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RIIO|ED1

Strategy consultation for the RIIO-ED1 electricity distribution price control

Uncertainty mechanisms

Supplementary annex to RIIO-ED1 overview paper

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Overview:

The next electricity distribution price control, RIIO-ED1, will be the first to reflect the new RIIO 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 for delivery.

We are now consulting on the strategy for the RIIO-ED1 review. This supplementary annex to the main consultation documents sets out our proposed approach for uncertainty mechanisms. This document is aimed at those who want an in-depth understanding of our proposals. Stakeholders wanting a more accessible overview should refer to the main consultation documents.

Associated documents

Strategy consultation for RIIO-ED1 - Overview

<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConOverview.pdf>

Links to supplementary annexes

- Strategy consultation for RIIO-ED1 - Outputs, incentives and innovation
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConOutputsIncentives.pdf>
- Strategy consultation for RIIO-ED1 - Business plans and proportionate treatment
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConBusinessPlans.pdf>
- Strategy consultation for RIIO-ED1 - Financial issues
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConFinancialIssues.pdf>
- Strategy consultation for RIIO-ED1 - Impact assessment
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConImpactAssessment.pdf>
- Strategy consultation for RIIO-ED1 - Tools for cost assessment
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConCostAssessment.pdf>
- Strategy consultation for RIIO-ED1 - Reliability and safety
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConReliabilitySafety.pdf>
- RIIO-ED1 Glossary of terms
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1SConGlossary.pdf>

Links to other associated documents

- Open letter consultation on the way forward for RIIO-ED1
<http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/riio-ed1/consultations/Documents1/RIIOED1LaunchOpenLetter.pdf>
- Handbook for implementing the RIIO model
<http://www.ofgem.gov.uk/Networks/rpix20/ConsultDocs/Documents1/RIIO%20handbook.pdf>
- Electricity Distribution Price Control Review 5 (DPCR5) Final Proposals
http://www.ofgem.gov.uk/Networks/ElecDist/PriceCtrls/DPCR5/Documents1/FP_1_Core%20document%20SS%20FINAL.pdf

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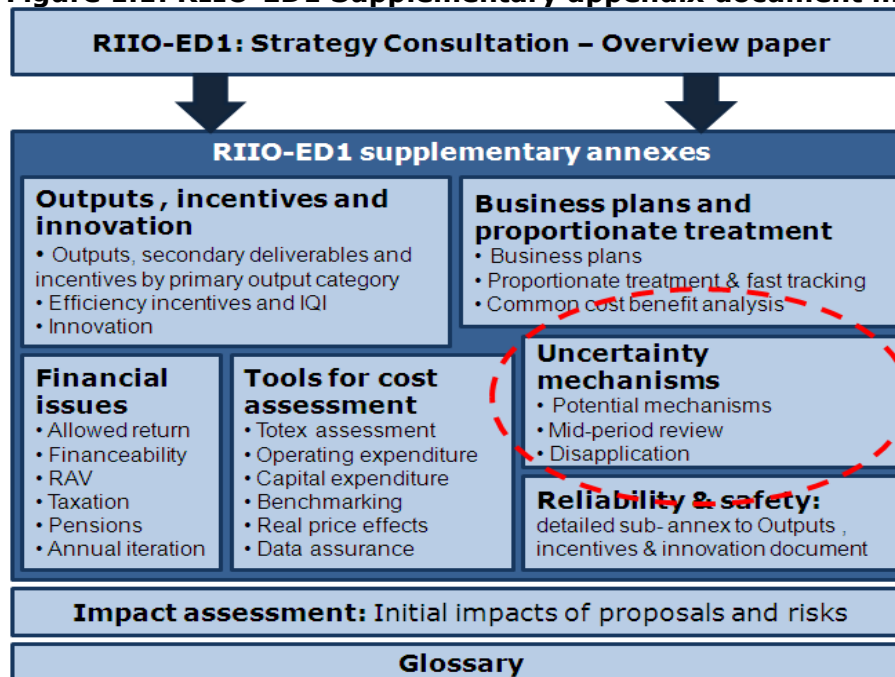
1. Introduction

Chapter Summary

This chapter sets out what is covered in this document and a summary table outlining the various uncertainty mechanisms that are set out in detail in the subsequent chapters.

1.1. The next electricity distribution price control, RIIO-ED1, will be the first time the new RIIO model is reflected in electricity distribution. We are now consulting on the strategy for the price control review. This supplementary annex to the main consultation document sets out our proposals for uncertainty mechanisms. This document is aimed at those who want an in-depth understanding of our proposals. Stakeholders wanting a more accessible overview should refer to the 'Strategy consultation – Overview'. Figure 1.1 below provides a map of the documents published as part of the consultations.

Figure 1.1: RIIO-ED1 Supplementary appendix document map



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

1.2. 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 stakeholders will need to provide to include additional uncertainty mechanisms beyond those discussed in this document

Strategy consultation for the RIIO-ED1 electricity distribution price control
Uncertainty mechanisms

- Chapter 3 sets out potential electricity distribution uncertainty mechanisms
- Chapter 4 sets out our proposed approach to the mid-period review of output requirements.

1.3. Table 1.1 summarises the uncertainty mechanisms proposed in this document.

Table 1.1: Potential RIIO-ED1 uncertainty mechanisms

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

2. Proposed approach to managing uncertainty

Chapter Summary

This chapter sets out our overall approach to managing uncertainty in RIIO-ED1. It sets out the principles guiding the use of uncertainty mechanisms and provides details on what stakeholders need to provide in order to suggest additional mechanisms.

