

Assessment of the resubmitted RIIO-ED1 innovation strategies

Supplementary annex to RIIO-ED1 overview

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Overview

This document summarises our assessment of the electricity distribution companies' revised innovation strategies for the next distribution price control (RIIO-ED1). This assessment is based on amended strategies submitted following our initial assessment. The fast-tracked DNO group, Western Power Distribution, also took the opportunity to resubmit its innovation strategy.

Context

In the RIIO-ED1 price control review we will set the outputs that the 14 electricity distribution network operators (DNOs) need to deliver for their consumers and the associated revenues they are allowed to collect. The review covers the eight year RIIO-ED1 price control period, which lasts from 1 April 2015 to 31 March 2023.

RIIO-ED1 is the first electricity distribution price control to reflect the new RIIO (Revenue = Incentives + Innovation + Outputs) model.

In March 2013, we published our decision on the key elements of the regulatory framework that the DNOs would need to understand in order to develop their business plans. We also set out our approach to assessing the business plans, including the role of proportionate treatment. Based on this decision, the DNOs submitted their business plans by 1 July 2013. We assessed these plans and, after consultation, decided which DNOs should be fast-tracked, as well as publishing indicative Network Innovation Allowance amounts for all licensees.

In March this year DNOs that were not fast-tracked submitted their slow-track business plans. At the same time all licensees submitted an updated innovation strategy. Western Power Distribution also took the opportunity to resubmit its innovation strategy, despite being fast-tracked. This is our assessment of these strategies.

Associated documents

RIIO-ED1: Draft determinations for the slow-track electricity distribution companies – Overview

<https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-draft-determinations-consultation-slow-track-electricity-distribution-companies>

Strategy Decision for RIIO-ED1 – Overview

<https://www.ofgem.gov.uk/publications-and-updates/strategy-decision-riio-ed1-overview>

Initial Assessment of the RIIO-ED1 Innovation Strategies

<https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-business-plan-assessment-and-fast-tracked-consultation>

Provisional Network Innovation Allowance for Distribution Network Operators

<https://www.ofgem.gov.uk/publications-and-updates/provisional-network-innovation-allowance-distribution-network-operators>

Decision to fast-track Western Power Distribution

<https://www.ofgem.gov.uk/publications-and-updates/decision-fast-track-western-power-distribution>

Executive summary

Innovation is one of the core tenants of the RIIO price control structure. This document provides our assessment of the innovation strategies DNOs have submitted to us. The quality of the strategies submitted determines the network innovation allowance (NIA) each company will receive during the RIIO-ED1 period. Companies can use this allowance to fund small scale innovative trials throughout the price control.

Alongside this document we have published the draft determinations for companies. These include some challenging efficiency targets designed to encourage DNOs to maximise the learning from innovation trials and make full use of smart metering data to deliver cost savings. Companies can use the NIA to help them achieve and potentially surpass the efficiency targets which we have set. They can use this funding to trial new techniques and operational practices which can be rolled out to deliver benefits to customers.

We are proposing the following innovation allowances for companies:

DNO Company Group	Proposed NIA amount (% of allowed revenue)
Electricity North West Limited	0.7
Northern Powergrid	0.6
Western Power Distribution	0.5
UK Power Networks	0.5
Scottish Power Energy Networks	0.5
SSE Power Distribution	0.5

We will consider stakeholders' responses to this consultation and publish our decision on NIA amounts alongside the final determination for slow-tracked companies in November this year. DNOs will not have the opportunity to resubmit innovation strategies following this consultation. We will take our decision based on the strategies submitted as part of the slow-track process and responses to this consultation.

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1. Introduction

Chapter summary

Background to the Network Innovation Allowance (NIA) and a summary of what we expected DNOs to include in their innovation strategies.

Purpose of this document

1.1. In February 2014 we published our provisional Network Innovation Allowance (NIA) for each of the DNOs.¹ The values were provisional because, as explained in our strategy decision, all DNOs (including fast-track companies) would have the opportunity to resubmit their innovation strategies in March.

