

Consultation

RIIO-ED2 Draft Determinations – UKPN Annex			
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The next electricity distribution price control (RIIO-ED2) will cover the five-year period to 31 March 2028. In December 2021 the Distribution Network Operators (DNOs) submitted their business plans to Ofgem setting out proposed expenditure for RIIO-ED2. We have now assessed these plans and this document, and others published alongside it, set out our Draft Determinations for DNO allowances under the RIIO-ED2 price control for consultation. Responses are sought to the questions posed in these documents by 25 August 2022. Following our consideration of these responses we will confirm our Final Determinations by December 2022.

The full suite of Draft Determinations documents outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses before confirming our Final Determinations. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at Ofgem.gov.uk/consultations. If you want your response – in whole or in part – to be

considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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1. Introduction

Purpose of this document

- 1.1 This document sets out our Draft Determinations for the Electricity Distribution (ED) price control (RIIO-ED2), for the areas that are specific to UKPN. The RIIO-ED2 price control will cover the five-year period from 1 April 2023 to 31 March 2028. All figures are in 2020/21 prices except where otherwise stated.
- 1.2 The purpose of this document is to focus on those elements of our consultation position for the price control settlement which specifically affect UKPN's licence areas including London Power Networks (LPN), South Eastern Power Networks (SPN) and Eastern Power Networks (EPN).
- 1.3 This document sets out any proposals that are specific to UKPN, including:
 - assessment of the business plan incentive (BPI), including consumer value propositions (CVPs)
 - baseline cost allowances
 - parameters for common outputs
 - bespoke Output Delivery Incentives (ODIs)¹
 - bespoke Price Control Deliverables (PCDs)
 - bespoke Uncertainty Mechanisms (UMs)
 - Network Innovation Allowance (NIA) funding.
- 1.4 This document is intended to be read alongside the RIIO-ED2 Draft Determinations Core Methodology Document and RIIO-ED2 Draft Determinations Overview Document. Figure 1 sets out where you can find information about other areas of our RIIO-ED2 Draft Determinations.

 $^{^{1}}$ In this document, we refer to 'ODI-F' which is a financial incentive and 'ODI-R' which is a reputational incentive

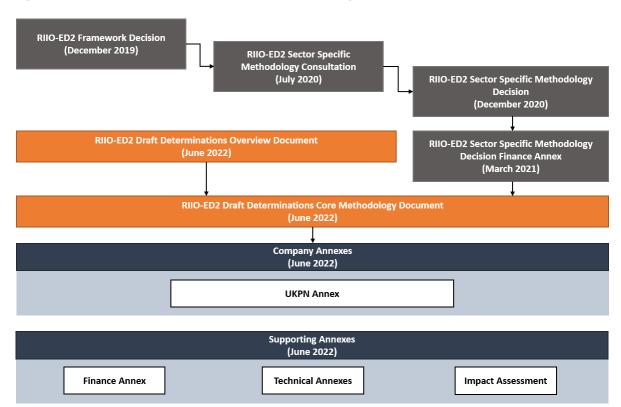


Figure 1: Draft Determinations document map

What are the company specific elements of UKPN's Draft Determinations?

- 1.5 This section sets out a high-level summary of the elements of our Draft Determinations which are specific to UKPN.
- 1.6 Table 1 summarises our assessment of UKPN across the four stages of the BPI and where you can find additional information about our consultation position for each stage.

Table 1: Summary of proposed UKPN BPI performance

BPI stage	Ofgem proposed position	Further detail
Stage 1 Minimum Requirements	Pass	Overview Document for approach to assessment and rationale
Stage 2 Consumer Value Propositions	No reward	Chapter 2 of this document
Stage 3 Penalty	No penalty	Chapter 3 of this document
Stage 4 Reward	No reward	Chapter 3 of this document
Cap calculation	N/A	Overview Document for approach to assessment and rationale

BPI stage	Ofgem proposed position	Further detail
Overall	No penalty and no reward	

- 1.7 The cost confidence assessment we have undertaken as part of this process results in a proposed Totex² Incentive Mechanism (TIM) incentive rate for UKPN of 50%. For further details on the TIM, see Chapter 9 in the Overview Document.
- 1.8 We present a summary of our proposed baseline Totex for UKPN in Table 2. This reflects our view of efficient costs including ongoing efficiency over RIIO-ED2. For further details, please refer to Chapter 7 of the Core Methodology Document.

Table 2: UKPN RIIO-ED2 submitted Totex versus proposed Totex (£m, 2020/21)³

Cost area	UKPN submitted Totex	Ofgem proposed Totex	Difference	Difference
Load related capex	607	541	-66	-10.9%
Non-load related capex	1,396	1,239	-157	-11.2%
Non-operating capex	342	305	-37	-10.8%
Network operating costs	997	885	-112	-11.2%
Closely associated indirects	1,535	1,363	-172	-11.2%
Business support costs	585	520	-65	-11.1%
Totex	5,462	4,853	-609	-11.1%

1.9 The common outputs that we are proposing for all DNOs in RIIO-ED2 are set out in Table 3 with further details provided in the Core Methodology Document. Table 3 also sets out the bespoke outputs that we are proposing to apply to UKPN in RIIO-ED2 (further details are contained within Chapter 2).

Table 3: Summary of proposed common and bespoke outputs applicable to UKPN

Output name	Output Type	Further detail
Common outputs for the ED Sector		
Annual environmental report		Chapter 3, Core Methodology Document

² Totex is a shorthand term for total expenditure

³ Submitted Totex is net costs, including our cost exclusions and reallocations and excluding Real Price Effects (RPE), ongoing efficiency, non-controllable costs, and pass-through costs (except New Transmission Capacity Charges (NTCC)). Proposed Totex is net costs, excluding RPEs, non-controllable costs, pass-through costs (except NTCC), but includes Ofgem's view of ongoing efficiency and is before post-modelling adjustments for uncertainty mechanisms.

Distribution System Operator (DSO) incentive	ODI-F	Chapter 4 Core Methodology Document
Digitalisation licence condition	Licence Condition (LC)	Chapter 4 Core Methodology Document
Technology Business Management taxonomy for classifying digital/IT spend	ODI-R	Chapter 4 Core Methodology Document
Innovation project to modernise regulatory reporting	ODI-R	Chapter 4 Core Methodology Document
Customer satisfaction survey	ODI-F	Chapter 5, Core Methodology Document
Complaints metric	ODI-F	Chapter 5, Core Methodology Document
Time to connect	ODI-F	Chapter 5, Core Methodology Document
Guaranteed standards of performance – Connections	LC	Chapter 5, Core Methodology Document
Major connections incentive	ODI-F	Chapter 5, Core Methodology Document and Chapter 2 of this document
Treating domestic customers fairly	LC	Chapter 5, Core Methodology Document
Consumer vulnerability incentive	ODI-F	Chapter 5, Core Methodology Document and Chapter 2 of this document
Vulnerability annual report	ODI-R	Chapter 5, Core Methodology Document
Interruptions incentive scheme	ODI-F	Chapter 6, Core Methodology Document and Chapter 2 of this document
Guaranteed standards of performance – reliability	LC	Chapter 6, Core Methodology Document
Network asset risk metric	PCD, ODI-F	Chapter 6, Core Methodology Document and Chapter 2 of this document
Cyber resilience IT	PCD	Chapter 6, Core Methodology Document and Confidential UKPN annex
Cyber resilience operational technology (OT)	PCD	Chapter 6, Core Methodology Document and Confidential UKPN annex
Proposed Bespoke outputs for UKPN		
Collaborative streetworks	ODI-F	Chapter 2 of this document
Off-grid anticipatory investment	PCD	Chapter 2 of this document

1.10 The common UMs that we are proposing for all DNOs in RIIO-ED2 are set out in Table 4 with further details in the Core Methodology Document. We are not proposing to accept any bespoke UMs for UKPN.