Question 1: Are there any additional criteria that we should take into account to guide the appropriate use of uncertainty mechanisms?

Overview

2.1. There are always uncertainties about the appropriate outputs companies should deliver and the expenditure requirements that will be needed over a price control period to ensure delivery. This is particularly true for controls covering a longer time period, such as the eight-year control we are proposing for RIIO-ED1. The RIIO framework includes a number of elements to help deal with these uncertainties. It also places the onus on network companies to set out how they intend to manage risk through the period. The elements of the uncertainty framework which we propose to introduce for RIIO-ED1 are:

- a range of uncertainty mechanisms
- a tightly-defined mid-period review of output requirements
- provision for disapplication of the price control
- risk sharing through the efficiency incentive rate.

2.2. These elements will affect the cash flow risks of the business and therefore our views on the appropriate level of notional gearing and the allowed return.

2.3. This document sets out our proposed approach for the first three elements. The efficiency incentive rate (which determines the extent to which any variations between actual and forecast costs are shared between investors and consumers) is discussed in the 'Supplementary Annex – Tools for cost assessment' and in the 'Supplementary Annex – Financial issues'.

RIIO principles guiding the use of uncertainty mechanisms

2.4. Uncertainty mechanisms allow changes to a network company's allowed revenues to be made in light of what happens during the price control period. We use the term "uncertainty mechanisms" to cover a range of mechanisms and provisions for adjusting the maximum revenue that a network company is allowed to collect.

These include: volume drivers, revenue triggers, specific re-openers, and pass-through costs.

2.5. Uncertainty mechanisms do not cover any arrangements that are included in a price control to encourage a network company to control its costs (efficiency incentives) or to deliver appropriate levels and timeliness of outputs (output incentives).

2.6. 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".*¹

2.7. The RIIO framework calls for:

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

2.8. The use of uncertainty mechanisms may benefit consumers in a number of different ways, but they may also bring downsides. The following table highlights potential justifications and drawbacks of uncertainty mechanisms, including those identified in the RIIO handbook.

Table 2.1: Potential justifications and drawbacks of uncertainty mechanisms

Potential justifications	Potential drawbacks
To lower the cost of capital	Can undermine incentives for efficiency
Reduce financeability concerns	Increase complexity of regime
Reduce consumers' exposure to forecasting uncertainty at price control review	May lead to volatility or unpredictability in network charges
Strike fair balance of charge between current and future consumers	Risk of unintended consequences
Avoid resource costs of forecasting	Resource costs to develop and implement mechanism

2.9. We recognise that uncertainty mechanisms have the potential to increase the volatility of charges that will feed into the customer's energy bill and are separately

¹ See page 96 of the RIIO handbook.

considering this issue for all network sectors through our consultation on mitigating network charging volatility.² The decisions we make as part of this work will be taken forward in the design of uncertainty mechanisms we propose in our strategy decision.

2.10. In any event, in line with the RIIO principles, we propose that the price controls will contain measures to manage charging volatility and predictability to avoid unnecessary volatility in charges that adversely affects consumers. This will be achieved 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 is discussed further in Chapter 4 of the 'Strategy consultation – Overview').
- The mechanisms will be designed with these considerations in mind: for example, through restricting the timing of revenues changes through the use of reopener windows (ie fixed periods when reopeners can be triggered).

Potential uncertainty mechanisms

2.11. DNOs will be able, as part of their business plans, to set out which uncertainty mechanisms they are seeking to use to help them manage risk, and what benefits these would bring for consumers (eg enabling a lower cost of capital). Ultimately we will decide whether to accept the companies' proposals and this is why we are setting out our early thoughts for consultation.

2.12. The circumstances in which uncertainty mechanisms are used, and the way that they are designed, matter for consumers. In Chapter 3 we set out our initial views, building on the work already undertaken for RIIO-T1 and GD1 but taking into account the specific circumstances for RIIO-ED1. We set out uncertainty mechanisms that may be in the interests of consumers and how they might be designed to mitigate potential downsides. We welcome views from respondents on the following with respect to the mechanisms outlined.

- Whether the need for a mechanism is sufficient to justify its inclusion within the price control, given potential downsides. Further information on the materiality of the issues presented would also help our decision making process.
- Whether the options proposed adequately address any downsides associated with the mechanisms. Are there other options that could better address these downsides?

² See our consultation (April 2012):
http://www.ofgem.gov.uk/Networks/Policy/Documents1/Charging_Volatility_Cons.pdf

The scope for additional uncertainty mechanisms

2.13. We acknowledge that the discussion in Chapter 3 may not have identified every potential mechanism which might be in the interests of consumers. We seek views as to whether there are other mechanisms that may be appropriate and what these might look like.

2.14. In order to justify the potential inclusion of another mechanism we will be seeking the supporting information as set out in Table 2.2 below. We would expect the DNOs to use these criteria when justifying any additional mechanisms that they identify in their business plans.

Table 2.2: 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 which might include those in Table 2.1 above. It is also necessary to set 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 which might include those in Table 2.1 above. 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.

3. Potential volume driver and reopener and uncertainty mechanisms

Chapter Summary

This chapter sets out the potential volume driver and reopener uncertainty mechanisms that we think might be appropriate for RIIO-ED1.

Question 1: Do you have any views on the design of the proposed high-volume low-cost connections volume driver?

Question 2: Do you have any views on the design of the proposed low carbon technologies volume driver?

