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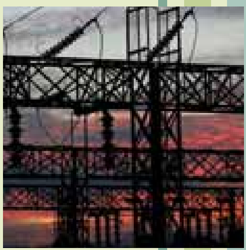
RIIO





Regulating energy networks for the future:
RPI-X@20 Recommendations

CONSULTATION

Target audience: **Consumers and their representatives, gas and electricity transmission and distribution companies, generators and offshore gas producers/importers, suppliers, shippers, debt and equity investors, those with sustainable development interests, academics and other interested parties.**

This document aims to provide an accessible overview of our recommendations. It sets out the 'what and the why' of our recommendations and is aimed at a wide range of interested parties. Details on how Sustainable Network Regulation would work are provided in more detail in our technical supporting paper. 'Implementing Sustainable Network Regulation' http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Implementation.pdf

We have worked closely with a number of stakeholders and interested parties to understand the issues and challenges facing the energy network companies. We have assessed a range of alternative regulatory frameworks and consulted widely on our developing ideas on specific aspects of the regulatory framework. We are keen to record our thanks to all of the companies, academics, organisations and individuals who have participated in and contributed to our review. Their comments have been taken into account as we have developed our recommendations.

Image of gas transmission pipe on front cover courtesy of National Grid

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Consultation

» **Reference:** 91/10
» **Publication date:** 26 July 2010
» **Deadline for response:** September 6 2010

Regulating energy networks for the future : RPI-X@20 Recommendations

Overview: RPI-X@20 is Ofgem's detailed review of energy network regulation. We are looking at how best to regulate energy network companies to enable them to meet the challenges and opportunities of delivering the networks required for a sustainable, low carbon energy sector. There is considerable uncertainty about the best way to meet these challenges whilst delivering value for money for existing and future consumers.

If Britain's energy network companies are to deliver the networks needed for a sustainable energy sector, the way we regulate them needs to change. This document aims to provide an accessible overview of our recommendations, for consultation, on a new regulatory framework - Sustainable Network Regulation using the RIIO model - for electricity and gas transmission and distribution network companies. We invite views on all aspects of our recommendations.

The Gas and Electricity Markets Authority (GEMA) is minded to implement this new framework but will reach a final decision in the autumn, taking account of responses to this consultation. The new regulatory framework would first be applied in the next transmission and gas distribution price control reviews (due to be implemented by April 2013) and in the sixth electricity distribution price control review (DPCR6, due to be implemented by April 2015).

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Associated documents

- Regulating energy networks for the future: RPI-X@20 Recommendations - Implementing Sustainable Network Regulation
  http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Implementation.pdf
- A Guide to Price Control Modification References to the Competition Commission - Licensee and Third Party Triggered references (Draft)
  http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Mod%20guidance.pdf
- Regulating energy networks for the future: RPI-X@20 Recommendations - Impact Assessment
  http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Impact.pdf
- Glossary
  http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/rec%20glossary.pdf
- Emerging Thinking consultation (January 2010)
  http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=42&refer=NETWORKS/RPIX20/CONSULTDOCS
- Principles, Process and Issues consultation (February 2009)
  http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=76&refer=NETWORKS/RPIX20/CONSULTDOCS
- Alistair Buchanan speech: Is RPI-X still fit for purpose after 20 years? October 2008
  http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=24&refer=NETWORKS/RPIX20/FACTSHEETS
- Alistair Buchanan speech: Ofgem's 'RPI at 20' project, March 2008
  http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=23&refer=NETWORKS/RPIX20/FACTSHEETS
- Other working papers, consultant reports and submissions by network companies and other parties can be found on the RPI-X@20 website: http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx
- A full list of all the documents produced for the RPI-X@20 review can be found at:http://www.ofgem.gov.uk/Networks/rpix20/Stakeholder/Documents1/RPI-X@20%20full%20list%20of%20paper.pdf

RPI-X@20 Recommendations

1 **Objective:** The overriding objective of energy network regulation is to encourage energy network companies to:

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

2 **Industry structure:** The framework would be implemented under the current industry structure. The Authority would keep under review the need to revisit the alignment of transmission and system operator incentives in gas and electricity, any formal electricity distribution system operator role, and other issues.

3 **Enhanced engagement:** Stakeholders are given greater opportunity to influence Ofgem and network company decision making through enhanced engagement.

4 **Third party modification requests:** We set out public guidelines on how the Authority would respond to a request from a third party that the authority exercise its discretionary power and refer a modification to the Competition Commission on the basis that our price control determination may operate against the public interest.[1] We would keep under review the guidance, including considering the merits of asking government to introduce a formal right of appeal through primary legislation. We would adapt to, and take account of, any changes that might arise if government consider legislative change in this area, for example in the context of consultation on and implementation of the EU third package.

5 **Outputs-led:** The price control would set outputs that network companies are expected to deliver to ensure safe and reliable services, non-discriminatory and timely connection and access terms, customer satisfaction, limited impact on the environment and delivery of social obligations.

6 **Retaining an ex ante control:** We would continue to set an upfront price control, incorporating a return on the regulatory asset value and inflation indexation. We think that it is appropriate to retain the retail prices index as the inflation index but will test our thinking over the summer before finalising our view.

7 **Length of the price control:** The price control would be set for eight years, with provision for a mid period review of the outputs that network companies are required to deliver. Uncertainty mechanisms would be implemented consistent with transparent RPI-X@20 principles on the use of such mechanisms. There would be scope to review the length of the control period at future price control reviews.

[1] Consideration of the public interest is referenced in the relevant powers in the Gas Act 1986 and the Electricity Act 1989 and will inform whether GEMA makes a price control modification reference.

RPI-X@20 Recommendations

8 **Proportionate assessment:** We would adopt a transparent and proportionate approach to assessing the price control package, with the intensity and timescale of assessment reflecting the quality of an individual company's business plan and its record for efficient output delivery. Under this approach, we may conclude the process early for some companies.

9 **Option to give third parties a greater role in delivery:** We would include, in the regulatory tool-kit, the option to require a company to provide market testing evidence that its proposals reflect long-term value for money. We would have the option to involve third parties in delivery and ownership of large and separable projects, where this is expected to drive innovation, long-term value for money and/or more timely delivery.

10 **Incentives:** There would be transparent rewards / penalties related to output delivery, including a backstop threat of using our existing powers for enforcement action and potential licence revocation for persistent non-delivery. There would be transparent, upfront, symmetric sharing rules for under-and overspend. Incentives would be calibrated to ensure they provide long-term value for money.

11 **Principles for ensuring efficient delivery is financeable:** We would ensure that efficient delivery of outputs is financeable by committing to publish the principles for setting a WACC-based allowed return to reflect the cash flow risk of the business over the long term. Financeability would be assessed in the round, including a cross-check against relevant credit rating ratios. As now, network companies would be expected to manage their business, including capital structure, efficiently to ensure they are financeable.

12 **Innovation stimulus package:** We would introduce a time-limited innovation stimulus for electricity and gas networks. These would be open to projects at any point in the innovation cycle and to both network companies and third parties for innovation related to delivering the networks required for a low carbon energy sector. The innovation stimulus package would include substantial prize funds to reward network companies and third parties that successfully implement new commercial and charging arrangements to help deliver a sustainable energy sector.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Contents

Executive Summary

Energy networks face a challenging and uncertain future

1 Britain's gas and electricity industries are facing their greatest challenge since the construction of the national grid and the conversion to North Sea gas. The demands of moving to a low carbon economy and meeting our renewable targets whilst maintaining safe, secure and reliable energy supplies will lead to profound changes in the way Britain produces, uses and transports gas and electricity.

2 The network companies that transmit and distribute our energy have a vital role to play. They provide the physical link between energy producers and their domestic and business customers. They will need to invest an estimated £32bn by 2020 to deliver the networks required for the low carbon economy and to maintain secure, reliable supplies.

3 The outlook is uncertain. How fast will change happen? Which technologies will prove the most effective in delivering low carbon energy? Network companies will have a key role in developing the answers. One thing is clear. Business as usual is not an option. Networks will need to be smarter, integrating increasing local renewable and intermittent sources of gas and electricity production and encouraging customers to make their demand more flexible aided by the rollout of smart meters.

4 To play a full role, network companies will need to build closer links with all of their customers from large businesses to domestic. They will need to plan for the long term, anticipating and responding to changes in current and future demand. They will have to remain flexible, keeping their options open to reflect the uncertainty they face. They will need to innovate in the way they design, build, operate and charge for their networks to deliver smarter networks and encourage customers to change their behaviour.

5 The scale of investment required means higher energy bills are almost certain. Network companies will have to show consumers that they are getting value for money over the longer term, setting out clearly what is being delivered and at what cost.

6 Companies will need to be able to finance the investment at a reasonable cost for existing and future consumers. We will need to ensure that the regulatory framework enables network companies to do this efficiently and rewards companies who outperform. This is consistent with delivering value for money for existing and future consumers.

The regulatory framework needs to change

7 The existing 'RPI-X' regulatory framework has served consumers well, delivering lower prices, better quality of service and more than £35bn in network investment since privatisation twenty years ago. But RPI-X was designed for a very different environment to the one we will face in the future. The regulatory framework needs to change to encourage network companies to deliver a sustainable energy sector and provide value for money.

8 The RPI-X@20 project has allowed us to thoroughly explore the role of network companies and the merits and drawbacks of the existing regulatory framework.
We examined a range of approaches, including what happens in other industries and countries.

9 We have developed our thinking in consultation with a wide range of stakeholders and interested parties, including network companies, government, investors, consumer groups and our Consumer First panel, users of the networks and their representatives, environmental organisations and academics. We have engaged effectively using a range of tools including workshops, small discussion groups, seminars, working groups, a working paper series, an active web forum, consultation documents and numerous bilateral meetings. We have welcomed and taken account of the ideas and feedback that we have received.

10 This document sets out for consultation our recommendations for a new regulatory framework, Sustainable Network Regulation. It covers all four network sectors – gas distribution and transmission, and electricity distribution and transmission – and is designed specifically to drive the smarter networks needed for secure and low carbon energy supplies. Indeed it puts sustainability alongside consumers at the heart of what network companies do.

Sustainable Network Regulation will deliver using RIIO

11 Sustainable Network Regulation would build on the existing RPI-X regulatory framework, retaining some aspects, evolving others and adding new dimensions where needed.

12 The new regulatory framework would follow better regulation principles, being more transparent, more accountable, more accessible and more proportionate. We, network companies and stakeholders would focus our attention where it is most needed to ensure value for money for today's consumers and future consumers. Regulatory reviews would be less frequent with a longer price control period. Our focus on outputs, rather than inputs, would encourage and deliver more effective engagement with, and focus on, the needs of existing and future consumers.

13 We would be committing to a price control framework that encourages network companies to deliver in response to commercial incentives with the potential to earn higher returns and face less intensive regulatory scrutiny if they innovate and outperform in delivering a safe, secure and low carbon energy sector and value for money. Companies that do not deliver would see lower returns, more intensive regulatory scrutiny and the risk that other parties would become involved in delivery of aspects of network services and, in extreme cases, enforcement action.

14 The new regulatory framework would be based on the **RIIO** model – **R**evenue set to deliver strong **I**ncentives, **I**nnovation and **O**utputs. The components are illustrated in Figure 1.

15 The Gas and Electricity Markets Authority (GEMA) will remain the decision maker on all aspects of the regulatory settlements for the energy network companies and, in particular, will continue to balance the interests of existing and future consumers.

16 But we recognise that making these decisions is becoming increasingly difficult. To maintain the legitimacy and accountability of our decisions, we need to understand fully the needs of stakeholders, allowing them to play a greater role in the decision making debate and, if they are unhappy with the outcome, make clear how they could challenge our price control decisions. We would set out guidance on how we would treat third parties' concerns about our final proposals, including how we would decide whether to modify the proposals and whether to refer the matter to the Competition Commission.

Figure 1: Components of the RIIO model

RIIO

Revenue

- Constraint on revenue set up front to ensure:
  - » Timely and efficient delivery
  - » Network companies remain financeable
  - » Transparency and predictability
  - » Balance costs paid by current and future consumers

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Incentives

- Deliver outputs efficiently over time with:
  - » Focus on longer term, including with 8 year control periods
  - » Rewards and penalties for output delivery performance
  - » Symmetric upfront efficiency incentive rate for all costs
  - » Use uncertainty mechanisms where add value for consumers

+

Innovation

- Technical and commercial innovation encouraged through:
  - » Core incentives in price control package
  - » Option of giving responsibility for delivery to third parties
  - » Innovation stimulus gives support and rewards for commercial innovation, building on LCN fund

+

Outputs

- Outputs set out in licence
- Consumers know what they are paying for
- Incentives on network companies to deliver
- Outputs reflect enhanced engagement with stakeholders

16 Sustainable Network Regulation is a comprehensive regulatory framework aimed at delivering real benefits for consumers - timely delivery of a sustainable energy sector at a lower cost to consumers than would be the case under the existing regimes. To deliver, network companies will need to change, bringing new ways of delivering into existing organisations. We need to encourage the change by providing commitment to allow companies that 'step-up' to be rewarded and by encouraging other stakeholders to join us in encouraging network companies to play a full role.

We welcome comments ahead of our final decision

17 GEMA will make its decision on the new regulatory framework in the autumn, taking account of the responses to this consultation. The framework will first be implemented in the forthcoming transmission and gas distribution price control reviews (TPCR5/GDPCR2). When implementing the framework we will ensure it is consistent with prevailing domestic and EU legislation, including the third package once implemented.

We welcome views on all of the issues set out in this document in particular on the individual recommendations. The deadline for submitting responses to us is September 6 2010.

Chapter 1
Introduction

Introduction

1.1 RPI-X@20 is Ofgem's comprehensive review of how we regulate Britain's energy networks[2]. We are looking ahead, on behalf of consumers, to ensure that we have a regulatory framework that can meet current and future challenges.

1.2 ***This paper sets out for consultation GEMA's 'minded to' decision to take forward our recommendations to implement a new regulatory framework - Sustainable Network Regulation - designed to promote smarter gas and electricity networks for a low carbon future***. GEMA will make a final decision on the new regulatory framework in the autumn, taking account of responses to this consultation. The framework that GEMA decides on will first be used at the next transmission (TPCR5) and gas distribution (GDPCR2) price control reviews (from April 2013) and then in the sixth electricity distribution price control review (DPCR6, from April 2015). We will consider implications of changes in the price control framework for independent network operators when we review their regulatory framework.

1.3 The recommended framework is broadly consistent with the proposals in our 'Emerging Thinking' consultation document (January 2010) and in our May 2010 working papers on longer-term price controls and financeability[3]. We have undertaken further analysis and stress-testing of the options and developed the principles to be applied at future price control reviews.

1.4 This document aims to provide an accessible overview of our recommendations and is aimed at a wide range of interested parties. We provide further details on how we envisage the regulatory framework would work in a more technical, detailed supporting paper on 'Implementing Sustainable Network Regulation'[4]. We are also publishing an Impact Assessment and draft guidance on how GEMA would consider requests for a price control licence modification reference to the Competition Commission[5].

1.5 The recommended framework can be brought in without legislation, although some aspects might be more effectively implemented through a change in legislation. We highlight these in the consultation paper. When implementing the framework at price control reviews we would ensure it was consistent with prevailing domestic and European legislation, and particularly the third package[6].

1.6 We believe that our recommendations on Sustainable Network Regulation provide a comprehensive and coherent package that would promote the delivery of a sustainable energy sector at value for money to consumers both now and in the future. ***We welcome views on all aspects of Sustainable Network Regulation***. Written responses should be submitted by September 6 2010.