1.2. All DNOs submitted amended innovation strategies. In this document we seek views on our assessment of the resubmitted strategies and our proposed NIA for all DNOs. We will publish our decision on each DNO's NIA in November this year.

Background and context

1.3. DNOs face significant challenges over the coming years, such as facilitating the transition to the low-carbon economy. To meet these challenges cost-efficiently, DNOs will need to try new operational, technical, commercial and contractual arrangements.

1.4. Many elements of the RIIO price control framework are designed to encourage innovation, for example lengthening the price control period to provide companies with more certainty of the rewards for successful innovation. DNOs have had access to specific funding for innovation in previous price controls through the Innovation Funding Incentive (IFI) and Low Carbon Networks Fund (LCN Fund). We think the LCN Fund has worked well and it is widely considered to have significantly improved the DNOs' attitude to innovation, knowledge sharing, anticipating the low-carbon future and collaborative working with third parties. In our strategy decision we confirmed that we would build on the success of the LCN Fund and continue the time-limited innovation stimulus.

Innovation during RIIO-ED1: a summary

1.5. The RIIO-ED1 framework contains strong incentives to innovate as part of normal business. For example, the quality of service incentives² should encourage

¹ <https://www.ofgem.gov.uk/publications-and-updates/provisional-network-innovation-allowance-distribution-network-operators>

² <https://www.ofgem.gov.uk/electricity/distribution-networks/network-price-controls/quality-service/quality-service-incentives>

DNOs to anticipate the impact of new loads and the efficiency incentive³ should incentivise DNOs to implement innovative solutions, where they are more efficient than conventional approaches.

1.6. However, we also appreciate that certain research, development, trials and demonstration projects are speculative and yield uncertain commercial returns. This is particularly true where benefits do not directly accrue to the DNOs and are linked to the role of energy networks in the transition to the low-carbon economy.

1.7. The NIA is a use-it-or-lose-it allowance that each DNO will receive as part of its price control settlement to fund small-scale innovative projects. The value of the NIA will be between 0.5 and 1 per cent of base revenues. The amount awarded to each DNO depends on how well the DNO demonstrates, in its innovation strategy, that it has a well thought through plan to focus its innovation efforts over the price control period. DNOs will receive 0.5 per cent of base revenue unless they provide a reasonable justification that a larger NIA will deliver additional value for consumers. They will be able to use the allowance to fund a maximum of 90 per cent of qualifying expenditure.

Summary of innovation strategy guidance

1.8. In our strategy decision we stated that DNOs' innovation strategies should, as a minimum, contain:

- the high level problems and challenges which the sector or company expects to face over the period, and the justification for initiating projects to address these
- the process or methodology by which the company will decide the focus for innovation during RIIO-ED1
- a demonstration that the problems and challenges have been identified, prioritised and justified in consultation with stakeholders
- discussion of the relative priorities, risks, benefits, value for money and potential customer impacts
- the consequences of innovation not occurring
- deliverables and potential deliverables from the research or development or trials, such as defined learning, revised codes, new charging methodologies etc
- evidence of how innovation funding (ie IFI and LCN Fund) from the current price control (DPCR5) has been used effectively and resulted in improved outcomes for consumers
- a description of its approaches to ensuring the efficient roll-out of successful innovation into business as usual (including innovation developed by other DNOs)

³ The efficiency incentive provides an ongoing incentive for DNOs to seek out lower cost solutions and manage the cost of output