Question 3: Do you have any views on the design of the proposed smart meters volume driver?

Question 4: Do you have any views on the design of the proposed street works reopener?

Question 5: Do you have any views on the design of the proposed enhanced physical site security reopener?

Question 6: Do you have any views on the design of the proposed load related expenditure reopener?

Question 7: Do you have any views on the design of the proposed high value projects reopener?

Question 8: Do you have any views on the design of the proposed innovation roll out mechanism reopener?

Question 9: Do you have any views on the design of the proposed pension deficit repair mechanism reopener?

Question 10: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

3.1. Table 3.1 below sets out the proposed volume drivers and reopener mechanisms contained within this chapter.

Table 3.1: Proposed volume drivers and reopener mechanisms for RIIO-ED1

Area	Type of uncertainty mechanism	Reopener threshold	Eligible for logging up and reviewing at RIIO-ED2 if reopener threshold not met during ED1
High-volume low-cost (HVLC) connections	Volume driver	Net position of expenditure vs. baseline based on actual/ forecast volumes contributes to load related reopener	No
Low carbon technologies	Volume driver (could be combined with Load related expenditure secondary network volume driver)	Net position of expenditure vs. baseline based on actual/ forecast volumes contributes to Load related reopener	No
Smart meters	Volume driver	Automatic	No
Street works	Reopener	One per cent of base revenue	No
Enhanced physical site security	Reopener	One per cent of base revenue	Yes
Load related expenditure	Reopener	One per cent of base revenue, plus 20 per cent above baseline load allowance	No
High value projects	Reopener	One per cent of base revenue	No
Innovation roll-out mechanism	Reopener	One per cent of base revenue	No
Pension deficit repair mechanism	Reopener		

Note: In all cases relevant expenditure is multiplied by efficiency incentive rate then compared with reopener threshold e.g. reopener threshold of £100 million, efficiency incentive rate of 50 per cent, then relevant expenditure would need to be equal to or greater than £200 million (£100 million/50 per cent) in order to be eligible for review.

High-volume low-cost connections involving shared assets volume driver

3.2. In DPCR5 the costs of the shared assets required for 'high-volume low-cost' (HVLC) connections involving shared assets are included in the allowed revenue using a volume driven approach – due to uncertainty over the number of connections that DNOs would be required to undertake. We propose to retain a similar mechanism for RIIO-ED1, albeit with a number of modifications.

3.3. For the purpose of these volume drivers, one of our proposals is to define the HVLC connections involving shared assets to include the following categories of connections as specified in the current annual reporting pack, 'Glossary of Terms - Regulatory Instructions and Guidance: Version 3':

- Small scale LV domestic and one-off commercial
- All other LV (with only LV work)
- LV end connections involving HV work.

3.4. An alternative proposal involves the inclusion of the HV end connections involving only HV work market segment within the HVLC volume driver and limiting the unit cost element to only cover the reinforcement work, since this is the only element that is funded through the price control.

3.5. For HVLC connections, we propose setting an ex ante allowance based on the volume forecast provided by each DNO and our assessment of efficient unit costs. We would then apply a forecast view of the appropriate ratio of net to gross costs to determine the net allowance (ie the percentage of the reinforcement that will be funded by the connection customers upfront. The details behind this assessment are provided in the 'Supplementary annex – Tools for cost assessment'.

3.6. We propose that during RIIO-ED1 an automatic volume driver would apply, reflecting differences between the actual number of connections made and the number assumed as part of our RIIO-ED1 ex ante allowance. This difference would be combined with our RIIO-ED1 unit cost assumptions to calculate the required adjustment to future revenue. As part of this mechanism we also propose to true up for the difference between the forecast level of customer contributions and the actual customer contributions. This will ensure that the funding received reflects the actual proportion of gross shared connection costs that are funded upfront through connection charges so that DNOs do not make a significant windfall gain or loss from such movements. We propose that this would be done on a symmetrical basis and would apply to under and over recoveries relative to our assumed proportion of costs to be funded by connection charges.

Low carbon technologies volume driver

3.7. There is a degree of uncertainty over the volume of low carbon technologies such as heat pumps, electric vehicles and micro-generation which will connect during

RIIO-ED1. Subsequently, it may be difficult for DNOs to assess the volume of reinforcement they need to undertake to accommodate these new demands. As set out in the 'Supplementary annex – Outputs, incentives and innovation', we propose that a mixture of ex ante allowance and uncertainty mechanisms should be used to manage this risk. We would expect there to be a clearly defined trigger point or dead band at which point the uncertainty mechanism would 'kick in'. We consider that there are strong merits in having a common volume driver across all DNOs as it will ensure that all DNOs are on a level playing field. In addition it will ensure that all companies are equally incentivised to deploy smart grid solutions in response to higher than expected volumes of reinforcement, where they provide cost savings. Options for such a volume driver and our assessment of them are outlined in the 'Supplementary annex – Tools for cost assessment'. We intend to undertake further work ahead of the February strategy decision in order to develop a robust mechanism that adheres to our principles on reopener mechanisms.

Smart meters volume driver

3.8. There are two types of costs related to the smart metering programme that may be incurred by the DNOs – costs related to the roll out of smart meters ie costs related to DNOs being called out to consumer premises ("call out costs"), and costs related to the DNOs' use of smart metering data. The latter would include costs/fees that will be charged to the DNOs for use of the DataCommsCo (DCC) services as well as costs for the DNOs' IT systems, including data aggregation systems, that would enable the DNOs to effectively use smart metering data.