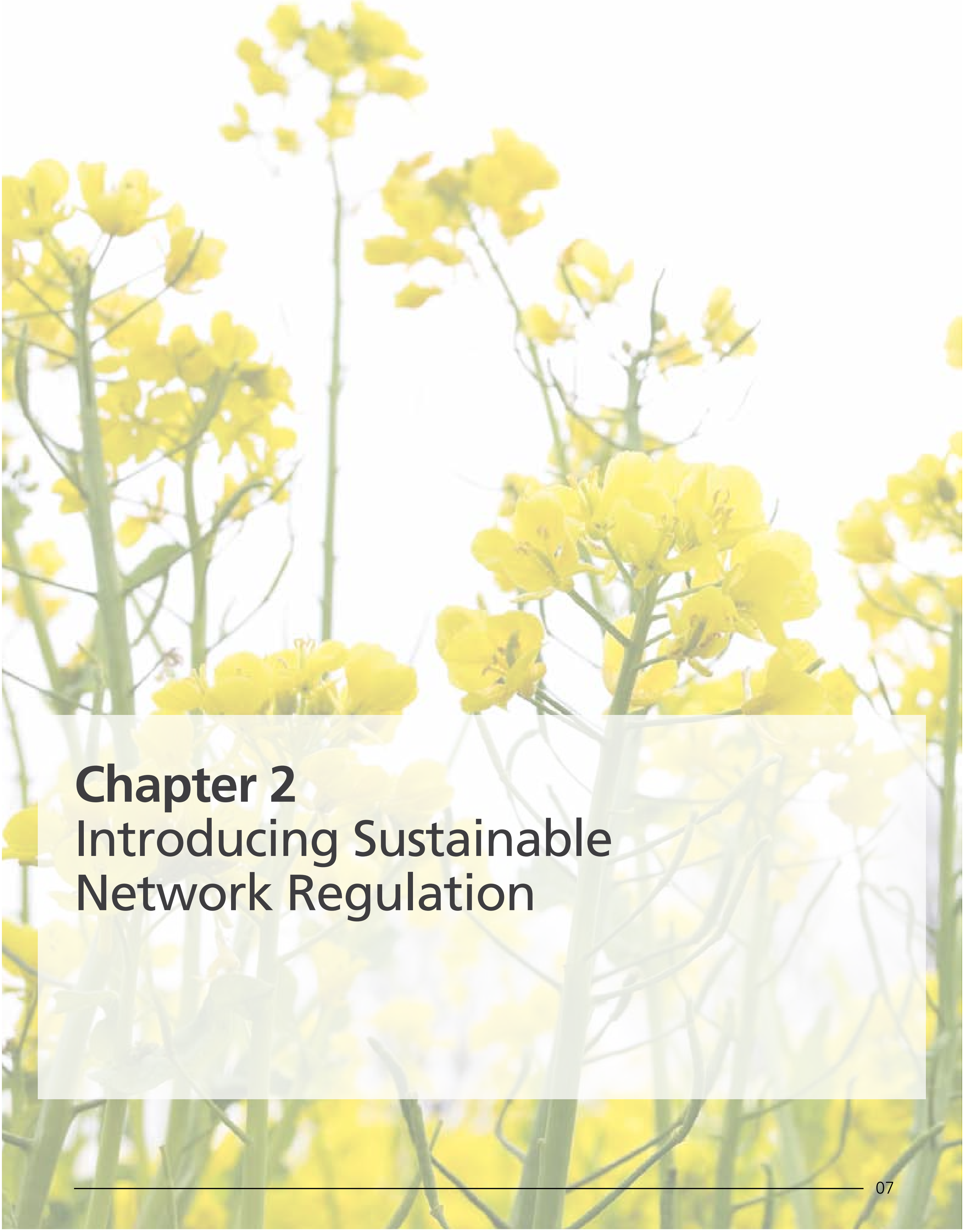
[2] We are looking at how to set price controls for the monopoly energy network companies (distribution network operators, gas distribution networks and transmission operators). We are not considering other aspects of how we regulate energy network services, including gas capacity auctions, gas entry and exit arrangements, electricity transmission access arrangements and system operator incentives. We are not considering regulatory arrangements for independent network companies in RPI-X@20. We will consider implications for regulation of Independent Distribution Network Operators and Independent Gas Transporters at a later stage.

[3] Links to these and other documents can be found in the 'Associated Documents' section of this paper.

[4] See, RPI-X@20 Recommendations - Implementing Sustainable Network Regulation http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Implementation.pdf

[5] See, RPI-X@20 Recommendations - Impact Assessment http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Impact.pdf and, A Guide to Price Control Modification References to the Competition Commission http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Mod%20guidance.pdf

[6] DECC is leading on the implementation of the Third Package in GB, which must be transposed into national law by 3 March 2011.



Chapter 2
Introducing Sustainable Network Regulation

Chapter 2 summary

We explain how energy network companies may need to change to meet the opportunities and challenges they face in delivering the networks needed for a sustainable energy sector. We provide an overview of our recommended new regulatory framework for energy network companies, Sustainable Network Regulation, confirm its objectives and discuss interactions between its implementation and the wider industry structure.

Recommendations in chapter 2

1 **Objective:** The overriding objective of energy network regulation is to encourage energy network companies to:

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

2 **Industry structure:** The framework would be implemented under the current industry structure. GEMA would keep under review the need to revisit the alignment of transmission and system operator incentives in gas and electricity, any formal electricity distribution system operator role, and other issues.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Introducing Sustainable Network Regulation

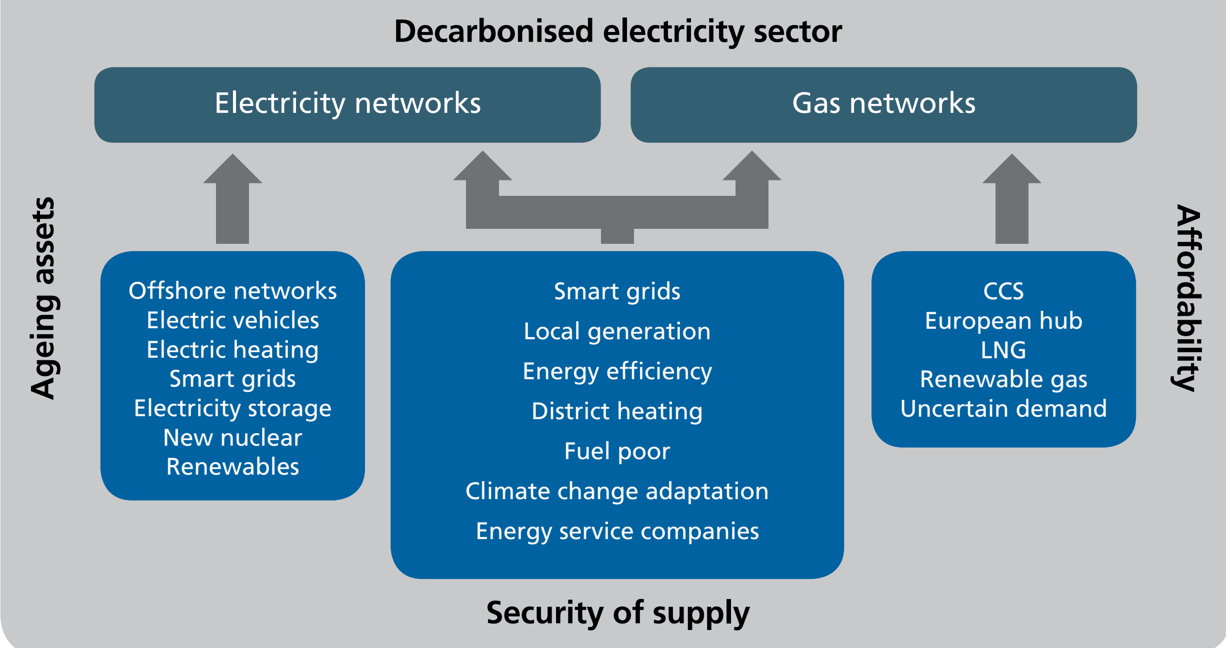
2.1 Energy networks are the backbone of the energy sector, providing the physical link between suppliers of gas and electricity and domestic and business consumers. The energy networks are owned and operated by privately owned companies who enjoy territorial monopolies.

2.2 They are subject to regulation by Ofgem, with their duties and obligations set out in licence conditions and legislation. This includes the duty to ensure that they are able to provide an economic and efficient service to those who wish to connect energy onto the network (generators in electricity, shippers in gas, independent network operators and interconnectors) and those that wish to take energy from the network (business and domestic consumers – with retail contracts with supply businesses – and interconnectors). To do this they must understand and anticipate the changing needs of consumers of network services are, and respond appropriately.

Changes in the energy sector

2.3 The energy sector is in a period of significant change. As shown in Figure 2, these changes are primarily driven by the need to deliver a low carbon economy - with a target of 80 per cent reduction in greenhouse gas emissions by 2050 and decarbonised electricity generation by 2030 – while maintaining security of supply. The drivers of change continue to evolve. Network companies and the regulatory framework will need to adapt accordingly.

Figure 2: Challenges facing the energy sector



Changes in the energy networks

2.4 These changes in the electricity and gas sectors are expected to alter the nature, scale and location of demand for network services. Network companies also need to make changes because of their own ageing assets. There is, as discussed in Appendix 2, significant uncertainty about what the networks need to do to meet these challenges and opportunities. But they are likely to need to:

- understand better the new and changing needs of existing and future consumers;
- invest in new capital assets and new operating solutions;
- undertake more innovation, both technological and commercial;
- focus on what is needed for the long term given the time horizons associated with the sustainable energy sector (e.g. 2050 and 2030 targets);
- continue to look for lower cost ways of delivering economic and efficient network services;
- consider alternative delivery options given uncertainty about how best to deliver; and
- develop new commercial relationships with users of the network and end consumers, to enable them to meet the challenges together.

2.5 Energy networks are vital to the delivery of the sustainable energy sector. Network companies can choose to rise to the challenges, taking a lead in delivery of a sustainable energy sector. Alternatively, they could choose to respond passively to demands placed on them or make choices that result in them becoming obstacles to delivery. We think it is important that they are rewarded for taking a leading role.

Figure 3: The case for changing the regulatory framework

RPI-X has delivered significant benefits for consumers:

Reductions in network charges

Improvements in operating efficiency

More efficient financing

Improved quality of service

Increased investment

Consumers have benefited from effective regulation alongside competitive markets

But

Stakeholders have suggested existing frameworks have led to:

Networks focused on 5 year price cycles

Networks focused on Ofgem not their customers

Limited consideration of innovation and 'how best to deliver'

Potentially limited appetite for risk

Bias for 'capex' solutions rather than non-network options

Limited focus on 'cross-sectoral' interactions

Mismatch between what we have and what we need

The case for changing the regulatory framework

2.6 In RPI-X@20 our focus has been on whether the existing 'RPI-X' framework would help or hinder energy network companies in meeting the challenges of the future at lowest long-term cost.

2.7 As discussed in 'Emerging Thinking', and illustrated in Figure 3, the existing regulatory framework has delivered well for consumers but it was designed for a different era. We do not think it would sufficiently encourage or reward network companies to take a leading role in meeting the challenges. It is important that the framework used to regulate network companies changes to encourage network companies to take on a full role.

What do we want the future regulatory framework to deliver?

2.8 The overriding objective of a future regulatory framework for energy network companies is to encourage them to:

- play a full role in the delivery of a sustainable energy sector; and
- deliver long-term[7] value for money network services for existing and future consumers.

2.9 It is in the interests of consumers that a company that delivers these outcomes is rewarded. Delivery will require significant investment and we will ensure that network companies that deliver efficiently are able to raise the required finance at a reasonable cost to existing and future consumers.

2.10 These objectives would be at the forefront of decision-making and we would consider, on an ongoing basis, whether and how they may need to change (e.g. if Ofgem's duties change). Discussions with stakeholders and the written responses to 'Emerging Thinking' signal widespread support for the regulatory framework to be designed and implemented to deliver these objectives.

Sustainable Network Regulation – the vision

2.11 Our recommended framework, Sustainable Network Regulation, is designed to drive smarter and more sustainable networks to deliver a secure and low carbon energy sector and long-term value for money for consumers. We would do this by having a transparent contract with network companies that sets out what they are expected to deliver and provides clear financial incentives for them to deliver long-term value for money for existing and future consumers.

2.12 Network companies, backed up by effective engagement with stakeholders and incentives, would work out how best to deliver. Companies that rise to the challenge and deliver for consumers would be rewarded, in terms of financial returns and a lighter touch regulatory approach that frees up management time to focus on running the networks.

2.13 Those that do not, would see real and material downside, including below average returns, greater regulatory scrutiny, greater risk that third parties are invited to take on responsibility for some aspects of delivery and, in extreme cases, the risk of enforcement action and potential licence revocation.

[7] 'Long term' could mean different things in different sectors; the relevant time scale will depend on the specific decisions being made. We would expect the length of time relevant for delivering value for money to be influenced by government targets for 2020, 2030 and 2050 and by the long-life of network assets (e.g. 30 to 40 years). It would also be influenced by the expected time over which new technologies and new ways of delivering would be expected to have an impact on costs (e.g. 10 to 15 years).

2.14 We would provide commitment to the transparent principles underpinning the framework, including strong incentives to deliver efficiently and clear principles on how we would ensure network companies that deliver efficiently could raise required financing at a reasonable cost to consumers. We would not micro-manage how networks make decisions, how they deliver or how they finance themselves. We would, however, take action on behalf of existing and future consumers, where network companies fail to meet the challenges.

2.15 The new regulatory framework would be based on the **RIIO** model – with **R**evenue set to deliver strong **I**ncentives, **I**nnovation and **O**utputs. We describe each of the components of the framework, shown in Figure 4, in the present paper and in our supporting paper. We recommend the same framework for the four energy network sectors. The way it is implemented may vary depending on the context and specific issues arising at price control reviews.

Figure 4: Components of Sustainable Network Regulation

Eight-year price control framework

- **Incentive-based** upfront control
- **Longer-term** context
- **Clear outputs** to be delivered
- **Rewards** for efficient delivery; penalties if not
- **Engagement** with consumers of network services
- Ofgem **proportionate assessment**
- Potential **Competition Commission reference**, triggered by network company or third party concerns

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Innovation stimulus package

- Outside of price control framework
- **Build on LCN Fund**
- **Innovation** to deliver sustainable energy sector
- Discretionary rewards for **commercial innovation**
- Open to network companies and **non-network parties**
- **One for gas and one for electricity**
- **Time-limited**

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Role for third parties in delivery (option in tool-kit)

- Option to ask companies to provide **market testing evidence**
- Option for **third parties to be responsible for delivery** only if:
  - » material and separable projects;
  - » expected long-term benefits greater than expected long-term costs; and
  - » no risk to timely delivery and system integrity
- Decision on role of third parties made at price control review (if use option)

2.16 It is a transparent, proportionate upfront price control framework that sets out:

- what outputs network companies need to deliver, reflecting views of stakeholders, the need to facilitate competition in supply (including potential competition in energy services) and statutory requirements on network companies and GEMA;
- an upper limit on the revenue network companies are allowed to raise from consumers over an eight-year period to deliver these outputs efficiently;
- clear principles on how the allowed return would be set and on how we would balance the revenue raised from existing and future consumers to ensure that efficient network companies are able to raise required finance at a reasonable cost to consumers;
- opportunities to earn higher returns by responding to incentives to deliver outputs efficiently over time, developing innovative (technical and commercial) delivery solutions where appropriate;
- risks of earning lower returns or potentially losing responsibility for aspects of delivery if outputs are not delivered or are not delivered efficiently;
- transparent conditions under which the price control might change during the price control period to reflect embedded uncertainty mechanisms;
- the potential for network companies and non-network parties to get partial financial support, and rewards, for technical and commercial innovation projects through an innovation stimulus package;
- the option for third parties to be more involved with delivery; and
- transparent principles on how we and network companies would effectively engage with stakeholders, and public guidance on how GEMA would consider price control modification requests from third parties reflecting legitimate and material public interest concerns with our final proposals.

2.17 We are building on the principles and practices of the existing RPI-X framework (see Appendix 3). We have taken the elements that deliver benefits effectively, adapted and developed other elements, and added new elements to enhance the framework that we have been using for more than 20 years. When implementing the principles of Sustainable Network Regulation at price control reviews we would ensure our decisions are consistent with prevailing domestic and EU legislation (including the third package).

Industry structure and implementation

2.18 Sustainable Network Regulation can be implemented effectively under the existing industry structure. The responses to our ‘Emerging Thinking’ consultation did not, in general, suggest that the existing industry structure would be a significant barrier to effective delivery of the objectives. Should there be changes in the industry structure (e.g. an increased role for energy service companies) these should be facilitated under Sustainable Network Regulation.

2.19 We will, however, keep under review the interactions between delivery of the objectives of the price control framework and the prevailing industry structure. In particular, we will keep under review the alignment of incentives between the transmission owners (TOs) and the national electricity transmission system (NETS) system operator (SO) and the gas national transmission system (NTS) SO and lessons from offshore transmission.