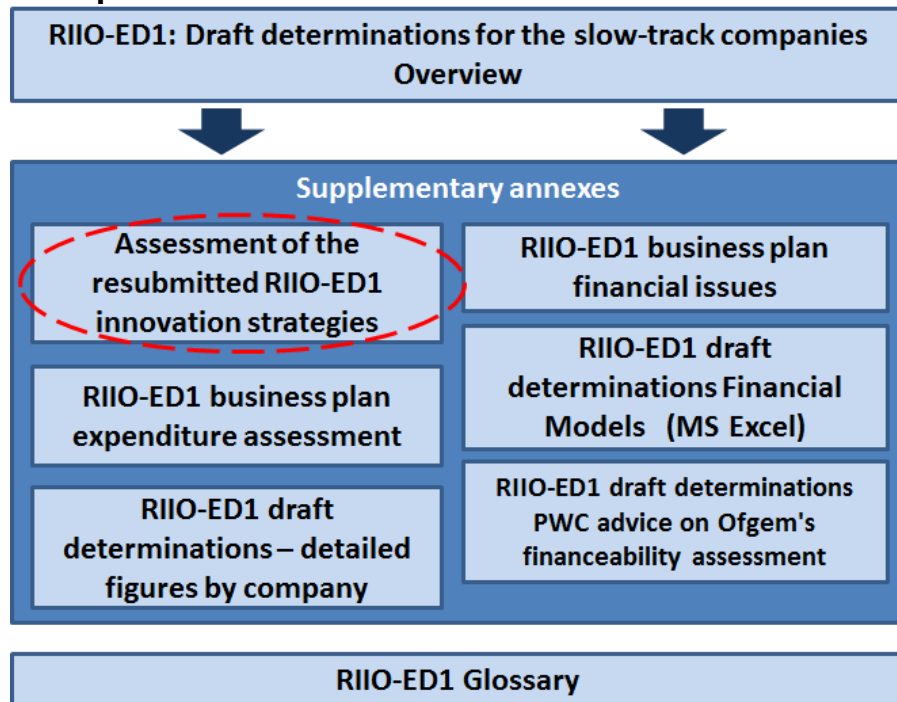
Assessment of the RIIO-ED1 resubmitted innovation strategies

- a description of its processes for reviewing and updating their innovation strategies within the price control period.
- evidence of how DPCR5 innovation funding (ie IFI & LCN Fund) has been used effectively and resulted in improved outcomes for consumers
- a description of their approaches to ensuring the efficient roll-out of successful innovation into business as usual (including innovation developed by other DNOs)
- a description of their processes for reviewing and updating their innovation strategies within the price control period.

1.9. As part of our analysis of the innovation strategies we posed written questions to some companies. We have reflected the answers to these questions in our assessment. Where answers to our questions have clarified aspects of a DNO's strategy, we expect the DNO to amend their innovation strategies to incorporate these answers.

1.10. Figure 1.1 below shows all the RIIO-ED1 documents we have published today. There are links to all these documents in the 'Associated Documents' section at the top of this document.

Figure 1.1: Map of the RIIO-ED1 draft determinations documents



2. Assessment of innovation strategies

Chapter summary

Our assessment of each distribution network operator's (DNO's) innovation strategy and our proposed Network Innovation Allowance (NIA) for each DNO.

Question 1: Do you agree with our assessment of each DNO's innovation strategy?

Question 2: Do you agree with our draft determination of the NIA for each DNO?

2.1. To receive an allowance greater than 0.5 per cent of base revenue, a DNO needs to first meet the minimum requirements and then demonstrate how it will exceed them. Moreover, a DNO must demonstrate what additional benefit customers will receive for any funding above the default amount.

2.2. In our assessment, we comment that some companies could have potentially received a higher allowance had it requested one. However, we are unable to award companies a higher allowance than they have requested. In addition, there is no scope for DNOs to resubmit their strategy or request a higher allowance. We can only raise the level of funding awarded where the proposed NIA is below that requested by the company.

Electricity North West Limited (ENWL)

Innovation strategy and requested NIA

2.3. ENWL submitted an amended innovation strategy alongside its slow-track business plan. It has changed its innovation strategy significantly since we assessed it as part of the fast-track plan last year. In that submission, ENWL fulfilled just three of the six minimum requirements of an innovation strategy.

2.4. ENWL requests an innovation allowance of 0.8 per cent of base revenue per year, as it did in its fast-track business plan. This is above the 0.5 per cent default.

Our proposed NIA

2.5. We think that ENWL's amended strategy exceeds minimum requirements in a number of areas and warrants an NIA of 0.7 per cent.

