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RIIO T1

RIIO GD1

Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Uncertainty mechanisms

Document Type: Supplementary Annex (RIIO-T1 and GD1 Overview papers)

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

Overview:
RIIO-T1 and GD1 are the first transmission and gas distribution price controls to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model. RIIO is designed to drive real benefits for consumers; providing network companies with strong incentives to step up and meet the challenges of delivering a low carbon, sustainable energy sector at a lower cost than would have been the case under our previous approach. RIIO puts sustainability alongside consumers at the heart of what network companies do. It also provides a transparent and predictable framework, with appropriate rewards to promote timely investment in the networks.

Having consulted on our initial strategy for the next transmission and gas distribution price controls, this supplementary annex to the main decision documents sets out our decision on the use of uncertainty mechanisms. This document is aimed at those seeking a detailed understanding of our proposals. Stakeholders wanting a more accessible overview should refer to the main decision documents.

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Associated Documents

Main decision papers

- Decision on strategy for the next transmission price control - RIIO-T1 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decision.pdf
- Decision on strategy for the next gas distribution price control - RIIO-GD1 http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decision.pdf

Links to supplementary annexes

- Decision on strategy for the next transmission price control - RIIO-T1 Outputs and incentives http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionoutput.pdf
- Decision on strategy for the next transmission price control - RIIO-T1 Tools for cost assessment http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisioncosts.pdf
- Decision on strategy for the next gas distribution price control - RIIO-GD1 Outputs and incentives http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisionoutput.pdf
- Decision on strategy for the next gas distribution price control - RIIO-GD1 Tools for cost assessment http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1decisioncosts.pdf
- Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Business plans, innovation and efficiency incentives http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionbusplan.pdf
- Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Financial issues http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisionfinance.pdf

Links to other associated documents

- Providing a greater role for third parties in electricity transmission: Early thinking and options http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/thirdpartyrole.pdf
- Decision letter on the regulatory asset lives for electricity distribution assets http://www.ofgem.gov.uk/Networks/Policy/Documents1/assetlivedecision.pdf
- The Weighted Average Cost of Capital for Ofgem's Future Price Control (March 2011 update) – Report by Europe Economics on behalf of Ofgem http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/GD1WACC.pdf
- Consultation on strategy for the next transmission price control - RIIO-T1 Overview paper (159/10)

http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIOT1%20overview.pdf

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

A glossary of terms for all the RIIO-T1 and GD1 documents is on our website: http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/T1decisiongloss.pdf

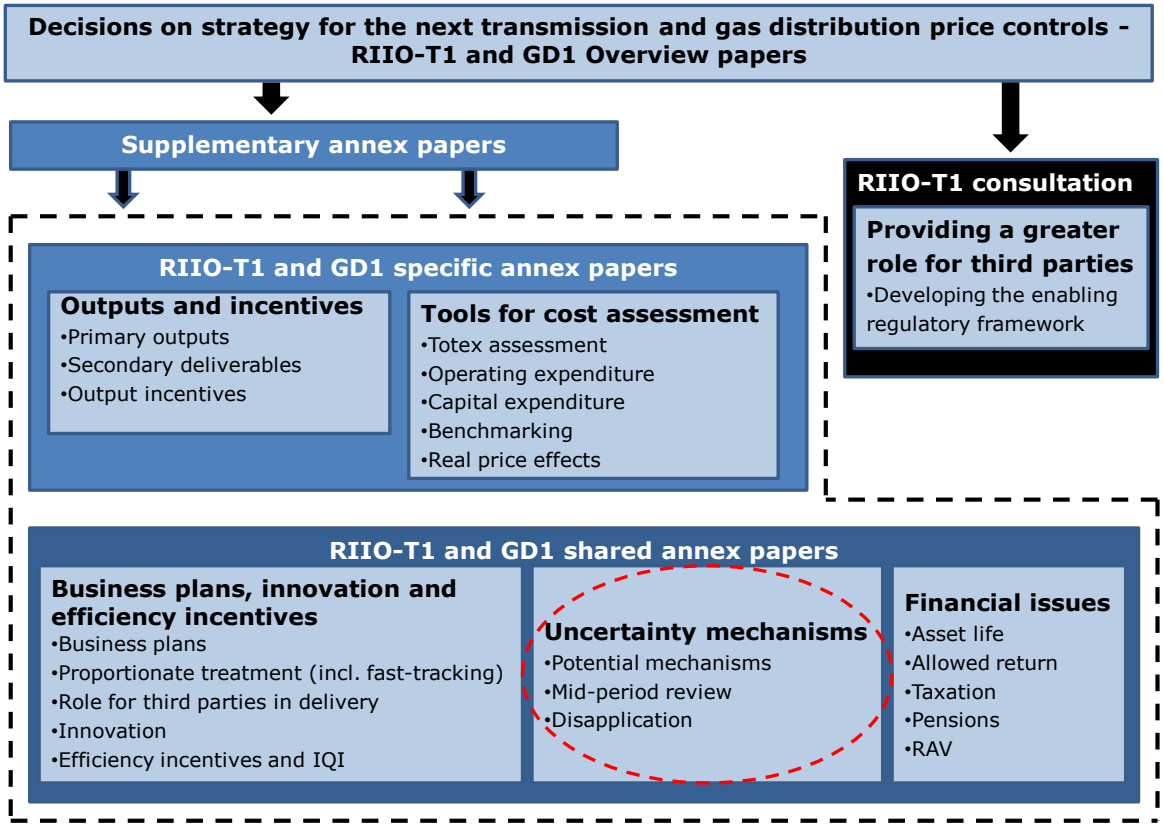
Table of Contents

1. Introduction

1.1. The next transmission and gas distribution price controls, RIIO-T1 and GD1, will be the first to reflect the new RIIO model. The price controls will be set for an eight-year period from 1 April 2013 to 31 March 2021. In December 2010, we consulted on our initial strategy for the two price control reviews.[1] The suite of documents included a supplementary annex, which set out our proposed approach to managing uncertainty.

1.2. Following consideration of responses received to the initial strategy consultation ('December document'), we have published a suite of documents setting out our decisions on RIIO-T1 and GD1. Figure 1.1 below provides a map of the RIIO-T1 and GD1 documents published as part of the suite of decision documents.

Figure 1.1: RIIO-T1 and GD1 document map*



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

[1]Consultation on strategy for the next transmission price control - RIIO-T1 Overview paper Ref 159/10 http://www.ofgem.gov.uk/Networks/Trans/PriceControls/RIIO-T1/ConRes/Documents1/RIIOT1%20overview.pdf
Consultation on strategy for the next gas distribution price control - RIIO-GD1 Overview paper Ref 160/10 http://www.ofgem.gov.uk/Networks/GasDistr/RIIO-GD1/ConRes/Documents1/RIIOGD1%20overview.pdf

Summary of key decisions

1.3. We outline in this document the uncertainty mechanisms that will apply during RIIO-T1 and GD1. Our approach has not changed to that set out in the December document. There is still scope for the network companies, in their business plan submissions, to suggest additional mechanisms or alternative mechanisms to those outlined here but we reiterate the requirement that strong evidence must be provided to justify these and that they must meet the RIIO criteria of providing value for money to consumers.

1.4. We recognise that uncertainty mechanisms have the potential to increase the volatility to charges that will feed into the customer bill. We are further investigating whether there is a requirement for an additional process to reduce volatility, eg a cap and collar on adjustments to allowed revenue. No decision in this area has yet been made as we will await the business plan submissions to give greater clarity on likely impacts that uncertainty mechanisms may have on allowed revenue.

1.5. The scope of some mechanisms have been increased in light of stakeholders' responses. For example, we have widened the scope of the street works reopener to cover additional cost areas. We have also increased the network companies opportunities to trigger the reopener, ie there will now be two reopener windows.

1.6. We will implement the mid-period review of output requirements as outlined in the December document and the scope will remain unchanged. We provide clarification around how we intend to keep the scope of the review contained in order not to open up wider aspects of the price control.

Structure of this document

1.7. The remainder of this document is structured as follows:

- Chapter 2 sets out our principles guiding the use of uncertainty mechanisms and the information that network companies will need to provide if they wish to propose additional uncertainty mechanisms beyond those discussed in this document
- Chapter 3 outlines uncertainty mechanisms that we propose be applied to all sectors currently under review (gas distribution, gas transmission and electricity transmission)
- Chapter 4 sets out specific gas distribution uncertainty mechanisms
- Chapter 5 discusses specific gas transmission uncertainty mechanisms
- Chapter 6 outlines specific electricity transmission uncertainty mechanisms
- Chapter 7 sets out our approach to the mid-period review of output requirements
- Appendix 1 summarises the responses received to the questions we consulted upon in December 2010.

2. Approach to managing uncertainty

Chapter Summary
This chapter sets out our overall approach to managing uncertainty in the RIIO-T1 and GD1 price controls. It sets out the principles guiding the use of uncertainty mechanisms and provides details on what network companies need to provide if they wish to propose additional mechanisms within their business plans.

Summary of consultation proposals

2.1. In our December consultation on RIIO strategy we set out our proposed approach to managing uncertainty. We highlighted the potential justifications for mechanisms and how these fit with the principles of RIIO. We also highlighted how we proposed to mitigate drawbacks that uncertainty mechanisms may create, such as volatility to charges.

2.2. The overarching principle for uncertainty mechanisms from the RIIO handbook is as follows: *"We expect network companies to manage the uncertainty they face. The regulatory regime should not protect network companies against all forms of uncertainty. The use of uncertainty mechanisms should be limited to instances in which they will deliver value for money for existing and future consumers while also protecting the ability of networks to finance efficient delivery."*[2]

2.3. We outlined that the use of uncertainty mechanisms may benefit consumers in a number of different ways, such as contributing to a lower cost of capital and reducing consumers' exposure to forecasting uncertainty at the price control review. But that they may also bring downsides, such as undermining efficiency incentives, creating volatility in charging, complexity and risks of unintended consequences.

2.4. In line with the RIIO principles, we set out in the December document the supporting information network companies would need to present in order to justify the inclusion of additional uncertainty mechanisms in the price control. These are set out in Table 2.1.

[2]See page 96 of the RIIO handbook.