Table 4: Summary of proposed common UMs applicable to UKPN

UM Name	UM type	Further detail
Common UMs to the ED se	ctor	
Coordinated Adjustment Mechanism	Re-opener	Overview, Chapter 5 of our SSMD ⁴
Real Price Effects	Indexation	Annex 2, Chapter 4 of our SSMD
Ofgem licence fee	Pass-through	Annex 2, Chapter 8 of our SSMD
Business rates	Pass-through	Annex 2, Chapter 8 of our SSMD
Transmission Connection Point Charges	Pass-through	Annex 2, Chapter 8 of our SSMD
Pension deficit repair mechanism	Pass-through	Annex 2, Chapter 8 of our SSMD
Ring-fence costs	Pass-through	Annex 2, Chapter 8 of our SSMD
Miscellaneous pass-through	Pass-through	Annex 2, Chapter 8 of our SSMD
Environmental legislation	Re-opener	Chapter 3, Core Methodology Document
Visual amenity	Use-It-Or-Lose- It (UIOLI)	Chapter 3, Core Methodology Document
Polychlorinated biphenyls	Volume driver	Chapter 3, Core Methodology Document
Load Related Expenditure (LRE) – Secondary Reinforcement	Volume driver	Chapter 3, Core Methodology Document
LRE – Low Voltage (LV) Services	Volume driver	Chapter 3, Core Methodology Document
LRE - General	Re-opener	Chapter 3, Core Methodology Document
Net Zero	Re-opener	Chapter 3, Core Methodology Document
Digitalisation	Re-opener	Chapter 4, Core Methodology Document
DSO	Re-opener	Chapter 4, Core Methodology Document
Worst Served Customers	UIOLI	Chapter 6, Core Methodology Document
Severe Weather 1-in-20	Pass-through	Chapter 6, Core Methodology Document
Storm Arwen	Re-opener	Chapter 6, Overview Document
Physical security	Re-opener	Chapter 6, Core Methodology Document

⁴ For more details on our Sector Specific Methodology Decision (SSMD) https://www.ofgem.gov.uk/publications/riio-ed2-sector-specific-methodology-decision.

UM Name	UM type	Further detail
Electricity system restoration	Re-opener	Chapter 6, Core Methodology Document
Cyber resilience OT and IT	Re-opener	Chapter 6, Core Methodology Document and Confidential UKPN annex
Cyber Resilience OT	UIOLI	Chapter 6, Core Methodology Document and Confidential UKPN annex
Smart meter information technology costs	Pass-through	Chapter 7, Core Methodology Document
Smart meter communications costs	Pass-through	Chapter 7, Core Methodology Document
Streetworks costs	Re-opener	Chapter 7, Core Methodology Document
Rail electrification	Re-opener	Chapter 7, Core Methodology Document
High Value Projects	Re-opener	Chapter 7, Core Methodology Document
Cost of debt indexation	Indexation	Chapter 2, Finance Annex
Cost of equity indexation	Indexation	Chapter 3, Finance Annex
Tax review	Re-opener	Chapter 7, Finance Annex
Inflation indexation of Regulatory Asset Value (RAV)	Indexation	Chapter 9, Finance Annex
Electric Vehicle Provider of Last Resort	To be confirmed	Chapter 6, Overview Document
Bespoke UMs to UKPN		
N/A	N/A	N/A

1.11 Table 5 sets out our NIA proposals for UKPN (further details can be found in Chapter 5). Our general approach to the NIA is set out in Chapter 3 of our Core Methodology Document.

Table 5: Summary of proposed NIA applicable to UKPN

Consultation position for UKPN NIA
£15m initial allowance, to be reviewed in 2025

1.12 Table 6 summarises the financing arrangements that we are proposing to apply to UKPN and all other DNOs. Please refer to Chapter 4 of our Finance Annex for more detail on these areas.

Table 6: Summary of financing arrangements applicable to UKPN

Finance Parameter	UKPN (SPN and EPN) Rate	Source
Notional gearing	60%	

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Cost of equity allowance	4.75%	
Cost of debt allowance	2.26%	See Table 19 in Finance Annex
WACC allowance	3.26%	

Finance Parameter	UKPN (LPN) Rate	Source
Notional gearing	60%	
Cost of equity allowance	4.75%	See Table 19 in Finance
Cost of debt allowance	2.32%	Annex
WACC allowance	3.29%	

2. Setting Outputs

Introduction

- 2.1 This chapter sets out our Draft Determinations for output areas that specifically apply to UKPN. In this chapter we provide our proposals on:
 - the UKPN-specific parameters for common outputs, detailed in our Core
 Methodology Document, which we propose to apply to all DNOs
 - the bespoke outputs and CVPs proposed in UKPN's Business Plan.

Common outputs

2.2 The UKPN-specific parameters for the common outputs which we are proposing for all DNOs in RIIO-ED2 are set out in the tables below. Further details on these outputs and our consultation position are set out in the Core Methodology Document.

Interruptions Incentive Scheme (IIS)

- 2.3 Tables 7-10 summarise UKPN's unplanned Customer Interruptions (CI) and Customer Minutes Lost (CML) targets and revenue cap and collar.
- 2.4 The unplanned targets are calculated under a common methodology that uses each DNO's own historical performance to determine their targets, which means they are bespoke for each DNO. This methodology ensures the DNOs are incentivised to improve their performance (or avoid it deteriorating) but recognises that there are factors that will affect each DNO's current performance and the cost and impact of any changes.
- 2.5 Please refer to Chapter 6 of the Core Methodology Document for our consultation position and rationale. Planned CI and CML targets will be updated at Final Determinations, once 2021/22 performance data has been finalised.

Table 7: Consultation position - IIS - unplanned CI targets

	2023/24	2024/25	2025/26	2026/27	2027/28
LPN	13.5	13.4	13.3	13.3	13.2
SPN	43.1	42.9	42.7	42.5	42.3

EPN	43.3	43.0	42.8	42.6	42.4

Table 8: Consultation position – IIS – unplanned CML targets

	2023/24	2024/25	2025/26	2026/27	2027/28
LPN	14.4	14.4	14.3	14.2	14.2
SPN	31.2	30.7	30.3	29.8	29.4
EPN	30.9	30.4	30.0	29.5	29.1

Table 9: Consultation position – IIS – revenue cap (£m)

	2023/24	2024/25	2025/26	2026/27	2027/28
LPN	7.5	7.5	7.5	7.5	7.5
SPN	7.8	7.8	7.8	7.8	7.8
EPN	12.0	12.0	12.0	12.0	12.0

Table 10: Consultation position – IIS – revenue collar (£m)

	2023/24	2024/25	2025/26	2026/27	2027/28
LPN	18.7	18.7	18.7	18.7	18.7
SPN	19.6	19.6	19.6	19.6	19.6
EPN	30.0	30.0	30.0	30.0	30.0

NARM PCD and ODI-F

2.6 Table 1 summarises our proposals for UKPN's Network Asset Risk Metric (NARM) baseline network risk output for RIIO-ED2. Please refer to Chapter 6 of the Core Methodology Document for our consultation position and rationale.

Table 11 Consultation position – NARM PCD and ODI-F – Baseline Network Risk Outputs (£R, 2020/21 prices)

Network	Draft Determinations Proposed Baseline Network Risk Output
LPN	197,057,392
EPN	474,329,173
SPN	900,491,839

Consumer Vulnerability Incentive (ODI-F)

2.7 Tables 12 and 13 summarise our proposals for UKPN's vulnerability incentive targets for the value of fuel poverty services delivered and the value of low carbon support services delivered, with financial targets set out in net present value (NPV).

Table 12: Consultation position – Consumer Vulnerability Incentive (ODI-F): the value of fuel poverty services delivered (NPV, £m)

	Year 2 target	Year 5 target
UKPN bespoke target	£3.71m	£9.28m

Table 13: Consultation position – Consumer Vulnerability Incentive (ODI-F): the value of low carbon support services delivered (NPV, £m)

	Year 2 target	Year 5 target
UKPN bespoke target	£1.06m	£6.39m

- 2.8 The NPV values proposed by UKPN in tables 12 and 13 are the forecasted values based on the delivery of its vulnerability strategy.
- 2.9 We have reviewed the targets proposed and the supporting rationale. That review is ongoing, and we will work with all DNOs to ensure that the DNOs' targets are complete, comparable and independently assured using the common Social Value Framework ahead of Final Determinations.
- 2.10 Our approach to be spoke target setting and further detail on these metrics can be found in Chapter 5 of our Core Methodology Document.

Major Connections Incentive (ODI-F)

- 2.11 The Major Connections Incentive will be an ODI-F with a maximum penalty exposure of 0.9% base revenue and applied to performance in the Major Connections Customer Satisfaction Survey.⁵ Please see "Creating consistency in baselines for ODI incentive rates, caps, or collars" in section 10 of the Finance Annex for our proposal to translate this incentive to 0.35% RoRE.
- 2.12 The penalty is calculated by applying approximately a 0.1% penalty rate per Relevant Market Segment (RMS), and will be applied based on the number of RMS where effective competition has not been demonstrated. Based on the outcomes of the Distribution Price Control Review 5 ('DPCR5') Competition Test and our minded-to proposals on the competition review for:

⁵ See the Major Connections Incentive section of the Core Methodology Document for more details.

⁶ For more details on which RMS have demonstrated evidence of effective competition, see our minded-to proposals https://www.ofgem.gov.uk/publications/consultation-our-review-competition-electricity-distribution-connections-market.

- UKPN's LPN region, there would be a maximum penalty of 0.2% of base revenue
- UKPN's SPN region, there would be a maximum penalty of 0.2% of base revenue
- UKPN's EPN region, there would be a maximum penalty of 0.2% of base revenue.

Common outputs consultation question

UKPN-Q1. What are your views on the company specific parameters we have proposed for the common outputs that we have set out above?