2.20 For example, we would observe in the business plans for TPCR5 the extent to which the TOs consider a wide range of options (e.g. charging and access rule changes as well as infrastructure solutions) for delivering outputs, including those relating to reliability and availability of network services. Where we have concerns that the incentives cannot be aligned appropriately within the existing industry structure, we would consider whether further change is warranted. We would consult thoroughly on any proposed changes and may if appropriate seek legislative change.

2.21 We will also keep any changes in the structure of distribution sectors under review. We expect to learn from experiences during the current electricity distribution price control period and from the use of the Low Carbon Network Fund (LCN Fund)[8]. We would also consider the implications of third package implementation.

Better regulation

2.22 Taking the views of stakeholders – including investors - and our duty to consider 'better regulation' principles, into account we have designed a framework that is transparent and proportionate, and provides greater certainty and predictability. The outputs-led approach, new business plans, proportionate assessment, and the longer price control period are designed to enable network companies, ourselves and stakeholders to focus effort where it is expected to add most value. We are committing to transparent principles that would underpin decisions at price control reviews. To ensure effective engagement we aim to continue to be transparent in our decision making.

2.23 We have sought to strike a balance between limiting the complexity in the framework and the need to ensure that the outputs regime and incentive mechanisms are sufficiently robust to protect consumers' interests. Where there is complexity it should be largely 'behind the scenes'; understood by Ofgem and network companies to ensure the incentives work as intended. Efforts would be made to ensure that we and the network companies explain the framework and what is being delivered in an accessible way to stakeholders.

[8] Further information on the Low Carbon Networks Fund can be found at: http://www.ofgem.gov.uk/Networks/ElecDist/lcnf/Pages/lcnf.aspx

Chapter 3
The price control review process and the role of stakeholders

Chapter 3 summary

We set out the proposed stages of the price control review and describe the expected role of stakeholders in the process. We explain how a decision by GEMA to refer a price control licence modification to the Competition Commission might be triggered by concerns raised by a network company or a third party.

Recommendations in chapter 3

3 **Enhanced engagement:** Stakeholders are given greater opportunity to influence Ofgem and network company decision making through enhanced engagement.

4 **Third party modification requests:** We set out public guidelines on how GEMA would respond to a request from a third party that it exercise its discretionary power and refer a modification to the Competition Commission on the basis that our price control determination may operate against the public interest[9]. We would keep under review the guidance, including considering the merits of asking government to introduce a formal right of appeal through primary legislation.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

[9] Consideration of the public interest is referenced in the relevant powers in the Gas Act 1986 and the Electricity Act 1989 and will inform whether GEMA makes a price control modification reference.

The price control review process and the role of stakeholders

3.1 Adopting Sustainable Network Regulation would have implications for the price review process, particularly in relation to how and when decisions relating to the price control are made. It is important that the transparency and legitimacy of our decision making are assured by the regulatory framework. In this context, we discuss the role of stakeholders in the price control review and explain how we would take account of public interest concerns raised by third parties.

Price review process

3.2 The price control review would be conducted within a similar timeframe to now; around two years. The move to an outputs-led framework, changes in how the price control would be set, and the role of stakeholders in the price control review would, however, change the timing of key stages of the review.

3.3 We would be conducting a more transparent and proportionate review, setting out at an early stage the outputs network companies would be expected to deliver and our proposed methodology. Network companies would set out and justify to us how they expect to deliver and what revenue they require to deliver efficiently. The main changes to the process would be as follows:

- We would publish our strategy for the review, including the outputs that we want network companies to deliver, early in the process to help them develop well-justified business plans. We would also set out our views on the cost of capital, incentive and uncertainty mechanisms, committing to these as far as possible.
- We would adopt a proportionate approach to assessing business plans. This may include reaching a price control decision early for the best performing companies.
- The methodology would be bedded down in advance of initial proposals to facilitate transparency and targeted discussions, allowing the latter part of the review to focus on the price control 'numbers'.
- Stakeholder engagement by network companies would be more prominent across the new process, backed-up by our enhanced engagement with stakeholders.
- Network companies and third parties would have the opportunity to raise a public interest concern with final proposals. This may result in GEMA deciding to make a price control modification reference to the Competition Commission.

3.4 Further details on the process are provided in Chapter 2 of our supporting paper.

Role of stakeholders in the price control review

3.5 Consistent with our proposals in 'Emerging Thinking', under Sustainable Network Regulation stakeholders would have greater opportunity to influence our and network company decisions through enhanced engagement. Details are provided in Chapter 3 of the supporting paper.

3.6 We would expect network companies to engage proactively with consumers on an ongoing basis, develop commercial relationships with users of the network that are focused on playing a full role in delivery of a sustainable energy sector, and build on and develop relationships with other key stakeholders (e.g. environmental interest groups). Where the needs of existing and future consumers (including network users) change we would expect network companies to respond and adapt their proposed delivery plans where this is consistent with providing long-term value for money.

3.7 We would provide them, through our business plan requirements and our proportionate approach to assessing price controls, with strong incentives to engage effectively at price control reviews and during the price control period, building on the approach used in the fifth electricity distribution price control review (DPCR5). This would help them to understand better the needs of their consumers and inform their consideration of how best to deliver high quality services at value for money.

3.8 We would expect them to show how information on consumer needs has fed through into decision making and justify any decisions that are different to those that stakeholders suggested were needed. We expect stakeholders will want sufficient information to enable them to understand what they are getting (outputs) and the potential impacts on charges.

3.9 Ofgem's enhanced engagement would be developed for each price control review, with the approach used reflecting the key issues and the key stakeholders. We would develop our tools for engaging with consumers, network users, government, and other stakeholders. We recognise the benefits of employing a variety of techniques, tailored to the needs of particular stakeholders and particular issues on which views are needed.

3.10 In many ways, it is about developing and building on the approaches adopted at recent price control reviews and in RPI-X@20. We would seek to ensure the effectiveness of our engagement by, for example, providing accessible information and a transparent timetable, focusing our engagement with different stakeholders on what matters most to them and making use of existing platforms as far as possible.

3.11 It is important that, as now, we work closely with government and other regulators (e.g. the Health and Safety Executive and Ofwat[10]) to ensure that prevailing legislation and developing government policy are reflected in the price control determinations. It is also important that network companies and other stakeholders have the opportunity to gain a better understanding of developing government policy relevant to sustainable energy network services.

3.12 In this context, we would consider at each price review how best to facilitate discussions between government and other parties involved in the review. The appropriate way forward would depend on any implications for independent regulation arising from implementation of the European third package.

3.13 We recognise that network users (suppliers, shippers, generators, independent network operators) and consumers will not always have the same interests, with differences at times reinforced by the industry structure and by arrangements for charging and connections. Today's consumers and network users may also have interests that are not always aligned with the interests of future consumers. Other stakeholder groups (e.g. environmental organisations) are also likely to have different interests to those of consumers.

[10] In future, given interactions between waste and energy, we may be engaging with Ofwat on new issues.

3.14 In this context, it is important that GEMA, with its duty to protect the interests of existing and future consumers, continues to take a balanced approach to assessing the price control. We would provide a transparent explanation of how we have made our decisions and how we considered the balance between existing and future consumers. This would be particularly important in situations where GEMA makes a decision that is different to what is proposed in a company business plan or to what has been put forward by stakeholders when engaging with Ofgem.

Third parties and Competition Commission references

3.15 In 'Emerging Thinking' we consulted on the potential advantages and disadvantages of allowing third parties to challenge our final price control proposals. We explored options, including the role of Judicial Review, under existing legislation[11] and the option of a more tailored formal right of appeal, which would require legislative change.

3.16 We have considered the responses to the consultation and further analysed the options. We set out our proposed approach here, with further details provided in Chapter 4 of the supporting paper.

3.17 If a network company does not agree to our final price control proposals, or the associated licence modification, GEMA has the option of making a price control modification reference to the Competition Commission. There is a common understanding of how our decision and the subsequent reference would work, building on precedents in other regulated sectors (e.g. GB water), but we do not have guidance on how we would make a decision to refer.

3.18 Under existing legislation, if a third party wrote to GEMA setting out a material and legitimate concern that our price control determination could operate, or be expected to operate, against the public interest, GEMA would need to respond. It could consider several options, including retaining the original proposals (refusing a request), changing the final proposals (including whatever consultation may be required to facilitate this) or making a price control modification reference to the Competition Commission.

3.19 At present, we have no guidance on how we would respond to any such third party public interest concerns. We are encouraging and expecting a broad range of stakeholders to engage with us and network companies during the price control review. In this context, we consider it would be appropriate to have transparent public guidance on how we would take account of such requests.

3.20 Our draft guidance is published alongside this consultation[12]. It relates to concerns raised by network companies and third parties. The power to make a modification reference sits with GEMA. We would expect parties making a request to demonstrate, with evidence, why there is a legitimate and material concern that our final proposals may operate against the public interest. Consideration of the public interest must relate to GEMA's prevailing duties. We would ordinarily expect the third party to have engaged effectively during the price control process.

[11] Section 12 of the Electricity Act 1989 and section 24 of the Gas Act 1986 provide that the Authority may make a reference to the Competition Commission which is framed so as to require the Commission to investigate and report on the matters specified in those provisions, such as the question of whether effects adverse to the public interest could be remedied or prevented by modifications of the licence conditions.
[12] See, A Guide to Price Control Modification References to the Competition Commission - Licensee and Third Party Triggered references (Draft) http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/Mod%20guidance.pdf

3.21 The modification request and any subsequent reference would be on the merits of the price control decision and is therefore a complement to the existing Judicial Review process[13]. Ordinarily, we would expect to refer the package as a whole but could decide, if appropriate, to make a reference on a single issue that was considered to be separable.

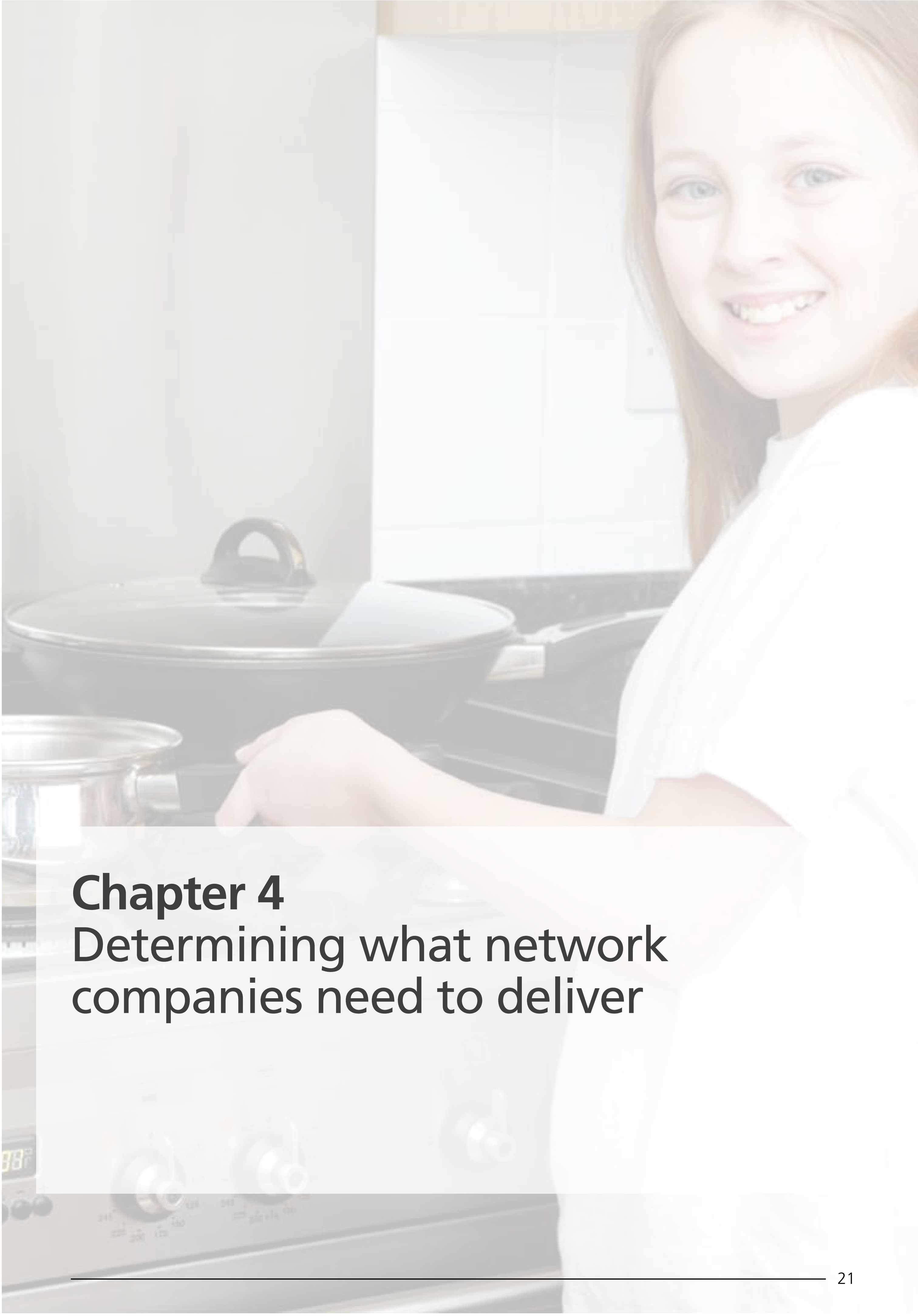
3.22 The provisions under existing legislation provide third parties with a genuine opportunity to influence decision making in the price control review. Publishing guidance would provide clarity on their role in the process and would be expected to make engagement more effective. It could also improve the transparency, accountability and legitimacy of our and network company decision making.

3.23 We recognise that this is not a formal third party right of appeal, which would need to be introduced by government through legislation. We also recognise that a number of parties favoured, in responses to 'Emerging Thinking', introducing such a formal right. We will keep the guidance under review and, as part of this, continue to assess the merits of seeking a formal third party right of appeal from government through legislation.

3.24 DECC will be consulting on implementation of the EU third package over the summer and, as part of this, they will be seeking views on their proposals for implementing the requirement for member states to "ensure that suitable mechanisms exist at national level under which a party affected by a decision of a regulatory authority has a right of appeal to a body independent of the parties involved and of any government"[14]. We would consider and adapt to any developments in this area, and any other future discussions on legislative options, as needed.

[13] Judicial Reviews are a challenge to the way in which a decision has been made, rather than the rights and wrongs of the conclusion reached. The court is unlikely to take a view on what the 'correct' decision is.

[14] Article 41.17 of the Gas Directive and Article 37.17 of the Electricity Directive



Chapter 4
Determining what network companies need to deliver

Chapter 4 summary

We describe the categories and types of outputs that energy network companies would be expected to deliver for existing and future consumers. We explain how the outputs would be determined at a price control review.