Table 2.1: Information required for additional uncertainty mechanisms

Issue	Information required
What is the issue/risk that the proposed mechanism addresses?	This needs to set out the uncertainty identified and the grounds why an uncertainty mechanism might be appropriate.
What is the proposed mechanism?	A description of what the mechanism is and how it works. This needs to be detailed enough to allow potential implementation. If there is a materiality threshold, this would need to be set out either as a percentage of allowed revenue or allowed expenditure.
What are the justifications for the mechanism?	This needs to set out the benefits of the mechanism. It is also necessary to set out the materiality of these issues where possible, eg what is the expenditure exposure of the issue/risk?
What are the drawbacks from the proposed mechanism?	This needs to set out the drawbacks of the mechanism. Again it is necessary to set out the materiality of these drawbacks where possible, eg the impact on charging volatility.
Can the drawbacks be reduced?	This would need to explain why the drawbacks cannot be mitigated through alternative mechanism designs, eg by using a driver instead of logging-up or cost pass through.
On balance, does the mechanism deliver value for money while protecting the ability to finance efficient delivery?	Explanation of why the benefits of the mechanism outweigh the drawbacks.

2.5. We acknowledged the downsides that uncertainty mechanisms may create and how the price controls will contain measures to manage charging volatility and predictability to avoid unnecessary adverse effects on consumers. We outlined that our proposals aimed to achieve this through the following:

- Provision for re-profiling during the price control period: with Ofgem's consent the network company will be able to change the profile of revenue collection (this was discussed further in Chapter 2 of the 'Supplementary Annex – Business plans, innovation and efficiency incentives').
- The mechanisms are designed with these considerations in mind: for example, we will introduce reopener windows (ie fixed periods when reopeners can be triggered) to improve predictability and reduce the volatility that may be introduced by such mechanisms.

Summary of responses

2.6. There was general agreement with our principles on setting uncertainty mechanisms and the information requirements for any additional mechanisms. One respondent suggested that mechanisms should be judged by a more formal cost benefit analysis that quantified the impacts of any mechanism.

2.7. Another respondent commented that they thought Ofgem's main concern seemed to be the need for uncertainty mechanisms to be as simple as possible in their design and that this could be at the detriment of allowing for efficient financeability.

2.8. A supplier raised concerns over the volatility to charges created by uncertainty mechanisms. They are keen for further discussion on the issue. They suggested three options for reducing volatility:

- A cap and collar on any changes to allowed revenue. All revenue adjustments outside the cap and collar would be logged-up to an appropriate time when they could be added to the allowed revenue collected, on an NPV neutral basis.
- Applying a smoothing algorithm to spread out any revenue adjustments over a set time period.
- Logging up of all revenue adjustments to an appropriate time when they could be added to the allowed revenue collected, on an NPV neutral basis.

2.9. They acknowledge that with any savings that consumers will see due to the increase in predictability and stability, ie a reduction in the risk premium charged by suppliers, there will also be a cost created by the delay in revenue collection by the network companies. Network companies would need to be compensated so that there is no loss to them from the delay to recouping revenue.

2.10. Most network companies within their responses included areas in which they feel a mechanism may be appropriate but did not, at this time, provide details of how any additional mechanisms would work. Table 2.2 below sets out the areas where the requirement for additional mechanisms have been suggested.

Table 2.2: Additional mechanisms suggested by network companies

Sector	Additional areas where uncertainty mechanism suggested
All sectors	To allow for changes in revenue from increases in RPEs, over those set by the ex ante allowance
	Legislative change, eg environmental, safety
	Interaction of outturn RPI and RPI assumed for tax allowances
	Pension Protection Fund (PPF) levies
Gas distribution	Impact of smart meter roll out on provision of emergency service
	Reopener for changes in the availability and cost of NTS products, eg flat capacity, flex capacity and system pressure
	Third party water ingress adjustment
Electricity Transmission	Reopener for changes to requirements for flood resilience
	Changes to the requirements for undergrounding
	Logging-up of costs for compensating landowners

Our decision

2.11. We propose to retain the principles that we set out in our December document for managing uncertainty. We believe that this approach provides a sound basis on which to ensure that uncertainty mechanisms are limited to instances where they will provide value for money for existing and future customers while also protecting the ability of networks to finance efficient delivery.

2.12. We will continue to require network companies to provide the information set out in Table 2.1 when justifying the inclusion of additional uncertainty mechanisms as part of the their business plan submissions. The only additional requirement in this area that we request is the inclusion of quantified costs and benefits where possible, as suggested by one of the respondents to our consultation. For example, where companies suggest that the benefit of an additional mechanism would be to lower the cost of capital, we would welcome an estimate of this impact to help us understand whether the mechanism represents value for money for consumers.

2.13. We are investigating whether any further mechanism is needed to manage charging volatility during the price control. In considering any mechanism to control for volatility we must take into account not only uncertainty mechanisms but the other elements of the price control that have the potential to create volatility, eg output and efficiency incentives. In designing the mechanisms outlined within this document we have aimed to minimise the level of volatility that they may create, eg

by introducing reopener windows. As outlined we have in place strict requirements for the inclusion of any further mechanisms put forward by the network companies.

2.14. One of the principles of RIIO is that network companies should see the consequences of their actions sooner and therefore any adjustments to allowed revenue should occur as soon as possible after the additional cost/saving is made. While acknowledging that this more timely adjustment may lead to an increase in volatility, and thus affect customers' bills (through the suppliers' risk premium), we believe these downsides are well mitigated and that timely adjustments are fairer to both existing and future consumers. We will consider our position on the requirement for an additional mechanism once the network companies have submitted their business plans. They will provide greater clarity on likely impacts that uncertainty mechanisms may have on allowed revenue. We also invite network companies, as part of their business plans, to propose how the extent of any revenue adjustments may be controlled to reduce charging volatility.

2.15. Table 2.3 below highlights the uncertainty mechanisms proposed within this document. Further details on specific mechanisms are outlined in the following chapters.

Table 2.3: Proposed uncertainty mechanisms

Mechanism	Applicable sectors	Timing of adjustment to allowed revenue	Chapter reference
RPI indexation	All	Annually	3
Licence fees and business rates pass through	All	Annually	3
Cost of debt indexation	All	Annually	3
Pension deficit repair	All	Every three years (April 2015 and every three years thereafter)	3
Tax trigger	All	Year following change in tax legislation	3
Centre for the Protection of National Infrastructure reopener	All	Restricted to two windows (April 2016, April 2019)	3
Mid-period review	All	Once (April 2017)	7
Disapplication of price control	All	Unknown	3
Street works reopener	Gas distribution	Restricted to two windows (April 2016, April 2019)	3
Mains replacement and asset risk	Gas distribution	Reopener (restricted to material changes in policy)	4

Mechanism	Applicable sectors	Timing of adjustment to allowed revenue	Chapter reference
Reopener for changes to the connection charging boundary	Gas distribution	Restricted to two windows (April 2016, April 2019)	4
Entry and exit capacity revenue drivers	Gas transmission	When there is a requirement for additional entry/exit capacity	5
Volume driver for connections expenditure	Electricity transmission	Value of driver for different types of connections projects set at start of price control, timing of adjustment dependent on delivery of connections projects	6
Wider reinforcement works: option a) trigger mechanism	Electricity transmission	Revenue allowance for each event set at the start of the price control, timing of adjustment dependent on event being triggered	6
Wider reinforcement works: option b) within period determinations	Electricity transmission	Annually (if TOs submit project costs for assessment)	6
Wider reinforcement works: option c) volume driver	Electricity transmission	Unit cost allowance set at the start of the price control, timing of adjustment dependent on changes to boundary capability	6
Inter-TSO cost pass through	Electricity transmission	Annually	6

3. Uncertainty mechanisms for all sectors

Chapter Summary
This chapter sets out the uncertainty mechanisms that apply to all sectors. It also summarises the arrangements for disapplication of the price control.

RPI indexation of allowed revenue

Summary of consultation proposal

3.1. At each price control review we set allowed revenues that can be recovered over the price control period. These allowed revenues are set in the prices of a base year during the review itself and are then indexed on changes in the Retail Prices Index (RPI) to provide protection against economy-wide inflation. At present, this RPI adjustment is calculated using the changes in the average RPI over a six-month period in the previous financial year compared to the six-month average in the year prior to the base year.

3.2. In our December document we consulted on three options for the time period over which the index is calculated:

- 12-month average: January to December (the calendar year)
- 12-month average: April to March (the financial year)
- no change: maintaining use of six-month averages.

Summary of responses

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

3.4. Two respondents suggested the potential need for transitional arrangements if any changes are implemented but they did not set out what these adjustments might be or how they would be calculated. One of these respondents indicated that transitional arrangements would only be necessary if a significant additional lag were built in.

Our decision

3.5. We propose that for RIIO-T1 and GD1 the RPI indexation use an average calculated over a 12-month period, from January to December. We acknowledge the

concerns raised over forecasting uncertainty that would exist if we were to implement an average using RPI from April to March.

3.6. This change will operate as follows. Price control allowed revenues will be set in 2009-10 prices (the base year). Allowed revenues for each financial year will then be indexed by changes in average RPI over the January-December period in the previous financial year compared to the January to December average in the year prior to the base year (2008).

3.7. For example, allowed revenue for the year commencing April 2013 will be adjusted for the percentage change in average RPI between January-December in 2008 and January-December in 2012.

3.8. This approach still builds in a lag between allowed revenue and actual economy-wide inflation but the adjustments are based on a 12-month average which avoids the risks associated with not taking into account RPI data for six months of the year. This approach to RPI indexation has also been built into the offshore transmission regulatory framework.

3.9. This change would apply to allowed base revenues for both RIIO-T1 and GD1, and also to the electricity transmission schemes relating to Transmission Investment for Renewable Generation (TIRG) and the successor to the Transmission Investment Incentives (TII).

3.10. We do not think that any transitional arrangements are necessary as part of this change. The change will still involve calculating an annual measure of inflation and any growth in RPI indices will not be double counted.

Street works reopener

3.11. In the December document this mechanism was labelled as a Traffic Management Act (TMA) permitting scheme reopener but we have renamed it street works reopener due to widening the scope of the mechanism.

Summary of consultation proposal

3.12. We set out a mechanism to provide protection against the introduction of permitting schemes under the Traffic Management Act 2004 (TMA) and the equivalent Act in Scotland. The purpose of the mechanism was to reduce consumers' exposure to forecasting uncertainty at the time of the price control review and to contribute to a lower cost of capital by providing companies protection against additional costs associated with the introduction of such permitting schemes. The potential downsides to consumers were mitigated by incorporating reopener windows to reduce any charging volatility and by setting a minimum threshold of additionally incurred costs that must be breached to trigger the reopener.