Bespoke outputs

- 2.13 For RIIO-ED2, we invited DNOs to propose additional bespoke outputs as part of their Business Plans reflecting the needs of, and feedback from, their stakeholders and consumers.
- 2.14 We said that companies were required to support their bespoke outputs with robust justification. In our Business Plan Guidance (BPG)⁷, we asked for this justification to ensure that the potential consumer benefits put forward under bespoke proposals were significant enough to merit introducing any additional cost and / or regulatory complexity associated with them.
- 2.15 In making our Draft Determinations for RIIO-ED2 outputs, we have sought to strike a balance between these trade-offs for each bespoke proposal. You can find the background and our assessment approach in our Overview Document.
- 2.16 UKPN has submitted five bespoke outputs and three CVPs. This includes two bespoke ODI-Rs, one bespoke ODI-F, one PCD and one voluntary standard. We provide a summary of each bespoke proposal below, with the full details of each bespoke output put forward by UKPN found in its Business Plan submission⁸. We set out our assessment of each output and detail which of them we are proposing to accept and apply to UKPN in RIIO-ED2.

⁷ Business Plan Guidance (BPG) https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-quidance.

⁸ UKPN's Business Plan https://ed2.ukpowernetworks.co.uk/#business-plan

Bespoke Output Delivery Incentives

2.17 Table 14 below summarises the bespoke ODI proposals that UKPN submitted as part of its Business Plan and our consultation position.

Table 14: UKPNs bespoke ODI proposals

Output name and description	Consultation position
Short Interruptions (SIs) (proposed Voluntary Standard): Reduce the number of SIs by 10% per customer and make automatic compensation payment of £25 to customers who experience more than 25 high voltage SIs in a year.	Reject: We are not proposing to develop a minimum standard around SIs for RIIO-ED2, due to differences in the number of years of robust data that we have obtained from individual DNOs. We still recognise that multiple SIs could be inconvenient for customers, but do not consider it necessary to set a specific reputational ODI on UKPN to report this. As this is a Business Plan commitment for UKPN, it will need to report progress under Standard Licence Condition 50 (Business Plan Commitment Reporting) (SLC 50).
Reporting repeat power cuts (ODI-R): Bespoke reporting metric for multiple loss of power occurrences of three minutes or longer	Reject: Although we recognise that repeated power cuts can be inconvenient for customers, we do not consider it is necessary to set a specific reputational ODI on UKPN to report this. As this is a Business Plan commitment for UKPN, it will need to report progress under SLC 50.
Reporting Total Time Not Supplied (ODI-R): Bespoke reporting metric to track the Total Time Not Supplied	Reject: Although we recognise that, in addition to the number of interruptions a customer experiences, the length of time also influences the level of inconvenience, we do not consider it necessary to set a specific reputational ODI on UKPN to report this. As this is a Business Plan commitment for UKPN, it will need to report progress under SLC 50.
Collaborative Streetworks (ODI-F): Reduce the disruption and economic impact associated with street- works.	Accept in full: We are proposing to accept this bespoke proposal. We note the strong stakeholder and existing Greater London Authority (GLA) project management arrangements for this proposal, alongside very strong evidence of consumer support and willingness to pay. We note the strong economic justification for undertaking this work, as well as the convincing cost benefit analysis. We consider that this incentive will enable UKPN to align its most disruptive streetworks activity with other sectors at least cost to its consumers.

Our consultation position on bespoke ODIs

Collaborative Streetworks

Table 15: Collaborative Streetworks description

Collaborative Streetworks				
Purpose	A financial ODI to incentivise collaboration between utilities for the delivery of streetworks in Greater London.			
Benefits	To bring down infrastructure costs for consumers and reduce environmental impact by reducing the frequency and duration of roadworks by aligning works for multiple parties within one project.			

Background

- 2.18 UKPN proposed a bespoke financial ODI to enable it to participate more fully in the GLA collaborative streetworks framework. The two main gas distribution networks in the GLA area (Cadent and SGN) already have such an ODI-F in place in the RIIO-2 price control for gas distribution.
- 2.19 This framework has established a methodology and forum for utilities to collaborate on 'dig once' infrastructure disturbances in the GLA area. By coordinating streetworks the disruption and cost to consumers will be reduced, but such coordination entails additional costs (in terms of project management, personnel, or insurance) that can act as a barrier to greater coordination with other utilities.

Consultation position

Table 16: Consultation position - Collaborative streetworks ODI-F

Output parameter	Consultation position		
Performance metrics	Minimum criteria for an eligible project will be as set out in the GLA collaboration manual ⁹ , and include: • 0.2km minimum length, except where project is categorised of strategic importance by GLA • Level two collaboration at a minimum, as defined in GLA collaboration manual • A minimum of two collaborating utilities • Project must represent a permanent solution, not a temporary repair • Work must be completed by the end of RIIO-ED2 • At least 40 projects completed by the end of RIIO-ED2.		
Incentive value	£0.305m per completed collaboration project, total to be capped at 0.5% base revenue. 10		
Reporting method	Annual reporting via DNO Business Plan commitment updates, also through the Smarter Networks Portal ¹¹ .		

Rationale for our consultation position

- 2.20 We consider that UKPN has provided thorough analysis undertaken on the financial and social benefits of this programme and agree that a financial ODI is a cost-effective mechanism to incentivise UKPN to collaborate on an increasing number of collaborative streetworks over the course of RIIO-ED2.
- 2.21 As with the RIIO-ED2 price controls for gas distribution, we consider that a financial ODI is more appropriate than setting a baseline allowance due to the uncertainty over the number and timing of projects appropriate for such collaboration.
- 2.22 We agree with UKPN that the performance measure should be the number of completed streetworks projects by the end of the price control period, subject to qualifying criteria as outlined in the table above.
- 2.23 We propose to set the incentive rate of £0.305m per completed project to ensure the same regulatory treatment and incentive to collaborate as that applying to the

⁹ GLA collaboration manual https://www.londoncouncils.gov.uk/sites/default/files/Collaboration-Manual 0.pdf

 $^{^{10}}$ Please see "Creating consistency in baselines for ODI incentive rates, caps, or collars" in section 10 of the Finance Annex for our proposal to set the maximum penalty of this incentive to -0.20% RoRE.

¹¹ Smarter Networks Portal https://smarter.energynetworks.org/

- relevant gas distribution networks¹². The value of any incentive earned will be subject to the TIM.
- 2.24 We do not propose to establish a separate reporting framework for this ODI, and the GLA collaborative framework already has a methodology for monitoring and evaluating projects and sharing outcomes. We do, however, propose that UKPN join Cadent and SGN in maintaining visible information or links to such reporting through the Energy Networks Association's Smarter Networks Portal.
- 2.25 Some stakeholders raised the possibility of consumers in the area paying double incentives for the same project by both their gas and electricity utilities, which is especially a risk if the incentive part of the scheme extends to water or other utilities. We note there is a small risk of this, but not one that is likely to materialise over the majority of RIIO-ED2 due to the timing of regulatory change in other sectors. We propose to keep this issue under review prior to RIIO-ED3.
- 2.26 Similarly, a number of stakeholders have queried why this should not be a common ODI-F across all DNOs. We do not currently have any evidence to show that costs and benefits would be similar in other areas, and none of the other DNOs requested funding in their business plans to investigate establishing such a scheme. We would be interested to see other DNOs investigate the potential for similar partnerships with their regional authorities prior to RIIO-ED3.

Bespoke ODIs consultation question

UKPN-Q2. What are your views on our proposals for UKPN's bespoke ODIs? UKPN-Q3. What are your views on our proposal to implement a collaborative streetworks ODI-F as set out above?

Bespoke price control deliverables

2.27 Table 17 below summarises the bespoke PCD proposals proposed for UKPN.

¹² The incentive rate for the gas distribution price control was based on analysis undertaken by the GDNs and the GLA. https://www.sqnfuture.co.uk/wp-content/uploads/2020/01/SGN-023-Suppinfo-Annex-of-Social-value-regression-analysis.pdf

Table 17: Bespoke PCD proposals UKPN

Output name and description	Consultation position
Off-gas grid anticipatory investment (initially proposed as CVP): deliver capacity for 242,000 off-gas grid customers to accelerate their transition to electric heating and transport.	Implement as PCD: This proposal has been submitted as a CVP. We propose to accept this output as a PCD, conditional upon UKPN providing evidence that allows us to develop a monitoring framework.
Polychlorinated biphenyls (PCB): (initially proposed as a PCD) Asset replacement programme to address PCB contaminated assets.	Accept as common UM: We are proposing not to attach a bespoke PCD, but to instead establish a common volume driver for all DNOs with an overhead network to ensure the removal of PCBs. Additional detail can be found in Chapter 3 of the Core Methodology Document.

