

# **Response to Ofgem's RII0-2 Sector Specific Methodology Consultation Western Power Distribution (WPD)**

14<sup>th</sup> March 2019

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# Executive Summary

## 1.1 Introduction

1.1.1 This document contains WPD's response to Ofgem's consultation on the sector specific methodology for the RIIO-2 price controls. Whilst WPD's own focus is naturally on the electricity distribution sector, we recognise the importance of looking at the industry as a whole system to bring the greatest benefits for consumers. Consequently, WPD is pleased to respond to the whole range of issues raised in this consultation across all sectors.

1.1.2 Overall, WPD is concerned that:

- (a) Ofgem is proposing significant changes to the price control regime in circumstances where WPD believes RIIO-1 has largely achieved its aims. This risks creating regulatory uncertainty that will ultimately harm consumers. (see Section 2)
- (b) This uncertainty is exacerbated by the fact that, although Ofgem is proposing substantial changes, specific details are not provided and WPD are unclear on how new mechanisms would work or what would be the likely reward and penalty structure. (see Section 3.2)
- (c) Ofgem fails to provide a clear statement of the RoRE range for energy networks that would allow an understanding or expectation of the returns that may be available to companies. In WPD's view the proposed incentive regime appears designed to limit the scope of rewards for outperformance. Accordingly, without clear evidence from Ofgem demonstrating a balanced reward/penalty expectation, investment and innovation in energy networks will be dis-incentivised to the detriment of consumers. Moreover, the proposed Return Adjustment Mechanism (RAMs) further reduce incentives to outperform. (see Section 4.4.8 onwards)
- (d) Ofgem's proposals include an unprecedented, very low proposed cost of capital based, amongst other things, on assumptions that appear flawed in particular in respect of market equity returns and energy network betas. At a transitional period for the need for carbon reduction and increased electrification, the return needs to be sufficient to ensure such investment can occur.
- (e) In addition, the cost of equity must be set at a level that enables Ofgem to meet its statutory duty in respect of the financeability of licensees. (see Section 4.3)
- (f) Ofgem is proposing to reduce further the allowed rate of return (AR) to below the expected rate of return (ER) by an arbitrary amount. This appears to have no theoretical or empirical justification. (see Section 4.2.20 onwards)
- (g) The dilution of cost sharing factors will ultimately harm consumers by reducing networks' incentives to reduce costs over the course of the price control, which reduce the scope for setting lower baselines in future price controls. (see Section 4.4.2 onwards)
- (h) It is as yet unclear how the immediate change from RPI to CPIH indexation will ensure Net Present Value neutrality. (see Section 5.2.74 to 5.2.78)

1.1.3 There is a real risk that the factors outlined above will collectively raise financeability issues for even reasonably efficient operators, as well as undermining incentives, innovation and

outputs. If financeability issues arise this suggests that Ofgem has not properly calibrated the price control regime. In this regard, Ofgem's proposed cashflow floor does not address any underlying drivers of financeability, does not meet Ofgem's statutory duty to ensure financeability, and instead increases equity risk by widening the circumstances in which a dividend lock-up may be imposed (see Section 4.3.6 onwards).

1.1.4 We have structured our response as follows:

- **Context from RIIO-1 (Section 2):** this is important since, in our view, RIIO-1 has largely been successful in incentivising the performance of the energy network industry, and so must provide the basis from which Ofgem makes further improvements to the regime;
- **Analysis of Ofgem's overall RIIO-2 framework (Section 3):** we believe it is important to understand the effect of Ofgem's new proposals taken as a whole. Since a number of individual incentive schemes have developed in RIIO, and Ofgem is proposing significant changes as well as the introduction of new mechanisms, it is important to understand how these interact. In particular it is important to ensure that there are no unintended consequences such as dilution of overall incentives or creating an unsustainable finance package;
- **Areas of specific concern with Ofgem's RIIO-2 proposals (Section 4):** our analysis has picked up material areas of concern – particularly overall returns to incentivise investment, and where RIIO-2 incentives appear to be weakened, and downside risks increased; and
- **Responses to each of Ofgem's detailed questions (Section 5).**

## 1.2 RIIO-1 has successfully incentivised performance

1.2.1 RIIO-1 was Ofgem's major reform of regulation of the energy network industry, linking company revenues, incentives for efficiency and innovation and the delivery of defined outputs. Ofgem has stated that RIIO-ED1 is delivering good outcomes for consumers:

*"A number of incentives within the RIIO-ED1 framework, both financial and reputational (such as public reporting on delivery), encourage strong performance against the output categories."<sup>1</sup>*

1.2.2 Accordingly, it is clear that customers are receiving the highest level of service and performance from the networks, and electricity interruptions are at a low. This is further supported by Ofgem's own metrics, for example:

- (a) All network companies (bar two GDNs) have met and exceeded their customer satisfaction targets.<sup>2</sup> All companies have achieved their social obligations. More specifically, all DNOs have received rewards for their performance in the SECV incentive (Stakeholder Engagement and Consumer Vulnerability metric)<sup>3</sup> and are compliant with the Health and Safety Executive (HSE) standards.<sup>4</sup>

<sup>1</sup> "RIIO-ED1 Annual Report 2017-2018", Ofgem, March 2019, Executive summary

<sup>2</sup> See Table 2.1

<sup>3</sup> "RIIO-ED1 Annual Report 2017-2018", Ofgem, March 2019, paragraph 2.14

<sup>4</sup> "RIIO-ED1 Annual Report 2017-2018", Ofgem, March 2019, paragraph 2.19

- (b) Under the reliability and availability output, since the beginning of RIIO-1 all DNOs have reduced the number of customer interruptions (CIs) by 11%, as well as the customer minutes lost (CMLs) by 9 % to 36 minutes on average.<sup>5</sup>
- (c) With regards to the environment outputs, reputational incentives have succeeded in incentivising companies to cut down on their emissions and reduce oil leakage from fluid filled cables.<sup>6</sup> Since the beginning of RIIO-ED1, there have been significant improvements at industry level.<sup>7</sup>

1.2.3 We therefore believe RIIO-1 is on track to deliver its objectives within the eight-year price control period of each sector, as agreed with stakeholders under their respective consultations.

1.2.4 All sectors have made efficiency gains against planned expenditure, and this has enabled them to outperform the RIIO-1 financial return expectations. This appears to be a point of concern for Ofgem; however, we believe it clearly demonstrates the power of the RIIO-1 incentives in driving efficiencies. Customers have shared in these benefits in RIIO-1 and will get the full benefit in RIIO-2 as forecasts are reset at new levels of efficiency.

1.2.5 In addition, under RIIO-1 Ofgem has the power to adjust its set allowances at the end of the period for cost categories where there was significant uncertainty about expenditure requirements at the time of setting allowances, and so can effectively use these uncertainty mechanisms to return a proportion of gains to customers. As a result, the higher than expected returns that certain companies are currently making should not be taken as indicative of the final RIIO-1 position.

1.2.6 WPD has encouraged Ofgem to take a full picture of company financial performance with the publication of our 2016/17 and 2017/18 RIIO Accounts. These accounts demonstrated that in the year 2017/18 we earned 6.3% overall, less than the allowed Cost of Equity of 6.4%. This is in the context of WPD having the highest customer satisfaction in the industry for the seventh consecutive year, with our highest ever score. Our overall performance has been recognised as frontier performing and thus we believe this to be a low return for an efficiently run top performing network operator. Ofgem should focus on RoRE numbers for each company that includes all variables, including debt financing costs. This would ensure that customers and stakeholders can assess the true extent of any perceived over performance in RIIO-1 financial returns.

1.2.7 WPD agrees that improvements should be made on the back of RIIO-1. There are two specific areas:

- (a) A large degree of the underspend has been seen as the result of a failure of RIIO-1 to accurately forecast changes in real prices of input costs (labour and materials in sectors other than electricity distribution). Ofgem's RIIO-2 proposals to index Real Price Effects (RPEs) should substantially eliminate the possibility of this occurring in RIIO-2 and the shortening of the price control to five years will reduce forecast uncertainty more broadly.
- (b) RIIO-1 output targets have incentivised licensees to improve and outperform the expected level of performance. With data gathered from RIIO-1, Ofgem will be in a

<sup>5</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.7

<sup>6</sup> "Review of the RIIO Framework and RIIO-1 Performance", *CEPA*, March 2018, paragraph 2.3

<sup>7</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.16

much better position to assess targets for RIIO-2, without the need for any fundamental change in methodology or approach.

- 1.2.8 In conclusion, although we recognise there are some weaknesses in the calibration of RIIO-1 that need to be addressed, overall, RIIO-1 has been successful and looking forward, the focus for RIIO-2 should be on refinement, not fundamental change.