Reasons for our proposed NIA

2.6. ENWL has submitted a clear innovation strategy. We consider that it meets all of the minimum requirements and exceeds them in some areas. For instance, it exceeds the minimum requirement to describe the challenges it expects to face

during the RIIO-ED1 period by describing how it intends to address those challenges. It also exceeds the minimum requirements when identifying which innovation activities it will undertake using its NIA. ENWL makes a number of general points regarding what will happen if innovation does not occur. It builds on this when it describes specific deliverables and it notes the consequences of not developing a specific solution. ENWL also outlines a clear process for introducing successful innovation to business as usual. ENWL will review its innovation strategy every year and consult stakeholders on possible changes to the strategy every two years.

2.7. ENWL fulfils the minimum requirements where it explains how innovation activities completed during DPCR5 will deliver significant benefits to customers. For example, it claims that over £130m of savings are reflected in its RIIO-ED1 plan. While our analysis of the plans has illustrated that while not all of these might be genuinely innovative, ENWL is still providing an excellent return on the investment made in innovation in the last two price controls.

Northern Powergrid (NPg)

Innovation strategy and requested NIA

2.8. NPg submitted an amended innovation strategy alongside its slow-track business plan. However, its strategy has not materially changed since we assessed it at fast-track. NPg's fast-track innovation strategy fulfilled all, and exceeded some, of the minimum requirements.

2.9. NPg requests an innovation allowance of 0.6 per cent of base revenue per year, as it did in its fast-track submission. This is above the 0.5 per cent default.

Our proposed NIA

2.10. NPg exceeds the minimum requirements in a number of areas we think the strategy warrants an NIA of 0.6 per cent, as requested. Potentially, NPg could have received a larger NIA had it been requested.

Reasons for our proposed NIA

2.11. NPg has a clear and well-structured innovation strategy which is easy to follow. We consider that NPg's strategy meets all the minimum requirements and exceeds some of them. For instance, NPg exceeds the minimum requirements when it explains the strategic challenges it expects to face during the RIIO-ED1 period. It discusses each of these challenges and clearly identifies where it will undertake innovative projects to address them.

2.12. It also exceeds the minimum requirements by clearly describing how stakeholders have informed the development of the strategy and areas of focus. It provides a good discussion of the relative priorities, risks, benefits and value for money. It adequately describes the consequences of not innovating and notes that

innovation could deliver £339-£395m of benefits out to 2031. NPg has put significant thought into the potential deliverables for the price control period. It also exceeds the minimum requirements by including clear guidance for incorporating innovation into day-to-day business, including by developing new training programmes. It shows how it has incorporated innovation into its standard business activities. These include those trialled by other companies as well as itself. It explains how it will review and update its innovation strategy.

Western Power Distribution (WPD)

Innovation strategy and requested NIA

2.13. In our fast-track assessment of the innovation strategies we asked WPD to submit an improved innovation strategy, even though it requested the default NIA. This is because it fulfilled only three of the minimum requirements. WPD subsequently submitted a revised innovation strategy which has been changed significantly from the previous one.

2.14. WPD requests an innovation allowance of 0.5 per cent of base revenue per year, as it did in its fast-track submission.

Our proposed NIA

2.15. WPD exceeds the minimum requirements in a number of areas. Based on its amended strategy, we consider that WPD could have potentially received a higher NIA if it had requested. However, we are unable to award an allowance higher than the 0.5 per cent requested.

Reasons for our proposed NIA

2.16. WPD's innovation strategy is clear and well-structured. It fulfils all the minimum requirements and exceeds them in some areas. We recognise the significant improvements since the previous version.

2.17. WPD's strategy exceeds some the minimum requirements in a number of places. For example it clearly explains several projects, which it categorises by scale. It describes the types of benefit these projects could lead to. WPD clearly explains how it has brought innovation projects from the current price control period into its regular business activities.

2.18 It discusses the potential challenges it expects to face, such as electrification of heat and transport, and connection of renewable generation. In summary, WPD expects an increased usage of the distribution network to pose a significant challenge. It clearly explains the methodology it uses to identify innovation projects to implement and describes a clear governance process which covers project selection and project management. It discusses the relative priorities for the RIIO-ED1 period. It claims that £128m of savings have been reflected within its RIIO-ED1

plan as a result of rolling out current, or planned, innovative trials. While we commented that the plan lacked detail on how smart grid solutions will be used, and how they have been embedded into its business, it represents a decent return on the innovation funding received.