3.13. We outlined that where costs were already being incurred under a permitting scheme, and six months of cost data could be provided, that an ex ante allowance would be set for these permitting costs. The costs associated with additional permitting schemes would be funded through the reopener mechanism. The proposed reopener did not provide protection against volume risk (ie the number of street works) as it only covered the additional incremental costs associated with permitting schemes for the works forecast at the time of the price control review.

3.14. We said that benchmarking would be used to assess the efficiency of one-off set-up costs, additional administration costs and the impact of any permit conditions, eg changes to working practices. This benchmarking would where possible make use of data from other network companies including the electricity distribution network companies (DNOs).

3.15. We proposed having one reopener window at the halfway point of the price control which the network companies could trigger to cover the additional costs (over the full control period) associated with permitting schemes not covered in the price control.

3.16. The reopener would only be triggered if the additional funding required as part of the reopener breached a pre-defined materiality threshold. We discussed the options for setting this threshold based on a percentage of base revenue, or in terms of allowed expenditure.

3.17. Our proposals indicated that we thought that this mechanism would only be applicable to gas distribution and not to transmission. We invited views as to whether the mechanism should be extended to the transmission sectors.

Summary of responses

3.18. Six respondents argued that additional reopener windows would be required beyond the one proposed in the December document due to the possible materiality of the costs and the uncertainty over timing. Suggestions to mitigate the issue included:

- an ex ante allowance set annually with any over spends or under spends being shared with consumers, within a cap and a collar
- allowing for two reopener windows during the price control
- not restricting reopeners to a window at all, allowing recovery of costs the year after any materiality threshold is breached.

3.19. One supplier was keen that we did not increase the number of windows and kept to one window at the halfway point in the price control.

3.20. In relation to materiality thresholds, for both the street works reopener and the Centre for Protection of National Infrastructure (CPNI) reopener, one respondent agreed with changing the methodology for calculating the threshold to be based on expenditure as this better represents the impact faced. Others disagreed, stating

that the use of percentage of base revenue was more transparent as users of the system could identify more with this figure. We note that this view does not preclude setting the threshold in terms of allowed expenditure but then re-expressing it in terms of allowed revenue to assist transparency. One respondent suggested that network companies be allowed to set their threshold based on their individual financeability and cost of equity package.

3.21. One Transmission Owner (TO) requested that the reopener for changes in the street works regime be applicable to them, in addition to the Gas Distribution Networks (GDNs), as they forecast significant work that could be affected by permitting schemes. The other TOs did not request that this mechanism apply to them.

Our decision

3.22. We have had further discussions with the network companies and the government departments responsible for the street works regime about potential changes to the costs of street works. These discussions have highlighted:

- particular parts of the street works regime that may change
- geographical areas where certain changes are more likely.

3.23. In light of these discussions we have revised our proposals to take account of uncertainty beyond introduction of permitting schemes, ie we have extended the scope of the reopener. We set out below these developments in our thinking.

3.24. Our approach to setting an ex ante allowance as part of the price control review remains unchanged from what we outlined in our December document. Where six months of cost data exists for permitting schemes we will set an ex ante allowance for the costs associated with these schemes. Costs associated with additional schemes would be covered by the reopener mechanism.

3.25. The permitting scheme costs captured by the reopener include:

- one-off set up costs
- permit fee costs
- additional admin costs
- additional costs from the introduction of permit conditions.

3.26. In addition to covering these permitting costs, we propose that the reopener will also capture changes to costs from developments to the street works regime in the following areas:

- changes to working practices from the introduction of, or changes to, codes of practice, eg the London Code of Conduct
- the levying of lane rental charges by highways authorities
- changes to inspection fees

- changes to the requirements for reinstatement, eg full and half width reinstatement
- congestion charging schemes - the introduction of new schemes or changes to existing ones.

3.27. We will not be including, within the reopener, any changes to penalty fees, eg FPNs, inspection penalties and overstay fines, occurring during the price control. The companies will need to manage this risk. This is consistent with the approach in the current electricity distribution price control (DPCR5).

3.28. If a reopener is triggered we will, in assessing the changes to cost items included within the reopener, undertake benchmarking between network companies where possible so that we only allow an adjustment for efficient costs. Within companies' annual reporting they will be required to provide details of costs associated with street works. The reopener will only provide protection against unit cost risks associated with street works and not volume risks to ensure that the companies retain appropriate incentives to minimise the number of works that they undertake. This means that we will only make adjustments based on the forecasted volume of works at the time of the price control using the proportion of works affected by changes.

3.29. We have taken on board the concerns raised that one reopener window will not be sufficient given the uncertainty over when additional costs will be faced. We have revised our proposal to allow for two reopener windows. This will allow the network companies to make submissions to us in both July 2015 and July 2018. We will then make a determination on any requests within four months allowing network companies to notify suppliers in December 2015 and December 2018 of any changes to charges to be introduced in April 2016 and April 2019. If no reopener is triggered costs will be logged-up and assessed at the next price control.

3.30. A reopener can only be triggered by a network company if the change to their efficient costs (either positive or negative) covered by this reopener breach the materiality threshold. Efficient costs will represent the total costs incurred, and likely to be incurred over the remaining years of the price control, once the efficiency incentive rate has been applied. As per the ex ante allowance network companies will need six months of cost data to justify each of the areas where they are requesting additional funding.

3.31. The threshold is one per cent of allowed expenditure in year one of the price control (2013-14) and once the efficiency incentive rate (from the Information Quality Incentive (IQI)) has been applied. We are setting the threshold in terms of allowed expenditure rather than allowed revenue, as we feel that this better represents the risk being undertaken by the companies during the price control period. The following illustrates how we will assess if the threshold has been breached:

- If additional costs (in 2013-14 prices) amount to £10m and the network company's efficiency incentive rate is 40 per cent then the total value of additional costs for assessment are £4m.

- If £4m is equal or greater than one per cent of the network company's expenditure in year one of the price control (2013-14) then the reopener will be triggered.

3.32. As noted by some of the respondents, a figure in terms of allowed revenue is more transparent, so we propose calculating the threshold in terms of expenditure but it can then be re-expressed as a percentage of allowed revenue.

3.33. If a network company were to trigger the first reopener, and an adjustment made to their allowed revenue, then in order to trigger the second reopener additional costs, allowed as part of the reopener, would need to again breach the one per cent threshold.

3.34. To further minimise the volatility to charges we will group the reopener for street works with the reopener for changes to the Critical National Infrastructure (CNI) requirements. Each reopener would have its own materiality threshold but the timing of the reopener windows and any changes to charges will be aligned.

3.35. It was initially thought that this would only be a material issue for the GDNs, who conduct a number of street works. However, this mechanism will be applicable to the TOs, if they can demonstrate that it passes our criteria. We have not received any evidence from the TO that expressed an interest in this mechanism that the costs may be material enough for it to warrant a mechanism rather than an ex ante allowance. We will assess, against our criteria, all business plan submissions in July 2011.

3.36. This mechanism will apply symmetrically. If costs were to fall below those forecast at the time the price control is set, then Ofgem could trigger the reopener or make an adjustment at the next price control review. This would occur if the materiality threshold were breached on the downside.

Changes in requirements of the Centre for the Protection of National Infrastructure

Summary of consultation proposal

3.37. We proposed an uncertainty mechanism to provide protection against the costs that may arise due to the requirement to enhance physical security provisions. We outlined a proposal to treat any costs through a reopener in a similar way to street works, and to group them within the same reopener window.

3.38. We set out that once a materiality threshold had been met, costs would be assessed and an ex ante allowance set for the remainder of the price control. If the threshold had not been met by the time of the window then costs would be logged-up and assessed at the next price control.

Summary of responses

3.39. The responses in paragraphs 3.18 to 3.20 above also relate to the proposal for changes to requirements by the CPNI. They focus on the need for a more flexible model for the reopener to allow for recovery of costs closer to the time of actual delivery of projects, than the current proposal may allow. One respondent suggests that costs should be recovered the year after the delivery of any project.

3.40. It has been suggested by one respondent that more information may be available on sites that would require enhancement by the time final proposals set the allowed revenues for RIIO-T1 and GD1. This could allow costs to be funded by an ex ante allowance. If this is not the case then they support the use of a reopener mechanism, but they think that one window is not adequate.

3.41. One respondent suggests that a suite of mechanisms is required to adequately deal with the uncertainty in this area. They feel that not only will there be costs for up-scaling the security position, but also ongoing opex costs that will be incurred over the longer term.

3.42. A TO pointed out that already during the current transmission price control (TPCR4) significant works have been undertaken in this area, and that they are in discussion with Ofgem on how this should be funded. The current mechanism, in TPCR4, allows for logging-up but this has been found to be insufficient for timely financeability. The actual costs being incurred are far greater than those forecast at the time the price control was set and therefore this mechanism is proving unfit and putting a burden on the TO's cash flow. They reference the developments being made to change the current licence terms to allow funding of CNI projects one year after project delivery, subject to an ex post review.

Our decision

3.43. We have taken on board the current developments in TPCR4 and outline below our further thinking on how this mechanism will operate.

3.44. As part of the price control we will set an ex ante allowance for any known projects. Any additional projects will be assessed during two reopener windows, if the materiality threshold for these projects is breached, or at the start of the next price control.

3.45. We propose grouping this reopener with the reopener for street works in terms of their timing, ie the reopener windows will coincide. Therefore there will be two opportunities during the price control for network companies to submit costs to us for assessment - in 2015 and 2018 - as well as the opportunity to submit costs as part of the price control review itself.

3.46. At the reopener windows we will review costs for any additional projects that have been completed and set an ex ante allowance for known projects that have

been identified as required over the remainder of the price control. Any further projects will be assessed at the end of the price control.

3.47. During the reopener windows evidence will need to be provided that every effort has been made to deliver projects at an efficient cost. As part of this we require that network companies submit to us details of the auditing process that the project costs have gone through. The audit should consist of two stages:

- Stage 1: Technical audit to provide proof that the proposed works meet the requirements of the CPNI.
- Stage 2: Audit of completed works to assess that work has been completed to the required standard and that costs incurred were efficient.

3.48. In addition to this evidence we will use benchmarking across the network companies (including the DNOs where appropriate) to assess the efficiency of costs.

3.49. The threshold will be set at the time of the price control. As with the street works reopener we will set a threshold in terms of allowed expenditure. The threshold will be set at one per cent of allowed expenditure, in year one of the price control (2013-14), once the efficiency incentive rate has been applied. Paragraph 3.31 sets out further details of how this would work. If a company were to trigger both the first and second reopener, on each occasion the threshold of one per cent of allowed expenditure would need to be breached.

