing with the index set out for RIIO-T1 and GD1. However, DNOs may, if they consider they have exceptional circumstances, suggest and justify modifications to the index in their business plans.

Cost of equity

9.13. As highlighted above, in the RIIO model we need to ensure that there is consistency and balance between the cash flow risk faced by companies, the level of notional gearing and the cost of equity. At this stage in the process our cost of equity assessment considers only the market factors, our RIIO-ED1 package and the risk generally experienced in the recent past by regulated businesses.

9.14. We think a cost of equity range of 6.0 - 7.2 per cent (post-tax real) is appropriate for the DNOs in RIIO-ED1. We consulted on this in our September strategy consultation and it is the same range that we set out in the RIIO-T1 and GD1 Strategy Decision. It was largely supported by respondents to the consultation. DNOs will need to set out in their business plans what they think is an appropriate cost of equity consistent with the cash flow risks.

Other financial issues

9.15. For other financial issues (including pensions, tax and RAV) we propose largely to follow established policies and procedures which are set out in full detail in the 'Supplementary annex - Financial issues'.

10. Next steps

10.1. In the next stage of RIIO-ED1, the DNOs will be required to finalise their well-justified business plans, based on the decisions set out in this document. We expect the companies to continue their stakeholder engagement during this period. The DNOs have to submit their business plans to Ofgem by 1 July 2013, and will be expected to publish the plans on their websites at the same time.

10.2. We will invite stakeholders to comment on the published plans.

10.3. Following submission of the plans we will begin the process of assessment to determine whether any company's plan is suitable for lighter-touch treatment or fast-tracking. We will publish our assessment in October 2013, with the Draft Determination of any DNO we are proposing to fast-track. This will be followed by a Final Determination (if relevant) for these fast-tracked companies in February 2014.

10.4. We will also start work to draft and modify the licence conditions required to implement RIIO-ED1 following the publication of this document. We will form a working group with the DNOs to advise us. We will start the development of the RIGs and other associated documents for RIIO-ED1 at the same time.

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

- the next meeting of the PCRF in summer 2013
- further meetings of some of the working groups to develop further thinking on more detailed implementation of policy, including details required for licence drafting
- an opportunity for the DNOs to meet with our Committee of the Authority in autumn 2013.

Appendices

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Appendix 1 – Summary of consultation responses

1.1. We received 49 responses to our September strategy consultation. Responses were received from DNOs, National Grid, DECC, environmental groups, consumer groups and other stakeholders. Not all respondents answered each of the questions set out in the strategy consultation. Non-confidential responses are published on our website as associated documents to the strategy consultation.[23]

1.2. The following is a summary of those responses which were received. We have summarized the views of respondents against each of the questions set out in the consultation.

Chapter 3 – Incorporating stakeholders' views

Question 1: Do you have any comments on our stakeholder engagement approach?

1.3. Most respondents supported our approach to stakeholder engagement. In particular, respondents noted the effectiveness of our multilayered approach and the success of the CCG, PCRF and Smart Grid Forum as tools for stakeholder engagement.

1.4. Five respondents raised concerns about our approach. The main concern was ensuring that all stakeholders are able to participate effectively in the process, specifically in relation to the expertise of the DNOs. Three suppliers were critical of our approach. Two felt that suppliers should be better represented in the process. Another expressed concerns that the process could be 'locked down' to meaningful stakeholder engagement at an early stage. One DNO stressed the importance of giving equal opportunity to all stakeholders.

Question 2: Do you have any views on how our engagement process or that of the DNOs could be made more effective?

1.5. Although mostly without comment, a number of respondents raised suggestions on ways in which the engagement process could be made more effective. On the overall process, one DNO advocated a non-prescriptive approach. Another suggested that Ofgem work alongside the DNOs to deliver an overall communications plan. One supplier proposed that Ofgem produce an evaluation of stakeholder engagement in the process.

[23] http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=36&refer=Networks/ElecDist/PriceCntrls/riio-ed1/consultations

1.6. A number of respondents commented on the need to ensure that all types of stakeholders are able to engage effectively in the process. One DNO felt that there was a lack of engagement with the investor community. Two respondents highlighted the need to check the views of national stakeholders against those of local stakeholders. A number of respondents expressed concern that the process was too DNO-focused and that steps should be taken to ensure that limited technical expertise does not act as a barrier to meaningful engagement from other stakeholders.