2.18. WPD explains that its process for rolling out new innovation-based policies is similar to the way it decides other, non-innovation policy changes. Finally, it states that it will review and reissue its innovation strategy annually.

UK Power Networks (UKPN)

Innovation strategy and requested NIA

2.19. UKPN submitted an amended innovation strategy alongside its slow-track business plan. UKPN met all the minimum requirements in its original submission and exceeded them in some areas. There were few changes in its resubmitted strategy.

2.20. UKPN requests an innovation allowance of 0.5 per cent of base revenue per year, as it did in its fast-track submission.

Our proposed NIA

2.21. UKPN exceeds the minimum requirements in a number of areas. Based on its amended strategy, we consider that UKPN could have potentially received a higher NIA if it had requested. However, we are unable to award an allowance higher than the 0.5 per cent requested.

Reasons for our proposed NIA

2.22. UKPN submitted a long but generally clear strategy. It fulfils all the minimum requirements and exceeds some of them. For instance, it clearly describes how stakeholders have contributed to the development of the strategy. It identifies challenges it expects to face during the price control. It also sets out a clear process for deciding which projects it would implement during the price control.

2.23. UKPN discusses its general approach to risk and how it tracks the benefits of innovation projects. It identifies innovations it developed during DPCR5 that it has rolled out or will roll out during RIIO-ED1. It also describes its approach to ensuring value for money. UKPN claims that £141m of cost savings has been included in its RIIO-ED1 business plan to reflect the roll out of current or planned innovation trials. While we consider that some of these were from existing practices, it demonstrates a good process for transitioning learning from trials into business as usual. UKPN also sets out a clear process for reviewing and updating its innovation strategy once every two years.

2.24. UKPN fulfils the minimum requirements by describing what it considers to be the consequences of not completing innovation projects. It has identified deliverables

and grouped these by when they would be achieved. It has also linked them to Smart Grid Forum deliverables.

SP Energy Networks (SPEN)

Innovation strategy and requested NIA

2.25. SPEN included an amended innovation strategy alongside its slow-track business plan. The innovation strategy has changed since fast-track. In its previous submission, SPEN fulfilled all but one of the minimum requirements for an innovation strategy.

2.26. SPEN requests an innovation allowance of 0.8 per cent of base revenue per year. This is above the default 0.5 per cent.

Our proposed NIA

2.27. SPEN's strategy meets all the minimum requirements. However, it does not exceed any, so we think it warrants an NIA of 0.5 per cent.

Reasons for our proposed NIA

2.28. SPEN submitted a short but well-presented innovation strategy. We think it fulfils the minimum requirements but does not exceed any of them. To justify an allowance of 0.8 per cent SPEN would have needed to provide more detail throughout the document and explain the additional benefits funding beyond the default amount would deliver.

2.29. SPEN performed well against the minimum requirements. It identified the challenges it expects to face during the RIIO-ED1 period and explains how it intends to address these challenges. It also outlines a clear strategy for identifying what innovation activities it will undertake using its NIA. SPEN fulfils the minimum requirements by making general points about what will happen if innovation does not occur. It also notes how it has processes in place to ensure innovation activities completed during DPCR5 will benefit customers during the RIIO-ED1 period.

2.30. SPEN also provides a process for how it will review its innovation strategy every year and consult stakeholders on possible changes. It also explains how it will engage with its own staff – this includes an internal innovation conference each year.

2.31. However, despite performing well against the minimum requirements, SPEN does not justify funding beyond the default level. To qualify for a higher allowance, it would have needed a more detailed innovation strategy. For example, while SPEN identifies the challenges it expects to face, it does not detail how these link to the deliverables it proposes. We would also have expected a more detailed explanation of how stakeholder engagement had helped to identify challenges and deliverables. SPEN could, in particular, have provided more detail on its engagement process with

stakeholders – internal and external. It could also have explained the customer impact of innovation in greater detail – including the impact of not innovating. Finally, SPEN could have performed more strongly if it had explained how it secures internal support for the rollout of successful innovation.