Recommendations in chapter 4

5 **Outputs-led:** The price control sets outputs that network companies are expected to deliver to ensure safe and reliable services, non-discriminatory and timely connection and access terms, customer satisfaction, limited impact on the environment and delivery of social obligations.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

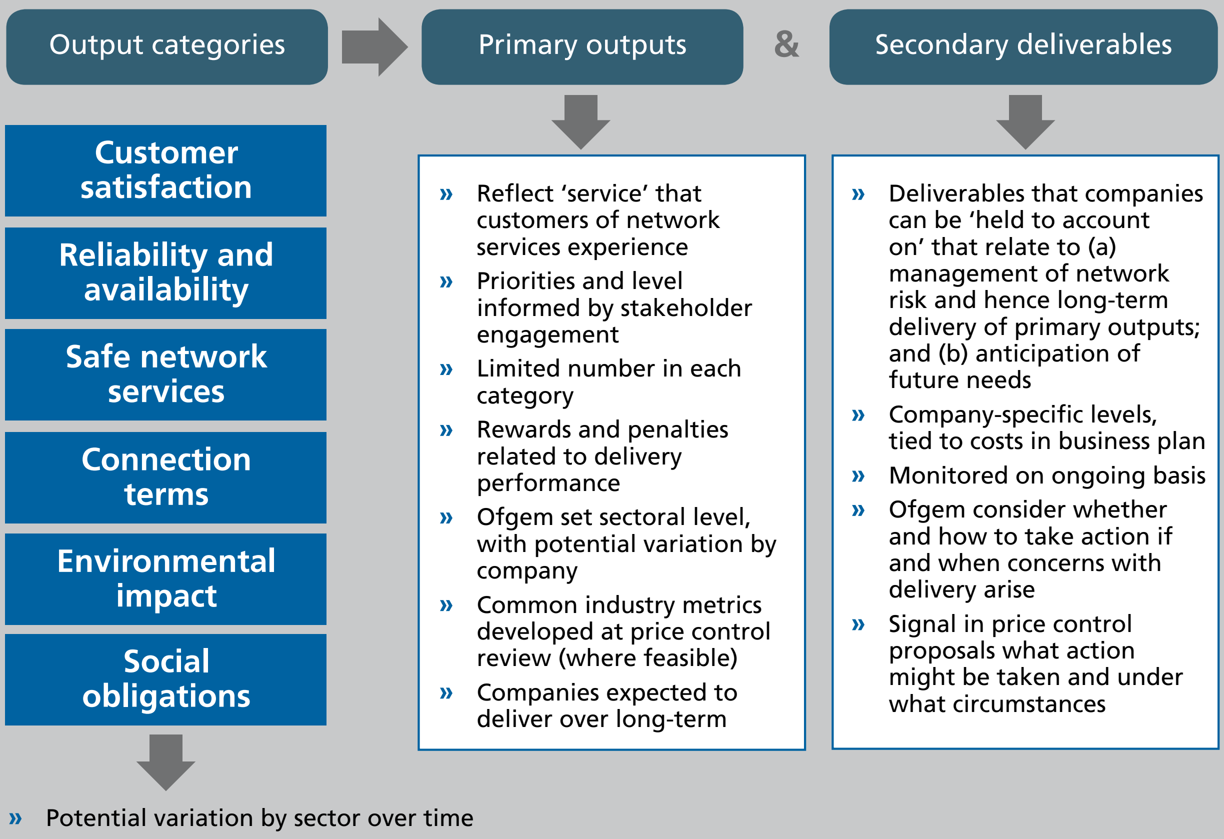
Determining what network companies need to deliver

4.1 The outputs that network companies are expected to deliver would be set out in the price control. All stakeholders would have a clear understanding of what network companies are delivering in return for the revenue they receive from consumers.

4.2 Figure 5 provides an overview of the framework we would use to set the outputs that network companies are required to deliver. Further details are provided in Chapter 6 of our supporting paper.

4.3 There is widespread support for this principle of having outputs at the heart of the regulatory framework.

Figure 5: Determining outputs



Output categories

4.4 The outputs network companies would be expected to deliver would relate to one or more of the categories shown in Figure 5. We have considered the output categories in more detail since 'Emerging Thinking', taking account of responses to that consultation, advice from Frontier Economics[15] and comments on the Frontier Economics report[16].

4.5 We are confident that the output categories are relevant and comprehensive for the four energy network sectors. The relative importance of the categories is likely to vary across the sectors. This would be reflected in the primary outputs included in each category and in the extent to which revenue is directly linked to delivery of these outputs.

4.6 Where feasible, we would expect to commit to these output categories for the long term. However, we recognise that the role of network companies in the delivery of a sustainable energy sector may change over time and we would therefore keep output categories under review to ensure they remain fit for purpose.

Primary outputs

4.7 The appropriate primary outputs to be included in each category would be determined at price control reviews. When setting the primary outputs we would engage with stakeholders and network companies and we would take account of prevailing and developing government policy.

4.8 We would need to ensure that the primary outputs are material, controllable, measurable, comparable, applicable and legally compliant[17]. The primary outputs would also need to be set to facilitate efficient competition in supply (e.g. competition amongst Independent Distribution Network Operators, Independent Gas Transporters, Independent Connection Providers and, potentially over time, between Energy Service Companies). Where these principles were not all met we would consider implications for the strength of any financial incentives for delivery.

4.9 There would be a limited number of primary outputs in each category and they would relate to consumers' and network users' experience of network services. For example, for reliability and availability, the primary output might relate to how many interruptions a customer faced; for connection terms the primary output might relate to the time it takes for a distributed generator to connect to a network. Ultimately, it is delivery of these primary outputs for which network companies would be held to account (see Chapter 6).

4.10 For each primary output we would determine, in the price control review, the base level that network companies were expected to meet. We would expect to set this base level early in the review so that network companies could take it into account in their well-justified business plans. Our decision on the base level would be informed by discussions with stakeholders and network companies, consumer research, prevailing legal obligations and government policy.

4.11 Companies would have the option of submitting, in their well-justified business plans, a level of a primary output that was more or less than the base level. They would need to show that this clearly provides value for money for existing and future consumers.

4.12 As discussed further in Chapter 6, there would be strong incentives on network companies to deliver these primary outputs overtime.

[15] Frontier Economics (May 2010), Output Measures in the future regulatory framework, http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=17&refer=NETWORKS/RPIX20/CONSULTREPORTS
[16] Comments on the Frontier report can be found at: http://www.ofgem.gov.uk/Networks/rpix20/ConsultReports/Documents1/summary%20output.pdf
[17] We explain these criteria further in Chapter 6 of our supporting paper.

Secondary deliverables

4.13 We would expect network companies to include in their business plan the costs required to deliver primary outputs in future price control periods and/or to deliver long-term value for money. For example, plans could include costs relating to:

- managing network risk to ensure that delivery of primary outputs in future periods is not put at risk by decisions in the price control period;
- projects that span price control periods and hence where action is taken during the next period to contribute to delivery of primary outputs in the future; and
- technical and commercial innovation projects, or other projects that span price control periods, that involve upfront costs but have the potential to deliver benefits in terms of long-term value for money in future periods.

4.14 Assuming the network company presents a well-justified case, we would expect to include costs of this type in the price control. To ensure that consumers do not pay an unnecessarily high price, we would require the company to set out the rationale for the expenditure in the context of a long-term strategy for delivery. We would also expect the network company to provide a clear link between costs in the period and either deliverables or indicators against which they can be held to account during the price control period.

4.15 These secondary deliverables are the 'means to an end', with primary outputs 'the end' to be delivered. The network companies would continue to be held to account to deliver the primary outputs in the future periods.

4.16 We would work with the network companies to identify the most appropriate secondary deliverables on a case-by-case basis. As far as possible, we would expect them to relate to outputs rather than inputs. For example, secondary deliverables relating to managing network risk might include asset health indices or long-term asset management strategies. We would encourage network companies to continue to seek better ways of delivering during the price control period, changing the approach where this is expected to be better for long-term value for money.

4.17 This is about encouraging longer-term thinking and delivery options that span price control periods to deliver long-term value for money. It is not about us micro-managing network company decision-making or holding them to deliver in a specific way.

4.18 We would collect information and monitor these secondary deliverables on an ongoing basis. Where a network company does not deliver what was assumed in the price control, we would want to understand why and we would consider what, if any, action to take.

4.19 We would not expect to impose automatic financial penalties in these cases but such action may be taken if considered necessary (either in the existing control or in the next price control). We would aim to be transparent about when and how adjustments might be made. For example, when setting a price control that includes an asset health secondary deliverable, we could set out that if the level of asset health assumed at the price control is not delivered we would, when setting the next price control, assume the secondary deliverable had been delivered and hence provide no further revenue for this purpose.

Anticipating and responding to future needs

4.20 A number of stakeholders have asked questions about how we would encourage anticipation of future needs, emphasising that this is one of the biggest challenges facing electricity transmission companies in particular. We have considered this issue in our work on transmission investment incentives[18] and developed our thinking in RPI-X@20.

4.21 With Sustainable Network Regulation we would encourage network companies to think about anticipation as part of their overall long-term strategy for playing a full role in delivery of a sustainable energy sector and delivering long-term value for money. This is about encouraging network companies to identify the 'right' amount of anticipatory investment (capital investment, innovation and operational changes) and making consideration of future needs part of 'business as usual'.

4.22 We would agree outputs with network companies, reflecting their assessment and the views of stakeholders, of the current and future needs of network users and wider stakeholder interests. We would use our proportionate approach to assessing base revenue, taking account of the network company's justification of proposed expenditure for delivery of outputs in the current and future price control periods.

4.23 Once the price control is set, network companies would be expected to manage the risks associated with taking action to meet future needs. We may consider including uncertainty mechanisms, subject to the principles discussed in Chapter 6, to allow revenue to be adjusted where the amount of work needed varies from that expected at the price control review.

4.24 We would also, as discussed above, make use of secondary deliverables to link delivery of long-term outputs and long-term value for money to decisions and actions in the price control period. We would not expect to undertake ex post efficiency assessments. We would, however, anticipate providing network companies with incentives to make best use of existing assets, including considering alternative uses (e.g. using underutilised gas network assets for Carbon Capture and Storage).

4.25 We recognise that for some large projects, where there is significant uncertainty about future usage, this approach may not be appropriate. We would consider allowing companies to raise revenue from consumers on a staged basis, linking the time at which we make decisions on revenue to be raised from consumers to completion of a phase or milestone of a project (e.g. completion of pre-construction work).

4.26 We recognise that this approach would involve extra effort for network companies, Ofgem and stakeholders in terms of updating and reviewing the case for expenditure at different stages. Consistent with our proportionate approach we would only adopt this more intensive approach for high-value projects, where there is uncertainty about the needs case, and we would aim to limit the number of stages in the process as far as possible.

[18] Further information on our work on the Transmission Access Review and Enhanced Transmission Investment Incentives can be found on our website: http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/tar/Pages/Traccrw.aspx

Chapter 5
Encouraging longer-term thinking with the price control

Chapter 5 summary

We explain the rationale for retaining an ex ante incentives-based price control framework and explain why and how we recommend moving to an eight-year price control period.

Recommendations in chapter 5

6 **Retaining an ex ante control:** We would continue to set an upfront price control, incorporating a return on the regulatory asset value and inflation indexation. We think that it is appropriate to retain the retail prices index as the inflation index but will test our thinking over the summer before finalising our view.

7 **Length of the price control:** The price control would be set for eight years, with provision for a mid-period review of the outputs that network companies are required to deliver. Uncertainty mechanisms would be implemented consistent with transparent RPI-X@20 principles on the use of such mechanisms. There would be scope to review the length of the control period at future price control reviews.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Encouraging longer-term thinking with the price control

5.1 As emphasised in Chapter 2, the existing RPI-X framework has delivered a number of benefits for existing and future consumers. The upfront incentive-based nature of the existing framework has encouraged network companies to reduce operating costs, improve quality of service and undertake considerable investment. The regulatory asset value (RAV) has also been an important instrument, across all GB regulated utilities, in encouraging investment at a relatively low cost of capital. We want the future regulatory framework to retain and build on these benefits.

5.2 We have considered alternative forms of regulation, in particular ex post regulation and negotiated settlements[19]. At a time when the sector needs certainty and transparency to attract vital investment, we think a move to either of these alternatives would be inappropriate. More generally, as discussed in 'Emerging Thinking', we are concerned that the interests of existing and future consumers would not be as effectively protected with either of these alternatives compared with upfront price controls.

5.3 There is widespread support from stakeholders for our recommendation to retain upfront price controls. To meet the challenges of a changing energy sector, we would use the incentives-based price controls to encourage network companies to focus on the longer term, including by extending the length of the price control period.

Inflation indexation

5.4 The ex ante price control would continue to be adjusted for inflation under Sustainable Network Regulation. The purpose of indexing the price control is to provide investors in network companies with protection against general inflation, which is outside their control. We currently index all aspects of the price control by the retail prices index (RPI). In 'Emerging Thinking' we noted that we would review whether it was appropriate to retain RPI as the inflation index.

5.5 At privatisation, RPI was the prominent inflation index in the UK. Since 2003 the Bank of England has used the consumer prices index (CPI) as the target measure of inflation for monetary policy, and CPI has become an increasingly established measure of general inflation. Though no index is perfect, CPI is therefore a potentially credible alternative index in the context of setting price controls.

5.6 Headline CPI growth is now 1.8 percentage points below headline RPI (3.2 per cent vs 5 per cent, June 2010) and the CPI has grown more slowly than RPI since 2003. The CPI has also been less volatile to date. We need to be sure that if we continue to use RPI to protect investors from inflation risk, consumers do not pay more than is necessary.

[19] Papers on these alternative regimes can be found on our website: http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx

5.7 In this context we have assessed three main options for indexing the price control:

- retention of RPI to index all aspects of the control;
- wholesale move to CPI to index all aspects of the control; and
- a hybrid approach were RPI is used to index the allowed return element of the revenue allowance and CPI is used to index all other aspects of the control.

5.8 We provide further detail on our analysis in Chapter 11 of our supporting paper.

5.9 We think that there is a case for moving to CPI. But there are significant practical problems with a wholesale move to CPI as corporate and government index-linked bonds continue to use RPI as the relevant index. We currently use information on the yields from RPI-indexed bonds when we assess a fair level for the allowed return on the RAV. If we were to move to CPI indexation of the allowed return we would have to develop a new potentially less transparent and more complicated approach in the absence of CPI-indexed sterling debt.

5.10 We therefore propose to retain RPI at this time but if a market in CPI indexed bonds developed we would want to revisit this issue at future price control reviews.[20]

5.11 Retaining the faster growing RPI index does not mean that consumers are paying more than necessary or, on the flip side, that there is systematic over-rewarding of shareholders. We can calibrate other elements of the price control package to reflect the use of RPI indexation.

5.12 The relative merits of retaining RPI and the hybrid approach are technically complex. But our initial analysis suggests a preference for retaining RPI based on its greater transparency and lower complexity.

5.13 We would welcome views on the choice of inflation index. We propose to test our analysis and assumptions prior to making our decision in the autumn with a range of experts (as well as stakeholders) including the Bank of England, the Government Debt Management Office, City experts on the bond market and leading academics.

Longer-term thinking and the length of the price control period

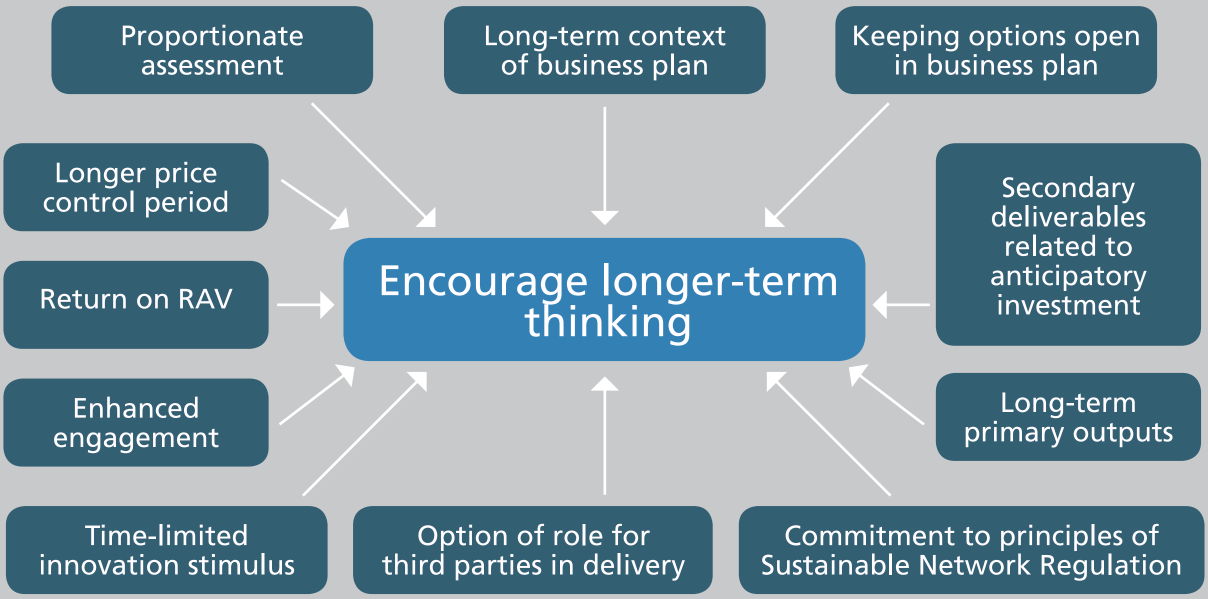
5.14 In 'Emerging Thinking' and in our May 2010 working paper on the length of the price control, we raised concerns that current arrangements for setting five-year price controls encourage network companies to focus on cost minimisation over a five-year period only (if not shorter). This potentially limits the extent to which companies consider options for delivering outputs which reduce long-term costs (e.g. investment in research and development (R&D) and workforce skills, decisions on whether to repair or replace assets, taking a long-term view in determining the scale of network reinforcement).

5.15 A number of responses to our working paper agreed that the focus on five-year horizons does affect the extent to which long-term decisions are taken.

