

Initial Assessment of the RIIO-ED1 Innovation Strategies

Supplementary annex

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Overview:

This document summarises our initial assessment of the electricity distribution companies' innovation strategies for the next distribution price control (RIIO-ED1). The innovation strategies were submitted as part of the companies' business plans. However we are evaluating the strategies in a parallel process to the main business plan assessment, and have not considered them in our assessments for proportionate treatment or fast-tracking.

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 (strategy) 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 on 1 July 2013. The suite of documents we are publishing here concludes our assessment of the plans.

Associated documents

Assessment of RIIO-ED1 business plans and fast-tracking (letter)

- Assessment of the RIIO-ED1 business plans
- Initial Assessment of the RIIO-ED1 innovation strategies
- RIIO-ED1 business plan expenditure - methodology and results document (to be published early December)
- RIIO-ED1 Glossary

The assessment letter and supplementary annexes can be found on our website at the following link:

<https://www.ofgem.gov.uk/publications-and-updates/riio-ed1-draft-determinations-fast-tracked-distribution-network-operators>

RIIO-ED1: Draft Determinations for Western Power Distribution Ltd

- RIIO-ED1 Fast-Track Draft Determination Financial Model (Excel)
- RIIO-ED1 Fast-Track Draft Determination Financial Model Audit Letter

The Draft Determinations and supplementary annexes can be found on our website at the following link:

<https://www.ofgem.gov.uk/network-regulation-%E2%80%93-riio-model/riio-ed1-price-control>

Consultation on the methodology for assessing equity market returns (to be published early December)

<https://www.ofgem.gov.uk/network-regulation-%E2%80%93-riio-model/riio-ed1-price-control>

Strategy Decision for RIIO-ED1 – Overview

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

Contents

1. Introduction	4
Purpose of this document	4
Background and context	4
Innovation during RIIO-ED1: a summary	4
Summary of innovation strategy guidance	5
2. Initial assessment of innovation strategies	7
Electricity North West Limited (ENWL)	7
Innovation strategy and NIA	7
Our assessment	7
Northern Powergrid (NPG)	8
Innovation strategy and NIA	8
Our assessment	8
Western Power Distribution (WPD)	9
Innovation strategy and NIA	9
Our assessment	9
UK Power Networks (UKPN)	10
Innovation strategy and NIA	10
Our assessment	10
Scottish Power Energy Networks (SPEN)	10
Innovation strategy and NIA	10
Our assessment	11
Scottish and Southern Electricity Power Distribution (SSEPD)	11
Innovation strategy and NIA	11
Our assessment	12
3. Next Steps	13

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 our Strategy decision we explained that we would publish an initial assessment of each DNO's innovation strategy, as submitted as part of its business plan, alongside our Assessment of business plans. This document contains that initial assessment; sets out our proposed Network Innovation Allowance (NIA) allowances for each DNO; and seeks stakeholders' views on our assessment and proposed allowance.

Background and context

1.2. 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 within their business.

1.3. 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 consider 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

1.4. We consider that within the RIIO-ED1 framework there are strong incentives to innovate as part of normal business. For example, the quality of service incentives¹ should encourage DNOs to anticipate the impacts of new loads and the

¹ <https://www.ofgem.gov.uk/electricity/distribution-networks/network-price-controls/quality-service/quality-service-incentives>

efficiency incentive² should incentivise DNOs to implement innovative solutions within their business, where they are more efficient than conventional approaches.

1.5. However, we also appreciate that certain research, development, trials and demonstration projects are speculative in nature 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 a low carbon economy. In March, we set out our decision to establish a time limited innovation stimulus which will be comprised of the Network Innovation Competition, the NIA and an Innovation Roll-out Mechanism.

1.6. The NIA will be a set use-it-or-lose-it allowance that each DNO will receive as part of their 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 will depend 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 a maximum of 0.5 per cent of base revenue unless they provide a reasonable justification that a larger NIA will deliver additional value for consumers. DNOs will be able to pass through a maximum of 90 per cent of NIA expenditure.