Cost of debt indexation

3.50. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 3 of 'Supplementary Annex - Financial issues'. Below is a summary of our decision.

3.51. We still consider indexation to be the most robust option available for setting the cost of debt allowance, to protect both the companies against the risk of rising market rates, and consumers. Our decision is to base the cost of debt index on the iBoxx indices for GBP Non-Financials of 10+ years maturity, with broad A and broad BBB credit ratings. This choice is based on stakeholders' strong preference for iBoxx and further analysis of the indices available. The allowance will be updated annually during the price control based on a 10-year simple trailing average of the index.

Pension deficit repair mechanism

3.52. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 6 of 'Supplementary Annex - Financial issues'. Below is a summary of our decision.

3.53. We have not changed our position from that outlined in the December document. We will undertake an efficiency review, true up, and reset allowances every three years within a price control. This is timed to coincide with the majority of

network companies' schemes triennial valuations. At the end of each price control period we do not intend to true up, unless this coincides with the rolling three year true up and reset cycle.

Tax trigger

3.54. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 5 of 'Supplementary Annex - Financial issues'. Below is a summary of our decision.

3.55. The treatment of tax over the RIIO-T1 and GD1 price controls will vary over time, UK GAAP will be used from 1 April 2013 to 31 March 2014 and for the remainder of the price control EU-IFRS will be implemented. Any delay in adopting EU-IFRS will fall within the scope of the tax trigger and be a trigger event.

3.56. For an adjustment to revenue to be made any changes to tax legislation must breach a trigger point. The trigger point will vary over the price control period; a different trigger point will exist for UK GAAP and EU-IFRS treatment of tax. The price control financial model will be re-run to assess whether the change to tax legislation will cause the trigger point to be reached. If it is deemed that the trigger point has been reached then an adjustment to allowed revenue will occur in the year subsequent to the year in which the trigger event occurred. The adjustment will be on the excess over the trigger point, ie the deadband.

Pass through of Ofgem licence fees and business rates

Summary of consultation proposal

3.57. We proposed that there be no change to the current policy for pass through items. Our reasons included that this mechanism avoids the resourcing costs required to forecast these fees, contributes to a lower cost of capital by protecting against revaluations, and that license fees are relatively small.

3.58. We raised some concerns that there may not be enough incentive on the network companies to protect consumers' interests at ratings revaluations, but we considered that any loss of efficiency would be relatively small. We also stated that network companies will have to demonstrate that they took reasonable action to minimise the ratings valuations.

Summary of responses

3.59. There was no challenge to the proposal to pass through these costs.

Our decision

3.60. The licence will continue to allow pass through of Ofgem licence fees and business rates. The allowance for business rates from 1 April 2013 to 31 March 2015 will be based on the 2010 valuations. The pass through allowance will then be updated every five years to coincide with revaluations. Changes to valuations will be subject to an efficiency review at which time network companies will have to demonstrate that they have done all they can to minimise the ratings revaluations.

Disapplication of the price control

Summary of consultation proposal

3.61. The process outlined in the December document reiterated what we set out in a guidance document in October 2009.[3] It outlined the arrangements for responding in the event that a network company experiences deteriorating financial health. This document, when taken alongside our general financing duty, makes this duty more explicit by providing greater transparency and clarity on the types of circumstances under which a price control will be re-opened and the likely process it will involve. These circumstances include situations in which:

- it can be demonstrated that adequate provision is not provided by the existing price control settlement
- the cause of financial distress was beyond the company's control
- re-opening the settlement could reasonably be expected to relieve the financial distress in a timely manner.

Summary of responses

3.62. The majority of respondents saw no need to change the current arrangements.

3.63. One respondent had concerns that the current licence provisions do not provide sufficient protection for companies in financial distress. They suggested Ofgem needs to review its position to ensure the framework is transparent and fit for purpose. They have concerns that at a time when investment requirements are increasing, along with increases in regulatory asset lives, that the current disapplication provisions do not provide enough protection for a company in financial distress.

Our decision

3.64. We do not intend to change the current policy from that outlined in the December document, ie the guidance set out in the October 2009 document would continue to apply. We believe that the current policy provides adequate and clear

[3] http://www.ofgem.gov.uk/Networks/Policy/Documents1/GUIDANCE%20DOCUMENT%20-%20FINAL%20OCT%2009.pdf

guidance for an efficient and economic network company that finds itself in financial distress. The procedure in place includes the following steps:

- Ofgem's continual monitoring of network companies financial health
- licence conditions that place constraints on operations of the network companies
- disapplication of the price control where necessary
- a trade sale to sell off the assets in financial distress
- as a final resort DECC may file an application to place the network company in energy administration.

3.65. The October 2009 guidance clearly states the requirements for disapplication of the price control. It concludes that the network company seeking disapplication will need to provide evidence that the current price control does not provide adequate provision for an efficient company to operate; that the cause of the financial distress was outside of its control; that reopening the price control would be adequate to relieve the financial distress; and that we assess it will also be in consumers' and other stakeholders' best interests.

4. Gas distribution uncertainty mechanisms

Chapter Summary
This chapter sets out additional mechanisms applicable only to the GDNs.

Mains replacement and asset risk

4.1. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 10 of 'Supplementary Annex - Outputs and incentives'. Below is a summary of our decision.

4.2. As set out in the December document, one of the primary outputs associated with safety is risk removed in terms of the reduction in the number of incidents per annum. This measure currently focuses on mains replacement but we are looking to increase the scope of this output, as more information becomes available, for other assets. There is current uncertainty in the future path of the mains replacement programme and therefore we propose including uncertainty mechanisms within the RIIO-GD1 price control.

4.1. We will include an uncertainty mechanism within the price control that addresses several areas of potential change:

- If the GDNs can appropriately demonstrate that risk removal on other assets is of equal or greater benefit to consumers as risk removal associated with work on non-core assets included in our cost baseline, we will allow them to substitute some of this work for the level of non-core risk agreed in their baseline. Under this approach our price control cost baselines would remain unchanged and the GDNs would continue to retain a share of any cost benefits associated with the substitution under the cost sharing factors.
- If it is not practical for GDNs to demonstrate equivalence of risk across a number of classes the GDNs could still make a case for rebalancing the outputs once they have more advanced asset management systems in place, and assuming it is supported by the evidence and is agreed with the HSE. In order to trigger such a reopener the GDNs will need to demonstrate that they have robust information associated with asset health and criticality and have integrated it with their planning. They will need to show that they can deliver a plan that delivers material benefits to consumers.
- If there are material changes to the Mains Risk Prioritisation System (MRPS) model we would look to make changes to the associated output targets that relate to the redefinition of the MRPS.

4.2. We would allow both ourselves and the GDNs to trigger a reopener if there is a material change to the mains replacement programme following the ongoing review by the HSE. A material change is one which increases or reduces GDN costs by more than one per cent of the allowed expenditure, after application of the efficiency incentive rate.

Connections volumes

Summary of consultation proposal

4.3. We outlined that there would be no mechanism for protection for connections volumes, as long as forecasts by the GDNs are well-justified. If there is significant disagreement, between the GDNs, over the volume of connections then it may be appropriate to introduce a connections driver similar to that in the DPCR5 price control.

Summary of responses

4.4. Most respondents agreed with an ex ante allowance for connections volume, and that a driver would not be necessary. One respondent felt that a revenue driver could be developed for the physical activity if there is uncertainty in the forecast of connections, while back office activity could continue to be part of an ex ante allowance.

Our decision

4.5. We have not changed our position from that outlined in the December document. If there is significant disagreement, from the GDNs, in the forecasts received for the volume of connections then a connections driver will be included as part of the price control. This will work by the setting of an ex ante allowance at the start of the price control, and at the next price control there will be a true-up of differences between the actual volume of connections and the forecast.

4.6. Within the GDN's business plan submissions they will be required to justify their forecast for connection volumes.

Loss of meter work driver

4.7. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 5 of 'Supplementary Annex - Tools for cost assessment'. Below is a summary of our decision.

4.8. We have not changed our position as set out in the December document. We will no longer provide a driver mechanism. Instead we will set an ex ante allowance for efficient costs, using benchmarking across the GDNs. We expect business plan submissions by the GDNs to include the cost of funding an efficient emergency service that makes best use of the labour time freed up from the loss of meter work.

Connection charging boundary

4.9. A summary of our December document and responses received, along with further details of the decision can be found in Chapter 3 of 'Supplementary Annex - Outputs and incentives'. Below is a summary of our decision.

4.10. We outlined options in our December document to fund connection costs if there was a move from a 'deep' to a 'shallowish' connection boundary for injecting gas into the gas distribution network. In the event of such a move, we have decided to initially use a logging up mechanism. If costs become material during the price control a reopener can be triggered. For a GDN to trigger a reopener their efficient logged up costs will have to breach a materiality threshold of one per cent of total expenditure (once the efficiency incentive rate has been applied). As with the reopener for street works and CPNI requirements, the opportunities to submit costs to us for assessment will be restricted to two windows, in July 2015 and July 2018. When a reopener is triggered we will assess whether there is sufficient information on costs for us to be able to introduce an incentivised pass through. If there is sufficient information this would replace the logging up mechanism for all GDNs. If there is not, the GDN triggering the reopener will be able to recover costs and the logging up mechanism will continue until either the second reopener window or the start of the next price control.

Sub-Deducts

Summary of consultation proposal

4.11. In our December document we outlined the uncertainty regarding who owns and is responsible for maintaining Sub-Deduct networks. We indicated that we intended to consult separately on the issue.

Summary of responses

4.12. One respondent welcomed the industry open letter consultation. Another commented that it is not practical for GDNs to adopt these networks and suggested that the only viable long term solution is to re-engineer the networks and meter points.

Current position

4.13. We published an open letter consultation on Sub-Deduct Arrangements on 18 March 2011.[4] This consultation will close on 6 May 2011. In the letter we stated that if, after consideration of responses it is decided that NGG or the GDNs assume responsibility for Sub-Deduct Arrangements going forward, they may incur additional

[4] http://www.ofgem.gov.uk/Networks/GasDistr/GasDistrPol/Documents1/OpenLetterSubDeductv1%2018.pdf

costs in assessing the risks and liabilities presented by these networks and may wish to commence an efficient programme of mitigation measures to reduce those risks.