5.16 We are therefore recommending a package of measures to encourage network companies to identify ways of delivering better value for money over the longer term. The main elements of the package that are focused on encouraging longer-term thinking are illustrated in Figure 6, with further details provided in Chapter 5 of our supporting paper.

[20] There are reasons to think it might – the government has recently announced it will index public (and some private pensions) to CPI rather than RPI. This may create demand for CPI indexed government and corporate debt if more defined benefit pension schemes start to move to CPI indexation.

Figure 6: Encouraging longer-term thinking



5.17 We have considered how effective the package of measures would be at delivering outputs and long-term value for money over time if we retained five-year price control periods. They would certainly help, and have been designed accordingly, but we think that an extension of the price control period would complement and enhance these other aspects of the framework.

5.18 By providing a firm commitment to revenue for a longer period than now, we would send a strong signal that we would be moving away from short-termism. There would be incremental benefits for consumers, with network companies expected to make different decisions over a longer price control period to those they make with a five-year control period. These are in addition to the benefits from the efficiency and output incentive regimes.

5.19 There would also be benefits in terms of lower regulatory burden, with comprehensive reviews taking place less frequently.

5.20 The key question is by how much we could credibly extend the price control period. We do not think, as suggested by some, that extending the period to match the asset management horizons of the network companies would be credible. The risks of needing to undertake a full comprehensive review earlier would be too great. Such a long period would also open up concerns relating to cost forecasting. At the other extreme, extending by a year would have limited impact.

5.21 It is in this context that we are recommending an extension to eight years. The benefits for consumers would be incremental but we are confident there would be real upside. The other aspects of the framework would reinforce the change.

5.22 We recognise that there are concerns that the price control would not remain fixed for the eight-year period, particularly in light of the uncertainty that network companies face about what needs to be delivered and how best to deliver. These concerns are also relevant with five-year price control reviews.

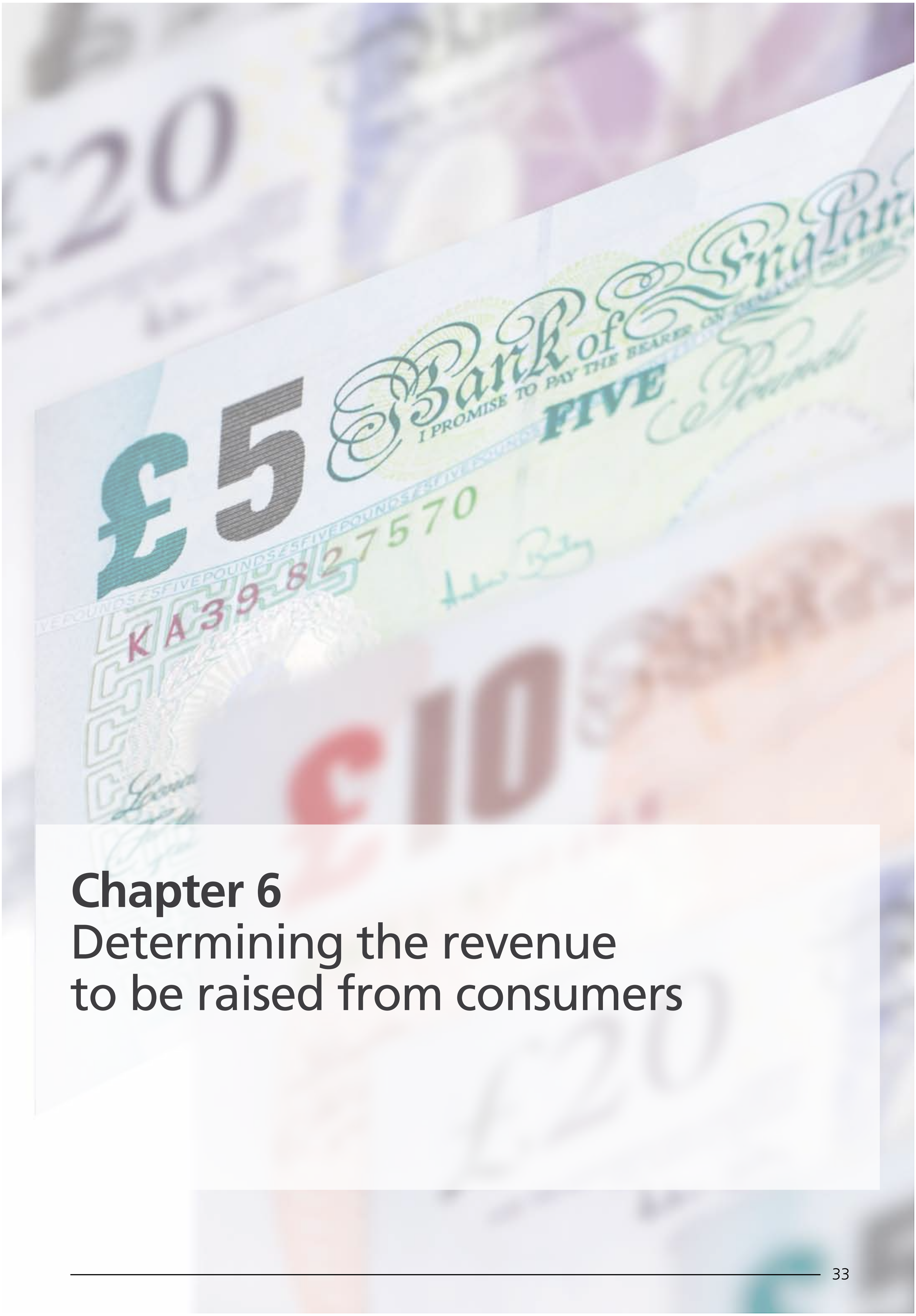
5.23 Recognising this uncertainty, we would provide clarity on when and how the price control would adjust during the eight-year price control period. Investors and consumers of network services would be better able to understand and make assumptions about how revenue might evolve during the period.

5.24 This is not about an increased number of, or more complicated, uncertainty mechanisms. Indeed, in many ways, as discussed further in Chapter 6, we would aim to curb the number of uncertainty mechanisms with our principles on when and how such mechanisms would be used.

5.25 One uncertainty mechanism we would use would be a mid-period review of the outputs that network companies are required to deliver. This review would only result in changes to revenue where requirements on the network companies change significantly (e.g. there is a change in the requirements for connecting electric vehicles).

5.26 We think the eight-year price control period, alongside the other elements of the framework focused on encouraging longer-term thinking, is appropriate for all four energy network sectors. In TPCR5 and GDPCR2 we are mindful of the need to consider whether it would be appropriate to delink the timing of these reviews in the future and therefore, in this case, have different price control lengths for a period.

5.27 As far as possible we want to provide certainty for network companies and investors on the length of the price control period. However, we recognise that there is, inevitably, some element of judgement in the choice of the length of the price control period. We therefore recommend reviewing the eight-year control period at future price control reviews, considering whether it would be appropriate to increase the length further or potentially to revert to five-year price controls. Any changes would be consulted on at the time.



Chapter 6
Determining the revenue to be raised from consumers

Chapter 6 summary

We provide an overview of how the price control would be set. We set out our proportionate approach to assessing well-justified business plans to determine expected efficient cost of delivery and we explain how we would have an option in the tool-kit to give third parties a greater role in some aspects of delivery. We explain how the revenue earned could be higher or lower than assumed at the price control because of performance in delivering outputs efficiently. We also explain how the revenue would adjust during the price control period to reflect uncertainty mechanisms.

Recommendations in chapter 6

8 **Proportionate assessment:** We would adopt a transparent and proportionate approach to assessing the price control package, with the intensity and timescale of assessment reflecting the quality of an individual company's business plan and its record for efficient output delivery. Under this approach, we may conclude the process early for some companies.

9 **Option to give third parties a greater role in delivery:** We would include in the regulatory tool-kit the option to require a company to provide market testing evidence that its proposals reflect long-term value for money. We would have the option to involve third parties in delivery and ownership of large and separable projects, where this is expected to drive innovation, long-term value for money and/or more timely delivery.

10 **Incentives:** There would be transparent rewards/penalties related to output delivery, including a backstop threat of using our existing powers for enforcement action and potential licence revocation for persistent non-delivery. There would be transparent, upfront, symmetric efficiency incentive rates for under and overspend. Incentives would be calibrated to ensure they provide long-term value for money.

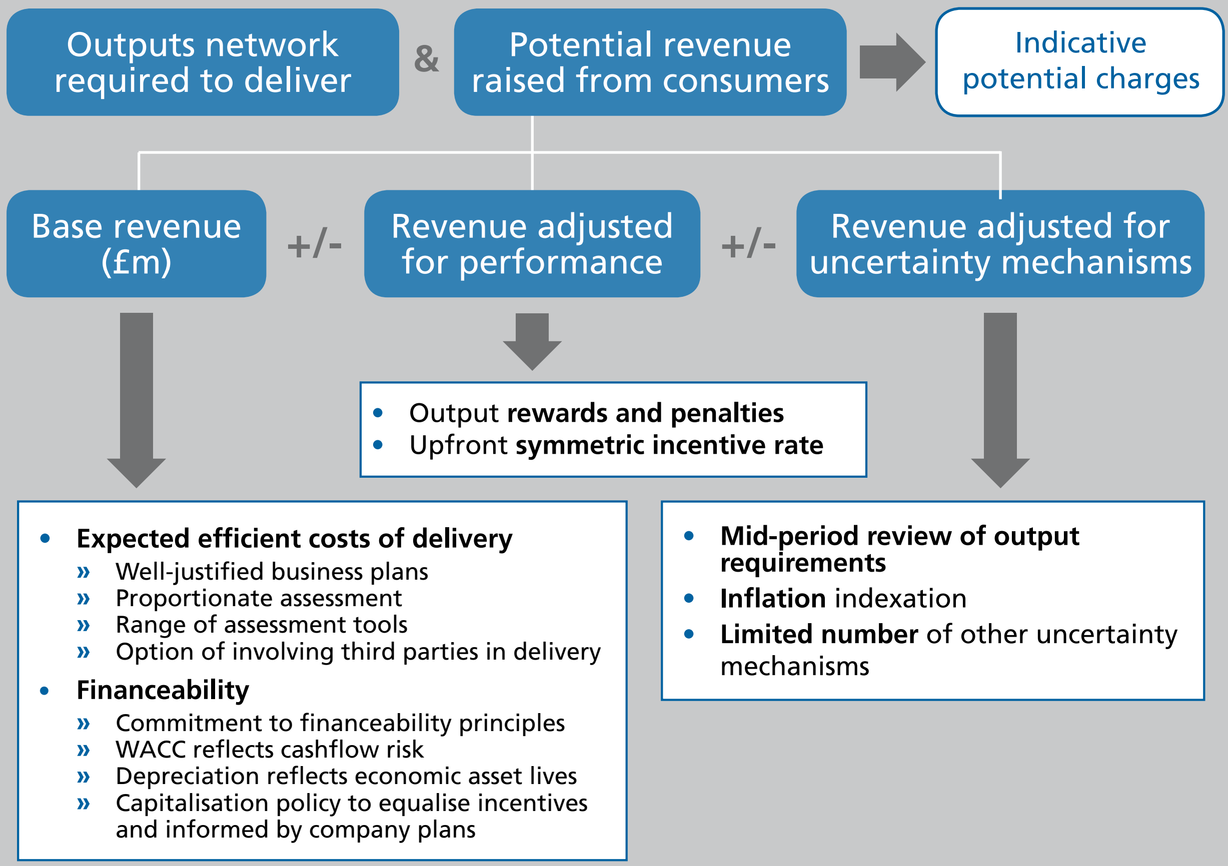
We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Determining the revenue to be raised from consumers

6.1 The price control sets out what network companies are expected to deliver and what potential revenue they can earn from existing and future consumers for delivering those outputs. To facilitate effective engagement, and to enable stakeholders to understand potential implications of the price control, network companies would also be expected to provide an indication of how their proposals might impact on network charges[21].

6.2 Figure 7 sets out the key components of the price control under Sustainable Network Regulation. We describe how base revenue and revenue adjustments during the period would be determined here and in Chapter 7 (financeability). Further details are provided in the supporting paper (Chapters 7,8,9,10,11 and 12).

Figure 7: Setting an upfront price control



[21] We recognise that it would only be feasible to provide indications of the potential changes in charges and we would not expect the network company to be held to any specific level of charges. We would encourage network companies to provide those that pay network charges with the relevant information to enable them to forecast the potential impact of network company choices, and our price control decisions, on future network charges.

Proportionate assessment of business plans to assess efficient costs

6.3 Under Sustainable Network Regulation network companies would work out how best to deliver the required outputs over time, effectively engaging with and taking account of the views of stakeholders. We would use their well-justified business plans, and other available information, to form our view of the expected efficient costs of delivering outputs and long-term value for money.

6.4 We would adopt a proportionate approach to assessing business plans, focusing attention and effort where it is expected to generate most value. We would combine our assessment of the expected efficient costs of delivery with the assessment of financing costs (see Chapter 7) to form a view on base revenue.

Well-justified business plans

6.5 Network companies would have responsibility for making the case on how best to deliver outputs. The business plan gives them the opportunity to demonstrate how they propose to deliver the objectives of Sustainable Network Regulation. The outputs and base revenue in a network company's price control are more likely to be consistent with the company's plan if it is a well-justified business plan.

6.6 A business plan would be considered well-justified where a network company:

- demonstrates that its proposals are focused on the delivery of primary outputs over time whilst providing long-term value for money;
- provides robust evidence to support its proposed approach to delivery;
- shows it considered alternative ways to deliver outputs, including technical and commercial innovations where relevant;
- as part of the assessment of alternative delivery solutions, provides information on the value associated with different options;
- sets out how its proposals for the eight year control period fit within a longer-term strategy for delivery of sustainable network services;
- demonstrates it has taken account of stakeholders' views;
- sets out how it has anticipated and responded to the needs of future consumers during the price control period; and
- shows it considered whether and how to work with others to identify potential collaborative delivery solutions that provide long-term value for money.

6.7 The aim is not to have bigger or more detailed plans, but rather to have plans that are more appropriately focused on delivery of outputs over time and where network companies demonstrate that they are delivering long-term value for money.

6.8 Alongside their business plans, network companies would submit a concise data template that would be consistent across all companies. The data requested would reflect what we need to undertake comparisons across companies, including formal benchmarking analysis. As far as possible, historical data would be collected through annual reporting packs and the data requirements specific to the price control review would be forward-looking.

6.9 Further details on what we expect to see in a well-justified business plan are provided in Chapter 7 of the supporting paper.

Proportionate assessment

6.10 In 'Emerging Thinking' we consulted on the idea that we treat companies differently at price control reviews depending on the quality of their business plans and their past performance at delivering efficiently. This proportionate approach would encourage network companies to perform better over time and to submit better business plans. It may encourage network companies to reveal information that would not be available otherwise, which might assist with the assessment of other companies – the so-called 'whistleblower effect'.

6.11 We consider this approach to be consistent with our 'better regulation' duty in the sense that it allows our resources, and those of the regulated companies, to be targeted where they are most needed.

6.12 Responses to the consultation saw benefit in the approach but emphasised that any difference in treatment must be non-discriminatory and based on transparent and objective criteria. We set out here the approach we would take, with further detail provided in Chapter 8 of the supporting paper.

- **Step 1:** Following receipt of companies' business plans, we would classify each network company as category A, B or C. We would assess the quality of the business plan, past performance in delivering outputs efficiently, and results from total cost benchmarking of business plans. The evidence would need to give a consistent view for us to differentiate between the companies.

  It would be possible for a network company to move from one category to another over time. Indeed, it is expected that companies in categories B and C would actively try to move 'up'. There is also a risk that a category A company that underperforms during the period goes to a different category at the next price review. Any company assessed as being category A would still be penalised under the price control if it failed to deliver.

- **Step 2:** We would vary the intensity of scrutiny of the network company plans according to their category. Where we undertake benchmarking analysis, data on all companies would be included in the analysis.

  Companies in category B are likely to face a similar level of scrutiny to the existing framework while we may use more intensive regulatory tools for those in category C.

  Companies in category A would face a 'lighter touch' level of scrutiny, on the grounds that we were more confident in their well-justified business plans and their ability to deliver.

  We may reach early agreement on the whole regulatory package for a company in category A. We would signal at the start of a price control review what network companies would need to do for us to consider reaching an early agreement ('fast tracking').

6.13 For companies in category B and C different assessment tools could be used, with the intensity of the scrutiny varying according to the scale of the cost area of concern. With this approach there would be a less mechanistic link between any single assessment technique (e.g. benchmarking) and the final assessment of expected efficient costs. The information from different techniques would be combined in a balanced way to inform our assessment.