### **1.3 General concerns about Ofgem's proposals for RIIO-2**

- 1.3.1 Ofgem is proposing large-scale revisions. We find this surprising given the success of RIIO-1 as outlined above. In WPD's view, the current RIIO-GD2/T2 proposals ignore the benefits RIIO-1 has provided. The RIIO-1 price control includes a strong incentive package that facilitates positive performance from network companies and directly benefits consumers. However, Ofgem's proposals for RIIO-2 include a penalty heavy "incentive" package, with the reward for high performing companies primarily being limited to the avoidance of a penalty.
- 1.3.2 Such large-scale revisions also raise real risks for consumers. Ofgem rightly emphasises the importance of regulation being stable and predictable, since regulatory risk (in particular where it is asymmetric in nature) will increase the cost of capital. Given that energy networks are capital intensive, any such increases in the cost of capital can be expected to lead to higher prices to the detriment of consumers.
- 1.3.3 The failure of Ofgem's RIIO-2 proposals to provide a logical and predictable continuation of RIIO-1 is especially of concern given the changing technological and market environment in which companies are operating. This changing environment creates investment challenges. In this context, Ofgem's proposed step changes in RIIO-2 to investment incentives, such as the sharp cut in the cost of capital, the restructuring of outputs and weakening of outperformance rewards, seriously challenge companies' abilities to respond to these changing demands with appropriate investment.
- 1.3.4 From the perspective of an electricity distribution network, we also find the scope of Ofgem's proposed changes surprising since RIIO-ED1 is still less than half way through its planned eight-year period. We understand the reason for undertaking the review now given the timing of other sectors but are nevertheless keen that precedents are not set that constrain decisions in RIIO-ED2 at this early stage.
- 1.3.5 RIIO is a complex regime, and so it is all the more important not to look at each element or scheme piecemeal, but rather to look at impacts in total, to ensure that adverse unintended consequences do not arise.
- 1.3.6 A major concern of Ofgem's overall proposals is on incentives. This combined with the impact of Return Adjustment Mechanisms (RAMs), together with a proposed arbitrary reduction for allowed versus expected returns, and other weakened incentives proposed by Ofgem in RIIO-2 (particularly the likelihood of lower Totex retention ratios), will substantially reduce financial incentives for cost efficiency and ODI (Outcome Delivery Incentives) and PCD (Price Control Deliverables) rewards and penalties. The key element of incentive-based regulation is that companies can increase their returns when they increase efficiency or improve outputs. The unprecedented, low sharing factors proposed by Ofgem, coupled with a shorter price control of five years rather than eight, risks compromising the incentive properties of RIIO.
- 1.3.7 More generally on incentives, in RIIO-1, known (albeit reducing) targets set at the start of the period have served customers well. Accordingly, we see no reason for change, especially

to methods that risk undermining existing incentive properties. By the time companies get to RIIO-ED2 Ofgem will have at least four to five years of regulatory reported data on costs and outputs from RIIO-ED1 plus five years of comparable data for DPCR5. This will provide good information about company performance, enabling Ofgem to set accurate and stable targets for RIIO-2.

- 1.3.8 It follows that dynamic resetting of targets and use of relative performance assessment over the course of a price control are both unnecessary and counter-productive, because they reduce the certainty that companies can build into their business plans for the rewards of service quality or output improvement and is not linked to the actual cost of delivery.

## 1.4 Specific concerns over profits and risk sharing incentive

### *Cost of equity*

- 1.4.1 Despite the detailed work still required (including work on specifying the risks that will be borne by companies in RIIO-2), we note that at 4.5% (real CPIH) Ofgem has proposed the lowest ever cost of equity set by a UK economic regulator. This is also significantly lower than that proposed by Ofwat for PR19 (5% real CPIH) and Ofcom's most recent December 2018 estimate for BT copper (5.3% real CPIH).<sup>8</sup>

- 1.4.2 We believe there to be fundamental flaws with each of Ofgem's steps leading to its proposed reduction in the cost of equity:

- Ofgem has changed the long-term assumptions used to calibrate the CAPM, which is not justified by rigorous economic analysis. Oxera's work for the ENA has shown that:
  - Ofgem's reduction in the TMR is based in part on spurious sources and should in no way be regarded as market expectations;<sup>9</sup>
  - Ofgem's asset beta range of 0.3-0.5 is heavily influenced by UKRN work based on only two water companies, ignores highly relevant evidence from European energy networks and uses unorthodox time series data.
- Ofgem then seeks to justify its CAPM results by arguing that it is consistent with selected "cross checks" all of which are far from compelling (see section 4.2.7 onwards). Financeability is a better cross-check that Ofgem should be using.
- Finally, Ofgem further adjusts the allowed cost of equity down by 50 basis points by arguing that there is a systematic expectation by investors that they will be able to outperform the allowed cost of equity by this margin. This is counter to existing regulatory practice, whereby regulators typically "aim-up" the cost of capital, an approach that has been endorsed by both regulators and the Competition and Markets Authority.<sup>10</sup> We believe this arbitrary adjustment from the expected return is invalid in a well-designed price control determination and ultimately detrimental to customers. (see 4.2.20 onwards)

- 1.4.3 Based on our assessment of the published RIIO-T2/GD2 proposals, we consider RoRE ranges are likely to be materially skewed to the downside, given the limited upsides in the proposed

<sup>8</sup> We note Ofwat's PR19 point estimate for the cost of equity of 5.03% (real CPIH), and Ofcom's December 2018 Business Market Connectivity Review cost of equity estimate of 7.4% (nominal for BT copper) – equivalent to 5.3% (real CPIH) ([https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0017/124730/bcmr-annexes-1-22.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0017/124730/bcmr-annexes-1-22.pdf)). Both are significantly higher than Ofgem's proposals for an expected cost of equity of 4.5% (real CPIH).

<sup>9</sup> "Review of RIIO-2 finance issues: Rates of return used by investment managers", Oxera

<sup>10</sup> Frontier Economics, "Adjusting baseline returns for anticipated outperformance: An assessment of Ofgem's proposals", March 2019.



incentive packages for ODI, PCD, monetised risk proposals, and Ofgem's proposals for Totex sharing factors.

- 1.4.4 It is critically important that investors have clarity as to the expected balance of reward and penalty incentives that Ofgem is proposing. This should be done by Ofgem providing an indicative RoRE range, with a justification of how this range is derived from its underlying proposed incentive packages.
- 1.4.5 However, irrespective of the balance of possibilities for under or over performance, Ofgem seems to imply that taking the bottom end of the expected CAPM range is acceptable since the resulting allowed returns (AR) remains within the range. The implication is that this is still an acceptable return for investors. However, this is a mis-characterisation of the CAPM cost of equity range. The range in fact represents uncertainty over the CAPM inputs – not an acceptable range for investors. The bottom end of this range is only acceptable as a cost of equity if all the low-end assumptions that support this figure are also simultaneously valid and the environment they operate is also stable. It cannot be considered a central estimate of the AR, since this is built on an entirely different justification of expected asymmetries in the regulatory regime.
- 1.4.6 Moreover, in weighing up its proposals in the round, Ofgem should be concerned that the step reduction in its proposed RIIO-2 cost of equity is at odds with the need for a stable and predictable regulatory environment. Such stability is essential to justify and support continued investment into the energy sector network at this critical time of technological and market change, with companies facing wider social and environmental responsibilities.

### ***Cost of Debt***

- 1.4.7 The cost of debt mechanism to be used in RIIO2 is more transparent, but as a key component of the WACC it needs to be correctly calibrated to better match a company's debt profile; in terms of tenor, rating and also in the recognition of transaction costs and cost of carry.

### ***Risk sharing***

- 1.4.8 Sharing factors for Totex are an important part of the energy network sector regulatory regime. As well as being important to the incentive properties of the regime, they are also important in determining the balance of risk and reward between companies and customers.
- 1.4.9 The strength of the sharing factor will be critical to incentivising high performance, and thus we believe Ofgem is wrong to reduce these rates from RIIO-1. There is good reason for setting higher incentives rates (i.e. above 50%): it drives companies to seek efficiencies that reduce costs in the current price control and are used to set baselines for future price controls. This leads to enduring lower costs for consumers. Setting sharing factors too low weakens the incentive to find efficiency improvements and cost savings; and ultimately prices for consumers will be higher.
- 1.4.10 RAMs are a new proposal for RIIO-2. In this response, we show that RAMs will dull incentives. This is because they penalise the combined impact of improved efficiency, innovation, and output performance on companies' returns.
- 1.4.11 We are surprised that Ofgem is proposing to introduce RAMs at this time. In RIIO-1 much of the perceived over-performance in respect to underspend is associated with RPEs, which is not evident in the electricity distribution sector. Ofgem indicates that RIIO-2 will introduce indexation of these effects and thus will largely remove this source of forecasting error.