Chapter 4 – Form and structure of the price control

Question 1: Do you have comments on the form or structure of the price control?

1.7. Most respondents approved of the form and structure of the price control set out in the September strategy consultation. Respondents felt that it provided an appropriate framework for DNOs to meet the challenges facing electricity distribution. All respondents supported the proposed eight year price control period, apart from one who felt that it should be kept at five years until RIIO-ED2. The DNOs were supportive but made some suggestions, such as ensuring that the cost of capital reflected their perceived increased risk of an eight-year price control and putting in place appropriate incentives and uncertainty mechanisms.

Question 2: Do you agree with our proposed changes to the RIIO-ED1 timetable?

1.8. The DNOs broadly agreed that our proposed changes to the timetable were appropriate. One highlighted that the timetable for actions was challenging. Another felt that individual licensees within a group need the ability to be fast tracked. A transmission operator (TO) supported the principle of no negotiation before fast track, but said that Ofgem needs to state whether being fast tracked applies at a group or licensee level.

1.9. Suppliers who responded to this question were more critical. Two suppliers noted that allowed revenues/ tariffs would not be visible until too late. One of these respondents raised concerns about the impact of appeals on timescales. Another supplier felt that there was too little time allocated in which stakeholders could comment on DNO's business plans.

Question 3: Do you have a view on the materiality of potential changes in allowed revenues/charges between price controls? Do you have proposals to address this?

1.10. A number of respondents expressed concern about the materiality of potential changes in allowed revenues/charges between price controls and the importance of taking steps to maximise certainty and minimise volatility. One DNO highlighted that suppliers want sufficient notice on the potential magnitude of any change, and proposed that this could be provided if decisions regarding allowed revenue are made as early in the RIIO process as possible. Two other DNOs supported the RIIO process, including business plans, for providing enhanced transparency and

predictability; one of which noted that the early fixture of revenues was therefore not required.

1.11. Suppliers responded that the materiality of potential changes is not yet known and that they need certainty on future allowed revenues. Two suppliers proposed agreeing first year allowed revenues based on July business plans, which could then be reconciled to any changes in later years of RIIO-ED1. One consumer group also expressed concerns about volatility.

Chapter 5 – Ensuring output delivery

Question 1: Do you consider that the proposed outputs and associated incentive mechanisms, taken together with other elements of the price control, will ensure that companies deliver value for money for consumers, and play their role in delivering a sustainable energy sector?

1.12. A broad range of responses was received to this question. A number of respondents stated that the approach was appropriate but that it was too early to say whether or not it will deliver value for money for consumers and help to deliver a sustainable energy sector. One consumer group, for example, stated that more information was needed on the materiality of different incentives to make such a judgement.

1.13. One of the DNOs expressed concern that the reward package was not commensurate with increased levels of risk under the RIIO price control. Another stressed that the overall level of incentives should not reduce from DPCR5 levels. One respondent felt that the proposed incentives to ensure investment in low carbon networks were insufficient and could lead to a delay in the take-up of low carbon technologies.

Question 2: Do you consider that the proposed outputs and incentive arrangements are proportionate (eg do we have too many or too few)?

1.14. The DNOs agreed that the proposed outputs and incentive arrangements are proportionate. In particular, one highlighted that the small number of outputs in each category allowed stakeholders to understand better the process and another stated that the proposals allow for DNOs to adapt to emerging stakeholder priorities.

1.15. One supplier raised a number of issues regarding the proposed outputs and incentive arrangements. It felt that IIS rewards appeared excessive and needed to include IQI, suggested that DNO incentive performance should be published annually, and expressed concern that customers should not pay twice for DNO innovation, eg through NIC/NIA and DNO incentives.

1.16. One consumer group felt that there was a risk that the level of flexibility suggested may encourage DNOs to innovate excessively at the expense of customers. Other comments from respondents remarked that there should be a

reward for long-term safety improvements and more focus on incentives to connect DG.

Question 3: Do you have any views on the proposed outputs and incentives?

1.17. A number of respondents provided detailed responses to this question. A broad variety of views were expressed regarding specific elements of the proposed outputs and incentives. The DNOs broadly approved of our proposals. One DNO mostly agreed with our proposals but felt that the combined package was too small. Another DNO thought that the IQI reward for fast-tracked companies should be increased. One DNO stated that there was no need for an incentive related to safety. Another did not agree with our losses proposals.