3.9. At this stage the DNOs have been unable to identify accurately the details of these costs and their materiality.

3.10. We propose that a volume driver for additional call outs associated with the smart meter roll-out should be introduced for RIIO-ED1. This volume driver would flex DNO allowances up or down versus the volumes assumed in the setting of their baseline allowance. We propose that the unit cost should be derived from benchmarked data provided in the business plans based on current call out rates. We propose that the volume driver would only apply to DNO related issues.

3.11. For the costs or fees that DNOs will be charged for the use of DCC services we propose that where DNOs are mandated to pay by their licence, then these costs will be treated as pass through items.

3.12. Further detail is set out in the Chapter 3 of the 'Supplementary annex – Outputs, incentives and innovation'.

Street works reopener

3.13. We propose to continue to provide a reopener mechanism, similar to that in place for DPCR5, to allow for changes in revenue arising from legislation related to street works. In DPCR5 we have provided a reopener in relation to costs incurred in

working in areas that are operating permit schemes established through the Traffic Management Act or the Transport (Scotland) Act 2005. In line with our proposals for RIIO-GD1 we propose that this be extended in RIIO-ED1 to cover other areas of street works legislation, including the New Roads and Street Works Act.

3.14. There is uncertainty in both the timing and impact (in terms of the costs that will be incurred by DNOs) of the roll-out of existing street works legislation or the establishment of new legislation. There could be a number of additional costs imposed on DNOs from a range of measures, including:

- highways authorities (HAs) implementing permit scheme and associated conditions on working practices
- the levying of lane rental charges by HAs
- changes to inspections fees
- changes to the requirements for reinstatement, eg full and half width reinstatement of roads
- congestion charging schemes – new schemes or changes to existing ones.

3.15. The purpose of the mechanism would be to contribute to a lower cost of capital by providing protection against the introduction of such schemes, and associated costs, and to reduce consumers' exposure to forecasting uncertainty at the time of the price control review. We consider that the potential downsides or a reopener can be mitigated by restricting changes in revenues to a reopener window to reduce any charging volatility, and by imposing a materiality threshold. It is intended that the mechanism would not provide protection against the volume of street works activity which ensures that efficiency incentives are not diminished.

3.16. A number of HAs have already introduced permitting and lane rental schemes. DNOs will have the opportunity, as part of their business plans, to request ex ante allowances for these costs. The mechanism will then protect against costs associated with the roll-out of further schemes or additional costs identified in paragraph 3.14.

3.17. We set out below our current thinking on how we see the mechanism working for the upcoming price controls.

- At the price control we would only set an ex ante allowance for costs where the DNO can provide 12 months of cost data relating to the street works legislation to enable us to benchmark those costs against other operators including the gas distribution companies.
- We propose that there is a reopener window partway through the control which the DNOs can trigger to cover the additional costs (over the full control period) associated with permitting schemes, and other street works legislation, not included as part of the ex ante price control settlement. Again, we would require at least 12 months of cost data to enable us to benchmark costs. The reopener would only be triggered if the additional funding required as part of the reopener breached a pre-defined materiality threshold. We set out below further details on the timing of the window and the size of this materiality threshold.

- All other additional costs would be subject to the efficiency incentive rate only, ie no logging up and ex post review at RIIO-ED2, unless the criteria for the reopener are triggered. The assessment of these costs would follow the same rules as the reopener.

3.18. We set out in table 3.2 below the protection that this reopener would bring.

Table 3.2: Protection provided by the TMA permitting reopener

Items protected against	Items not protected against
The timing of the introduction of costs related to street works legislation	Volumes of activity, ie the number of works
The level of fees set by the relevant authorities	The proportion of notices or permits that are subject to penalties
Efficient one-off set up costs associated with schemes (over and above those that are funded at the time of the price control or previously funded)	
Additional costs arising from the introduction of permit conditions (eg the London Code of Practice)	
Efficient additional administration costs associated with permitting	

3.19. In assessing the additional costs arising from some activities, eg permit fees, our approach may be mechanistic. Our baseline allowance for each network company is likely to be based on forecasts of the number of works to be undertaken. When revising allowances we propose to only consider the proportion of notices that have been replaced by permits and the actual average cost of permits. We propose to then use this to extrapolate forward assumptions for the remainder of the price control period. We propose that these differences will then feed back through our original volume and penalty rate assumptions to allow revised allowances to be calculated.

3.20. We propose that our assessment of the efficiency of any one-off set up costs, additional administration costs and the impact of any permit conditions will be more comparative in nature. We propose to benchmark these costs against those submitted by other network companies at the time of the reopener and those from other industries (eg gas distribution) to ensure that the strong efficiency incentives are preserved on this expenditure.

3.21. We set out below our initial views on the timing of the reopener window and the materiality threshold.

- **Reopener window:** Our initial view is that this could be positioned halfway through the control. This would mean the DNOs would make their submissions to us in May 2019, we would make a decision through direction of change in allowances through the annual iteration of the financial model in November 2019, the DNOs would notify suppliers of their charges in December 2019 and any changes to charges would be introduced in April 2020.

- **Materiality threshold:** We propose that the materiality threshold is set as a percentage of base revenue. We consider that, consistent with our approach in RIIO-GD1, a materiality threshold of one per cent (following the application of the efficiency incentive rate)³ of base revenues may be appropriate for RIIO-ED1.