Summary of innovation strategy guidance

1.7. In our Strategy decision we stated that DNOs' innovation strategies should, as a minimum, contain the following information:

- the high level problem(s) and/or challenge(s) which the sector/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
- demonstration that the problems/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(s) not occurring
- deliverables and potential deliverables from the research or development or trials, such as defined learning on an issue, revised codes, new charging methodologies etc
- evidence of how innovation funding (ie IFI & 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)

² The efficiency incentive provides an ongoing incentive for DNOs to seek out lower cost solutions and manage the cost of output delivery by sharing any savings between the DNO and customers.

- a description of its processes for reviewing and updating their innovation strategies within the price control period.

1.8. In addition, DNOs were required to set out in their innovation strategies information relating to the following three requirements:

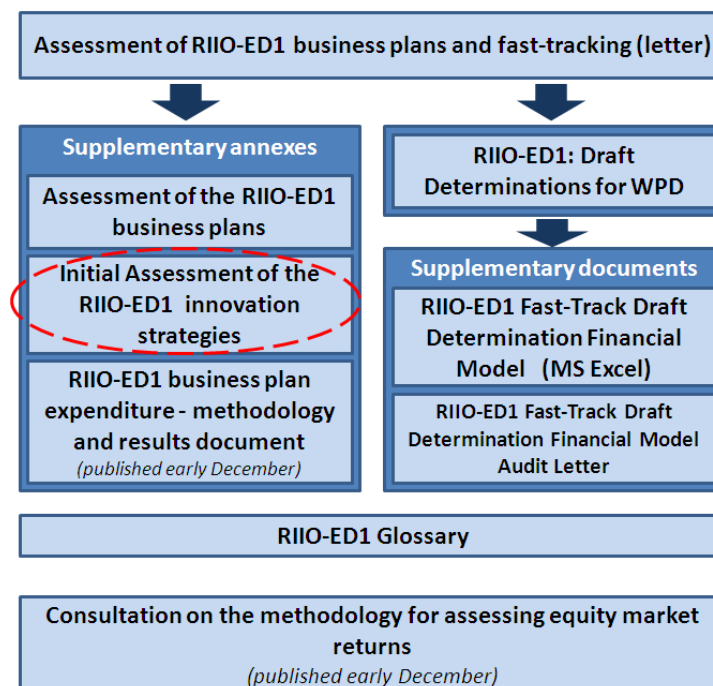
- evidence of how DPCR5 innovation funding (ie IFI & LCN Fund) has been used effectively and resulted in improved outcomes for consumers
- a description of their approaches to ensuring the efficient roll-out of successful innovation into business as usual (including innovation developed by other DNOs)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

1.9. Chapter 2 contains our initial assessment of the innovation strategies. It also sets out the indicative level of the NIA. Chapter 3 outlines the next steps for the process.

1.10. When we published the minimum requirements set out above we expected all licensees to fulfil them whether or not they were seeking funding beyond the default amount. With this in mind, we expect licensees to resubmit their innovation strategy whether or not they are seeking funding beyond the default amount.

1.11. This document is part of a suite of documents we have published as part of our RIIO-ED1 business plan assessment. Figure 1.1 below sets out a map of all the RIIO-ED1 documents we are publishing. Links to all these documents are set out in the 'Associated Documents' section at the front of this document.

Figure 1.1: Map of the RIIO-ED1 business plan assessment and Draft Determinations documents



2. Initial assessment of innovation strategies

Chapter Summary:

An outline of our initial assessment of each DNO's innovation strategy and our proposed NIA for each DNO.

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?

Electricity North West Limited (ENWL)

Innovation strategy and NIA

2.1. ENWL includes a concise innovation strategy with its business plan. It outlines the processes it will use to identify opportunities for future innovation and a brief summary of what will happen if innovation does not occur.

2.2. ENWL requests an innovation allowance of 0.8 per cent of base revenue per annum. This is 0.3 per cent above the default amount. ENWL has not specifically explained what it will do with funding beyond the default amount or what benefits it will deliver.

Our assessment

2.3. ENWL's submission meets three of the minimum requirements for an innovation strategy set out in our Strategy Decision. However, it does not explain the risks associated with innovation projects and it only briefly explains the consequences if innovation does not occur. ENWL sets out a good process to identify opportunities for innovation projects. It will work in collaboration with EA Technology Limited as well as through engaging with customers and other stakeholders to identify these opportunities. Ideas will be evaluated against stakeholder priorities and a cost benefit analysis will be carried out to assess which innovation projects to implement. We consider this is one of the stronger aspects of ENWL's strategy.