1.18. A number of respondents commented that there was a need for a stronger incentive to connect DG. One consumer group raised concerns that the proposed outputs could cause large increases in customer charges. It also noted that there should be more emphasis on how innovation could reduce the need for reinforcement. One environmental group felt that undergrounding should be extended to areas outside of NPs and AONBs.

Chapter 6 – Assessing efficient costs

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

1.19. Only the six DNOs responded to this question. No major objections to our approach were raised but they did make a number of suggestions. One noted that using a range of models is appropriate but highlighted that all aspects of efficiency should be covered by these models and that we should not use the average results across all models. Another questioned the appropriateness of using the upper quartile as the benchmark in all cost assessments. One respondent suggested changes to the overall toolkit approach, including the use of bottom up disaggregated totex benchmarking during the initial and non-fast track assessment.

Question 2: Do you have views on our proposed use of proportionate treatment?

1.20. Again, only the DNOs responded to this question. They were generally positive about our proposed use of proportionate treatment. A number of specific concerns were raised. One DNO felt that the timescales for the initial stage of assessment were ambitious and suggested that adequate guidance would be needed to ensure consistency across initial submissions. Two DNOs noted that there might not be sufficient opportunity to make changes to business plans following initial Ofgem feedback. One considered that fast-tracked business plans may still need changes in specific areas. Another respondent felt that the proposed shortened three-stage process for RIIO-ED1 might result in DNOs missing out on fast-track status because they would be unable to fine tune their business plans based on initial Ofgem feedback.

Question 3: Do you have any views on the criteria for assessing business plans?

1.21. Only the six DNOs responded to this question. They broadly agreed with the criteria for assessing business plans. One emphasised the importance of the entire assessment process being transparent across the DNOs. Other DNOs proposed specific alterations. For example allowing DNOs who are not granted fast track status due to a limited number of issues with their business plans to be able to benefit from the fast tracking IQI matrix once approved, and including a commitment to safety in the well-justified business plans as a necessary condition for fast tracking.

Chapter 7 - Innovation

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

1.22. Most respondents indicated that they believe innovation to be very important during the ED1 period and approved of the focus on innovation throughout our proposals. Two respondents felt that major innovation investment during ED1 could lead to inefficient investment as the uptake of low carbon technologies is still uncertain. One of these respondents commented that the investment should wait until the ED2 period when the challenges facing the distribution network are clearer. One respondent commented that Ofgem needs to be mindful of DNOs performance against incentive schemes where DNO innovation and improved performance has been made possible by customer funding from the LCN Fund and, in the future, the Innovation Stimulus.

Question 2: What should the funding threshold for the NIC be? Do you agree with our proposal to review it after two years to reflect learning from the LCN Fund?

1.23. Most respondents agreed with our proposed funding threshold for the NIC. Five respondents stated that the funding threshold should be at the high end of the proposed range (£90 million). One DNO felt that incentives were not strong enough for business as usual application of innovation. One supplier proposed that innovation revenues should be subject to a two year lag. Only one respondent, a consumer group, expressed a view that the proposed funding threshold was potentially too high.

1.24. All respondents who commented agreed with on our proposal to review the NIC after two years.

Chapter 8 – Managing uncertainty

Question 1: Do you have any views on the uncertainty mechanisms identified?

1.25. Only the DNOs responded to this consultation question. Most DNOs felt that additional areas needed to be included in the uncertainty mechanisms. One DNO identified a number of areas where we should modify our proposed approach to ensure the efficient allocation of risks between customers and companies. Another

DNO considered that clarification was needed for some of the uncertainty mechanisms, in particular smart meters costs. One respondent raised concerns over the timing of the reopener window with regards to data collection. Another stated that the High Value Project mechanism should include all associated indirects and should allow for outputs to be varied.

Question 2: Are there any additional uncertainty mechanisms required?

1.26. One DNO stated that no additional uncertainty mechanisms were required. Four DNOs proposed additional mechanisms. These suggestions included: reinstate the DG mechanism; add a smart meter reopener mechanism related to costs for DNO systems; cover additional risks, including transmission exit point charges, smart meter costs and black start costs; add a single mid-period review for submarine cables and the decommissioning of the embedded diesel power stations in Orkney and Western Isles, following completion of transmission reinforcements; include appropriate notification periods and smoothing or profiling of revenues to address potential variability and volatility of tariffs.

Question 3: Are there any mechanisms that we have included that are not necessary and why?