Furthermore, in the electricity distribution sector much of the current underspend appears to be simply a delay in spend on the part of UKPN. This further reduces any potential case for any form of RAMs.

- 1.4.12 If RAMs are nevertheless to be introduced, companies should be rewarded for absolute (Class 1) and not relative (Class 2) performance. An absolute incentive target allows companies to make investments based on more certainty as to the likely returns. Investors are ultimately interested in absolute return, or relative return compared to the total investment market in which they could potentially invest. They are not primarily interested in relative return compared to peers within a part of the UK energy network sector. The lack of such certainty on absolute returns may easily undermine the investment case by increasing risk, and also raising the underlying cost of equity in these networks.

### ***Financing***

- 1.4.13 We remain of the view that Ofgem should fully consider its statutory duty to ensure the financing of licensees. Ofgem appears to regard a financeability test as a trigger for action by shareholders, rather than a critical cross check of whether the expected cost of equity is sufficient.
- 1.4.14 In the short term, financeability risks are masked by Ofgem's decision to move from RPI to CPIH indexation of the regulatory asset value (RAV), since this will increase current revenues and reduce future revenues. However, this move is a one-off cash flow benefit that will dwindle over time with lower RAV growth. The underlying issue is that in the long-term a 4% CPIH real cost of equity may challenge companies' current investment grade credit ratings.
- 1.4.15 Ofgem's principal proposal to address the financeability risk is what it calls a Liquidity Based Cash Flow Floor. This is only a temporary solution as any Cash Top-up payments will eventually need to be repaid by the company at an interest rate equal to the WACC. It does not address the long term financeability problem created by Ofgem's downward step in the cost of equity and has already been recognised by the largest rating agencies as largely negative.
- 1.4.16 The key to resolving any financeability risk should be to encourage equity investment through a realistic cost of equity. The cashflow floor does the opposite of this by widening the circumstances in which a dividend lock-up may occur.
- 1.4.17 RIIO-1 is working. RIIO-2 should focus on refinement, not fundamental change.

## 2 Context from RIIO-1

### SUMMARY

RIIO-1 was Ofgem's major reform of regulation of the energy network industry, linking company revenues (and consumer prices) to delivery of outputs, and incentives for efficiency and innovation. We believe RIIO-1 is on track to deliver its objectives within the eight-year price control period of each sector.

Even though RIIO-1 is not yet complete (and in the case of electricity distribution less than half way through), companies have mostly achieved output targets. All sectors have made efficiency gains against planned expenditure, and this has enabled them to outperform the RIIO-1 financial return expectations. This appears to be a point of concern for Ofgem. This is notwithstanding that higher efficiency is desirable, and the higher than expected returns that companies are currently making should not be taken as indicative of the final RIIO-1 position.

Some targeted adjustments to RIIO-1 would address such concerns, as will reducing the price control period to five years (thereby reducing forecasting periods and allowing re-setting to occur more frequently). Moreover, a large degree of the underspend in T1 and GD1 is the result of a failure of RIIO-1 to forecast changes in real prices of input costs (labour and materials). Ofgem's RIIO-2 proposals to index Real Price Effects (RPEs) will substantially eliminate the possibility of this occurring in RIIO-2. In ED1 much of the sector underspend in the initial years appears to be due to delays in UKPN's programme (which in part is covered by uncertainty or other close-out mechanisms), and so is neither indicative of the rest of the sector, nor the eventual outcome of RIIO-ED1.

RIIO-1 output targets have incentivised licensees to improve and outperform the expected level of performance. The data gathered from RIIO-1 will allow Ofgem to set more stretching targets in RIIO-2, without the need for any fundamental change in methodology or approach.

Overall, RIIO-1 has been successful. Accordingly, the focus for RIIO-2 should be on refinement, not fundamental change.