Role of the Information Quality Incentive

6.14 It is expected that our proportionate approach to assessing business plans, and the incentives to submit well-justified business plans, would enable us to identify costs that appear unreasonably high and cut them to levels more consistent with both proposed outputs and the unit costs of similar companies. This would help, to some extent, to meet concerns that companies may submit higher than needed expenditure forecasts.

6.15 We anticipate that some residual incentive for companies to submit higher than needed forecasts may remain. The consequences of this for consumers are mitigated to some extent by the fixed efficiency incentive rate.

6.16 As an additional measure, we would also include the Information Quality Incentive (IQI) in the price control framework in all four energy network sectors. This tool was developed to encourage companies to submit more accurate expenditure forecasts than they would do in its absence. We provide further information on how the IQI would work in Chapter 8 of our supporting paper.

6.17 We think the added value from the IQI tool outweighs the 'behind the scenes' complexity for the forthcoming price control reviews. The incremental benefits of the IQI may reduce over time as:

- companies become experienced in developing well-justified business plans;
- the risk of us allowing third parties to have a role in some aspects of delivery encourages companies to provide forecasts based on best available information; and
- we become more experienced in assessing business plans.

6.18 We would therefore review the use of the IQI in future price control reviews.

Option of a greater role for third parties in delivery

6.19 In 'Emerging Thinking' we consulted on the idea of having an option in the tool-kit of allowing third parties to have a greater role in delivery. This could come through network companies using other parties to assist them in delivery, whilst retaining responsibilities for delivery and ownership of assets.

6.20 We would have the option of requiring network companies to explore such options where we had concerns with their proposals. We would also have the option of giving third parties, who may be newly licensed for the purpose rights and obligations associated with aspects of delivery. In the appropriate cases, the new licensed operator would take on ownership of the relevant assets.

6.21 Having these options in the tool-kit would be expected to ensure timely delivery of outputs and delivery of value for money for existing and future consumers. The value for money benefits are expected to come from innovative ideas, potential lower long-term cost delivery solutions, available resources and skills, and new sources of financing. Having the credible option should encourage network companies to innovate and seek out lower cost delivery solutions.

6.22 We acknowledge that opening up delivery to third parties could, if badly managed or inappropriately implemented, increase uncertainty for investors and potentially increase the costs of financing. These risks can be managed by setting out and committing to transparent principles on when and how the option of involving third parties in delivery might arise. We set out the principles on when we would consider the option here and in our supporting paper (Chapters 8 and 13).

Market testing

6.23 As now, under Sustainable Network Regulation network companies would be expected to involve third parties in delivery of outputs where this delivers cost savings and/or supports timely delivery of projects. We would expect the network companies to consider options of this type (e.g. outsourcing, joint ventures) given the strong efficiency incentives in the framework.

6.24 Where we had significant concerns about the level of costs or the design of the delivery solution in a company's business plan, we would have the option to ask a network company to provide evidence of market testing. The evidence would be expected to show that their proposed delivery solutions and expenditure proposals provide long-term value for money.

6.25 The option would be used where other assessment and incentive arrangements were not considered sufficient. The evidence would inform our assessment of the revenue to allow under the price control. The option may also arise where a company has persistently failed to deliver outputs.

6.26 If we used this option, the network company would run any competitive process and remain responsible for delivery of outputs. We would consider how to take account of the resulting market testing evidence in the price control, with the focus on ensuring that network companies had incentives to procure efficiently.

Providing new operators with responsibility for aspects of delivery

6.27 We would also have the option of giving a third party responsibility for delivering key projects, following a competitive process. The third party would be an existing or new licensed network operator. We would expect the third party to be involved with the design, build, operation and ownership of the related assets. The delivery and maintenance of new assets associated with the project would therefore not be part of the existing network company's price control.

6.28 We would only consider this option for large, separable enhancement projects and where the potential long-term benefits were expected to exceed the potential long-term costs. We would be particularly interested in potential benefits, in terms of new technologies, new delivery solutions and financing arrangements, for new types of projects. We would not consider the option if there was a risk to timely delivery of key outputs. We would consider the option if a network company persistently fails to deliver outputs.

6.29 We would consider discussing potential alternative delivery options and levels of interest with relevant third parties, for example through an expression of interest, to inform our assessment of potential benefits and costs. Ideas on how third parties may do things differently may also be forthcoming from stakeholders through enhanced engagement.

6.30 In cases where we decide to involve third parties in delivery in this way we would expect to be responsible for the competitive process used, to identify the third party licensee who would take on the responsibility for delivery. We would consider how best to regulate the new network operator.

Encouraging delivery of outputs and long-term value for money

6.31 With Sustainable Network Regulation there would be a set of incentive mechanisms that would be designed to encourage network companies to deliver outputs over the long term and to seek out delivery solutions that are innovative and lower cost over time.

6.32 Our recommendations on how best to encourage delivery of long-term value for money are consistent with the proposals in 'Emerging Thinking'. Respondents welcomed the incentives-based approach. There was widespread support for us developing the approach to efficiency incentives used in DPCR5 (i.e. fixed and symmetric efficiency incentive rate, equalised incentives and link between output delivery and revenue). There were requests for more detail on how the incentives would work in practice. We set out here, and in our supporting paper (Chapters 9 and 10), the type of incentives we would use in the framework. Decisions on the incentive schemes themselves would be made at price control reviews.

Incentivising long-term delivery of primary outputs

6.33 Revenue and hence the return earned during the price control period would vary according to performance in delivery of primary outputs. We would publish information on primary output delivery on an annual basis, reinforcing reputational incentives. We would provide network companies with the opportunity to earn clear and significant rewards for delivering. We would also want to ensure that where they failed to deliver, they faced real and significant downside.

6.34 When making choices between financial incentives and reputational incentives, and when making decisions on the strength of financial incentives, we would consider the nature and quality of the output measures, the extent to which they are controllable by the network company and any existing reward/penalty schemes operated by other regulators (e.g. the Health and Safety Executive). We would calibrate the strength of the incentives individually and as a package to ensure the price control delivers long-term value for money. We would aim to streamline the package of incentives where possible, considering the merits of simple approaches when designing schemes.

6.35 We recognise that in some circumstances it may be appropriate for a network company to delay or limit delivery of a primary output in order to meet the wider objective of long-term value for money. In this context, we would consider whether to have an automatic adjustment of revenue or to review the circumstances around the delivery failure before deciding to adjust revenue.

6.36 In addition to the reward and penalty schemes, the framework would include strong backstop threats for network companies that persistently fail to deliver primary outputs. Network companies would face a risk that we would consider involving third parties in delivery. As now we would take enforcement action where outputs, specified in licences, were not being delivered. We would also make use of our powers to revoke a network company's licence if failure to deliver continued. These options would only be used in exceptional cases.

6.37 We would not include in the framework the option, discussed in 'Emerging Thinking', of requiring sale or lease of assets where non-discriminatory connection terms were not met. However, we would consider using Competition Act 1998 powers where there was concern that there may be an abuse of a dominant position.

Efficiency incentives

6.38 The price control would include a symmetric efficiency rate to which we would commit for the length of the price control period. If a network company found a way to deliver its outputs at lower cost during the price control period, it would earn higher profits and share a proportion of the benefits with consumers. If its costs increased, it would earn lower profits and share a proportion of the costs with consumers. This approach builds on that taken in DPCR5 and has been widely supported.

6.39 We would be looking to provide strong incentives to seek out lower long-term cost delivery solutions. We would take account of the length of the price control period and the extent to which the RAV adjusted in line with actual expenditure, amongst other factors, when determining the appropriate strength of the incentive rate. The network company would face the same efficiency incentive rate for the duration of the price control period regardless of whether the company had spent more or less than envisaged. The same rate would apply to operating expenditure and capital expenditure. We would set the spread of rates early in the price control review and the actual rate that a company observes would fall out of the IQI.

6.40 The adjustments to revenue for the efficiency incentive rate would be implemented during the price control period rather than at the next price control review. We would consider how best to implement these adjustments to ensure that they are based on audited data (resulting in a lag) and to encourage network companies to manage, where necessary, any significant volatility in charges.

6.41 Where there are differences between costs incurred during the period and those that were assumed when the price control was set we would expect to apply the efficiency incentive rate automatically. We would not ordinarily undertake a review of the ‘efficiency’ of the expenditure incurred.

6.42 However, we would, in exceptional circumstances, consider over-riding the mechanistic sharing of actual expenditure through the efficiency incentive rate where it was evident that a company’s expenditure decisions were unreasonable at the time they were made. We would not use this option to penalise companies that took reasonable decisions to anticipate future customer needs or to develop innovative delivery options, even if the merits of these might be questioned with the benefit of hindsight. Financial output incentives would also come into effect if outputs had not been delivered.

Uncertainty mechanisms

6.43 At a price control review we would consider whether and how to set mechanisms to adjust revenue during the period to reflect factors that are considered to be outside the company’s control. We would expect network companies to manage normal business risk. Uncertainty mechanisms would only be used where they provide protection to consumers against the uncertainties faced by Ofgem in determining the revenue to allow for the future fixed period.

6.44 We set out, in Chapter 11 of our supporting paper, the principles that we would use to determine when and how best to introduce uncertainty mechanisms. These can be summarised as follows.

- In general, we would expect network companies to manage the uncertainty they face[22].
- Uncertainty mechanisms should only be used where they would deliver value for money for existing and future consumers while also protecting the ability of networks to finance the efficient delivery of outputs.
- When designing uncertainty mechanisms we would be mindful of the need to ensure that they were transparent and as predictable as possible, enabling those that pay network charges to be better able to predict potential changes.
- We would consider the appropriate timing at which mechanisms might be activated to ensure the impact on network charges was managed by network companies as far as possible, and to ensure that the impact on Ofgem and company resources was proportionate.
- We would consider how mechanisms work together in the package, limiting risks of unintended consequences arising from interactions between mechanisms.

6.45 The aim would be to limit the number and complexity of uncertainty mechanisms as far as possible, but not at the expense of ensuring that efficient delivery is financeable and that long-term value for money is delivered. We would be transparent about the uncertainty mechanisms that would be in place at each price control review and we would aim to commit to not intervening further during the price control period.

6.46 As discussed in Chapter 5, one uncertainty mechanism that would be used is a review of output requirements mid-way through the price control period. We expect that the six output categories would remain valid. But there may be a need for changes to the output measures. For example, we may need to introduce new measures to reflect new government targets on connections for electric vehicles or tighter renewable targets.

6.47 We would not review other aspects of the price control, including the cost of capital and incentive arrangements. We would make this clear to all stakeholders and provide a firm commitment at the comprehensive price control review by providing clarity in licences on the scope and process of the mid-period review of output requirements.

6.48 If we decided that we did need to change the outputs that the company is required to deliver, we may also need to adjust the revenues allowed. The adjustments would be the minimum necessary to compensate network companies for increases in requirements or to compensate consumers where output requirements are reduced. Standard options for raising concerns (e.g. requests for modification references to the Competition Commission and Judicial Review) would apply at the time of a mid-period review of output requirements.

[22] This is consistent with the approach adopted by other regulators, including the Competition Commission in their recent consideration of 'notified items' in the water sector in the context of the Bristol Water reference. Competition Commission (June 2010), 'Bristol Water plc: A reference under Section 12(3) of the Water Industry Act 1991 – Provisional Findings.' http://www.competition-commission.org.uk/inquiries/ref2010/bristol/pdf/pfs_for_publication.PDF .

Chapter 7
Ensuring efficient delivery is financeable

Chapter 7 summary

We present our recommendations on the principles for embedding financeability into the new regulatory framework, and how we would continue to ensure that efficient companies are able to finance their regulated activities. Our recommendations build on the ideas set out in our May 2010 working paper. We also invite views on whether and how best to develop transition arrangements when implementing the principles at price control reviews.

Recommendations in chapter 7

11 **Principles for ensuring efficient delivery is financeable:** We would ensure that efficient delivery of outputs is financeable by committing to publish principles for setting a WACC-based allowed return to reflect the cash flow risk of the business over the long term. Financeability would be assessed in the round, including a cross-check against relevant credit rating ratios. As now, network companies would be expected to manage their business, including capital structure, efficiently to ensure they are financeable.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Ensuring efficient delivery is financeable

7.1. Our principal objective is to protect the interests of existing and future consumers. We also have a duty "to have regard to the need to secure that licence holders are able to finance the activities which are the subject of obligations on them." This means that efficient network companies should be able to secure financing in a timely way and at a reasonable cost in order to facilitate the delivery of their regulatory obligations. This is also in the interests of consumers. However, it is important that the regulatory framework does not provide excessive returns, reward inefficiency or 'bail-out' a company that has encountered financial distress as a result of its own behaviour.

7.2 In 'Emerging Thinking', we consulted on whether there is merit in establishing a set of principles that guide our decisions on financeability in future price controls. Respondents to 'Emerging Thinking' welcomed the idea of providing commitment to principles but sought further detail on what these principles would be and how they would be implemented at future price control reviews. We provided further detail in our May 2010 working paper[23] and in a report prepared for us by Cambridge Economic Policy Associates (CEPA)[24].

7.3 We have developed our recommendations taking account of discussions on those papers, recognising in particular concerns raised in relation to our proposals on depreciation. We think it is appropriate for debates and discussions on the 'numbers' arising from implementation of these principles, and any associated transition arrangements, to be continued in price control reviews. However, in line with our statutory duties, we would continue to ensure that all network companies that operate efficiently are able to finance the efficient delivery of their regulated activities and that we do not introduce excessive volatility into the relevant capital markets.

Overview of our principles

7.4 Our principles are focused on ensuring that efficient delivery is financeable and that the balance of costs paid by existing and future consumers is fair, reflecting the expected balance of benefits received from investment in network services. For example, if expenditure on network services is expected to yield benefits for thirty years, we would expect that consumers over the thirty year period would contribute to the costs of the expenditure.

7.5 By establishing and committing to clear, upfront principles, we would provide as much certainty to investors, companies, ratings agencies and consumers as possible while ensuring that our ability to react to future events is not unduly constrained. These principles enhance and improve our existing approach to financeability, rather than representing a step change.

7.6 Given the need to secure financing for large-scale investment in the energy networks sector, we think it is appropriate to retain the framework that investors, network companies and other stakeholders are familiar with. We have considered a range of alternative models.

[23] Ofgem current thinking working paper: Financeability: http://www.ofgem.gov.uk/Networks/rpix20/WorkingPapers/Documents1/May%20 Financeability%20paper%2019052010%20final.pdf

[24] CEPA (May 2010), RPI-X@20: Providing Financeability in a future regulatory framework: A report for Ofgem http://www.ofgem.gov.uk/Networks/rpix20/ ConsultReports/Documents1/Final%20CEPA%20RPI-X@20%20Financeability%20Report%20May%202010.pdf

7.7 Although these alternatives have been proposed as ways of dealing with legitimate issues arising with the existing approach to financeability taken by regulators (e.g. the need to reflect differences in cashflow risks of the regulated business in the allowed return), we think we can deal with these issues more effectively through the principles set out here. We provide further detail on why we have rejected other models, most notably the split cost of capital[25], in Chapter 12 of the supporting paper.

7.8 As now, we would ensure that all network companies that operate economically and efficiently are able to finance their regulated activities. Consistent with the guidance we have published on our arrangements for responding in the event that an energy network company experiences deteriorating financial health, we would not bail out companies that find themselves in financial distress as a result of their own behaviour[26].

7.9 We summarise below our proposed principles for ensuring that financeability is embedded in the price control framework. **Further details are provided in Chapter 12 of our supporting paper**.

- **Long-term view:** We would take a longer term view of financeability, - reinforced by regulatory commitment.
- **WACC based return:** We would continue to use a real, weighted average cost of capital (WACC) based approach to setting the allowed return.
- **Notional gearing:** The size of the notional equity wedge would reflect the company's risk exposure and may vary within and between sectors, but only where there is material difference in the risk faced. The magnitude of the risk exposure will depend on the strength of the various output incentives and the uncertainty mechanisms of the package. In making any changes to the notional gearing between control periods, we would take into account the effect that this might have on a company's ability to finance itself, particularly where there is a decline in the notional gearing assumption.
- **Cost of equity:** We would continue to set the cost of equity based on a capital asset pricing model (CAPM) approach but would consider evidence from other models.
- **Cost of debt:** The cost of debt embedded in the allowed return would be a backwards looking determination, based on a long term trailing average of forward interest rates. There would be an annual adjustment in the allowed return on debt, based on movements in the trailing average rather than making a step movement at every price control. The index would likely be based on the real yields of sterling issuers of a similar credit rating to regulated utilities.
- **Depreciation:** When considering depreciation we would focus on how best to balance the costs paid by existing and future consumers, taking account of the expected economic life of assets and uncertainty in the future use (and usefulness) of assets.