1.27. None of the respondents identified any mechanisms that we have included that are not necessary.

Chapter 9 – Financing efficient delivery

Question 1: Do you consider that our proposed package of financial measures will enable required network expenditure to be effectively financed?

1.28. There was a mixed response from the DNOs to this question. Four DNOs agreed with our overall approach. In particular, one DNO noted that our proposed package was broad enough to enable required network expenditure to be effectively financed, if modified appropriately for each DNO. Another felt that the early range on cost of equity would help to maintain certainty for investors in the closing stages of DPCR5. Two DNOs did not consider that our proposed package was appropriate. Both expressed concern that the financial measures proposed would increase risk.

1.29. One supplier supported our proposed package but felt that depreciation should be more closely aligned with the lifetime of the assets. Another supplier expressed the opinion that electricity distribution charges should decline over RIIO-ED1. National Grid stressed the importance of providing sufficient revenues, and not placing too much risk on companies, so as to ensure that necessary investment and maintenance programmes are implemented to the benefit of consumers.

Question 2: Do you have any views on our proposed approach to assessing the cost of equity and the associated range of 6.0-7.2 per cent (real post-tax)?

1.30. The DNOs, a TO and one supplier responded to this question. Responses from the DNOs were mixed. Four DNOs stated that there was much more risk and uncertainty for the network companies in RIIO-ED1 compared to DPCR5, which should be reflected in the allowed cost of equity. Two DNOs stated that the upper half of the published range is likely to prove appropriate to balance the added risks whilst another DNO stated that the cost of equity should be at the top half of the range to reflect the current market cost of equity.

1.31. One DNO supported the relatively tight cost of equity range at this early stage as it facilitates investor certainty in the closing stages of DPCR5. Another stated that the absence of clarity surrounding the assumed gearing makes it impossible to effectively assess the cost of equity.

1.32. One supplier expressed surprise at our proposed range for the cost of equity, commenting that it seemed to diverge from recent evidence, regulatory decisions, and the views of the Competition Commission. National Grid was broadly supportive of our proposed approach. It emphasised that the cost of equity must be assessed alongside notional gearing and risk or uncertainty in (notional) equity returns and that these risks are increased under the RIIO framework due to the longer duration and enhanced focus on outputs.

Question 3: Do you have any views on the other elements of our financeability proposals?

1.33. Respondents raised a variety of views in response to this question. Five DNOs expressed concern about the debt index. All felt that it did not provide on-going funding for issuance costs, or recognise costs of efficiently incurred debt from times that predate the index when interest rates were higher. Three DNOs proposed extending the trailing average of the cost of debt index to 20 years to smooth out movements in interest rates and more closely match the maturity of DNO debt. A TO commented on the need to make adjustments if RPI, when calculated on a new basis, is lower than in the existing methodology.

1.34. One environmental group suggested that there was need for a simple incentive on DNOs to encourage DG and to make viable, cost-efficient connection offers. Another respondent expressed concern with regards to our proposals to extending asset lives from 20 to 45 years.

Appendix 2 – Overview of the electricity distribution sector

What is electricity distribution?

1.35. Electricity distribution networks carry electricity from the high voltage transmission network to industrial, commercial and domestic users. Some generators (generally smaller scale) are connected directly to the distribution network. The distribution networks are owned and operated by privately owned companies (DNOs) who have territorial monopolies. Consequently, we regulate the revenues DNOs can recover from consumers and incentivise them to innovate and find new ways to improve their efficiency and quality of service – using the price control process. The DNOs' duties and obligations are set out in licences and legislation.

1.36. As illustrated in Figure A1.1 there are 14 DNOs within six ownership groups. Distribution costs account for about 18 per cent of electricity bills.[24] The current cost per average household is approximately £85 per annum. In return, DNOs are expected to deliver a safe and reliable supply and to respond effectively to requests for new connections, complaints and queries.

The current price control – DPCR5

1.37. The current, fifth electricity Distribution Price Control (DPCR5) set allowed revenues for the period from 1 April 2010 to 31 March 2015. The price control takes the form of a revenue cap which determines the maximum revenue a DNO can collect from its consumers. The price control formula allows for the allowed revenues to be updated annually for the change in the RPI. It also allows for changes in specific cost or revenue items that we were unable to forecast with certainty at the price review, and adjustments for rewards and penalties in relation to DNOs' performance in managing interruptions, losses and customer service.