### 2.1 Introduction

- 2.1.1 RIIO was a substantial revision to the system of price controls across all energy networks, which was the subject of much work, analysis and consultation. Ofgem is now proposing large-scale revisions to this framework. Accordingly, it is important that these changes are informed by a careful consideration of actual outcomes so far. Ofgem rightly emphasises the importance of regulation being stable and predictable, since regulatory risk (in particular where it is asymmetric in nature) will increase the cost of capital. Given that energy networks are capital intensive, any such increases in the cost of capital can be expected to lead to higher prices to the detriment of consumers.
- 2.1.2 It is also important that any incentive-based price control regime ensures that licensees' allowed revenues incentivise cost reduction, reward innovation and reflect the delivery of desired outputs (which Ofgem summarises as being the goal of RIIO, hence its abbreviation). As in every competitive environment, efficiency, innovation and improved outputs should be

rewarded. If Ofgem wants to mimic competition, the more efficient companies should be allowed to earn increased returns.

- 2.1.3 Accordingly, a natural place to start when considering the appropriate model for RIIO-2 is to review performance under RIIO-1. Only three years of results are available for the eight-year price control for Electricity Distribution and five for the other sectors, and so results are still preliminary. However, some clear themes can be noted based on performance to date.

## 2.2 Performance to date under RIIO-1

### RIIO is delivering real benefits to consumers

- 2.2.1 RIIO-1 is on track to deliver its objectives. The RIIO framework has been successful in incentivising network companies to improve their performance and achieve the defined outputs. As stated in the 2017/18 report for RIIO-ED1:

*"A number of incentives within the RIIO-ED1 framework, both financial and reputational (such as public reporting on delivery), encourage strong performance against the output categories."<sup>11</sup>*

- 2.2.2 Under RIIO-1 there are six overarching output categories: reliability and availability, environment, customer service, social obligations and safety. As noted by Ofgem, DNOs continue to perform strongly against four of the six categories: reliability and availability, customer satisfaction, social obligations, and safety.<sup>12</sup> Table 2.1 below provides a summary of all network companies' performance. Notably, all operators have achieved their targets within the social obligations category.<sup>13</sup>

**Table 2.1: Summary of network companies' performance (2017-2018)**

Output targets	Gas Transmission	Electricity Transmission	Gas Distribution	Electricity Distribution
Reliability and Availability	<b>Missed</b>	<b>Achieved</b>	<b>Missed by 1 GDN</b>	<b>Missed by 1 DNO</b>
Environment	<b>Missed</b>	<b>Achieved</b>	<b>Achieved</b>	<b>Achieved</b>
Customer Satisfaction	<b>Achieved</b>	<b>Achieved</b>	<b>Missed by 2 GDNs</b>	<b>Achieved</b>
Social Obligations	<b>n/a</b>	<b>Achieved</b>	<b>Achieved</b>	<b>Achieved</b>
Safety	<b>Achieved</b>	<b>Achieved</b>	<b>Achieved</b>	<b>Missed by 2 DNOs</b>
Connections/wider works	<b>Achieved</b>	<b>Achieved</b>	<b>Achieved</b>	<b>Missed by 6 DNOs</b>

Source: RIIO-ED1 Annual Report 2017-2018, *Ofgem*, March 2019, RIIO-ET1 Annual Report 2017-2018, *Ofgem*, March 2019, RIIO-GD1 Annual Report 2017-2018, *Ofgem*, March 2019 and RIIO-GT1 Annual Report 2017-2018, *Ofgem*, March 2019

- 2.2.3 Since the start of RIIO-1 customer satisfaction scores have improved and so has the quality of engagement, both in the development of the business plans and more broadly.<sup>14</sup> All operators, bar two GDNs, met their annual customer satisfaction targets. The two Cadent GDNs that did not, received a penalty of £1.16 million in 2017-2018 for their low customer satisfaction scores and have committed to improve their customer satisfaction experience.<sup>15</sup>

<sup>11</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, Executive Summary

<sup>12</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, Executive Summary

<sup>13</sup> Social obligations are not applicable in gas transmission.

<sup>14</sup> "RIIO-2 Framework Consultation", *Ofgem*, March 2018, paragraph 3.2

<sup>15</sup> "RIIO-GD1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.5

This action demonstrates the range of tools available to Ofgem to ensure licensees are held accountable.