4.14. Subject to consideration of responses to the consultation, we do not consider that commencement of such risk mitigation measures should be delayed until the implementation of the RIIO-GD1 price control, due to take effect in April 2013. Therefore once a decision has been taken and if the additional costs of responsibility are material in the light of total allowed revenues to the party concerned, we would consider applications for additional allowed revenues under GDPCR1, including efficiently incurred risk mitigation measures on Sub-Deduct Arrangements. We also stated that we may consider a logging up mechanism for that purpose.

4.15. We recognise that any risk mitigation programme may extend into the RIIO-GD1 price control period and therefore the impact of such a programme will need to be included in relevant companies' business plans.

5. Gas transmission uncertainty mechanisms

Chapter Summary
In this chapter we set out the responses to our proposals for uncertainty mechanisms for gas transmission. We also set out our current thinking on this topic.

Revenue drivers for incremental entry and exit capacity

Summary of consultation proposal

5.1. During the eight-year price control period, there will be uncertainty about the level of expenditure needed to deliver incremental entry and exit capacity on the gas transmission system. There is uncertainty as to where and when the capacity will be needed, and in terms of the costs of incremental capacity at different entry and exit points. The existing gas transmission price control includes revenue drivers which provide increases to National Grid Gas' (NGG) allowed revenues when it needs to provide additional capacity at entry and exit points.

5.2. In our December document, we set out our proposals to introduce a number of changes to bring the existing arrangements for gas transmission entry and exit revenue drivers in line with the RIIO framework, particularly in relation to the upfront efficiency incentives. In addition, we also consulted on:

- changes to the operation of revenue drivers if there are delays on the user side
- when the value of revenue drivers at specific entry or exit points would be set.

Alignment of efficiency incentives with the RIIO framework

5.3. We proposed to align revenue drivers for gas transmission with the approach to efficiency incentives set out in the RIIO framework. The efficiency incentives under the revenue drivers would be such that variations in the expenditure incurred in building incremental capacity would be treated in the same way as variations in other categories of gas network expenditure (eg other capital expenditure).

5.4. This would involve an upfront efficiency incentive rate, which determines the extent to which variations in expenditure are shared between consumers and investors. The risk sharing under the efficiency incentive rate would not be conditional on an ex post efficiency review. The implementation of the efficiency incentive rate would be made through annual revenue adjustments over the course of the price control period, as with other areas of gas TO expenditure.

Operation of revenue drivers if there are delays on the user side

5.5. A user can request incremental entry capacity to be delivered by providing a financial commitment to NGG at the long-term auctions. We outlined three concerns with the current regime in the case where a user's project is delayed or abandoned:

- First, if the user holds capacity at only that entry point it can default on credit provision to NGG without incurring penalties. A Uniform Network Code modification proposal (UNC332) seeks to address this issue by removing the ability for a user to defer its capacity if it does not provide sufficient credit. If approved, the user will continue to hold the capacity and be invoiced for it.
- Second, NGG receives revenue from the contractual delivery date even if no additional capacity is made available. The process for how to make an Income Adjustment Event (IAE) in NGG's gas transporter licence has been clarified, which allows those shippers wishing to give notice of an IAE to reduce NGG's allowed revenues in light of project delays.
- The third concern is that currently NGG progresses any reinforcement work to meet contractual delivery dates without any definite link to the progress being made by the user on delivering its project. To deal with this concern, we proposed to employ similar arrangements to those for incremental exit capacity. NGG would notify the user of a date by which certain demonstration information must be provided. If the user fails to provide the demonstration information by the relevant demonstration date NGG can delay any reinforcement work by up to a year. After three delays to the demonstration date the user ceases to hold the capacity and NGG recovers (shared between all shippers) all costs incurred for work done up to the latest demonstration date.

When the value of revenue drivers would be set

5.6. The values of revenue drivers could be set either at the price control review, or during the price control period. We set out benefits and drawbacks of different approaches, including an option whereby we would: set or revise the values for revenue drivers at the price control review; decide whether these could be re-determined after some specified date; and retain the flexibility to set values for other entry and exit points that are triggered as needed during the price control period (potentially based on a standard methodology). We recognised that we would need to adopt an approach that does not discriminate unfairly between users, and that we would need objective reasons for any different treatment of existing entry and exit points at the price control review.

5.7. We invited views on the appropriate split between setting the value of revenue drivers at the price control review and setting them during the period, when incremental capacity is triggered.

Summary of responses

5.8. The majority of respondents that commented on this topic supported the option of retaining revenue drivers for incremental capacity in gas transmission. Indeed, one was strongly opposed to the alternative which would require cost forecasting for an eight-year period. A network user was unconvinced that a revenue driver is required for incremental capacity. It said that any uncertainty mechanism must cover both upsides and downsides in order to address cases in which the project costs are significantly lower than were envisaged when the mechanism was set.

5.9. One network company said that revenue drivers are not appropriate for large projects, where it would prefer a staged approach.

5.10. A network user said that the current system is uncoordinated, and that the cumulative effect of uncertainty mechanisms could be price volatility.

5.11. Concerning delays on the user side, one network company said that a staged approach would help, whilst another network company was concerned that some approaches would simply transfer the risk from NGG to the GDNs.

5.12. Concerning when the values of revenue drivers should be set, one network company said that the cost allowances should be kept up-to-date during the price control period. It also said that consideration should be given to the development of output measures that capture the changing behaviour of existing capacity beyond that assumed credible when the original revenue driver was agreed.

Our decision

5.13. We do not agree with the suggestions from the stakeholder that revenue drivers for incremental capacity should not be used. Over the eight-year period of the price control there is potential for substantial changes in the gas transmission network (eg associated with Liquefied Natural Gas (LNG) and intermittency of electricity generation). We do not believe that it would be in consumers' interests to set an ex ante allowance for the full eight-year period without any revenue adjustment for increases in the capacity required at entry and exit points.

5.14. We do not believe that the type of revenue driver that we proposed would undermine efficiency incentives or create disproportionate complexity. In contrast, seeking to forecast all the incremental capacity that could be triggered over the eight-year period, and the impact of this for the expenditure requirements of NGG would be a difficult exercise, exposing consumers to risks of paying unnecessarily high prices.

5.15. We have decided to proceed on the basis that the price control for gas transmission will retain the use of revenue drivers for incremental entry and exit capacity, as envisaged in our December document.

5.16. We recognise that there are benefits of setting the revenue drivers at the price control review. It would allow us to scrutinise all costs at once, and it would allow the information to be instantly available to developers. However, we also recognise that there are drawbacks with this approach. The revenue drivers could become out of date if there are changes in costs or in network parameters. We have considered entry and exit capacity separately.

Incremental exit capacity

5.17. There are about 180 exit points on the network. Of those exit points that are likely to receive a trigger for extra capacity, some of these had their revenue drivers set at TPCR4 or subsequently. We have decided that it is appropriate to retain these revenue drivers for RIIO-T1. We expect NGG to include, in its business plan, its informed views on network development. We ask NGG to provide, in its business plan, proposals for revenue drivers based on accepted methodologies for those points that are likely to receive a trigger, but whose revenue drivers have not been set yet. These proposals should include costs and the expected profile of expenditure.

5.18. For exit point revenue drivers that are in place at the start of RIIO-T1, we remain open to provisions that would allow the unit costs and modelling to be revised during the price control period to be more cost-reflective. This would make use of up-to-date cost forecasts (preferably via some form of indexation, rather than reopeners) network size and flow patterns. We ask NGG to propose in its business plan any such provisions. NGG should retain the right to call for a revision of a revenue driver. We also believe that Ofgem should have the right to call for such a revision, and there might be cases in which our decision to do so is influenced by the views of third parties, such as shippers and developers. We would put in place safeguards to ensure that this right was only used when appropriate.

5.19. We consider that it would be an inefficient use of time and resources for NGG to work towards revenue drivers for the exit points that are unlikely to receive a trigger. However, if demand transpired during the price control period, then we would expect NGG to request revenue drivers as and when they are required.

Incremental entry capacity

5.20. There are about 20 entry points on the network. The revenue drivers for almost all of these have not been updated since the start of TPCR4. NGG should propose, in its business plan, updated revenue drivers based on accepted methodologies for all of the entry points. These proposals should include costs and the expected profile of expenditure. We recognise that some of the entry points are unlikely to receive a trigger. We would be open to NGG setting out reasoning, in its business plan, for not providing revenue drivers for certain entry points.

5.21. For entry point revenue drivers that are in place at the start of RIIO-T1, we remain open to provisions that would allow the unit costs and modelling to be revised during the price control period to be more cost-reflective. This would make use of

up-to-date cost forecasts (preferably via some form of indexation, rather than re-openers) of network size and flow patterns. As for exit points, we ask NGG to propose, in its business plan, such provisions for revising the unit costs and modelling during the price control period. As for exit points, we believe that Ofgem should have the right to call for such a revision, and there might be cases in which our decision to do so is influenced by the views of third parties, such as shippers and developers. We would put in place safeguards to ensure that this right was only used when appropriate.

Issues for both exit and entry

5.22. We are currently producing a generic methodology that will formalise the existing processes by which we set revenue drivers for incremental exit and entry capacity. The outcomes of that work will not be available for use in NGG's business plan. We ask that NGG indicates in its business plan whether it expects to review revenue driver values before the start of RIIO-T1, to reflect the developments on the generic methodology, or for any other reason.

5.23. We have decided that expenditure made in RIIO-T1 through these revenue drivers should not be subject to an ex post efficiency review. We prefer to rely upon rigorous up front cost assessment and a strong efficiency incentive. We believe that this offers greater protection from over spends for consumers.

5.24. Finally, the revenue drivers are to be aligned with the RIIO approach to the efficiency incentive rate. We will carry out further work to identify in detail how this alignment will work in practice.

5.25. In Chapter 2 of this paper we discuss measures to manage charging volatility and predictability to avoid unnecessary adverse effects on consumers.

5.26. We will work with NGG to determine how to implement our proposals.

6. Electricity transmission uncertainty mechanisms

Chapter Summary
In this chapter we set out the responses to our proposals for uncertainty mechanisms for electricity transmission. We also set out our current thinking on this topic.

Uncertainty mechanisms relating to network connections

Summary of consultation proposal

6.1. In our December document, we set out our proposals to use volume drivers and potentially other uncertainty mechanisms for electricity transmission connections expenditure.