Off-gas grid anticipatory investment

Table 18: Off-grid anticipatory investment PCD description

Off-gas grid anticipatory investment PCD					
Purpose	Deliver capacity for 242,000 off-gas grid customers				
Benefits	Support the transition to electric heating and transport				

Background

- 2.28 UKPN proposed an off-gas grid strategic investment project CVP which we do not propose to reward (see Table 20) but instead implement as a PCD. The proposal contained two components. The first is a programme of capacity release ahead of need to enable, by the end of 2028, 242,000 off-gas grid customers to decarbonise their heating and transport. The second element is a programme of coordinated advice to off-gas grid communities to promote the uptake of energy efficiency and heat electrification.
- 2.29 UKPN proposed that its successful delivery of the programme would be measured through the number of households with sufficient capacity to decarbonise their heat and transport in off-gas grid areas in UKPN's region, and against the number of households with electrified heat.
- 2.30 This proposal has partial support from UKPN's CEG. The CEG stated that funding the works is in line with results from consumer and stakeholder research, but it

raised concerns about the works being proposed as a CVP and the potential reward. The CEG explained that UKPN had not tested its bespoke CVP methodology and associated potential rewards with its customers, and voiced concerns about the values UKPN had used to calculate the benefits.

Consultation position

Table 19: Consultation position – Off-gas grid anticipatory investment PCD

Output parameter	Consultation position
Totex baseline allowances	£73.14m, conditional upon evidence that allows Ofgem to develop appropriate safeguards including an improved
	measurement and reporting framework
Delivery date	End of ED2
Performance metrics	TBD

Rationale for consultation position

- 2.31 In our SSMD, we said that DNOs may identify circumstances in which adding surplus capacity in the short-term to meet anticipated growth in demand over a longer-term horizon is appropriate.¹³ We said that we expect there to be controls in place, such as PCDs, to ensure that any funding provided to support the provision of additional capacity is only used for the purpose intended.
- 2.32 Releasing capacity on the distribution network in areas where there is high certainty that heat decarbonisation will lead to an increase in demand is strategically important because this reduces the risk of delays and deliverability challenges in the future. We consider that this certainty exists in areas which are not connected to the gas distribution network.
- 2.33 We are therefore proposing to fund the capacity release element of UKPN's proposal, conditional upon more information being provided. We request that UKPN provides us with additional evidence, following publication of our Draft Determinations, or at the latest as part of its response to this consultation, that enables us to develop appropriate metrics against which delivery of the PCD can

¹³ See paragraph 4.51 of our SSMD Overview Document

be measured. We consider that UKPN's current proposed metrics may be insufficient.

- 2.34 Attaching a PCD to this programme ensures that UKPN is held to a tangible output and ensures that consumers are protected should UKPN undertake a lower volume of work than expected, which is especially pertinent given the high materiality of the spend.
- 2.35 We also request that UKPN submit more information on the steps it took to evaluate the opportunities for energy efficiency services to offset the need for some of the proposed reinforcement works.
- 2.36 We are not proposing to fund the second element of the proposal that comprised advice to communities and individuals to support coordinated heat decarbonisation and energy efficiency uptake, worth £1.5m. We note that UKPN's stakeholders expressed clear support for DNOs playing a coordination role in the rollout of energy efficiency measures, as UKPN stated in its Business Plan. However, UKPN provided otherwise limited justification and evidence of the benefits these advice and information activities would have. In its response to a supplementary question on this, UKPN stated that the innovation project where it is trialling the approach has not yet concluded.

Consultation question

UKPN-Q4. What are our views on our proposals for UKPN's bespoke PCDs?

Consumer Value Propositions

- 2.37 Table 20 below summarises the CVP proposals that UKPN submitted as part of its Business Plan and our consultation position in relation to each. Where necessary, we have provided detail on our rationale for our consultation position in the section following the table.
- 2.38 UKPN's CEG was in principle supportive of the initiatives UKPN proposed as CVPs, but raised concerns about their CVP funding approach, the proposed split of benefits and costs between UKPN and customers, and the social return on investment values UKPN had assumed. Consequently, the CEG was unsure that the funding approach would be in consumers' best interest.

Table 20: UKPN's CVP proposals

Consultation position Output name and description **Reject:** We welcome a scale-up in UKPN's fuel poverty support in RIIO-ED2. We note that the 10-**Consumer Vulnerability Fuel** fold increase in support provided across elements of **Poverty support programme:** the support programme is largely at no extra cost to Supporting 200,000 customers with consumers, with either UKPN absorbing the cost or direct in-depth fuel poverty support its shareholders contributing to the programme. as part of the fuel poverty support With this in mind, and on the large scale proposed, programme. Achieving the 200,000 we are proposing to reject the £9m requested for target by investing £9m this CVP because we do not consider it in shareholder fund to support consumers' best interest to fund an additional 100,000, and a further £9m funded 100,000 customers being supported, and also by customers under the CVP to funding any CVP reward associated. We support support the remaining 100,000 UKPN's shareholder funded proposal for 100,000 customers. fuel poor customers. Please refer to paragraphs 2.39 - 2.45 of this document for further detail. **Reject:** UKPN propose to utilise the funding through this CVP to discount the cost of network connections Whole Systems CVP for Public for EV chargepoints for stakeholders interested in **Charging:** delivering 2,400 delivering them, ie chargepoint providers. We additional charge points to believe that utilising a CVP to discount the costs of a customers without access to offproduct or service for a third-party provider goes street parking and in areas of poor beyond the scope of what we expect from a DNO air quality. and believe that the delivery of EV chargepoints should be a market-led activity. **Accept with no reward:** We propose to reject this proposal for a CVP reward and instead fund the Whole Systems CVP for Off-gas works as a bespoke PCD (see paragraphs 2.28-2.36 grid: deliver capacity for 242,000 for further detail). We consider that this proposal off-gas grid customers to does not warrant a CVP reward because anticipatory accelerate their transition to capacity release programmes form part of DNOs' electric heating and transport. business as usual activities, and do not go beyond baseline expectations.

Fuel poverty support programme

Background

2.39 In its Business Plan, UKPN proposed a CVP to provide support to 200,000 fuel poor customers and facilitate the delivery of tailored support to a further 300,000 fuel poor customers in RIIO-ED2 by investing £18m in total, of which £9m is shareholder funded. The £9m requested through this CVP proposal will specifically provide in-depth support to 100,000 out of the 200,000 proposed in the fuel poverty support programme.

Consultation position

Table 21: Fuel poverty support programme CVP description

CVP	Consultation position			
Fuel poverty support programme	Reject			

Rationale for consultation position

- 2.40 We are proposing to reject this CVP proposal and the associated £9m of funding.
- 2.41 We are supportive of UKPN's scale up in fuel poverty support from RIIO-ED1 and the intention to fund in-depth fuel poverty support through a £9m shareholder fund. However, we consider that funding a further £9m through this CVP to support an additional 100,000 fuel poor customers (which is in addition to the 100,000 supported through the shareholder fund and 300,000 fuel poor customers supported through UKPN's regional collaboration programme) unjustified.
- 2.42 While we recognise the need for a scale up in fuel poverty support and the impact of the cost of living crisis, we consider that investing a further £9m of consumer's money into a scheme for an additional 100,000 customers to be supported is not appropriate. Accepting this would push UKPN's fuel poverty support beyond that of any other DNO for RIIO-ED2 contributing to a disparity of support across DNO regions.
- 2.43 UKPN's CEG found its CVP well-conceived, beyond business as usual and predicted to deliver additional benefits to customers. It noted that proposals would be strengthened by further work to evidence benefits and added that it is for Ofgem to decide on whether the proposals are in line with the intentions for CVPs.
- 2.44 We noted the views of Citizens Advice in our assessment of this proposal, agreeing with the comments made in relation to it not being fully clear how this CVP relates to the shareholder funded £9m of support for 100,000 fuel poor customers and whether this shareholder funding is contingent on the CVP's acceptance.
- 2.45 The Challenge Group did not recommend the acceptance of this proposal. While noting that this CVP is carved out of UKPN's wider fuel poverty programme, it raised several areas of concern with the proposal. We agreed with the Challenge Group view that the type of activity proposed by UKPN is well established, and

also have concerns regarding the assumptions made about the benefits it can deliver.

Consultation questions

- UKPN-Q5. What are your views on our proposal to fund investment to release capacity in off-gas grid areas ahead of need via a PCD as set out above?
- UKPN-Q6. Which metrics could be used for holding UKPN to account for delivery of its off-gas grid proposal via a PCD and protecting consumers by clawing back allowances?
- UKPN-Q7. What are your views on our proposal for UKPN's CVPs?

3. Setting baseline allowances

Introduction

3.1 This chapter sets out our Draft Determinations on baseline allowances for the different cost areas within UKPN's Business Plan submission. We intend this chapter to be read alongside other parts of our Draft Determinations that set out our overall approach to RIIO-ED2.