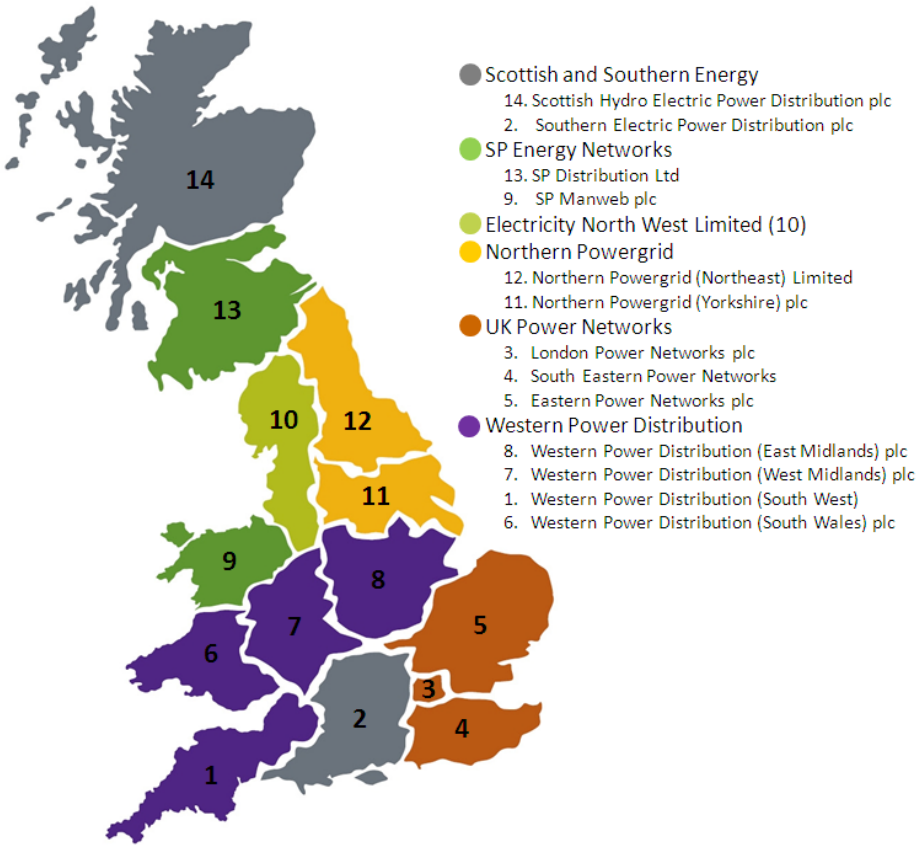
1.38. In DPCR5 we set total allowed revenues for the sector at around £16bn for the five-year period. Network investment constitutes the DNOs' major expenditure item at £7.6bn. Other major expenditure categories include operating expenditure (£3.0bn) and support costs (£5.2bn) (all 2011-12 prices).

1.39. DPCR5 was a significant step towards the RIIO framework. It had an increased focus on outputs and looked at the role DNOs would need to play to facilitate the transition to a low carbon economy. Therefore, where components of DPCR5 are working well and satisfy the RIIO principles (such as the interruptions incentive and

[24] http://www.ofgem.gov.uk/Media/FactSheets/Documents1/household-bills.pdf

the DNOs' reporting of their carbon footprint), we have sought to maintain them as part of RIIO-ED1.

Figure A1.1: DNO location and ownership



1.40. We require the DNOs to report financial and performance data to us on an annual basis to allow us to monitor their performance against the regulatory settlement. As set out in the Electricity Distribution Annual Report for 2010-11[25] DNOs are generally showing improved performance against reliability and availability measures and are engaging well in the environmental arena.

25 http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/DPCR5/Documents1/Electricity_Distribution_Annual_Report_for_2010_11.pdf

Appendix 3 – Smart Grid Forum (SGF)

In conjunction with DECC, we established the SGF to look at the policy and regulatory implications of smart grids. The SGF work was divided into six work streams; initially focussed on informing RIIO-ED1. We have provided further details on the key work streams (WS1, WS3 and WS6) relating to RIIO-ED1 below.

- **WS1**: Assumptions and scenarios – DECC has led work on developing four national scenarios around the potential take up of low carbon technologies, which the DNOs have translated into scenarios for their network areas. These scenarios have been updated since the publication of our September strategy consultation, although the general trends remain the same.