6.2. We stated that our starting point was to use volume drivers for those projects for which neither the need nor the timing was certain at the time of the price control review. We said that it may be appropriate to set volume drivers with different unit cost allowances for different types of connections projects. Projects could be differentiated on a number of criteria, including ranges (or bands) based on capacity, distance to the existing network, and certain geographical factors that add complexity.

6.3. We recognised that volume drivers might not be sufficient to deal with certain high-value connections projects for which there was uncertainty at the time of the price control review. We suggested the use of a trigger mechanism, based on an upfront estimate of project costs, in cases where a particular project could be identified at the time of the price control review but the timing was uncertain. We also identified the possibility of provisions to adjust allowed revenues, during the price control period, to set an upfront revenue allowance for qualifying high-cost connections projects. This mechanism would have similarities to the Transmission Investment Incentives (TII), and is discussed further in the section on wider works, below.

6.4. We said that we did not consider arrangements that are based on pass through of actual expenditure (eg logging up arrangements) to be in the interests of consumers, because of the risks of damaging efficiency incentives.

Summary of responses

6.5. Across those stakeholders that responded on this topic, there was strong support for a volume driver for connections, and for omitting high-cost projects from the volume driver. There was support for banding for different types of projects, but one network company said that there should be an appropriate balance between accuracy and complexity. It said that accuracy meant ensuring that both the costs

and lead-times of the projects covered by the revenue driver are reasonably consistent. Another network company proposed that there should be a limited number of categories which reflect distance and/or capacity.

6.6. Another network company proposed a revenue driver mechanism with pass through component and volume-driven unit cost allowance, similar to the current 'local revenue driver' arrangements.

Our decision

6.7. We have decided to proceed on the basis that the price control for electricity transmission will include volume drivers for connections projects. We ask that TOs include, in their business plans, the forecast baseline for these costs and proposals for the values of volume drivers. There should be appropriate supporting evidence for the baseline on a bottom-up basis setting out the likely mix of connections projects. The volume drivers may be differentiated according to different types of connections projects. The values proposed should be justified (eg by reference to analysis of historical costs and cost forecasts). The companies will need to provide evidence in terms of relevant historical costs and costs for a basket of forecast connection projects in order to substantiate the driver. We also ask the TOs to provide the expected profile of expenditure on each type of connection and a detailed breakdown of project costs and asset additions.

6.8. We ask the TOs to explain the scope of the volume driver, eg distinctions between sole-use connections and shared assets. Alternatively, TOs could suggest options for dealing with sole-use connections outside of the price control. This would remove the volume risk faced by the TO. But there would need to be appropriate protections to prevent customers with sole-use assets from paying too much. In either case, we ask the TOs to provide a breakdown between costs for sole-use connections and for shared assets. We also ask the TOs to provide the expected profile of expenditure for each type of connection, whether sole-use or shared assets.

6.9. In order for us to assess companies' proposals for the values of volume drivers, we will need to have relevant information. We are considering what historical data we should seek from the TOs in order to support this assessment.

6.10. If a TO considers a volume driver to be inappropriate, it is able to propose an alternative uncertainty mechanism and explain why this would be better for consumers. But this should be in addition to information that would allow us to set volume drivers if we considered the alternative mechanism to be inappropriate.

6.11. If a TO considers that volume drivers will not be sufficient, it should include proposals in its business plan for additional uncertainty mechanisms, taking account of the suggestions we have made for potential high cost connections projects. Such proposals should specify a rule to determine which connections projects would qualify for this mechanism rather than for a volume driver. We do not consider a cost threshold (eg £x per MW) appropriate, as this could distort expenditure decisions.

6.12. We continue to believe that uncertainty mechanisms for connections expenditure that are based on pass through of actual expenditure (eg arrangements for logging up with an ex post efficiency review) will not be in the interests of consumers and may conflict with the RIIO framework. TOs should not include such arrangements as part of the proposals in their business plans for electricity transmission connections expenditure.

6.13. Finally, we ask the TOs to set out, in their business plans, the distinctions and methodologies that they have used for distinguishing between connections expenditure and wider reinforcements works.

Uncertainty mechanisms for wider reinforcement works

Summary of consultation proposal

6.14. In our December document, we set out our proposals for possible uncertainty mechanisms for wider reinforcement works in electricity transmission. We identified in our December document that the scale of costs will be substantial and that there will be uncertainty, at the price control review, about what projects to increase the transfer capability of the transmission networks will be in consumers' interests.

6.15. We identified different options for uncertainty mechanisms, each of which is discussed in more detail in the 'Supplementary Annex - Outputs and incentives'. We presented three uncertainty mechanisms, and suggested that a combination of these could bring significant benefits to consumers:

- Option (a): Potential trigger mechanisms through which the required capacity and associated revenue allowance would adjust mechanistically during the price control period according to pre-specified trigger criteria. The trigger criteria and additional revenue allowance would be determined at the price control review.
- Option (b): Provisions that would allow Ofgem to make within-period determinations to approve additional increases in boundary capability, and to provide associated upfront funding during the price control period. This would have similarities to the current TII mechanism.
- Option (c): Provisions under which the network company would have flexibility to choose what level of increase in boundary capability to deliver, and would earn additional revenue, through a volume driver, for each unit of additional capacity that was delivered (up to an agreed maximum). Such a mechanism could be symmetrical such that it would adjust revenues downwards should a TO decide that a smaller increase in boundary capability is in consumers' interests, compared to the increase envisaged, and funded, in base revenues. The scope for such flexibility would be subject to the TO delivering any minimum increases in boundary capability that are agreed at the time of the price control review. This volume driver would be set at the price control review. The additional funding would be conditional on any decisions that the company makes to increase boundary capability being compatible with a network planning policy that we will have approved at the price control review.

6.16. We also presented a fourth option that could be used as part of the arrangements for secondary deliverables for electricity transmission wider works: an incentive mechanism based upon subsequent utilisation of assets. We felt that, whilst this had some attractive properties, it also presented some difficulties.

Summary of responses

6.17. There was agreement on the need for uncertainty mechanisms for wider reinforcement works, but there were differing views on which were most appropriate.

6.18. One network company noted that within-period determinations would have a higher administrative burden and risk of micro-management. It said that it would therefore initially expect this option to be used in more exceptional circumstances. Another network company expressed support for a trigger mechanism, and has expressed support for within-period determinations and associated upfront allowances. Another network company has a strong preference for within-period determinations.

6.19. A network user said that there needs to be more clarity for anticipatory works, and that they should be "more managed", rather than being left to the TOs. It also said that the key issue with any uncertainty mechanism is the predictability of Transmission Network Use of System (TNUoS) charges.

6.20. One network user included a consultant's report that said that negative triggers are now a practical option, because the volume of future connections is now known with greater certainty, whereas the timing was not. Under this approach, capacity and associated revenue allowance forecasts would be set at the price control review, but the TO's revenue would be reduced if it failed to deliver the investment within a pre-specified time period (or simply over the price control period).

Our decision

6.21. Uncertainty mechanisms for wider works are closely linked to secondary deliverables for wider works. We provide further information in the 'Supplementary Annex - Outputs and incentives' on the role we envisage for the different types of uncertainty mechanisms identified for wider works, and what we are looking for from TOs in their business plans. A brief summary is given here of our decisions.

6.22. We will proceed with our proposals to use a combination of the three uncertainty mechanisms. We will consider the TO's proposals for mechanisms, as presented in their business plans.

6.23. We will consider what lessons can be taken from the current TII process and applied to the process for any within-period determinations under RIIO-T1 (option (b) above).

6.24. In the case of negative triggers for when a network company fails to deliver a project within a specified time period, we think that this point relates more to penalties for late delivery (or non-delivery) of secondary deliverables (for further details see 'Supplementary Annex - Outputs and incentives) than to uncertainty mechanisms.

6.25. We expect the TOs to present, in their business plans, their proposals for different circumstances and for different degrees of uncertainty (eg about the need for increases in boundary capability, and about timing and costs). We ask the TOs to provide the expected profile of expenditure for wider works, where appropriate broken down into specific projects. We also ask the TOs to provide, where possible, a detailed breakdown of project costs and asset additions.

6.26. We provide further information in the 'Supplementary Annex – Outputs and incentives' on the role we envisage for the different types of uncertainty mechanisms identified for wider works, and what we are looking for from TOs in their business plans.

6.27. In Chapter 2 of this paper we discuss measures to manage charging volatility and predictability to avoid unnecessary adverse effects on consumers.

6.28. Finally, as noted earlier in this chapter, we ask the TOs to set out, in their business plans, the distinctions and methodologies that they have used for distinguishing between connections expenditure and wider reinforcements works.

Inter-TSO costs

Summary of consultation proposal

6.29. In our December document, we set out our proposals for the treatment of costs that the TOs incur under the Inter-TSO Compensation (ITC) Mechanism. These costs are not known in advance. We proposed that these costs should continue to be subject to a pass through mechanism, provided that the TOs can satisfy us on two points. Firstly, that this approach poses no risk to efficiency incentives; and, secondly, that the TOs have proactively engaged with their European stakeholders to ensure that inter-TSO costs are at appropriate levels and are recovered in an appropriate way.

Summary of responses

6.30. Two network companies agreed that EU Inter-TSO costs should be passed through to consumers. It was pointed out that this ITC scheme is now mandatory under the Third Energy Package, and there was reassurance that the TOs do engage proactively in the process.

Our decision

6.31. We will proceed with our proposal on the basis that the EU Inter-TSO costs will be subject to a pass through mechanism. We will ask the TOs for assurances, as part of their business plans that this will pose no risk of exposing consumers to unnecessarily high costs. We also recognise that the ITC scheme could result in increased revenue for TOs. The pass through mechanism should operate such that any such benefits are passed through to consumers as well.

7. Mid-period review of output requirements

Chapter Summary
In this chapter we set our decision on how the mid-period review of output requirements will operate under RIIO-T1 and GD1. We confirm the scope of the review, along with its process and timetable.

Summary of consultation proposals

7.1. In our December document, we set out that the scope of the mid-period review of output requirements is tightly restricted to:

- changes to outputs that can be justified by clear changes in Government policy
- the introduction of new outputs that are needed to meet the needs of consumers and other network users.

7.2. In addition, we set out:

- the process that will be followed to decide whether there is a material change that requires a mid-period adjustment to outputs
- how a change made at the review would feed through to a change in revenue allowance
- that any changes made at the review would be appealable
- we also provided an indicative timetable for the review:
  - three months to consult, understand the issues and decide whether to progress
  - six months to develop policy (Ofgem, network companies and wider stakeholders)
  - three months to consult on proposals and make any amendments.