2.4. ENWL highlights the key challenges it expects to face in the next price control period. However, it does not explain why innovation is the best way to address these challenges. The extent to which ENWL has used its stakeholder engagement to identify these is not clear. ENWL does not explain what will happen if innovation does

not take place. Finally, ENWL does not specifically identify or justify why extra funding beyond the default amount is needed.

2.5. We do not consider that ENWL has provided sufficient justification for its proposed additional allowance. We need to be satisfied that an additional allowance will provide clearly defined additional value to existing and future customers. Therefore we consider that ENWL's current innovation strategy warrants an NIA of 0.5 per cent. We look forward to ENWL submitting a strategy that fulfils all of the minimum requirements.

Northern Powergrid (NPg)

Innovation strategy and NIA

2.6. NPg includes a well-structured innovation strategy with its business plan. It sets out a clear process for identifying opportunities for innovation projects which link well to the challenges it has identified.

2.7. NPg requests an innovation allowance of 0.6 per cent of base revenue per annum. This is 0.1 per cent above the default amount. NPg does not specifically explain what it will do with this additional funding or what benefits it will deliver. However, it does set out a clear process for setting priorities for innovation and implementing projects.

Our assessment

2.8. NPg's submission meets all of the minimum requirements for an innovation strategy set out in our Strategy Decision. It presents a good case for further funding above the default amount. In particular NPg provides a robust assessment of the relative priorities, risks, benefits, value for money and potential customer impacts. Another strong aspect of NPg's strategy is the explanation of the process by which it intends to identify opportunities for innovation projects. NPg also explains how it will assess the relative benefits of different innovation opportunities. It also explains that it will identify opportunities for future innovation projects on the basis of the learning from its existing projects. In addition, it will review the outputs of other industry and academic partners' projects. NPg provides a strong range of deliverables that address the challenges it expects to face. It also explains where it has utilised learning it (and other DNOs) have developed into business as usual. This provides us with confidence that future innovations will also be incorporated into its business as usual.

2.9. While the strategy fulfils all the minimum requirements, it would have been stronger still if further detail had been included. In particular NPg could have explained why innovation projects are required to address the challenges it has identified. It would also have been useful if NPg had explained its process for assessing the value of rolling out innovations.

2.10. On balance, we consider that NPg has provided sufficient justification for its proposed additional allowance (0.1 per cent above the default level of 0.5 per cent). We are satisfied that an allowance of 0.6 per cent will provide additional value to existing and future customers.

Western Power Distribution (WPD)

Innovation strategy and NIA

2.11. WPD's plan includes a concise innovation strategy. It sets out the challenges it expects to face and its processes for identifying which innovation projects to implement. It also explains its involvement in industry wide groups focused on transferring proven innovation into business as usual.

2.12. WPD requests the default innovation allowance of 0.5 per cent of base revenue per annum.

Our assessment

2.13. WPD fulfils three of the minimum requirements of an innovation strategy set out in our Strategy Decision. WPD sets out the challenges it expects to face in the next price control period. An area where the strategy is stronger, relative to the rest of the document, is WPD's approach to ensuring value for money. This is one of its key objectives when implementing projects. WPD includes a project review process within projects to ensure successful delivery.

2.14. In many other areas WPD's strategy is vague. WPD notes that 75 per cent of stakeholders endorsed its innovation strategy and view of the future. However, it is not clear exactly what stakeholders were asked to endorse. WPD identifies the challenges it faces as a business but provides no detail on the innovative methods it will use to address these challenges. No explicit learning outcomes or deliverables were detailed in this innovation strategy. WPD indicates that transitioning innovative solutions into business as usual is a key priority. However, it does not provide sufficient detail in the strategy on how it will do this. While WPD states its strategy is subject to continuous internal review it does not explain how it will do this or how stakeholders will be involved in this process. It has an innovation contact for each DNO whose responsibility is to learn as much as possible from other DNOs' innovation projects and feed this back into WPD's business. However, it is not clear on the process it will employ to transfer learning, developed internally or at another DNO, from the innovation team into the broader business.