3.22. We welcome respondents' views on the appropriate timing of the reopener window and the materiality threshold.

Enhanced physical site security reopener

3.23. DPCR5 contains an uncertainty mechanism in relation to additional costs incurred by DNOs from the requirement to enhance the security of particular sites on their networks. We consider it is appropriate to retain this mechanism.

3.24. We propose that for RIIO-ED1 we will set an ex ante allowance for those projects where the DNO is able to provide sufficient detail on the expected works and associated costs.

3.25. For those projects where the appropriate level of detail is not available at the time when RIIO-ED1 revenue allowances are set, we propose that DNOs will be allowed to recover costs during the price control through the application of a reopener. Costs would be assessed during a reopener window, provided that the materiality threshold for these projects is breached. Following such an assessment, any appropriate adjustments to revenue allowances would be directed by Ofgem for recovery within the RIIO-ED1 period. If the materiality threshold is not met, we would consider the logged up costs at the start of the next price control.

3.26. During the reopener window, the DNOs would need to provide evidence to demonstrate that every effort has been made to deliver projects at an efficient cost. As part of this process, we would be likely to require the DNOs to submit to us details of the auditing process to which the projects have been subjected. The audit would be expected to consist of two stages:

1. technical audit to provide proof that the proposed works meet the security requirements
2. audit of completed works to assess that work has been completed to the required standard and that costs incurred were efficient.

3.27. In addition to this evidence, where we feel that it is appropriate to do so, we anticipate carrying out some level of benchmarking across the DNOs to assess the efficiency of costs.

³ By this we mean that for example, if the efficiency incentive rate is 50 per cent then in effect the materiality threshold is two per cent of base revenues.

3.28. We propose that this mechanism would operate with the same reopener window and materiality threshold as that proposed for street works.

Load related expenditure reopener

3.29. We think it appropriate to continue the DPCR5 reopener mechanism for managing the uncertainty associated with load related expenditure associated with general reinforcement and the shared element of low-volume high-cost (LVHC) connections that is funded through distribution use of system (DUoS) charges.

3.30. We propose that DNOs can trigger a reopener (at a reopener window) if they can demonstrate a net 20 per cent greater efficient expenditure over the whole RIIO-ED1 period (ie actuals plus forecasts for the remainder of the period) on load related expenditure compared to the Ofgem baseline allowance. The reopener and the threshold would apply to connections expenditure, general reinforcement expenditure, and any low-carbon technology volume driver expenditure if this is separately categorised from general reinforcement (ie there would be a combined reopener for these costs rather than a separate reopener for each component). In the case of LVHC connections, the net efficient expenditure minus the ex ante baseline (including where this sets a minus value) would contribute to the expenditure eligible for the reopener. In the case of expenditure areas involving volume drivers (ie: HVLC connections and low-carbon installations) the net efficient expenditure minus the amended baseline for the specific volume of connections delivered (including where this sets a minus value) would contribute to the expenditure eligible for the reopener.

3.31. We propose that high value projects (HVP) would not be considered within the load related expenditure reopener.

3.32. We propose that this mechanism would operate with the same materiality threshold and reopener window as set out in the street works reopener discussed above. We set out below the other details of our proposals for how this mechanism would operate.

3.33. The DNOs would be required to justify an increase in efficient expenditure requirement through use of the load index secondary deliverable, as set out in the 'Supplementary annex - Reliability and safety' and the volume of high cost connections. As part of this assessment we would also consider any offsetting impact from efficient demand-side response (DSR) activities to avoid general reinforcement so that DNOs would not be discouraged from undertaking these activities. RPEs would not be capable of providing a justification for expenditure being greater than or less than the baseline allowance - the risk of RPEs exceeding the assumptions included in the baselines would be for the DNOs to manage.

3.34. The reopener would allow the DNOs to recover any additional efficient expenditure above the 20 per cent threshold. No adjustment would be made for the efficient expenditure up to the 20 per cent threshold beyond the usual operation of the efficiency incentive which means that in practice the DNOs are only really

exposed to around 10 per cent (assuming a 50 per cent incentive rate) of the Ofgem baseline allowances due to demand risks.

3.35. The reopener would be symmetrical and could be triggered by Ofgem as part of the RIIO-ED2 review if the 20 per cent threshold has been met due to a reduction in demand. The same one per cent of allowed revenue materiality threshold would apply if the reopener mechanism were activated at this time.

High value projects (HVP) reopener

3.36. In DPCR5 we developed a mechanism for separately analysing major schemes above £15million in value. We also included a reopener to enable DNOs to recover any additional efficient expenditure above a 20 per cent materiality threshold. We currently think that a reopener mechanism may still be appropriate for managing the uncertainty associated with large investment projects. We are considering whether a mechanism akin to that developed for Strategic Wider Works in RIIO-T1 would be more suited for RIIO-ED1.

3.37. We believe that any HVP reopener would need to be proportionate, and therefore propose setting a threshold of £50million for RIIO-ED1. This reopener would cover both schemes that were not included in the original price control baselines due to them failing to have one or more of the following, clear outputs, forecast costs or a need case and schemes which were not known about by the DNO at the time of setting the price control allowances.

3.38. We envisage any HVP reopener operating on a project by project basis. DNOs seeking to trigger the reopener during the window would need to demonstrate that they have/will meet the associated outputs included in any baseline allowance given at the start of the price control and that their net efficient expenditure over the entire ED1 period on high value projects exceeds the one per cent of base revenue threshold.