Summary of responses

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

7.4. In terms of the scope of the review, the strongest concerns were raised by a GDN, an electricity distribution network company and an energy supplier. Their concerns were broadly based around our ability to keep the scope of the mid-period review of output requirements tightly defined to prevent the eight-year price control collapsing into two four-year price control reviews. They believe that we will find it challenging to make incremental changes to revenue to accommodate any change in outputs, without damaging incentives or impacting other areas of the control. Another concern was that we might take retrospective action at the review to 'claw-back' gains made over the first four years of the review.

7.5. The process and timetable was broadly supported by respondents. However, some issues that were raised included:

- a couple of respondents suggested that the mid-period review length could be shortened
- a consumer representative suggested that a quantitative threshold should be used to trigger the mid-period review
- a network company noted that any mid-period review proposals should be subject to appeal at the Competition Commission (CC). Another suggested we should change the disapplication mechanism to allow them to force a direct CC reference after four years (even if we do not agree).

Our decision

7.6. Recognising the scope for significant changes in outputs during an eight-year price control period, the RIIO framework will include provision for a mid-period review of output requirements. For RIIO-T1 and GD1 the mid-period review will start in January 2016.

7.7. The scope of the mid-period review of output requirements will remain unchanged. There are a couple of clarifications around the process and timetable that we laid out in our December document.

7.8. We acknowledge concerns from several stakeholders around the scope of the review and our ability to keep it contained, not opening up wider aspects of the price control settlement. However, we are confident that our mid-period review proposals minimise this risk. We discuss several of the issues below.

7.9. When making a change at the mid-period review we will look to apply the latest information available to set the level of incremental revenue associated with changes to outputs driven by government policy or new outputs that are in the interest of consumers and other network users. We will not be constrained by any cost assessment made at the price control review, although we will consider this information insofar as it is relevant. We are committed to not making retrospective adjustments at the mid-period review, for example, to 'claw-back' any gains that had been made through delivery of the outputs set at the price control at lower cost than expected.

7.10. One concern was that in some cases, it may be challenging to distinguish the expenditure needed over the remainder of the price control period to deliver the original set of outputs and the expenditure needed over the remainder of the price control period to deliver any additional outputs proposed at the mid-period review. We do not, however, believe this is an insurmountable obstacle. As part of the mid-period review process we would look to network companies and other stakeholders to identify any risks of retrospective adjustments, which we would be seeking to avoid.

7.11. In our December document we noted that, if we consider that changes to outputs are necessary, we would not alter incentive mechanisms, the allowed return or other price control parameters other than as required to accommodate the change to outputs. Some concern has been raised that we would always look to update them at the mid-period review. This is not the case. We will only do so recognising the risks that altering key price control parameters might have. This includes: that changes could expand the scope of the review; feed into wider areas of the original price control settlement; and undermine incentives to the detriment of consumers. If we deemed it necessary to change any of the existing price control parameters at the mid-period review, this will be based on consultation with stakeholders and will reflect the materiality of the issue being addressed.

7.12. There were a few comments around the scope of the review. Therefore, for clarity, we re-confirm that the review will not be used:

- to reduce/increase charges to consumers where a company has delivered at lower/higher costs than expected at the price control review
- as an opportunity to penalise companies for non delivery – this will be done through the relevant output incentive mechanisms and enforcement action as appropriate
- to consider revenue adjustments that could be triggered throughout the process by other separate RIIO mechanisms - even if the time periods coincide. This would include adjustments to a network company's revenue:
    - for the implementation of ideas developed through the innovation stimulus
    - for changes made due to uncertainty mechanisms
    - to make a change to an existing output where the measurement/reporting arrangements are found to be unfit or where an administrative error has been identified.

7.13. In addition, we confirm that network companies and other stakeholders will be able to come to us and make a case for a new output measure to be added at the mid-period review.

7.14. In terms of the mid-period review process, we asked whether all changes to output requirements made at the mid-period review should require a licence change. We raised an alternative option under which the licence agreed at the price control review could be drafted to allow Ofgem to change the outputs, and to adjust allowed revenue accordingly, at the mid-period review, without a modification of the licence provided that this did not breach a specified threshold (eg based on the scale of impact on expenditure).

7.15. All network companies, except one, said that all adjustments made at the mid-period review should require a licence change. We have decided to take this approach. The alternative approach of seeking to define a threshold below which a licence change is not needed would add unnecessary complexity to the mid-period review process and could be contentious to define.

7.16. We noted in our December document that we would clarify the appeals process around the mid-period review of output requirements in light of DECC's changes to

the existing process to challenge licence modifications. Based on DECC's recently released Government conclusions on their proposals for appealing licence modifications,[5] we do not expect their changes to have a marked impact on the mid-period review timetable. However, the full details of the process will not be known until later in the year. Once we know the specific details, if necessary, we will provide stakeholders with an update of the mid-period review process.

7.17. One consultation response suggested that we should reformulate the existing disapplication process, instead of introducing the mid-period review of outputs process. It was suggested that a licensee should be able to force a CC reference, to bring the price control to an end after four years, where they can show that the required outputs have changed, or are changing. We do not think it is appropriate to change the existing disapplication. Doing this will undermine the benefits of an eight-year price control by allowing network companies to bring the price control to an end after four years.

7.18. We have considered one respondent's suggestion that we consider a quantitative trigger for the mid-period review to start. Given the scope of the review, we remain of the view that it is not possible to establish a quantitative threshold relative to outputs rather than costs. In some cases we may need to introduce new output measures that do not have a significant impact on expenditure. In such cases a quantitative threshold would not be viable.

7.19. A couple of respondents suggested that the mid-period review timetable may be too long. We consider that the length of the review is appropriate, given the likely importance of any changes to outputs needed at the review, particularly once the necessary stakeholder engagement and consultations are factored in. It is also important to re-emphasise that twelve months is an upper bound for the mid-period review process. The review could be as short as three months. For example, if following the 'open letter consultation', there is deemed to be no grounds to progress the review. Furthermore, the remainder of the timetable we set out in our December document is indicative, and would be determined as part of the three month 'open letter consultation' process. Once the issue(s) that need addressing at the review have been established, we would have the flexibility to reduce the timetable of the process - if appropriate.

7.20. In our December document we set out an indicative timeline and approach for the mid-period review of output requirements. This remains applicable, however, should there be marked changes in the appeals process that impact its timetable we will update this diagram later in the year.

7.21. The mid-period review will start in January 2016, with any changes to output requirements from the mid-period review to apply from April 2017 (the start of the fifth year of RIIO-T1 and GD1.

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

Appendix 1 - Consultation Questions and Responses

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

1.2. The following is a summary of those responses which were received.

Chapter Two – Proposed approach to managing uncertainty

Are there any additional criteria that we should take into account to guide the appropriate use of uncertainty mechanisms?

1.3. There was general agreement with our principles on setting uncertainty mechanisms.

1.4. One respondent commented that they thought Ofgem's main concern seemed to be the need for uncertainty mechanisms to be as simple as possible in their design and that this could be at the detriment of allowing for efficient financeability.

1.5. A supplier raised concerns over the volatility to charges created by uncertainty mechanisms. With their resoponses they included a report from their consultants CEPA on how charging volatility could be controlled. Three options for reducing volatility were put forward:

- A cap and collar on any changes to allowed revenue. All revenue adjustments outside the cap and collar would be logged-up to an appropriate time when they could be added to the allowed revenue collected, on an NPV neutral basis.
- Applying a smoothing algorithm to spread out any revenue adjustments over a set time period.
- Logging up of all revenue adjustments to an appropriate time when they could be added to the allowed revenue collected, on an NPV neutral basis.

1.6. In their response they acknowledge that with any savings that consumers will see due to the increase in predictability and stability, ie a reduction in the risk premium charged by suppliers, there will also be a cost created by the delay in revenue collection by the network companies. Network companies would need to be compensated so that there is no loss to them from the delay to recouping revenue.

Do you agree with the information requirements that we set out to support the justification of additional uncertainty mechanisms? If not, what changes should we make to these requirements?

1.7. There was general agreement with our information requirements for any additional mechanisms.

1.8. One respondent suggested that mechanisms should be judged by a more formal cost benefit analysis that quantified the impacts of any mechanism.

1.9. Another respondent felt that we needed to further consider any interactions between mechanisms.

Chapter Three – Potential uncertainty mechanisms for all sectors

Do you think there should be a change to a 12-month average approach to RPI indexation of allowed revenues? If there were a change to a 12-month average approach, would there need to be any transitional adjustments?

1.10. There was general support for changing the approach to RPI indexation from using a six-month average to using 12 months. Only one respondent suggested that a change was unnecessary.

1.11. Respondents preferred the option of using data from January to December over data from April to March when constructing the average. This was because it avoids the need to forecast January to March data when setting charges and removes the resulting increased possibility of under or over recoveries.

1.12. Two respondents suggested the potential need for transitional arrangements if any changes are implemented but they did not set out what these adjustments might be or how they would be calculated. One of these respondents indicated that transitional arrangements would only be necessary if a significant additional lag were built in.

Do you have any views on the design of the reopener for the introduction of Traffic Management Act permitting schemes? In particular, is the timing of the reopener window appropriate and what approach should we adopt to set the materiality threshold before it can be triggered? Do you agree with our proposal that the reopener would only apply in gas distribution?

1.13. Six respondents argued that additional reopener windows would be required beyond the one proposed in the December document due to the possible materiality of the costs and the uncertainty over timing. Suggestions to mitigate the issue included:

- an ex ante allowance set annually with any over spends or under spends being shared with customers, within a cap and a collar
- allowing for two reopener windows during the price control
- not restricting reopeners to a window at all, allowing recovery of costs the year after any materiality threshold is breached.

1.14. One supplier was keen that we did not increase the number of windows and kept to one window at the halfway point in the price control in order to reduce the

impact on charging volatility. One consumer representative commented that it was important that networks were incentivised to act efficiently.

1.15. In relation to materiality thresholds one respondent agreed with changing the methodology for calculating the threshold to be based on expenditure as this better represents the impact faced. Others disagreed, stating that the use of percentage of base revenue was more transparent as users of the system could identify more with this figure. One respondent suggested that network companies be allowed to set their own threshold based on their individual financeability and cost of equity package.

1.16. A TO requested that the reopener for changes in the street works regime be applicable to them as they forecast significant work that could be affected by permitting schemes. The other TOs did not request that this mechanism be applicable to them.