2.15. We consider WPD has failed to achieve the minimum requirements in a number of areas. Even though WPD only requests the default amount we expect all licensees to meet all the minimum requirements. We look forward to WPD submitting a strategy that achieves this. Our assessment of WPD's current strategy is that it warrants the default NIA of 0.5 per cent.

UK Power Networks (UKPN)

Innovation strategy and NIA

2.16. UKPN includes a detailed but easy to navigate innovation strategy with its plan. In its strategy UKPN identifies the challenges it expects to face and justifies why innovative methods should be used to address them. UKPN explains the role stakeholders played in the development of its strategy.

2.17. UKPN requests an innovation allowance of 0.5 per cent of base revenue per annum. This is the default level set out in our Strategy Decision.

Our assessment

2.18. UKPN's innovation strategy meets all the minimum requirements set out in our Strategy Decision. It is particularly strong in two areas. It demonstrates that stakeholders were closely involved in the development of the strategy and highlights the use of a number of tools it has used to engage with stakeholders. These include forums, its website and telephone surveys. This has led to a good multi-phased approach to stakeholder engagement. In addition, UKPN identifies where elements of the strategy changed as a result of stakeholder feedback. UKPN sets out a clear process for reviewing its innovation strategy at least every two years and how changes in the strategy will inform other aspects of the business plan. In addition, UKPN identifies a number of other triggers for reviewing the strategy. These include: major technology breakthroughs, substantive changes to innovation funding arrangements and learning from innovation projects completed by other DNOs.

2.19. UKPN provides a good justification for the key challenges it expects to face. It is not clear the extent to which its stakeholder engagement informs this aspect of the strategy. UKPN explains the sources of ideas within the business for innovation projects. However, it does not explain what the process and criteria for deciding which ideas to take forward are. UKPN sets out a number of metrics for measuring progress in innovation projects. However, it does not explain how these metrics will be tracked. It is also not clear the extent to which the benefits a project might deliver informs the decisions on which projects to implement. We consider that UKPN's innovation strategy meets our minimum requirements and we consider it is worth an NIA of 0.5 per cent.

Scottish Power Energy Networks (SPEN)

Innovation strategy and NIA

2.20. SPEN includes a concise and easy to navigate innovation strategy with its business plan. It identifies the challenges it expects to face in the period. It explains the processes by which it identifies opportunities to use innovative methods. It also details what the consequences would be if innovation did not occur.

2.21. SPEN requests an innovation allowance of 0.8 per cent of base revenue per annum. This is 0.3 per cent above the default amount. In its innovation strategy SPEN indicates that with the larger allowance it would focus on challenges it expects to face further in the future; if it received an NIA at the default level then it would focus on short term issues.

Our assessment

2.22. SPEN's submission meets all but one of the minimum requirements for an innovation strategy set out in our Strategy Decision. Three aspects of SPEN's strategy stand out. It explains the consequences if innovation does not occur, such as: hindering the low carbon transition; losing an opportunity to reduce costs for consumers; and continuing to adopt asset intensive methods. SPEN includes a clear innovation road map, listing seven areas of focus and includes deliverables linked to RIIO-ED1 outputs. SPEN draws attention to ways in which DPCR5 innovation funding has delivered technical, procedural and commercial improvements, and therefore savings for customers.

2.23. In our view SPEN has not justified, other than by reference to stakeholders' views, why innovation projects should be undertaken to address challenges identified in the strategy. It is not clear the extent to which stakeholders have contributed to the content of the strategy rather than an assurance that they felt there was value in investing a certain amount. While SPEN discusses its relative priorities and its methods for assessing these it does not appear to consider the impact of innovation projects on customers. While SPEN explains how innovation is transferred into business as usual across the organisation, this aspect of the strategy would benefit from further detailed explanation. In particular, we would like to understand how SPEN achieves internal support for transferring innovative methods and practices in to its day-to-day business.