Innovation roll-out mechanism reopener

3.39. As set out in Encouraging innovation chapter of the 'Supplementary annex – Outputs, incentives and innovation', we expect companies to come forward with proposals to roll out innovative techniques (investment, operation, commercial or charging arrangement) as part of their business plan submissions. Under our proposals, where the company can demonstrate a long term business case for this technique, we will award funding as part of the price control settlement even if, within the price control period, the new technique is higher cost than business as usual.

3.40. We are concerned that roll out delays are more likely in relation to innovative solutions aimed at bringing an environmental benefit than those which are primarily aimed at improving operational efficiency. The pace of change associated with the low carbon transition and the degree of learning that is going on in this space mean

that the business case for innovative environmental solutions is likely to evolve quickly. Equally, the difficulty network companies have in capturing the benefits they bring to the wider society as well as the upfront effort in making the associated cultural and commercial changes may put the company off rolling it out in the absence of any adjustment to their allowed revenues. We are concerned that with an eight year price control settlement, these factors could delay the achievement of important environmental benefits for several years.

3.41. We are therefore minded to include, as we have for RIIO-T1 and GD1, a revenue adjustment mechanism within the price control which allows companies to apply within the price control period for additional funding to roll out innovative solutions. Funding would be provided through a company's allowed revenue using the standard capitalisation ratio. We propose that innovation roll out would be funded only where:

- the innovative solution has been proven to be beneficial to facilitating the low carbon energy sector
- the innovation facilitates the achievement of environmental outputs in place at the start of the price control, or introduced at the mid-term review, and the company agrees to committing to delivering enhanced outputs in return for funding
- the innovation has insufficient commercial benefits within the remainder of the price control period to justify the company undertaking it
- the additional net funding required to roll out the innovation is sufficiently material to prevent the company from undertaking the roll out.

3.42. For RIIO-T1 and GD1 we have proposed two reopener windows for this mechanism and we propose taking the same approach for RIIO-ED1.

Pension deficit repair mechanism

3.43. In Chapter 6 of the 'Supplementary annex – Financial issues' we set out the details of our proposed approach to pensions, which builds on learning under RIIO-T1 and GD1 and DPCR5. As part of the proposals we have included a provision to adjust revenue allowances during the price control period in light of updated information on pension deficits. We propose that these adjustments are made every three years to coincide with the timing of the majority of triennial valuations. The purpose of the mechanism is to promote a fair balance of charges between existing and future consumers by not delaying any adjustments to allowed revenue until the next price control where the adjustments are part of Ofgem's policy on pension deficit repair contributions.

4. Potential indexation, pass through and trigger mechanisms

Chapter Summary

This chapter sets out the potential indexation, pass through and trigger uncertainty mechanisms that we think might be appropriate for RIIO-ED1. It also summarises the current arrangements for disapplication of the price control where we are not proposing to make any changes.

Question 1: Do you have any views on the proposed RPI indexation of allowed revenues mechanism?

Question 2: Do you have any views on the proposed cost of debt indexation mechanism?

Question 3: Do you have any views on the proposed pass through of Ofgem licence fees and business rates?

Question 4: Do you have any views on the proposed tax trigger mechanism?

Question 5: Do you have any views on the disapplication of the price control process?

Question 6: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

Retail Price Index (RPI) indexation of allowed revenues

4.1. 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 RPI to provide protection against economy-wide inflation. We consulted and decided to change the approach we use for RPI indexation, for RIIO-T1 and GD1, in July 2011.⁴

4.2. We propose to adopt this approach for RIIO-ED1. If we adopt this approach, allowed revenues will be indexed each year based on a forecast of RPI. There will then be a true-up two years later to account for differences between outturn RPI and forecast RPI. We welcome respondent's views on adopting this approach.

4.3. The Office for National Statistics (ONS) is currently consulting on its methodology for calculating the RPI. Once the ONS makes a decision on the methodology, and how to implement any changes, we will consider any potential implications for RIIO-ED1. At this stage we cannot speculate on the implications of the ONS' proposals. We understand that a decision is due to be reached by the ONS

⁴ See decision on RPI indexation:

<http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=117&refer=Networks/Trans/PriceControls/RIIO-T1/ConRes>

by the end of 2012 and that any changes would start feeding through to RPI in March 2013.

Cost of debt indexation

4.4. Under the RIIO framework, we proposed to index the cost of debt component of the allowed return to a long-term trailing average of band yields. We propose to follow the approach of RIIO-T1 and GD1 and use the iBoxx index. Further details of the proposed mechanisms are set out in Chapter 2 of the 'Supplementary annex – Financial issues'.

4.5. The result of indexation for the cost of debt is that revenue allowances will be adjusted mechanistically to reflect movement in the trailing average. The primary reason for including this mechanism is that it contributes to a lower cost of capital (ie it removes the need for any "headroom") by protecting DNOs and consumers against variations in the market-wide cost of debt over the price control period. The main downsides of the mechanism are the increase in complexity of the regulatory regime and additional volatility to charges (albeit with a lag after the index data have become available). We think these downsides are outweighed by the benefits to consumers particularly at a time where there is significant uncertainty over the cost of debt over the horizon of the price controls.

Pass through of Ofgem licence fees and business rates

4.6. Ofgem licence fees and business rates (providing that the DNOs can demonstrate that they have taken reasonable actions to minimise the ratings revaluations) are currently pass-through items under the existing price controls. We propose a continuation of these policies for the following reasons.