Do you have any views on the design of the mechanism for changes in the requirements required by the Centre for the Protection of National Infrastructure? As above, is the timing of the reopener window appropriate and what approach should we adopt to set the materiality threshold before it can be triggered?

1.17. Six respondents argued that additional reopener windows would be required beyond the one proposed in the December document due to the possible materiality of the costs and the uncertainty over timing. It was suggested that costs incurred should be assessed ex post and an adjustment to allowed revenue be made one year after the project delivered. Another respondent suggested two reopener windows.

1.18. In relation to materiality thresholds one respondent agreed with changing the methodology for calculating the threshold to be based on expenditure as this better represents the impact faced. Others disagreed, stating that the use of percentage of base revenue was more transparent as users of the system could identify more with this figure. One respondent suggested that network companies be allowed to set their own threshold based on their individual financeability and cost of equity package.

1.19. It was suggested by one respondent that more information may be available on sites that would require enhancement by the time final proposals set the allowed revenues for RIIO-T1 and GD1. This could allow costs to be funded by an ex ante allowance. If this is not the case then they support the use of a reopener mechanism, but they think that one window is not adequate.

1.20. A TO pointed out that already during the current price control (TPCR4) significant works have been undertaken in this area, and that they are in discussion with Ofgem on how this should be funded. The current mechanism, in TPCR4, allows for logging-up but this has been found to be insufficient for timely financeability. The actual costs being incurred are far greater than those forecast at the time the price control was set and therefore this mechanism is proving unfit and putting a burden

on the TO's cash flow. They reference the developments being made to change the current licence terms to allow funding of CNI projects one year after project delivery, subject to an ex post review. Another TO suggested that there was no need to change the current mechanism for logging up costs.

1.21. One respondent suggests that a suite of mechanisms is required to adequately deal with the uncertainty in this area. They feel that not only will there be costs for up-scaling the security position, but also ongoing opex costs that will be incurred over the longer term.

Are there any additional mechanisms that we should be considering? If so, how should these be designed?

1.22. Most network companies that responded included areas in which they feel a mechanism may be appropriate but did not, at this time, provide details of how any additional mechanisms would work.

Do you agree with our proposal to leave the disapplication arrangements unchanged?

1.23. The majority of respondents saw no need to change the current arrangements.

1.24. One respondent had concerns that the current licence provisions do not provide sufficient protection for companies in financial distress. They suggested Ofgem needs to review its position to ensure the framework is transparent and fit for purpose. They have concerns that at a time when investment requirements are increasing, along with increases in regulatory asset lives, that the current disapplication provisions do not provide enough protection for a company in financial distress.

Do you have any views on the other mechanisms discussed in this chapter?

1.25. Responses on the other mechanisms can be found in the papers referenced within the relevant sections.

Chapter Four – Potential gas distribution uncertainty mechanisms

Do you have any views on our proposed approach to managing uncertainty around connections volumes?

1.26. Most respondents agreed with an ex ante allowance for connections volume, and that a driver would not be necessary. One respondent also felt that a revenue driver could be developed for the physical activity if there is uncertainty in the forecast of connections, while back office activity could continue to be part of an ex ante allowance.

Do you agree with our proposal to remove the loss of meter work revenue driver? If not, why do you think retaining the mechanism is in the consumer interest?

1.27. One consumer representative felt that it was correct to remove the driver as the time of transition will have ended.

1.28. A network company agreed with the removal of the revenue driver but added that the provision of an emergency service should be funded through the price control.

1.29. Other respondents felt that if the driver were to be removed that it was essential that the allowances currently received from the revenue driver be maintained through RIIO-GD1. One respondent was strongly against the setting of an ex ante allowance to fund the emergency service. They felt that full upfront funding is required, but note that they are investigating a symmetrical incentive mechanism.

1.30. Further responses can be found in 'Supplementary Annex - Tools for cost assessment'.

Are there any additional mechanisms that we should be considering? If so, how should these be designed?

1.31. Most network companies that responded included areas in which they feel a mechanism may be appropriate but did not, at this time, provide details of how any additional mechanisms would work.

Do you have any views on the other mechanisms discussed in this chapter?

1.32. One network user was concerned that a reopener for repex could significantly impact suppliers' ability to offer long-term fixed energy deals. They suggested that due to the uncertainty surrounding repex policy that the price control should be set for five years rather than eight.

1.33. Further responses on the other mechanisms can be found in the papers referenced within the relevant sections.

Chapter Five – Potential gas transmission uncertainty mechanisms

Do you agree that it is appropriate to continue to use an uncertainty mechanism for delivering entry and exit capacity in gas transmission, and do you agree that revenue drivers are the most appropriate uncertainty mechanism?

1.34. The majority of respondents that had comments on this question supported the option of retaining revenue drivers for incremental capacity in gas transmission. Indeed, one was strongly opposed to the alternative which would require cost forecasting for an eight-year period. However, a network user was unconvinced that a revenue driver is required for incremental capacity. A network user said that the current system is uncoordinated, and that the cumulative effect of uncertainty mechanisms could be price volatility.

If you think that a different mechanism could be more suitable, do you have any views on how such a mechanism could operate?

1.35. The network user that was unconvinced that a revenue driver is required said that any uncertainty mechanism must cover both upsides and downsides in order to address cases in which the project costs are significantly lower than were envisaged when the mechanism was set. One network company said that revenue drivers are not appropriate for large projects, where it would prefer a staged approach. It also said that within-period determinations could be useful where investment was driven by customers' network flexibility requirements.

Do you agree that our proposals will properly align the mechanism with the RIIO framework?

1.36. There was agreement that the proposals are consistent with the RIIO framework.

Do you have any views on changes to the operation of revenue drivers if there are delays on the user side?

1.37. One network company said that a staged approach would help, whilst another network company was concerned that some approaches would simply transfer the risk from NGG to the GDNs.

Do you have any views on the process that would be used to set the value of revenue drivers at specific entry or exit points?

1.38. One network company said that the cost allowances should be kept up-to-date during the price control period. It also said that consideration should be given to the

development of output measures that capture the changing behaviour of existing capacity beyond that assumed credible when the original revenue driver was agreed.

Chapter Six – Potential electricity transmission uncertainty mechanisms

Do you think that an uncertainty mechanism for electricity transmission connections expenditure is likely to be in consumers' interests?

1.39. There was agreement from respondents that uncertainty mechanisms were in the consumers' interests.

Do you have any views on future connections projects (number of projects, costs, etc.), and the uncertainty around these numbers?

1.40. Network companies stated that within their well-justified business plans they will include details of future connections projects.

Do you agree that volume drivers are the preferred option, and do you have any views on how they should be designed?

1.41. There was strong support for a volume driver for connections, because it will reduce consumers' and TOs' exposure to forecasting error. There was also support for omitting high cost projects from the volume driver. There was support for banding for different types of projects, but one network company said that there should be an appropriate balance between accuracy and complexity. It said that accuracy meant ensuring that both the costs and lead-times of the projects covered by the revenue driver are reasonably consistent. Another network company proposed that there should be a limited number of categories which reflect distance and/or capacity.

Are any other uncertainty mechanisms needed for connections expenditure? If so, how should these be designed?

1.42. A network company proposed a revenue driver mechanism with a pass through component and a volume-driven unit cost allowance, similar to the current 'local revenue driver' arrangements.

Do you have any views on the option of setting upfront revenue allowances, during the price control period, for qualifying high-cost connections projects?

1.43. There was support for omitting high cost projects from the volume driver. One TO said that there were benefits in treating them in the same manner as wider reinforcement works. Another TO said that the full pass through of these costs

should be retained. One TO proposed an ex ante allowance with a trigger mechanism to activate the adjustment, and that there should be a review of the expenditure forecast as a basis for setting an ex ante project allowance.

Do you have any views on the uncertainty mechanisms that we have proposed for wider reinforcement works?

1.44. There was agreement on the need for uncertainty mechanisms for wider reinforcement works, but there were differing views on which were most appropriate.

1.45. One network company noted that within-period determinations would have a higher administrative burden and risk of micro-management. It said that it would therefore initially expect this option to be used in more exceptional circumstances. Another network company expressed support for a trigger mechanism, and had expressed support for within-period determinations and associated upfront allowances. Another network company had a strong preference for within-period determinations.

1.46. A network user said that there needs to be more clarity for anticipatory works, and that they should be "more managed", rather than being left to the TOs. It also said that the key issue with any uncertainty mechanism is the predictability of TNUoS charges.

1.47. One network user included a consultant's report that said that negative triggers are now a practical option, because the volume of future connections is now known with greater certainty, whereas the timing was not. Under this approach, capacity and associated revenue allowance forecasts would be set at the price control review, but the TO's revenue would be reduced if it failed to deliver the investment within a pre-specified time period (or simply over the price control period).

Do you have any views on the treatment of Inter-TSO costs?

1.48. Two network companies agreed that EU Inter-TSO costs should be passed through to consumers. It was pointed out that this ITC scheme is now mandatory under the Third Energy Package, and there was reassurance that the TOs do engage proactively in the process.

Chapter Seven – Mid-period review of output requirements

Do you agree with the scope of the mid-period review? If not, what changes to the scope are needed?

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

1.50. In terms of the scope of the review, the strongest concerns were raised by a GDN, an electricity distribution network company and an energy supplier. Their concerns were broadly based around our ability to keep the scope of the mid-period review of output requirements tightly defined to prevent the eight-year price control collapsing into two four-year price control reviews. They believed that we would find it challenging to make incremental changes to revenue to accommodate any change in outputs, without damaging incentives or impacting other areas of the price control. Another concern was that we might take retrospective action at the review to 'claw-back' gains made over the first four years of the review.

Do you agree with the indicative process and timetable? If not, how could the process and timetable be improved?

1.51. The process and timetable was broadly supported by respondents. However, some issues that were raised included:

- a couple of respondents suggested that the mid-period review length could be shortened
- a consumer representative suggested that a quantitative threshold should be used to trigger the mid-period review
- a network company noted that any mid-period review proposals should be subject to appeal at the CC. Another suggested we should change the disapplication mechanism to allow them to force a direct CC reference after four years (even if we do not agree).

Do you have views on when we should make licence changes as a result of any actions taken at the mid-period review? If a threshold to make a licence change is seen as appropriate, what should this be?

1.52. All network companies, except one, said that all adjustments made at the mid-period review should require a licence change.