Baseline allowances

- 3.2 Baseline Totex referenced in this chapter comprises forecast controllable costs¹⁴ and is inclusive of our proposed ongoing efficiency challenge, unless stated otherwise. Furthermore, the figures presented in this chapter do not include real price effects (RPEs) to allow comparison with DNOs' submissions.
- 3.3 Table 22, 23 and 24 compare UKPN's submitted baseline Totex for each of its networks with our Draft Determinations position at a disaggregated cost activity level.

Table 22 LPN RIIO-ED2 submitted Totex versus proposed Totex by cost activity (£m, 2020/21 price base)

LPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex ¹⁵	Connections	51	47	-4	-8.7%
Capex	New Transmission Capacity Charges	5	4	-0	-10.1%
Capex	Primary Reinforcement	82	75	-7	-8.2%
Capex	Secondary Reinforcement	42	38	-4	-9.1%
Capex	Fault Level Reinforcement	1	1	-0	-7.8%
Capex	Civil Works Condition Driven	12	11	-1	-8.5%
Capex	Blackstart	-	-	_	-
Capex	Legal and Safety	20	19	-2	-8.5%

¹⁴ Non-controllable costs, while included in overall allowed revenue recoverable by DNOs, are not included in baseline Totex and are treated separately. See Chapter 7 of the Core Methodology Document for more details on what is and isn't included in the numbers presented here.

 $^{^{15}}$ Capex is a shorthand term for capital expenditure and Opex is a shorthand term for operational expenditure

LPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex	Quality of Supply (QoS) and North of Scotland Resilience	_	-	_	-
Capex	Flood Mitigation	2	2	-0	-8.7%
Capex	Physical Security	-	-	_	-
Capex	Rising and Lateral Mains	-	-	_	-
Capex	Overhead Line Clearances	-	-	_	_
Capex	Losses	1	1	-0	-8.5%
Capex	Environmental Reporting	5	4	-0	-7.5%
Capex	Operational IT and telecoms	41	38	-3	-8.4%
Capex	Worst Served Customers	_	-	_	_
Capex	Visual Amenity	-	-	_	-
Capex	Diversions (excl Rail)	23	21	-2	-8.1%
Capex	Diversions Rail Electrification	_	-	_	_
Capex	Civil Works Asset Replacement Driven	17	16	-1	-8.5%
Capex	Asset Replacement NARM	177	162	-15	-8.6%
Capex	Asset Replacement Non- NARM	9	9	-1	-8.6%
Capex	Asset Refurbishment Non- NARM	2	1	-0	-8.3%
Capex	Asset Refurbishment NARM	2	2	-0	-8.3%
Capex	IT and Telecoms (Non-Op)	54	50	-4	-8.0%
Capex	Non-Op Property	12	11	-1	-7.8%
Capex	Vehicles and Transport (Non-Op)	15	13	-1	-8.4%
Capex	Small Tools and Equipment	11	10	-1	-8.5%
Capex	High Value Projects (HVP) RIIO-ED2	-	-	-	-
Capex	Shetland	-	-	-	-
Opex	Tree Cutting	-	-	-	_
Opex	Faults	134	123	-11	-8.5%
Opex	Severe Weather 1 in 20	_	-	_	_
Opex	Occurrences Not Incentivised (ONIs)	38	35	-3	-8.5%
Opex	Inspections	20	18	-2	-8.5%
Opex	Repair and Maintenance	51	46	-4	-8.5%
Opex	Dismantlement	0	0	-0	-8.5%

LPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Opex	Remote Generation Opex	-	-	_	_
Opex	Substation Electricity	10	9	-1	-8.5%
Opex	Smart Meter Rollout	2	2	-0	-7.2%
Opex	Total Closely associated indirects (CAI)	437	399	-37	-8.5%
Opex	Total Business Support	171	156	-15	-8.5%
Cost activities sub-total ¹⁶		1,445	1,323	-123	-8.5%
Excluded cost activities ¹⁷		_	-		_
Total Totex (modelled component)		1,445	1,323	-123	-8.5%
Technically assessed Totex		_	-	_	_
Total Total	ex	1,445	1,323	-123	-8.5%

Table 23 SPN RIIO-ED2 submitted Totex versus proposed Totex by cost activity (£m, 2020/21 price base)

SPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex	Connections	31	28	-3	-10.4%
Capex	New Transmission Capacity Charges	12	11	-1	-9.9%
Capex	Primary Reinforcement	25	22	-2	-9.4%
Capex	Secondary Reinforcement	60	53	-6	-10.5%
Capex	Fault Level Reinforcement	12	11	-1	-10.0%
Capex	Civil Works Condition Driven	12	11	-1	-10.2%
Capex	Blackstart	_	-	_	-
Capex	Legal and Safety	15	14	-2	-10.2%
Capex	QoS and North of Scotland Resilience	-	-	_	-
Capex	Flood Mitigation	5	5	-1	-10.2%
Capex	Physical Security	_	-	_	-
Capex	Rising and Lateral Mains	5	5	-1	-10.2%
Capex	Overhead Line Clearances	23	21	-2	-10.2%
Capex	Losses	0	0	-0	-10.2%

¹⁶ Proposed Totex for Worst Served Customers and Visual Amenity are shown here including ongoing efficiency for comparability with other activities, but ongoing efficiency is removed from these two activities as a post-modelling step. See Worst Served Customers and Visual Amenity sections in Chapter 7 of the Core Methodology Document for the proposed Totex values excluding ongoing efficiency.

 $^{^{17}}$ QoS and North of Scotland Resilience, Diversions Rail Electrification and Severe Weather 1 in 20 cost activities are excluded from the modelled component of Totex. See Chapter 7 of the Core Methodology Document for details.

SPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex	Environmental Reporting	14	13	-1	-8.9%
Capex	Operational IT and telecoms	70	62	-7	-10.3%
Capex	Worst Served Customers	11	10	-1	-10.1%
Capex	Visual Amenity	7	7	-1	-10.2%
Capex	Diversions (excl Rail)	51	46	-5	-9.9%
Capex	Diversions Rail Electrification	_	-	_	-
Capex	Civil Works Asset Replacement Driven	11	10	-1	-10.5%
Capex	Asset Replacement NARM	188	169	-19	-10.3%
Capex	Asset Replacement Non- NARM	13	12	-1	-10.3%
Capex	Asset Refurbishment Non- NARM	2	2	-0	-10.0%
Capex	Asset Refurbishment NARM	14	13	-1	-10.1%
Capex	IT and Telecoms (Non-Op)	54	49	-5	-9.7%
Capex	Non-Op Property	10	9	-1	-9.5%
Capex	Vehicles and Transport (Non-Op)	22	20	-2	-10.1%
Capex	Small Tools and Equipment	10	9	-1	-10.2%
Capex	HVP RIIO-ED2	-	-	_	-
Capex	Shetland	-	-	_	-
Opex	Tree Cutting	33	30	-3	-10.2%
Opex	Faults	142	127	-14	-10.2%
Opex	Severe Weather 1 in 20	3	-	-3	-100.0%
Opex	ONIs	40	36	-4	-10.2%
Opex	Inspections	16	14	-2	-10.2%
Opex	Repair and Maintenance	46	42	-5	-10.2%
Opex	Dismantlement	0	0	-0	-10.2%
Opex	Remote Generation Opex	_	_	_	-
Opex	Substation Electricity	8	7	-1	-10.2%
Opex	Smart Meter Rollout	3	3	-0	-8.9%
Opex	Total CAI	405	364	-41	-10.2%
Opex	Total Business Support	157	141	-16	-10.2%

SPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Cost activities sub-total ¹⁸		1,532	1,373	-159	-10.4%
Excluded cost activities ¹⁹		-3	-		_
Total Totex (modelled component)		1,529	1,373	-155	-10.2%
Technically assessed Totex		23	21	-2	-9.7%
Total Tote	(1,551	1,394	-158	-10.2%

Table 24 EPN RIIO-ED2 submitted Totex versus proposed Totex by cost activity (£m, 2020/21 price base)

EPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex	Connections	66	57	-9	-13.4%
Capex	New Transmission Capacity Charges	1	1	-0	-14.5%
Capex	Primary Reinforcement	64	55	-9	-13.4%
Capex	Secondary Reinforcement	75	65	-10	-13.9%
Capex	Fault Level Reinforcement	5	5	-1	-13.9%
Capex	Civil Works Condition Driven	15	13	-2	-13.4%
Capex	Blackstart	_	_	-	-
Capex	Legal and Safety	19	17	-3	-13.4%
Capex	QoS and North of Scotland Resilience	-	-	-	-
Capex	Flood Mitigation	10	8	-1	-13.3%
Capex	Physical Security	_	_	_	-
Capex	Rising and Lateral Mains	1	1	-0	-13.4%
Capex	Overhead Line Clearances	35	30	-5	-13.5%
Capex	Losses	1	0	-0	-13.4%
Capex	Environmental Reporting	34	29	-4	-12.1%
Capex	Operational IT and telecoms	109	94	-15	-13.5%
Capex	Worst Served Customers	17	15	-2	-13.3%
Capex	Visual Amenity	7	6	-1	-13.4%
Capex	Diversions (excl Rail)	91	79	-12	-13.0%

¹⁸ Proposed Totex for Worst Served Customers and Visual Amenity are shown here including ongoing efficiency for comparability with other activities, but ongoing efficiency is removed from these two activities as a post-modelling step. See Worst Served Customers and Visual Amenity sections in Chapter 7 of the Core Methodology Document for the proposed Totex values excluding ongoing efficiency.