- Allowing cost pass through avoids the resource costs of accurately forecasting these fees over the price control period. Business rates could be significantly impacted by revaluations expected in 2015.
- For business rates, the policy may contribute to a lower cost of capital by providing protection against revaluations.
- These costs are predominantly outside of the control of the DNOs and so efficiency incentives will not be under mind as DNOs do not have much scope to manage this area of expenditure.
- Ofgem's licence fees are relatively small (around [£15m] for the DNOs in 2011-12) and do not vary significantly year-on-year, meaning that pass-through has limited implications for volatility of charges.
- There are no resource costs to develop the mechanisms as they are already in place and simple to operate.

4.7. While these costs are predominantly uncontrollable by the DNOs, in the case of business rates the DNOs have an opportunity to influence ratings revaluations. We intend to ensure that DNOs are still incentivised to minimise ratings revaluations through the design of the pass through mechanism. We discuss this in further detail in Chapter 5 of the 'Supplementary annex – Financial issues'.

Tax trigger

4.8. For RIIO-ED1 we propose to maintain the DPCR5 methodology for dealing with uncertainties caused by changes in tax rules. A reopener is triggered in response to changes in tax including the tax treatment of opex and capex. The purpose of the mechanism is to contribute to a lower cost of capital by protecting the DNOs and consumers against variation in the tax regime over the price control period.

4.9. Chapter 5 of the 'Supplementary annex – Financial issues' sets out the details of our proposed approach to tax.

Disapplication of the price control

4.10. During a price control review, we seek to provide a licensee with a revenue stream that is expected to be sufficient to enable it to finance efficient delivery of its obligations.

4.11. Our statutory duties (including the financing duty) do not only apply at the time that a price control is set. If circumstances arise during the control period, which mean that the revenue allowance set at the price control review is insufficient to enable an efficiently managed company to finance its regulated activities, then we will consider requests from that company for amendments to its price control. If there is sufficient justification to do so, the price control will be re-opened.

4.12. We issued a guidance document in October 2009 setting out the arrangements for responding in the event that a network company experiences deteriorating financial health.⁵ This document provides greater transparency and clarity on the types of circumstances under which we consider that a price control might be re-opened and the likely process it would involve.

4.13. In view of our duty to have regard to the need to secure that licensees are able to finance their obligations under the Gas Act and Electricity Act we believe that network companies should be able to request that changes are made to the price control in the event that financeability is put at risk. This process can be seen as a way of managing the impact of highly significant, but unpredictable, events which could occur during the price control period. As such, seeking to invoke our general financing duty as a basis for re-opening a price control settlement will be expected to be rare. Consistent with our guidance on our arrangements for responding in the event that a network company experiences deteriorating financial health, our financing duty does not mean that Ofgem would provide regulatory relief to alleviate financial distress in all circumstances. We would consider why a licensee faced financial distress and to what extent they had acted reasonably and had financed and

⁵ <http://www.ofgem.gov.uk/Networks/Policy/Documents1/GUIDANCE%20DOCUMENT%20-%20FINAL%20OCT%2009.pdf>

operated the relevant network efficiently. Network companies have an obligation to develop and maintain efficient and co-ordinated systems. Where financial distress arises despite the company operating in an economic and efficient manner, Ofgem would consider at its discretion what tools, if any, are appropriate to respond to that distress.

4.14. We do not propose any change in our current policy for RIIO-ED1, either for the disapplication licence condition (other than to bring the drafting up to date with the legislative changes to the licence modification process brought about by the Third Package) or the guidance document.

5. Mid-period review of outputs

Chapter Summary

In this chapter we set out our proposals for how we expect the mid-period review of output requirements to operate over RIIO-ED1. This includes setting out the scope of the review and the process we would expect to follow, including the consultation(s) that will be conducted and the associated timescales.

Question 1: Do you agree with the scope of the mid-period review? If not, what changes to the scope are needed?

Question 2: Do you agree with the indicative process and timetable? If not, how could the process and timetable be improved?

Question 3: 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?

Overview

5.1. The RIIO framework provides for an eight-year price control with provisions for a mid-period review of output requirements. The RIIO handbook identified that the review “*may be particularly important when the outputs-led framework is first implemented and in periods of significant change (for example, the transition to a low carbon economy in electricity)*”.

5.2. This section considers three issues:

- the scope and use of the mid-period review of output requirements
- licence implications
- an indicative process and timetable for the review.

Scope and use of the mid-period review of output requirements

5.3. There is the potential for increased uncertainty under a longer price control period. As such, and in line with RIIO-T1 and GD1, in addition to the uncertainty mechanisms we are proposing to include for RIIO-ED1, we also propose to conduct a mid-period review of output requirements. The review will identify whether changes are needed to the outputs that the DNOs are expected to deliver. 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.

5.4. It is important that the scope of the mid-period review of output requirements is tightly defined to prevent the price control period collapsing to four years and

undermining the benefits of the longer-term price control period. We propose to restrict the scope of the review to consider:

- material changes to existing outputs that can be justified by clear changes in government policy (eg if government policy on climate change changes, a higher or lower level of delivery or performance may be needed)
- introducing new outputs that may be needed to meet the needs of consumers and other network users.

5.5. Other than in these circumstances, the mid-period review would not be used to adjust the output measures or output incentives that were set at the price control review.

5.6. In addition, it is important to highlight that the mid-period review process would not be used to consider revenue adjustments that could be triggered throughout the process by other mechanisms that we have proposed. For example, if we were to adjust a DNO's revenue for the implementation of ideas developed through the innovation stimulus, as described above, this would be done in a separate process from the mid-period review.