[25] For further details on this model see: "Infrastructure investment, the cost of capital, and regulation: an assessment" – Dieter Helm, December 2009 http://www.dieterhelm.co.uk/sites/default/files/Oxrep%20Infrastructure%20Dec09.pdf

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

- **Capitalisation policy:** We would add a fixed proportion of costs to the RAV, with the rest being remunerated in the year in which they are expected to be incurred. The percentage to be added to the RAV would be set at the price control review to strike a fair balance between current and future consumers, in light of the proportion of capex-like costs expected during the price control period our approach would be consistent with our objective to equalise incentives between opex and capex in the overall controls.

- **Financeability:** Our financeability assessment of proposed price controls would be informed by a number of sources including ratings agency credit metrics considered over the long term. As now, network companies would be expected to manage their business, including capital structure, efficiently to ensure that they are financeable. Where there are concerns with financeability we would consider whether and how best to transition the application of our financeability principles. This approach is consistent with the approach adopted by the Competition Commission in the recent report on the Bristol Water reference[27].

- **Cross-check:** We would use the return on regulated equity (RORE) analysis developed in DPCR5 as a tool to check the package fits together appropriately. We would use the analysis to ensure that those companies that deliver for consumers earn attractive rates of return, whilst those that demonstrably do not deliver, will earn low returns. Very poor performers could see rates of return below the cost of debt.[28]

Transition arrangements

7.10 Our proposals are value neutral in cash flow terms. However, application of the above principles may have implications for the timing of a company's cash flows and reported earnings. The precise impact will not be clear until companies have submitted their well-justified business plans as part of the price control review process. In some sectors it may mean that a network company's cash flows are brought forward, in others they may be pushed out.

7.11 Given the large amount of investment required in the sector going forward, we do not want to make it difficult or unnecessarily expensive for companies to raise the necessary finance. Our recommendations on financeability are designed to do the opposite by setting clear principles upon which future decisions will be based.

7.12 Where implementing the principles in a single step could cause excessive disruption to the market in affected securities and/or raise concerns about financeability, we would adopt appropriate transition arrangements at price control reviews. The focus would be on ensuring that the principles are applied but over a period of time, which we expect to be no longer than a single control period (eight years).

[27] Competition Commission (June 2010), 'Bristol Water plc: A reference under Section 12(3) of the Water Industry Act 1991 – Provisional Findings.' http://www.competition-commission.org.uk/inquiries/ref2010/bristol/pdf/pfs_for_publication.PDF

[28] Further details on our RoRE analysis is available in appendix 3 of the following document: http://www.ofgem.gov.uk/Networks/ElecDist/PriceCntrls/DPCR5/Documents1/FP_5_Financial%20Issues.pdf

7.13 In seeking to identify whether transition arrangements are necessary, the types of factors that we would have regard to include:

- the length of the price control and options for phasing within the control period;
- the effects of the proposals on allowed revenue;
- the impact on the notional company's ability to raise necessary finance, both debt and equity;
- the impact on key cash flow ratios, as calculated by credit ratings agencies; and
- the impact on ratios commonly used in equity valuation.

7.14 Where transition arrangements are necessary, the precise nature of these would be consulted on at price control reviews, reflecting the specific circumstances of a given sector at the time. There is a range of approaches that we could adopt to ensure appropriate transition. These include:

- gradually moving to the new depreciation rate over the period of a price control;
- applying the current depreciation rate to the existing RAV and the new depreciation rate to future RAV additions only (i.e. existing RAV is unaffected); and
- using an 'accelerated depreciation' schedule for existing RAV, e.g. sum-of years-digits but a straight-line methodology for future additions.

7.15 These are discussed in more detail in Chapter 12 of our supporting paper. We welcome views on how we should consider whether and how to transition financeability changes at a price control review.

Chapter 8
Innovation stimulus package

Chapter 8 summary

We describe how the regulatory framework would encourage innovation and how the incentives would be supplemented by a time-limited innovation stimulus package.

Recommendations in chapter 8

12 **Innovation stimulus package:** We would introduce a time-limited innovation stimulus for electricity and gas networks. These would be open to projects at any point in the innovation cycle and to both network companies and third parties for innovation related to delivering the networks required for a low carbon energy sector. The innovation stimulus package would include substantial prize funds to reward network companies and third parties that successfully implement new commercial and charging arrangements to help deliver a sustainable energy sector.

We welcome comments and views on these recommendations which we are minded to take forward in a future regulatory framework.

Innovation stimulus package

8.1 Given the scale of challenges that network companies face and the uncertainty about how best to deliver, innovation is needed to ensure network companies deliver a sustainable energy sector and long-term value for money. The need for innovation has been widely recognised throughout RPI-X@20, including in responses to our consultations.

8.2 With Sustainable Network Regulation we would encourage innovation through the price control framework and a separate innovation stimulus package.

8.3 Further detail is provided in Chapter 14 of our supporting paper.

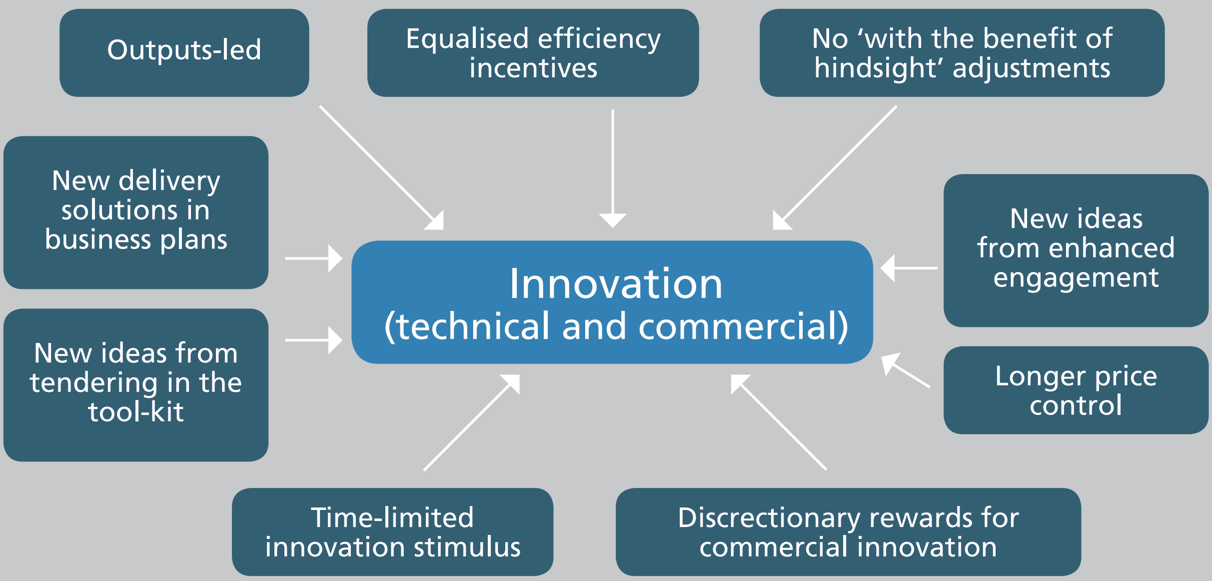
Encouraging innovation through the price control framework

8.4 RPI-X regulation has encouraged energy network companies to innovate where this has delivered operating cost savings during the price control period. Beyond this, however, innovation in technological change and commercial arrangements has been limited amongst energy network companies.

8.5 The core RPI-X incentives are not designed to encourage step-change innovation or innovation that delivers benefits beyond the commercial incentives of the regulated business. This is the reason why the innovation funding initiative (IFI) and the LCN Fund have been added onto the existing frameworks. Similar concerns with the RPI-X framework have also been identified in the water sector.[29]

8.6 Sustainable Network Regulation is designed to encourage technological and commercial innovation. This is about encouraging the right type and level of innovation, at the right time, to deliver a sustainable energy sector and long-term value for money network services. The aspects of the framework that are most relevant are illustrated in Figure 8.

Figure 8: Sustainable Network Regulation is designed to encourage innovation



[29] See, for example, the Cave Review of competition and innovation in water markets http://www.defra.gov.uk/corporate/consult/cave-review/

8.7 The outputs-led, longer-term price control framework would provide stronger incentives on network companies to seek out more and different types of innovation than under the RPI-X framework. The option of involving third parties in some aspects of delivery and a greater involvement of third parties in the price review process would also increase the incentives to innovate efficiently. This approach to encouraging innovation has been widely supported.

8.8 In the context of delivering innovation related to the wider sustainable energy sector, where the commercial benefit of the innovation may not be clear, network companies may be slow to deliver the level of innovation needed in the timescales required. As a result, Sustainable Network Regulation also includes an innovation stimulus package to supplement the incentives in the price control framework.

The time-limited innovation stimulus package

8.9 In 'Emerging Thinking' we suggested that the regulatory framework should include a time-limited innovation stimulus to provide upfront partial funding for innovation projects related to the role of networks in delivering a sustainable energy sector. There was widespread support for this idea. Taking account of responses to the consultation, ongoing analysis, and developments with the LCN Fund we set out how the innovation stimulus package would be developed.

8.10 The form of the mechanism is expected to be similar to the LCN Fund in a number of respects, involving regular open competitions for funding and partial project funding. There would be requirements on all parties receiving funding under the scheme to share information and lessons learned from projects. An independent panel would assess the bids received in the competitive process but GEMA would take the final decisions on the awarding of funding.

8.11 Decisions on the maximum amount of money to be raised from consumers to support the innovation stimulus would be made at each price control review. We would also consider at price control reviews the value of any innovation rewards, including those for commercial innovation discussed below.

8.12 When developing the governance arrangements for the innovation stimulus, we would take account of lessons learned from the LCN Fund. A key difference from the LCN Fund would be that the innovation stimulus would be available to fund all types of innovation from R&D, to trialling, to demonstration projects. Funding would also be available for projects led by network companies or by appropriately licensed non-network parties.

8.13 We would ask the Secretary of State to create a new licensable activity, linked to participation in the innovation stimulus, and non-network parties would be expected to hold one of these licences to be eligible to bid for funding. Further details are provided in Chapter 13 of our supporting paper.

8.14 There would be two stimuli, one for the electricity networks and one for the gas networks. We intend to set these up, including creating a new licensable activity (through an order from the Secretary of State), governance arrangements and documents, so that they can go live from 1 April 2013 when the new gas distribution and transmission price controls will be implemented. We would consider, when developing the governance arrangements, how best to develop the innovation stimulus package and the LCN Fund without undue disruption to the operation of the LCN Fund.

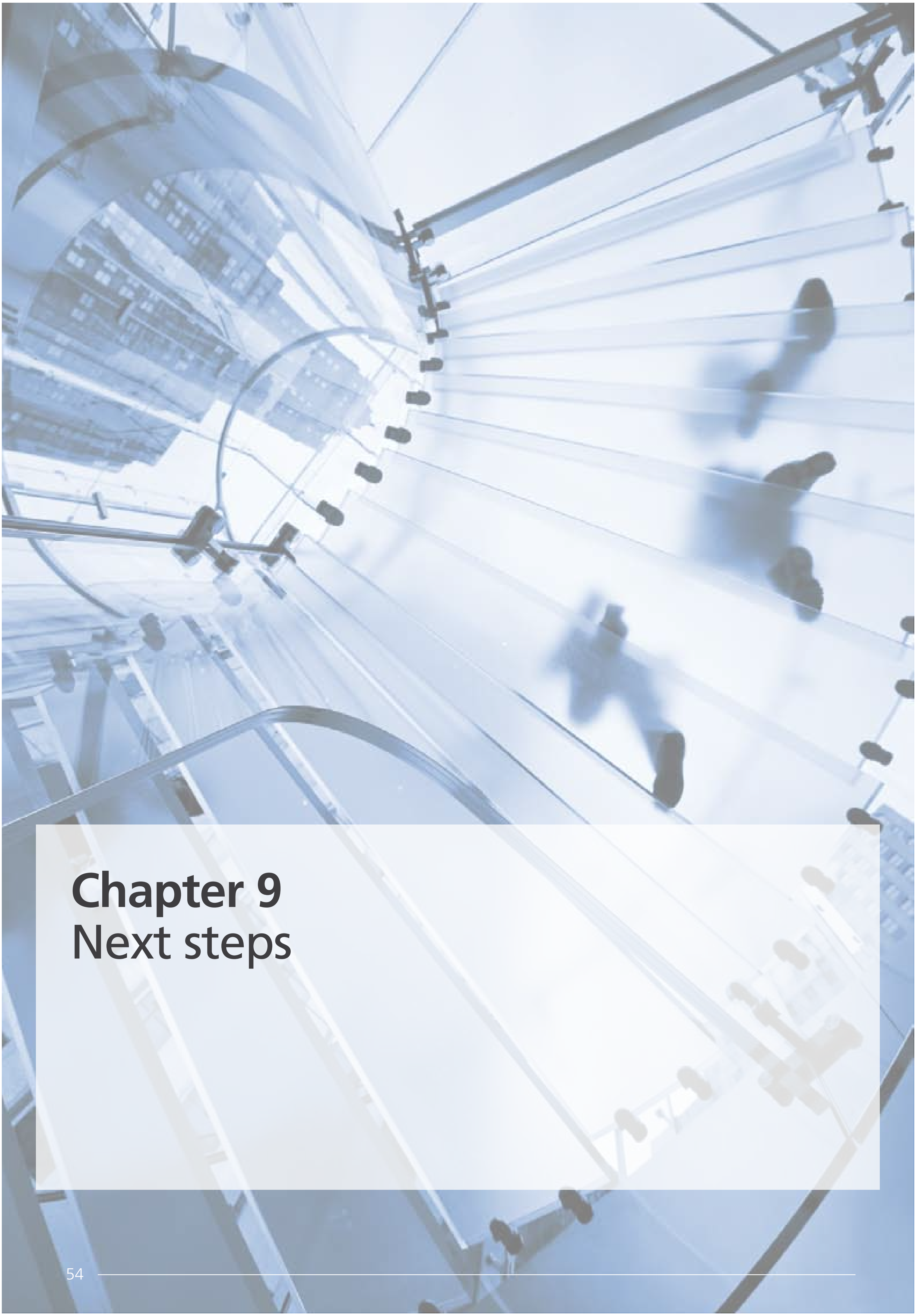
Rewards for commercial innovation

8.15 The decisions and actions that network companies take are not affected by the price control framework in isolation. Wider aspects of the regulatory arrangements, industry structure and commercial arrangements interact with the price control framework to influence the viable options for delivering the objectives of Sustainable Network Regulation. These wider aspects include charging arrangements, connections and access terms, industry codes, the separation of distribution and supplier responsibilities, and the TO/SO arrangements.

8.16 The choices that a network company makes about how best to deliver affect, and are affected by, these wider arrangements. A network company can see them as a constraint, limiting the options considered to those that work easily within the status quo of the sector. However, a network company focused on playing a full role could see the wider aspects of the framework as a potential opportunity to identify new commercial arrangements for meeting the objective.

8.17 We would encourage such innovation by providing a reward for new commercial solutions that are developed to meet the objectives of Sustainable Network Regulation. These rewards would be administered through the innovation stimulus package, with the governance panel providing recommendations to GEMA on whether they should be awarded.

8.18 Third parties would also be eligible for the rewards if they proposed and instigated changes to the wider regulatory arrangements. For example, assuming changes in the Code Governance Review are implemented, a third party that successfully pushed forward a charging modification designed to meet the objectives of Sustainable Network Regulation could be eligible for a commercial innovation reward.



Chapter 9
Next steps

Chapter 9 summary

We explain how to respond to this consultation and set out how we plan to bring RPI-X@20 to a close to enable us and others to focus on implementation of Sustainable Network Regulation in TPCR5 and GDPCR2.

Next steps

9.1 RPI-X@20 was launched in March 2008 and began in earnest in autumn 2008. During the review we have engaged extensively with a wide range of stakeholders and interested parties, through workshops, bilateral meetings and publication of working papers and consultation papers.