2.32. Since it has not covered these areas and in particular has not explained how funding beyond the default amount will deliver additional benefits to customers, we are unable to propose an allowance above the default level of 0.5 per cent.

Scottish and Southern Electricity Power Distribution (SSEPD)

Innovation strategy and requested NIA

2.33. SSEPD included an amended innovation strategy alongside its slow-track business plan. Its fast-track strategy fulfilled six out of the seven minimum requirements.

2.34. SSEPD requests an innovation allowance of 1 per cent of base revenue per year, as it did in its previous submission. This is above the 0.5 per cent default level.

Our proposed NIA

2.35. We consider that SSEPD has met all the minimum requirements. However, it has not exceeded any of them. Consequently, it has not justified funding beyond the default amount of 0.5 per cent.

Reasons for our proposed NIA

2.36. SSEPD has submitted a long and detailed innovation strategy which is difficult to read. SSEPD explains the main challenges it expects to face during the RIIO-ED1 period as well as some lower order challenges. To exceed our requirements in this area it could have provided a clearer justification of why innovation projects are needed to address the challenges it has identified.

2.37. SSEPD outlines an approach for selecting which projects to implement. It clearly illustrates how stakeholder engagement has informed the general development of its strategy. However, it could have provided more detail on how stakeholder engagement has helped to identify challenges and priorities.

2.38. It identifies 20 core innovations it will develop or roll out in the price control period. However, it is not clear which of these will become part of everyday business and which will require further research or development funded by the NIA. SSEPD could have explicitly identified which of the core innovations would use NIA funding before being rolled out.

2.39. SSEPD discusses relative priorities, risks and benefits and explains the consequences of not innovating. It would have been more useful if discussion had been limited to those core innovations where SSEPD intends to use NIA funding.

2.40. SSEPD clearly explains how DPCR5 innovation has been and will continue to be used to benefit customers. However, to exceed the minimum requirements, it could also have explained how it was building on the learning from other DNOs' projects.

2.41. SSEPD includes a process for reviewing its innovation strategy each year. While it provides a good summary of how stakeholders informed the development of the original strategy it could have provided more detail on the process for deciding the focus of innovation activities – for example, explaining how it had canvassed stakeholder views and reflected them within its innovation strategy.

3. Next steps

Chapter summary

The next steps in establishing the amount each DNO will receive for its NIA and the remaining process.

3.1. We will consider stakeholders' responses to this consultation and publish our decision on NIA amounts alongside the final determination for slow-tracked companies in November this year. DNOs will not have the opportunity to resubmit innovation strategies following this consultation. We will take our decision based on the strategies submitted as part of the slow-track process and responses to this consultation.

Slow-track Process	We publish our consultation on proposed NIAs for resubmitted innovation strategies alongside the slow-track draft determinations.	30 July 2014
	We consider stakeholder responses to proposed NIAs.	September-October 2014
	We publish our decision on NIAs for all DNOs alongside our final determination for slow-tracked companies.	November 2014

Appendix 1 – consultation response and questions

1.1. We would like to hear your views on any of the issues set out in this document.

1.2. We especially welcome responses to the specific questions at the beginning of each chapter. These are replicated below.

1.3. Responses should be received by 26 September 2014. It would be helpful if you could submit them electronically. Please send them to:

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1.4. You can send any queries to the same address.

1.5. Unless marked confidential, all responses will be published in our library and on our website, www.ofgem.gov.uk. You can ask us to keep your response confidential. We'll 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.

1.6. If you'd like your response to remain confidential, clearly mark the documents to that effect and include the reasons for confidentiality. Please restrict any confidential material to the appendices to your response.

Once we've considered the responses to this consultation, we intend to publish our decision in November.

CHAPTER: Two

Question 1: Do you agree with our initial assessment of each DNO's innovation strategy?

Question 2: Do you agree with our proposed NIA for each DNO?