5.7. Should the outcome of the mid-period review be a change to an existing output, we would not apply any alterations retrospectively (eg a change in the incentive rate or to the output level).

5.8. We do not think it is possible to capture the consumer interest with a quantitative threshold (eg related to expenditure implications) as to whether a potential output change is sufficiently material. Nonetheless, in taking decisions at the mid-period review of output requirements, we propose to give weight to the potential risks and downsides of changes being considered. These include:

- the risk of reducing incentives to improve output performance over the price control period
- administrative costs of the review
- the risks of the review process and uncertainty caused by it distracting companies from delivery
- the risks of unintended consequences from a change in outputs
- creating network charging volatility.

5.9. If we decided, following consultation, that a change to output requirements is needed, we would review whether, and to what extent, the revenue in the price control will need to change to reflect the impact of the change in outputs on expenditure requirements over the remainder of the price control period. Any change to allowed revenues would be limited to what can be justified by the change to outputs.

5.10. The potential adjustment to the revenue allowance mid-period review of output requirements would not be used to reduce charges to consumers where a

company has delivered at lower costs than expected at the price control review or to increase charges to consumers when costs have been higher than expected. Furthermore, the mid-period review is not an opportunity to penalise companies for non delivery – this would be done through the relevant output incentive mechanisms and enforcement action.

Indicative process for the review

5.11. Any changes to output requirements from the mid-period review would apply from April 2019 (the start of the fifth year of RIIO-ED1). For DNOs to start collecting any adjustment to their allowed revenue from April 2019 they would need to feed any resulting revenue changes into their charging models after we have issued our decision on proposed output changes. Customers would need advance notification of changes to charges. For this reason, we propose to initiate the mid-period review of output requirements, with an 'open letter consultation', in January 2018.

5.12. If, following our 'open letter consultation', we found no grounds for making changes to outputs within the scope of the review, we would expect the process to end within six months (by July 2018) and allow the original RIIO-ED1 settlements to continue unchanged.⁶

5.13. Otherwise, we would continue with the review, and consult on proposed changes to output requirements in September 2018 (though we may still decide at this stage, after further assessment, that no changes are appropriate). The process we would follow in the six months leading to this consultation would depend on the issues at hand and would be set out when we decide to proceed with the review. Some core elements of the process are shown in the figure above. We would use stakeholder engagement and working groups as appropriate. We may decide it is best for network companies to lead this engagement and to come back to us with proposals on appropriate changes to outputs.

5.14. DNOs, other affected licensees and certain third parties would be able to appeal any licence modification coming out of the mid-period review process. In addition to this, any decisions (for instance, not to make any modifications) would remain susceptible to challenge by way of Judicial Review.

⁶ We are seeking to provide as much certainty as possible on the timing of the mid-year review. We hope the timings provided will prove to be broadly accurate but, at this stage, they are necessarily indicative.

Appendices

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Appendix 1 - Consultation Response and Questions

1.1. Ofgem would like to hear the views of interested parties in relation to any of the issues set out in this document.

1.2. We would especially welcome responses to the specific questions which we have set out at the beginning of each chapter heading and which are replicated below.

1.3. Responses should be received by 23 November 2012 and should be sent to:

- James Hope
- RIIO-ED1
- 9 Millbank, London, SW1P 3GE
- 020 7901 7029
- RIIO.ED1@ofgem.gov.uk

1.4. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.

1.5. Respondents who wish to have their responses remain confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. It would be helpful if responses could be submitted both electronically and in writing. Respondents are asked to put any confidential material in the appendices to their responses.

1.6. Next steps: Having considered the responses to this consultation, Ofgem intends to publish the Strategy Decision in February 2013. Any questions on this document should, in the first instance, be directed to:

- James Hope
- RIIO-ED1
- 9 Millbank, London, SW1P 3GE
- 020 7901 7029
- RIIO.ED1@ofgem.gov.uk

CHAPTER: One

N/A

CHAPTER: Two

Question 1: Are there any additional criteria that we should take into account to guide the appropriate use of uncertainty mechanisms?

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CHAPTER: Three

Question 1: Do you have any views on the design of the proposed high-volume low-cost connections volume driver?

Question 2: Do you have any views on the design of the proposed low carbon technologies volume driver?

Question 3: Do you have any views on the design of the proposed smart meters volume driver?

Question 4: Do you have any views on the design of the proposed street works reopener?

Question 5: Do you have any views on the design of the proposed enhanced physical site security reopener?

Question 6: Do you have any views on the design of the proposed load related expenditure reopener?

Question 7: Do you have any views on the design of the proposed high value projects reopener?

Question 8: Do you have any views on the design of the proposed innovation roll out mechanism reopener?

Question 9: Do you have any views on the design of the proposed pension deficit repair mechanism reopener?

Question 10: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

CHAPTER: Four

Question 1: Do you have any views on the proposed RPI indexation of allowed revenues mechanism?

Question 2: Do you have any views on the proposed cost of debt indexation mechanism?

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Question 5: Do you have any views on the disapplication of the price control process?

Question 6: Are there any additional mechanisms that we should be considering? If so, how should these be designed?

CHAPTER: Five

Question 1: Do you agree with the scope of the mid-period review? If not, what changes to the scope are needed?



Strategy consultation for the RIIO-ED1 electricity distribution price control
Uncertainty mechanisms

Question 2: Do you agree with the indicative process and timetable? If not, how could the process and timetable be improved?

Question 3: 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?