2.24. We consider that SPEN has not provided sufficient justification for its proposed additional allowance. SPEN explains how it will prioritise its activities based on when challenges will arise. However, it does not include specifics or an assessment of the benefits which additional funding will deliver. We are not satisfied that an additional allowance will provide clearly defined additional value to existing and future customers. We therefore consider that SPEN's innovation strategy currently warrants an NIA of 0.5 per cent. We look forward to SPEN submitting a strategy that fulfils all of the minimum requirements.

Scottish and Southern Electricity Power Distribution (SSEPD)

Innovation strategy and NIA

2.25. SSEPD includes a detailed innovation strategy that is easy to navigate. In its strategy SSEPD sets out a strategic approach to innovation. It describes the use of a screening tool to identify opportunities for innovation and summarises what would happen if innovation did not occur.

2.26. SSEPD requests an innovation allowance of one per cent of base revenue per annum. This is the maximum amount. SSEPD explains that providing the full amount would allow SSEPD to “go the last mile” in translating innovation into business as usual – creating standards, developing processes, ensuring industry consensus, and consulting stakeholders.

Our assessment

2.27. SSEPD’s innovation strategy meets six of the minimum requirements set out in our Strategy Decision. SSEPD sets out a strategic approach to identifying opportunities for innovation. It also describes how an innovation screening tool will be used for selecting innovation projects. SSEPD provides an explanation of how innovation and learning funded through DPCR5 has been transferred to business as usual and the procedures it has in place to do so.

2.28. While SSEPD identifies a number of challenges it expects to face, it does not explain how innovative approaches could be used to address these. SSEPD identifies a number of key stakeholders it has engaged with on innovation issues. However, it is not clear how these stakeholder’s views have influenced the development of SSEPD’s innovation strategy. SSEPD does not explain what deliverables will result from the research and development activities it intends to undertake with its NIA. More broadly, it does not explain what work will be carried out with the extra funding beyond the default level, or what value this work will provide to customers.

2.29. SSEPD has not fulfilled all the minimum requirements we set out in our Strategy Decision. It has not explained what value it will deliver if it receives funding beyond the default amount. We consider that SSEPD has not provided sufficient justification for its proposed additional allowance. We are not satisfied that an additional allowance will provide clearly defined additional value to existing and future customers. Therefore we consider that SSEPD’s current innovation strategy warrants an NIA of 0.5 per cent. We look forward to SSEPD submitting a strategy that fulfils all of the minimum requirements.

3. Next Steps

Chapter Summary

The next steps in establishing the amount each DNO will receive for their NIA.

3.1. We will consider stakeholders' responses to this consultation and publish our decision on indicative NIA amounts alongside the fast-track final determination in February 2014. However all DNOs will have the option to resubmit their innovation strategies in March 2014, when the slow-tracked companies resubmit their business plans. If a DNO chooses not to resubmit its strategy, the indicative NIA published alongside the fast-track final determination will stand.³

3.2. We will assess any revised innovation strategies and will consult on the new proposed NIA amounts alongside draft determinations for slow-tracked companies. Again, we will consider stakeholder responses and will publish the final NIA decision alongside the final determination for slow-tracked companies. The key timings and our approach are set out in the table below:

	Key milestones	Indicative dates
Fast-track process	We publish our assessment of the innovation strategies and consult on our proposed NIA for each DNO alongside the business plan assessment.	November 2013
	We consider stakeholder responses to our NIA proposals.	Dec-Jan 2013
	We publish indicative (but not final) NIAs for all DNOs alongside our decision on fast-tracking.	February 2014
Slow-track process	All DNOs may resubmit innovation strategies (including fast-track companies). Alternatively DNOs can accept indicative NIA published in February decision. If a licensee does not resubmit, and in the absence of any objections to our assessment, we will consider that they have accepted the decision.	March 2014

³ If a DNO resubmits its strategy, we will assess the new strategy only. This could therefore result in its NIA being revised up, down or staying the same from the indication given at the fast-track determination stage.



Initial Assessment of the RIIO-ED1 Innovation Strategies

	We consult on proposed NIA for resubmitted innovation strategies alongside the Draft Determinations for slow-tracked companies.	July 2014
	We consider stakeholder responses to proposed NIA for resubmitted strategies.	August - September 2014
	We publish our decision on NIA for all DNOs alongside our Final Determinations for slow-tracked companies.	November 2014