¹⁹ QoS and North of Scotland Resilience, Diversions Rail Electrification and Severe Weather 1 in 20 cost activities are excluded from the modelled component of Totex. See Chapter 7 of the Core Methodology Document for details.

EPN	Cost activity	Submitted Totex	Proposed Totex	Difference	Difference
Capex	Diversions Rail Electrification	-	_	-	-
Capex	Civil Works Asset Replacement Driven	18	15	-2	-12.9%
Capex	Asset Replacement NARM	252	218	-34	-13.4%
Capex	Asset Replacement Non- NARM	21	18	-3	-13.6%
Capex	Asset Refurbishment Non- NARM	2	2	-0	-13.3%
Capex	Asset Refurbishment NARM	10	9	-1	-13.2%
Capex	IT and Telecoms (Non-Op)	85	74	-11	-13.0%
Capex	Non-Op Property	21	18	-3	-12.9%
Capex	Vehicles and Transport (Non-Op)	31	27	-4	-13.4%
Capex	Small Tools and Equipment	19	16	-2	-13.4%
Capex	HVP RIIO-ED2	-	-	-	-
Capex	Shetland	-	-	-	-
Opex	Tree Cutting	57	49	-8	-13.4%
Opex	Faults	227	196	-31	-13.4%
Opex	Severe Weather 1 in 20	6	-	-6	-100.0%
Opex	ONIs	74	64	-10	-13.5%
Opex	Inspections	20	18	-3	-13.4%
Opex	Repair and Maintenance	56	48	-8	-13.5%
Opex	Dismantlement	0	0	-0	-13.4%
Opex	Remote Generation Opex	-	-	-	-
Opex	Substation Electricity	15	13	-2	-13.4%
Opex	Smart Meter Rollout	5	4	-1	-12.2%
Opex	Total CAI	693	600	-93	-13.5%
Opex	Total Business Support	258	223	-35	-13.4%
Cost activities sub-total ²⁰		2,419	2,090	-329	-13.6%
Excluded	Excluded cost activities ²¹		_		_
Total Total	ex (modelled component)	2,413	2,090	-323	-13.4%
Technical	ly assessed Totex	52	47	-5	-9.7%
Total Total	ex	2,466	2,137	-328	-13.3%

Technically assessed costs

3.4 For technically assessed costs, we have made the following adjustments, listed in Table 23 below. Our proposed view of bespoke outputs is presented in Chapter 2. Further details on other items are provided later in this chapter.

Table 23 Consultation position - technically assessed costs

	Draft Determinations proposal				
Proposal name	Submitted	Proposed (1)	Confidence		
	£m	£m			
Whole Systems PCD for Off-gas Grid	75.25	£73.14	High		
(1) Proposed costs do not include efficiency challenge					

3.5 We established UKPN's ex-ante allowance for the Off-gas Grid PCD by multiplying benchmarked unit costs by the volumes of work proposed by UKPN, which resulted in a reduction to total submitted costs. The use of benchmarked unit costs gives us sufficient confidence to classify this expenditure as high confidence. While there is uncertainty related to workload volumes, our use of a PCD mitigates this risk.

Engineering Justification Paper Reviews

- 3.6 We have reviewed each of the individual Engineering Justification Papers (EJP) submitted by UKPN, as well as the supporting documentation. The EJPs were assessed in accordance with paragraph 2.23 of the Engineering Justification Papers for RIIO-ED2 Guidance document.²²
- 3.7 As discussed in Chapter 7 of our Core Methodology Document, our assessment provided a view on each EJP which was assigned one of three outcomes: Justified, Partially Justified or Unjustified.
- 3.8 Our review of the EJPs is one of several assessment tools that has contributed to our overall assessment and proposed costs and volumes. The positions set out in

https://www.ofgem.gov.uk/sites/default/files/docs/2021/02/riio ed2 engineering justification paper guidance ndf

²⁰ Proposed Totex for Worst Served Customers and Visual Amenity are shown here including ongoing efficiency for comparability with other activities, but ongoing efficiency is removed from these two activities as a post-modelling step. See Worst Served Customers and Visual Amenity sections in Chapter 7 of the Core Methodology Document for the proposed Totex values excluding ongoing efficiency.

 $^{^{21}}$ QoS and North of Scotland Resilience, Diversions Rail Electrification and Severe Weather 1 in 20 cost activities are excluded from the modelled component of Totex. See Chapter 7 of the Core Methodology Document for details.

- this specific section should be considered in the wider context of the cost assessment methodology set out in Chapter 7 of the Core Methodology Document.
- 3.9 UKPN submitted a total of 92 EJPs to substantiate its RIIO-ED2 submission.
- 3.10 We consider that UKPN has provided sufficient evidence to demonstrate the needs case for investment for most of their proposed investment areas. In the majority of cases, our view is that UKPN has considered and assessed an appropriate range of options when selecting the proposed investments.
- 3.11 We note that some of the proposed volumes of investment are significantly increased compared with historical volumes. We note that UKPN has provided only limited information regarding why these step changes in volume are proposed, how these volumes would be delivered, and any changes required to their internal organisation or relationships with external contractors to ensure delivery of the proposed volumes. As such, we have lower confidence in whether the volumes proposed by UKPN for the relevant proposals can be delivered in the RIIO-ED2 period.
- 3.12 A summary of our review assessing UKPN's EJPs as Justified, Partially Justified, or Unjustified for each EJP is presented in Table . We have provided more detail on EJPs of significant value where our review determined the EJP to be Partially Justified or Unjustified in Appendix 1.

Table 26 Summary of the UKPN EJP Review

EJP Review Outcome	No. of EJPs
Justified	42
Partially Justified	28
Unjustified	22
Total EJPs	92

Load Related Investment (LRE) Proposals

3.13 We consider UKPN has provided sufficient evidence to demonstrate a needs case for investment, and has presented robust optioneering, and options selection for the majority of the primary reinforcement investments. While we note that the need for some investments is based on historical information, we consider the assumptions presented by UKPN are reasonable and give us a degree of

- confidence that the investment will be needed under a range of potential future outcomes.
- 3.14 We have identified some other instances where UKPN has not demonstrated the need for investment in the RIIO-ED2 period against the scenarios presented and the optioneering process appears limited, both in terms of the selection of preferred options and the proposed delivery plans. We note that the majority of proposals, including those with delivery proposed in the early years of the RIIO-ED2 period, appear to be at an early stage of development. This increases risks around need and cost certainty.
- 3.15 We consider UKPN has provided sufficient evidence to demonstrate a need for investment in relation to secondary reinforcement, and at a basic level, the investment types proposed by UKPN appear appropriate. However, the volumes and costs are highly dependent on actual demand and generation development and the unavoidable use of forecasts naturally creates a degree of uncertainty.
- 3.16 We consider UKPN's proposals in this area do not provide sufficient detail as to how the actual interventions proposed were determined and provide limited identification of specific investments. While we recognise that forecasts for work in this area in later years of the RIIO-ED2 period will not be substantive, we would expect a greater degree of detail for proposals for early in the price control period. As such, investments in this area are deemed to be Partially Justified.
- 3.17 Our LRE engineering review and recommendations have helped inform the LRE Draft Determinations proposals. The overall Draft Determination proposals reflect the wider assessment undertaken, including the processes described in Chapters 3 and 7 of the Core Methodology document.