- **WS3** – Developing Networks for Low Carbon – the DNOs are leading this work and have commissioned the creation of a model (the 'Transform model') to evaluate the network impacts of the assumptions and scenarios from WS1 and assess the costs and benefits of different smart grids solutions. Further information can be found at: http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=47&refer=Networks/SGF/Publications. Given the input from a variety of respected smart grids experts, we expect the DNOs to use this model when justifying smart grids expenditure in their business plans. First indications are that investing in some level of smart grids is likely to be justified irrespective of the volume take up of low carbon technologies, but that it is worth waiting until we have more future certainty (ie RIIO-ED2) before embarking on a wholesale roll-out.

- **WS6** - Commercial and Regulatory. This work stream brings together stakeholders to investigate the potential commercial and regulatory challenges of implementing the smart grid solutions (including demand side response). The work stream published a report in August 2012. We have used it to inform the RIIO-ED1 policy development. This concluded that there are few barriers to the deployment of smart grid solutions in RIIO-ED1. Many of those identified could be addressed by industry through existing governance arrangements for engineering recommendations and charging methodologies. The report also highlighted that there are a lack of commercial mechanisms to enable parties to maximise the use of smart grid solutions. The work stream is in the process of scoping out a work programme which will assess the development of smart grids, particularly in terms of how customers will engage with smart grids.

Further information and reports can be found on the Ofgem website at: http://www.ofgem.gov.uk/Networks/SGF/Pages/SGF.aspx

Appendix 4 – Assessment criteria

Table A1.1 sets out the five core criteria against which we will assess the business plans. It includes the key questions we will consider in assessing each DNO's business plan against the criteria. In order to be fast-tracked, DNOs must demonstrate that their plan meets the criteria in all of the sections listed below.

Table A1.1: Criteria for business plan assessment

Process: Has the DNO followed a robust process?
Is the business plan clearly presented, with all key content included?
Has the DNO engaged with stakeholders, and explained how this has influenced its business plan?
Has the DNO submitted, and justified, all data tables and the PCFM?
Does the business plan provide a strategy for long-term delivery?
Outputs: Does the plan deliver the required outputs?
Has the business plan covered the outputs specified in our strategy decision or provided clear and compelling justification for any departures from the strategy decision?
Has the DNO explained the resource implications for delivery of each output identified?
Has the DNO explained how it will deliver outputs, and justified output baseline/forecast?
Has the DNO explained the quality of its existing outputs and secondary deliverable information (including information on asset health, criticality and asset risk) and how it plans to improve this information in future?
Resources (efficient expenditure): Are the costs of delivering the outputs efficient?
Has the DNO demonstrated that cost projections are efficient?
How does the plan compare with others/does it reflect wider best-practice?
Has the DNO demonstrated that their financial costs are efficient (eg through market-testing)?
Has the DNO explained cost projections in context of historical performance?
Has the DNO demonstrated a consideration of alternative approaches to achieving value for money in the delivery of its outputs?
Has the DNO clearly linked its expenditure to relevant outputs and secondary deliverables?
Resources (efficient financing): Are the proposed financing arrangements efficient?
Does the business plan conform with the financial policies specified in the strategy, are any departures well-justified?
Has the DNO provided evidence that financial costs are efficient?
Is the data in the plan consistent and has the DNO explained cost projections in context of historical performance?
Uncertainty & risk: How well does the plan deal with uncertainty & risk?
Has the DNO clearly articulated the key uncertainties it faces and considered how it will address them (eg including uncertainty mechanisms)?
Has the DNO considered risk and how to mitigate those risks?

Appendix 5 – RIIO-ED1 timetable

Phase	Year	Month	Milestone
Strategy Development	**2012**	**February**	Open letter consultation published (8 weeks consultation)
		September	Strategy consultation published (8 weeks consultation)
	2013	**March**	Strategy decision published
Initial Business Plan Assessment and Fast-Track Decision		**July**	DNOs submit & publish business plans Invitation for comments (4 weeks)
		September	DNO bilateral meetings with the CCG DNO bilateral meetings with the CoA
		October	Initial assessment and fast-track Draft Determination published (8 weeks consultation)
	2014	**February**	Fast-track Final Determination published
Draft and Final Determinations and Launch		**March**	Non-fast-track DNOs resubmit & publish business plans Invitation for comments (4 weeks)
		July	Non-fast-track Draft Determination published (8 weeks consultation)
		November	Non-fast-track Final Determination published
		December	Statutory Consultation (28 days) on licence modifications
	2015	**April**	Wednesday 1st - new price control (RIIO-ED1) commences