9.2 The ideas presented in this consultation have been in the public domain for some time, particularly since publication of 'Emerging Thinking'. The detail that has been developed takes account of responses to that consultation, responses to our working papers on longer-term price controls and financeability, and to our ongoing analysis and the analysis of our advisers[30].

9.3 We are mindful of the need to bring RPI-X@20 to a close and to implement the framework, particularly in relation to the next transmission and gas distribution price control reviews, which will formally begin this summer. However, consistent with the original principles of the review, we think it appropriate to consult on GEMA's 'minded to' decision on the framework before formally making a decision and bringing the review to a close. GEMA intends to make a decision in early autumn, taking account of responses to this consultation.

9.4 **Details of how to respond are set out in Appendix 1. We welcome responses between now and September 6 2010.**

[30] All these papers can be found on our website: http://www.ofgem.gov.uk/Networks/rpix20/Pages/RPIX20.aspx

Appendices

Index

Appendix 1 - Consultation response

1.1 Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document. We would especially welcome responses on our individual recommendations which we have set out at the beginning of each chapter and at the front of the document.

1.2 Responses should be received by September 6 2010 and should be sent to:

RPI-X@20 consultation
- Local Grids and RPI-X@20

Ofgem
2nd floor
9 Millbank
London
SW1P 3GE

Email: RPI-X20@ofgem.gov.uk

1.3 Unless marked confidential, all responses will be published by placing them in Ofgem's library and on our website www.ofgem.gov.uk. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.4 Respondents may request that their response is kept confidential. Respondents who wish for their responses to remain confidential should clearly mark them to this effect and include the reasons for confidentiality. Confidentiality disclaimers within emails will not be taken to represent a request for confidentiality with respect to the response itself. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5 We will publish a summary of responses on the website and we will consider comments received during the course of RPI-X@20. Any questions on this document should, in the first instance, be directed to:

Hannah Nixon, Partner
Transmission and RPI-X@20

Ofgem
2nd floor
9 Millbank
London
SW1P 3GE

Email:hannah.nixon@ofgem.gov.uk

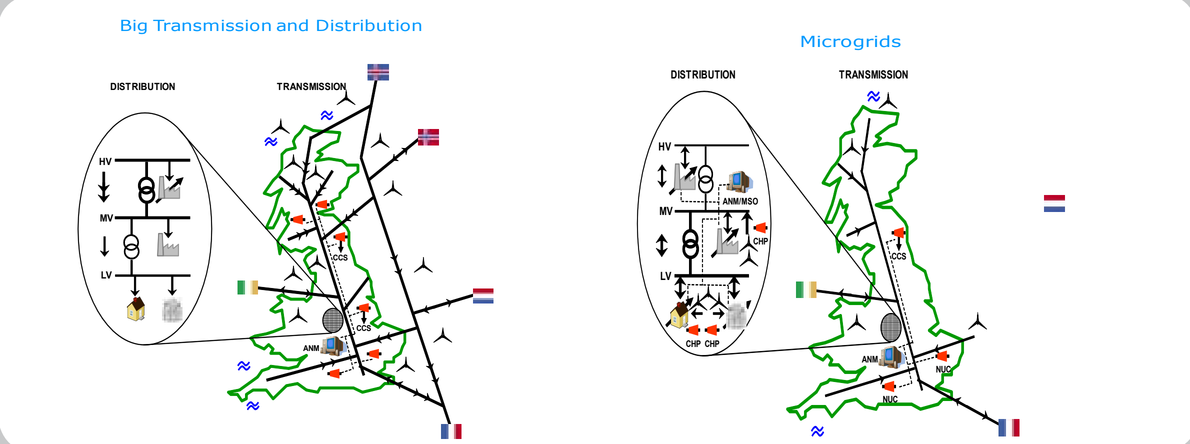
Appendix 2 - Uncertainty about future energy networks

1.1 There is, as discussed in Chapter 2, significant uncertainty about what the networks need to do to meet the challenges and opportunities that they face. We discuss here the nature of the uncertainty for electricity and gas network companies.

1.2 Our study on Long Term Electricity Networks Scenarios (LENS)[31] showed that there is considerable uncertainty about the long-term shape and size of electricity networks required to meet these challenges. LENS set out five plausible scenarios for electricity networks for 2050, two of which are illustrated in Figure 9. In one scenario, transmission system operators (TSOs) are at the centre of networks activity. Network infrastructure development and management continues as expected from today's patterns, while expanding to meet growing demand and the deployment of renewable generation. In another, customers are at the centre of activity in electricity networks and take much more responsibility for managing their own energy supplies and demands. As a consequence, microgrid system operators emerge to provide the system management capability to enable customers to achieve this with the new technologies.

1.3 There are a similar range of plausible scenarios for gas networks. For example, the average and peak demand for gas network services might fall if there was a reduction in gas-fired electricity generation and a reduction in domestic use of gas because of increases in electric heating. However, another plausible scenario could see stable or increased demand for the gas transmission network, as 'green' gas-fired generation and gas storage remain key to provision of security of supply, particularly as back-up generation. Additionally gas networks could be used for carbon capture and storage (CCS), and gas distribution networks to support increased local combined heat and power (CHP) generation and/or district heating systems.

Figure 9: Examples of Long Term Electricity Network Scenarios



[31] Electricity Network Scenarios for Great Britain in 2050, Final Report for Ofgem's LENS Project (Ref. No. 157/08), November 2008. Authors: Graham Ault, Damien Frame (Institute for Energy and Environment, University of Strathclyde), Nick Hughes, Neil Strachan (King's College London, University of London). Peer reviewers: Jim Watson (SPRU, University of Sussex), Michael Pollitt (Judge Business School, University of Cambridge). http://www.ofgem.gov.uk/Networks/Trans/ElecTransPolicy/lens/Documents1/20081107Final%20Report.pdf

Appendix 3 - Comparison to RPI-X

1.1 To those familiar with the current 'RPI-X' regulatory framework as applied to energy network companies, Sustainable Network Regulation may seem familiar. This is not surprising as the framework has evolved from the framework that has successfully delivered for consumers over the past twenty years.

1.2 We have built on, adapted and added to the existing frameworks, making changes to reflect the changing objective of the regulatory framework. This results in a shift in focus from inputs to outputs and consequent implications for how we assess and determine the price control.

1.3 The evolutionary changes to the regulatory framework can have a revolutionary impact on the effect of regulation on the performance of network companies. Significant changes in how companies operate and make decisions will be needed. For example, companies would make different decisions in response to the requirements for well-justified business plans and the potential to earn rewards where they consider different ways of doing things and consider a longer-term context.

1.4 We set out in Table 1 the areas where the frameworks are the same; areas where Sustainable Network Regulation is different, but builds on the existing framework; and areas that are new to the regulatory framework.

1.5 The summary table reflects a general view of RPI-X regulation, although we recognise that the precise details of the regulatory frameworks for each of the energy network sectors vary.

Table 1 : Comparison of Sustainable Network Regulation and RPI-X regulation

	Frameworks are the same	Sustainable Network regulation builds on RPI-X	Sustainable Network Regulation is different
Type and length of control	Price control set upfront for a fixed period of time.	Price control sets out the amount of potential revenue a company can earn (£m). There is no 'X' factor.	Eight-year price control period rather than five, with mid-period review of output requirements. Company business plans and our assessment of them reflect horizon longer than price control period. Longer-term strategy determines appropriate short-term strategy.
Focus of regulatory framework		Continued focus on efficiency, but long-term value for money rather than short-term cost savings.	Focus on what primary outputs networks are delivering rather than how they deliver (inputs). More explicit focus on sustainability.
Role of network companies	To deliver those responsibilities set out in their licence and other legal obligations placed upon them.	Greater onus on network companies to step up and determine how best to deliver outputs and value for money over time.	More onus on companies to understand and take account of the needs of existing consumers and anticipate the potential needs of future consumers of network services. Network companies need to be alert to opportunities to deliver value for money.
Engagement with stakeholders	Ofgem consultation process	Network companies expected to engage more effectively with consumers, users of the network and other stakeholders (e.g. environmental interest groups), rather than focusing on Ofgem. Ofgem adopts multi-layered approach to enhanced engagement, building on and improving existing approaches.	Published guidance that sets out how we might consider making a reference to the Competition Commission in response to a legitimate and material public interest concern from a third party about our finance price control proposals.

	Frameworks are the same	Sustainable Network regulation builds on RPI-X	Sustainable Network Regulation is different
Business plans	Assessment of expected efficient costs and hence base revenue reflects information provided in company business plans.	Encouraged network companies to think about the challenges faced, e.g. electric vehicles. IQI mechanism currently used in distribution price controls to be applied to all four sectors as a tool to improve the quality of companies' business plans.	Companies need to make a strong case to us that their business plans and delivery solutions are value for money over the long term. Clear link between what is to be delivered and cost.
Assessment of expected efficient costs	Ofgem assessment of expected efficient costs of delivery feeds into base revenue. Assessment draws on company business plans and other sources of information, and uses a range of techniques including comparative efficiency analysis.	Focus on total costs in assessing business plans and designing incentives. Benchmarking analysis important, but less of a 'mechanistic' link to determination of allowed revenue. Increased role for international benchmarking. Will need to develop panel data over time. Greater flexibility on what techniques may be used when assessing business plan and expected efficient costs (e.g. spot checks, vary scrutiny proportionately).	Greater onus placed on companies to justify why their plans are efficient. Potential to require company to provide market testing evidence, included in regulatory tool-kit for assessing efficient costs.
Proportionate treatment			Proportionate approach to the level of scrutiny of each company's business plan, according to the quality of the business plan and track record for efficient delivery. Potential for early price control settlement for the best performers.

	Frameworks are the same	Sustainable Network regulation builds on RPI-X	Sustainable Network Regulation is different
Competition in delivery		Primary outputs set in a way that facilitates effective competition upstream and downstream, for example amongst independent network operators and potentially in the future with Energy Service Companies.	Option to give third parties responsibility for aspects of delivery, where a network company does not deliver outputs or does not demonstrate that their proposals for material and separable projects are value for money for the long term.
Incentives for long-term efficient delivery	Incentive mechanisms are used to influence how network companies operate and make decisions	Mix of output incentives determined using transparent principles. Potential rewards/penalties faced by network companies would be streamlined and more tightly linked to efficient delivery of primary outputs. Upfront efficiency incentive rate, with savings and higher costs shared annually (with a lag) between companies and consumers. Same rate for opex and capex. Adjustments to revenue during period for output incentives and efficiency incentive rate. Limited use of ex post efficiency reviews. Possibility of enforcement action and licence revocation in the event of persistent non-delivery of outputs.	
Innovation		Innovation encouraged through incentives underpinning the long-term and outputs-focused framework. Introduce two separate, time limited, innovation funding mechanisms (one for gas, one for electricity) that build on existing IFI and LCN Fund. Develop governance arrangements building on LCN Fund arrangements.	Innovation funding mechanisms allow for financing to be awarded to network companies or non-network parties for innovation projects at all points in the innovation cycle. Innovation funding mechanisms to include rewards for innovation in network companies' charging and commercial arrangements.

	Frameworks are the same	Sustainable Network regulation builds on RPI-X	Sustainable Network Regulation is different
Inflation indexation	Revenues companies allowed to collect under the price control adjust in line with changes in the RPI during the control period.		
Uncertainty mechanisms	Role for uncertainty mechanisms to provide some protection to network companies against financial risks, where this is in consumers' interests.	Determine when and how to design and implement uncertainty mechanism using transparent principles.	
Financeability	Investors earn a WACC-based return on a regulatory asset value Regulatory asset value is not 'at risk' as long as outputs are delivered. Same approach to cost of equity.	Similar approach to cost of debt, but more transparency and long-term commitment to principles. We would assess financeability in the round, considering evidence from a number of sources, including cash flow metrics used by credit rating agencies. Onus on companies to resolve any short-term cash flow concerns. Fixed percentage of total expenditure to be capitalised. Percentage set a price control review to strike a fair balance between existing and future consumers, in light of proportion of capex-like costs expected during price control period.	Long-term commitment to principles for determining WACC and assessing financeability. Nominal gearing reflects an assessment of the cash flow risk that a business faces under the regulatory package. Potential for variation in allowed return across companies if very different risk exposure. Depreciation period should reflect average economic asset lives.

	Frameworks are the same	Sustainable Network regulation builds on RPI-X	Sustainable Network Regulation is different
Commitment			Longer-term commitment to principles underpinning the regulatory framework, particularly those relating to financeability. Clear and objective rationale for moving away from these principles when we identify a need to adapt the framework.
Price control review process	2 to 2.5 years		More information upfront about our strategy and methodology for the price review. More focus on enhanced engagement with stakeholders by both network companies and Ofgem. Potential for GEMA to make decisions on some aspects of policy or a company’s price control proposal earlier in the process than previously.
Industry structure	Implement with existing structure	Keep TO/SO arrangements, lessons from offshore transmission and any developments in potential Distribution System Operator (DSO) role under review.	

Appendix 4 - The Authority's powers and duties

1.1 Ofgem is the Office of Gas and Electricity Markets which supports the Gas and Electricity Markets Authority ("the Authority"), the regulator of the gas and electricity industries in Great Britain. This appendix summarises the primary powers and duties of the Authority. It is not comprehensive and is not a substitute to reference to the relevant legal instruments (including, but not limited to, those referred to below).

1.2 The Authority's powers and duties are largely provided for in statute (such as the Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000, the Competition Act 1998, the Enterprise Act 2002 and the Energy Acts of 2004, 2008 and 2010) as well as arising from directly effective European Community legislation.

1.3 References to the Gas Act and the Electricity Act in this appendix are to Part 1 of those Acts.[32] Duties and functions relating to gas are set out in the Gas Act and those relating to electricity are set out in the Electricity Act. This appendix must be read accordingly.[33]

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

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

the shipping, transportation or supply of gas conveyed through pipes;

the generation, transmission, distribution or supply of electricity;

the provision or use of electricity interconnectors.

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

[32] Entitled "Gas Supply" and "Electricity Supply" respectively

[33] However, in exercising a function under the Electricity Act the Authority may have regard to the interests of consumers in relation to gas conveyed through pipes and vice versa in the case of it exercising a function under the Gas Act.

1.7 In performing these duties, the Authority must have regard to:

the need to secure that, so far as it is economical to meet them, all reasonable demands in Great Britain for gas conveyed through pipes are met;

the need to secure that all reasonable demands for electricity are met;

the need to secure that licence holders are able to finance the activities which are the subject of obligations on them[34]; and

the need to contribute to the achievement of sustainable development.

1.8 In performing these duties, the Authority must have regard to the interests of individuals who are disabled or chronically sick, of pensionable age, with low incomes, or residing in rural areas.[35]

1.9 Subject to the above, the Authority is required to carry out the functions referred to in the manner which it considers is best calculated to:

promote efficiency and economy on the part of those licensed[36] under the relevant Act and the efficient use of gas conveyed through pipes and electricity conveyed by distribution systems or transmission systems;

protect the public from dangers arising from the conveyance of gas through pipes or the use of gas conveyed through pipes and from the generation, transmission, distribution or supply of electricity; and

secure a diverse and viable long-term energy supply.

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

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

the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed and any other principles that appear to it to represent the best regulatory practice; and

certain statutory guidance on social and environmental matters issued by the Secretary of State.

[34] Under the Gas Act and the Utilities Act, in the case of Gas Act functions, or the Electricity Act, the Utilities Act and certain parts of the Energy Acts in the case of Electricity Act functions.

[35] The Authority may have regard to other descriptions of consumers.

[36] Or persons authorised by exemptions to carry on any activity.

Appendix 5 - Glossary

A full glossary of terms used in RPI-X@20 documents can be found on our website:

http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/rec%20glossary.pdf

Appendix 6 - Feedback Questionnaire

1.1 Ofgem considers that consultation is at the heart of good policy development. We are keen to consider any comments or complaints about the manner in which this consultation has been conducted. In any case we would be keen to get your answers to the following questions:

1. Do you have any comments about the overall process, which was adopted for this consultation?
2. Do you have any comments about the overall tone and content of the report?
3. Was the report easy to read and understand, could it have been better written?
4. To what extent did the report's conclusions provide a balanced view?
5. To what extent did the report make reasoned recommendations for improvement?
6. Please add any further comments?

1.2 Please send your comments to:

Andrew MacFaul
Consultation Co-ordinator
Ofgem
9 Millbank
London
SW1P 3GE

andrew.macfaul@ofgem.gov.uk