Non-Load Related Investment Proposals

- 3.18 Overall, we consider UKPN has provided sufficient evidence to demonstrate a needs case for its proposed condition-based asset replacement and refurbishment EJPs. However, there are some examples where UKPN's methodology for determining the volumes of activity to be delivered in the RIIO-ED2 period is not sufficiently clear and evidenced.
- 3.19 We consider this to be particularly relevant in asset categories where UKPN have proposed volumes that significantly exceed observed run rates in RIIO-ED1 without adequate justification for the step change in requirements. Based on the

- information provided by UKPN, we consider that its plans in these areas are at an early stage of development with only generic information regarding optioneering and proposed delivery strategy provided.
- 3.20 UKPN's asset replacement plans around Fluid Filled Cables (FFC) were a key area of focus within our review. We note that specific cable routes or sections that form part of the RIIO-ED2 replacement plan also formed part of UKPN's RIIO-ED1 proposals.
- 3.21 We consider that UKPN has provided credible evidence to demonstrate the needs case for investment based on both the age and condition of the cables identified. However, our assessment has identified two key concerns with the justifications provided.
- 3.22 First, we assess that UKPN has not sufficiently evidenced why these cables are now assessed to be in a worsening condition (other than age) compared to the position at the start of RIIO-ED1. Second, we consider that UKPN has not sufficiently evidenced how the costs and risks associated with ongoing maintenance and/or failure would become unacceptable to consumers during RIIO-ED2 compared to the existing asset management strategy adopted under RIIO-ED1 which has been considered acceptable.
- 3.23 For selected substation assets, we note that UKPN's RIIO-ED1 Business Plan was based mainly on replacement of assets while the delivery programme during the price control period to date has focussed on the refurbishment or repair of such assets. We also note that the UKPN RIIO-ED2 plan includes limited planned refurbishment or repair of assets and generally prioritises replacement options.
- 3.24 We consider that UKPN's asset management approach during RIIO-ED1, with lower volumes of asset replacement and higher volumes of asset repair or refurbishment, could be repeated during RIIO-ED2. Accordingly, the scope for a change in asset management practices towards potentially lower cost interventions is reflected in our assessment of the deliverability of volumes proposed.
- 3.25 UKPN's other non-load related EJPs cover a range of different proposals. These proposals were generally considered to be well evidenced. However, there are some examples where the methodology for determining the needs case and/or

volume was unclear in the EJP. In these categories, we assess that the EJPs are Partially Justified.

TIM

3.26 Our cost confidence assessment results in a proposed Totex Incentive Mechanism (TIM) incentive rate for UKPN of 50.0%. For further details on the TIM, see Chapter 9 in the Overview Document.

BPI Stage 3

3.27 We propose that UKPN does not incur any penalty following our BPI Stage 3 assessment as we do not consider it submitted any lower confidence costs.

BPI Stage 4

- 3.28 We propose that UKPN will earn no reward following our BPI stage 4 assessment.
- 3.29 Table 27 sets out our proposals on high-cost confidence categories, allowances and the associated Stage 4 rewards (before the application of RPEs and OE).

Table 27: Draft Determinations on BPI Stage 4

Cost category	Company's view (£m)	Ofgem view (£m)	BPI reward
Modelled costs	5,387.6	5,130.5	N/A
Whole Systems PCD for Off-gas Grid	75.3	72.9	N/A

Consultation question

UKPN-Q8. What are your views on our proposals for the outcome of Stages 3 and 4 of the BPI for UKPN?

4. Adjusting baseline allowances for uncertainty

Introduction

- 4.1 In this chapter we set out our consultation positions on the bespoke UMs that UKPN proposed in its Business Plan.
- 4.2 We set out more detail on the common UMs in our Core Methodology Document and Overview Document, including the broader consultation position and rationale.

UKPN bespoke **UMs**

- 4.3 We invited the DNOs to propose bespoke UMs with suitable justification in our SSMD.²³ We have considered the extent to which the supporting information justifies the key criteria outlined in the BPG²⁴:
 - materiality and likelihood of the uncertainty
 - how the risk is apportioned between consumers and the network company
 - The operation of the mechanism
 - How any drawbacks may be mitigated to deliver value for money and efficient delivery.
- 4.4 We also considered whether the uncertainty was regionally specific, or sector wide, to assess whether a common UM could be more appropriate. You can find the background and our assessment approach in Chapter 6 of our Overview Document.
- 4.5 Table 28 below summarises the bespoke UM proposals that UKPN submitted and outlines our consultation position.
- 4.6 For full details on the bespoke UMs, refer to UKPN's Business Plan.

²³ Paragraph 5.37 of our SSMD https://www.ofgem.gov.uk/publications/riio-ed2-sector-specific-methodology-decision

²⁴ Paragraph 5.44 of our BPG https://www.ofgem.gov.uk/publications/riio-ed2-business-plan-guidance.

Table 28: UKPN bespoke UMs

UM name	Consultation position
UM1 Services Volume Driver: A volume driver for LV services	Reject : We are proposing to reject because we consider this is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.
UM2 Capacity Volume Driver: A capacity-based volume driver secondary reinforcement	Reject: We are proposing to reject because we consider this is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.
UM3 Investment in Primary Infrastructure: A re-opener mechanism for primary reinforcement	Reject : We are proposing to reject because we consider this is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.
UM4 Connections within Price Control: A re-opener to adjust allowances in response to changing customer contributions to connections.	Reject : We are proposing to reject because we consider this is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.
UM5 Diversions: A re-opener for costs of diversions which are not funded by the third party requesting them	Reject: We find insufficient justification for UKPN's proposed UM, or a common UM for diversions more broadly. We consider the forecasting risk that this UM seeks to address should be managed by DNOs through their business plans and the proposed ex ante diversions allowances. We do not consider the forecasting risk for diversions to be materially different enough from any other cost activity to require a reopener. We also want to ensure that DNOs are incentivised to minimise diversions costs, and we consider ex ante funding to be the best approach to do this.
UM6 Accelerating London's Decarbonisation: To provide a specific response to GLA plans to decarbonise London by 2030	Reject: We are proposing to reject because we consider this is addressed by our common LRE UMs and/or the Net Zero re-opener. Please refer to Chapter 3 of the Core Methodology Document for more information.
Access SCR: To account for Access SCR related uncertainty.	Reject : We are proposing to reject because we consider this is addressed by our common LRE UMs. Please refer to Chapter 3 of the Core Methodology Document for more information.

Bespoke UM Consultation questions

UKPN-Q9. What are your views on our proposals for UKPN's bespoke UMs?

5. Innovation

5.1 Our SSMD and the Core Methodology Document set out the criteria that we have used to assess NIA funding requests.²⁵ The Core Methodology Document also details our proposals for the RIIO-ED2 NIA Framework and extension of the existing Strategic Innovation Fund to the DNOs.

Network Innovation Allowance

- 5.2 UKPN in its Business Plan proposed it should be awarded £25m of NIA over 5 years, equivalent to £5m per year, which is approximately equivalent to NIA spent annually in RIIO-ED1, and less than it was allowed to spend.
- 5.3 We set out below our Draft Determinations on UKPN's RIIO-ED2 NIA funding.

Consultation position

Table 29: NIA consultation position

Name of the measure	DNO proposal	Consultation position
Level of NIA funding	14 75m over 5 vears	£15m initial allowance, to be reviewed in 2025.

Rationale for consultation position

- 5.4 We propose that UKPN should be awarded £15m (see Core Methodology Document, Paragraph 3.131 on our proposal to review in 2025 whether more NIA funding is required). This is an initial 3-year allocation of NIA allowances, calibrated based on assessment against the NIA criteria and the subsequent benchmarking of allowances (see Core Methodology Document paragraph 3.133 on our approach to benchmarking).
- 5.5 We consider that UKPN satisfactorily met our five NIA criteria.
 - UKPN proposed areas in which to target its innovation spending which we agreed carry risk and are suitable for ringfenced innovation stimulus

²⁵ Paragraph 4.96 of our SSMD Overview Document https://www.ofgem.gov.uk/publications/riio-ed2-sector-specific-methodology-decision. Paragraph 1.325 of our Core Methodology Document.

funds. UKPN's CEG also provided assurance that UKPN's areas to target NIA funding in had been co-created with consumers and stakeholders, using a variety of methods, and that engagement had been strong.

- The evidence provided by UKPN gives us comfort that it is planning to undertake innovative initiatives using BAU funds during RIIO-ED2.
- It also showed that its proposals incorporate best practice.
- UKPN provided evidence that it has in place a process to monitor innovation spend.
- UKPN also showed that it has in place procedures for innovation to be rolled out into BAU, including a process to monitor benefits from innovation projects. It was able to supply us with supporting evidence in the form of detailed models which it claimed support its estimates of innovation benefits. This demonstrates that UKPN currently has a process in place to track these.

Consultation question

UKPN-Q10. What are your views on the level of proposed NIA funding for UKPN?

Appendix 1 - Key Engineering Recommendations

- A1.1 This appendix provides additional details regarding our assessment of specific EJPs.
- A1.2 Due to the high number of EJPs presented within the submission, we have not provided our view on each of UKPN's EJPs within this document. Instead, this appendix focuses on EJPs of significant value where our review determined the EJP to be Partially Justified or Unjustified.

Table 30: LRE - Key Engineering Recommendations

Paper	Comments	Identified Risks
Flexibility ED2-EJP-SG- 011	Partially Justified. UKPN identified named sites where flexibility services will be utilised in place of capital investment to manage load growth or specific maintenance / outage periods. Some costs are associated with ongoing RIIO-ED1 "legacy" contracts where the service is no longer required. It is not considered efficient that consumers should pay for errors in UKPN's forecasting of need.	Due to need being based on future demand / generation growth there is risk related to inherent uncertainty and also consumers paying for services that are ultimately not procured.
Greater Cambridge East-West Strategy ED2-EJP-EP-	Partially Justified. A coordinated investment strategy in the Cambridge area (expansion of assets to the East and West) was proposed including a new Grid substation and a new primary substation. The needs case and optioneering presented is considered to be clear and well justified and is accepted. However, there is material uncertainty regarding cost and deliverability with major elements (such as site selection, cable routing, and consenting) not yet achieved which raise concerns regarding the proposed delivery timescales and estimated costs.	We consider there to be material risk relating to the cost and deliverability with major elements, such as site selection, cable routing, and consenting which have not yet been undertaken and could impact the proposed delivery timescales and estimated costs.

Distribution Reinforcement ED2-EJP-NP- 101	Partially Justified. Investment in a range of LV assets is proposed to meet future load growth. The proposed volumes are highly dependent on scenario outturn and hence there is inherent uncertainty regarding volume and cost. UKPN proposed an uncertainty mechanism to accommodate scenarios in which required investment is greater than proposed costs. Underspend is proposed to be managed through TIM.	It is accepted that UKPN is likely to have to undertake an extensive portfolio of investment in this area and that requirements are highly dependent on scenario outturn and hence are outside of UKPN's control. However, UKPN's proposal suggests that underspend should be managed through TIM. This creates a significant risk of unearned performance as a result of uncertainty in forecasting.
Small Section Conductor ED2-EJP-NP- 103	Partially Justified. The needs case and options are considered robust. However, the approach taken to identifying individual schemes and defining overall volumes is unclear despite there being a significant increase compared to the RIIO-ED1 run rate. UKPN presents a flat distribution of cost and volumes delivered across the RIIO-ED2 period indicating that planning of these investments is at an early stage. No further information was provided in response to SQs regarding the reason for the step change in volumes and how deliverability will be managed.	We do not believe that the proposed volumes have been sufficiently justified at this stage and therefore are considered a risk.
High Risk Overhead Composite Spurs ED2-EJP-NP- 013	Partially Justified. UKPN propose to interconnect spurs based on high customer numbers, high capacity of connected transformers, and presence of cable in first section(s). General needs case is valid, however level of intervention proposed appears excessive for little gain. It is not clear why the proposed option has been selected.	UKPN's options assessment included a proposal to intervene only on "Priority 1 Spurs". It is not clear what benefits are achieved beyond this level of intervention and hence we consider there to be a risk with the selected option and hence its associated volumes and costs.
Mural Wiring ED2-EJP-NP- 104	Partially Justified. The needs case for intervening on looped services is considered robust. However, out-turn volumes will be entirely dependent on customer activity.	We considered that there is a risk related to the out-turn volumes due to them being entirely dependent on customer activity.

	Unjustified. There is a well justified	Given the limited number of
	needs case on the basis of operational	assets involved it is expected
	safety and network performance for this	that greater detail would be
Phasing out of	proposal. However, aspects related to	provided regarding the
legacy	load growth are not clearly evidenced.	specific investments proposed
networks	Given the limited number of assets	and the development of these
(2kV)	involved it is expected that greater detail	proposals. Only basic
ED2-EJP-NP-	would be provided regarding the specific	information regarding the
000	investments proposed and the	delivery dates, cost and
008	development of these proposals. UKPN	phasing of these investments
	has provided only basic information	has been provided which
	regarding the delivery dates and cost	raises a risk of what will be
	phasing of these investments.	delivered in RIIO-ED2.

Table 31: NLRE and non-NARM - Key Engineering Recommendations

Paper	Comments	Identified Risks
Off Grid Gas Investment ED2-EJP-NP- 102	Partially Justified. The paper sets out an acceptable needs case and associated analysis for upgrading network infrastructure supplying customers not connected to gas supplies in order to ensure that these customers can benefit quickly from decarbonisation technologies. However, there is limited explanation or justification for the volume that is proposed for delivery in RIIO-ED2.	We consider that there is a risk related to the proposed volumes as we do not believe that they have been sufficiently justified at this stage.
Asset Protection ED2-EJP-NP- 012	Partially Justified. The EJP presents a justified needs case for the works, with credible optioneering. There is limited justification provided for the volumes proposed within the EJP.	We consider that there is a risk related to the proposed volumes as we do not believe that they have been sufficiently justified at this stage.
HV Cable Replacement ED2-EJP-AS- 027	Partially Justified. There is considered to be a clear need to intervene on some HV cables during the RIIO-ED2 period and it is accepted that replacement is the only credible options for these assets. However, it is unclear how the proposed volumes have been arrived at. This was not sufficiently clarified by UKPN during the SQ process.	We consider that there is a risk relating to the proposed volumes as we do not believe that they have been sufficiently justified at this stage.
LV Cable Replacement combined with CONSAC ED2-EJP-AS- 028	Partially Justified. There is considered to be a clear need to intervene on some LV cables during the RIIO-ED2 period and it is accepted that replacement is the only credible options for these assets. However, it is unclear how the proposed volumes have been arrived at. This was not sufficiently clarified by UKPN during the SQ process.	We consider that there is a risk related to the proposed volumes as we do not believe that they have been sufficiently justified at this stage.

Table 32: NLRE and NARM - Key Engineering Recommendations

Paper	Comments	Identified Risks
Wood Poles and Narrow Based Towers ED2-EJP-AS- 020	Partially Justified. We note three trends in these asset categories: 1. The needs case for intervention on some assets of this type is	We consider there to be a risk relating to the proposed volumes as we do not consider them to have been sufficiently justified at this stage. In addition, we have concerns that if approved, the delivered works may be significantly different.
HV Transformers ED2-EJP-AS- 024	accepted and the optioneering presented is considered robust. 2. UKPN propose a significantly higher volume of replacements	
Primary Transformers ED2-EJP-AS- 090	than forecast or delivered in RIIO-ED1. However, no information is provided to sufficiently justify this increase	
Broad based Towers ED2-EJP-AS- 091	or describe the planning and delivery strategy. 3. The RIIO-ED1 investment trends showed in some cases noteworthy changes from	
LV Switchgear ED2-EJP-AS- 023	replacement to refurbishment, with limited justification for these movements.	
Tower Painting Programme ED2-EJP-AS-	The combination of these 3 trends leads to uncertainty regarding deliverability and the robustness of the proposed volumes.	
052		

Paper	Comments	Identified Risks
Fluid Filled Cable Replacement Programme Paper ED2-EJP-AS- 095	 Unjustified. We note 2 main trends in these proposals: We note in RIIO-ED1 a number of the cables presented for intervention in ED2 definitively ruled out "do nothing" or "repair" in RIIO-ED1. As these cables appear to have been repaired or had no intervention, this causes difficulty in accepting the presented optioneering in RIIO-ED2 which mirrors the wording and theme used in RIIO-ED1. The cable asset health as reported is now questioned as we are unclear the risk attached to the cable and predicted deterioration is correct. This causes the needs case to be questioned. We would have expected additional narrative on these points. As a result, there is considered to be a contradiction between the needs case and optioneering presented by UKPN in their submission and their actual approach to assets of this kind. This creates uncertainty as to whether the proposed investments will ultimately be delivered. 	We consider there to be a risk related to the delivery of proposed works.

Appendix 2 - Consultation questions

1. Introduction

2. Setting Outputs

UKPN-Q1. What are your views on the company specific parameters we have proposed for the common outputs that we have set out above?

UKPN-Q2. What are your views on our proposals for UKPN's bespoke ODIs?

UKPN-Q3. What are your views on our proposal to implement a collaborative streetworks ODI-F as set out above?

UKPN-Q4. What are our views on our proposals for UKPN's bespoke PCDs?

UKPN-Q5. What are your views on our proposal to fund investment to release capacity in off-gas grid areas ahead of need via a PCD as set out above?

UKPN-Q6. Which metrics could be used for holding UKPN to account for delivery of its off-gas grid proposal via a PCD and protecting consumers by clawing back allowances?

UKPN-Q7. What are your views on our proposal for UKPN's CVPs?

3. Setting baseline allowances

UKPN-Q8. What are your views on our proposals for the outcome of Stages 3 and 4 of the BPI for UKPN?

4. Adjusting baseline allowances for uncertainty

UKPN-Q9. What are your views on our proposals for UKPN's bespoke UMs?

5. Innovation

UKPN-Q10. What are your views on our proposals for UKPN's NIA funding?

Appendix 3- Privacy Notice

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest ie a consultation.

4. With whom we will be sharing your personal data

No personal data will be shared with any organisations outside Ofgem.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for twelve months after the project is closed.

6. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- · object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.
- 7. Your personal data will not be sent overseas
- 8. Your personal data will not be used for any automated decision making.
- 9. Your personal data will be stored in a secure Government IT system.

10. More information

For more information on how Ofgem processes your data, click on the link to our "Ofgem privacy promise".