- 2.2.4 The DNOs continue to actively engage with their stakeholders and are working to address the needs of their vulnerable customers to meet their social obligations. Companies are assessed by an independent expert panel that awards an overall score for each DNO. In 2017-18 WPD was the highest scoring company at 8.75/10, with four other DNO groups increasing their score over the previous year.<sup>16</sup>
- 2.2.5 Reliability and availability outputs have also been improving. The Interruptions Incentive Scheme (IIS) currently in place in the electricity distribution sector is performing well and has resulted in a reduction of 11% and 9% in the number and the duration of interruptions experienced by customers respectively in the ED1 period to date.<sup>17</sup>
- 2.2.6 As far as their environmental targets are concerned, all operators (bar NGGT) have reduced their carbon footprint and emissions.<sup>18</sup>
- 2.2.7 Under connections, NGGT and all gas distribution companies have achieved their targets. In the electricity distribution sector, eight of the 14 DNOs achieved their connection time targets in 2017-2018 (an improvement from 2016-2017, when six DNOs achieved their targets), and the majority met their time taken to quote for connections targets.<sup>19</sup> The monitoring and reporting of the relevant measures under RIIO-1 is beneficial for customers. Ofgem's annual reports clearly identify poor performance helping to continually drive up industry performance.
- 2.2.8 As highlighted by CEPA, RIIO-1 has resulted in efficiency improvements across network operators.<sup>20</sup> As such, all operators, with the exception of three DNOs and NGGT are expected to underspend their total expenditure allowances for RIIO-1, whilst still achieving their outputs. Through the Totex Incentive Mechanism (TIM) these underspends are shared with customers and Ofgem will be able to use such data to form a more accurate basis for the benchmarks used to calibrate allowed returns in RIIO-2.
- 2.2.9 The overall success of RIIO-1 is well captured in the Keynote Presentation by Jonathan Brearley (Ofgem Executive Director – Systems and Networks) at Ofgem's March 2018 "Future Networks" event – reproduced below in Figure 2.1.

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<sup>16</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, Table A2.4

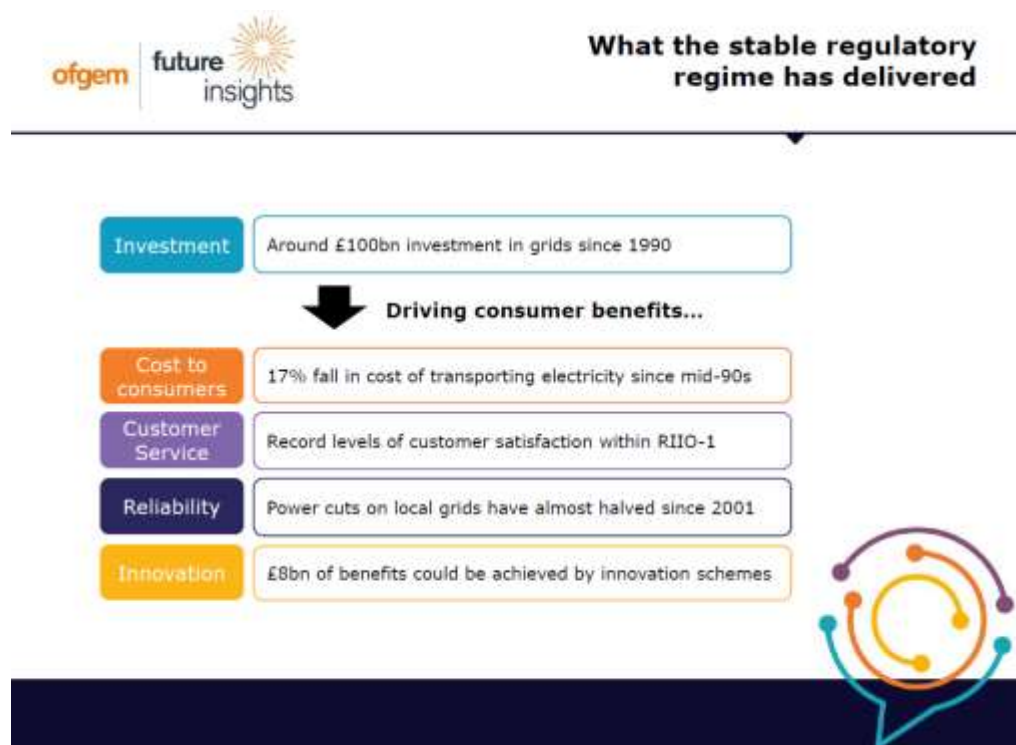
<sup>17</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.7

<sup>18</sup> NGGT failed to decrease its gas emissions. However, it should be noted that it was penalised £1.4 m for its underperformance ("RIIO-GT1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.10)

<sup>19</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, paragraph 2.11

<sup>20</sup> "Review of the RIIO Framework and RIIO-1 Performance", *CEPA*, March 2018, paragraph 2.3. CEPA noted: "All network companies except for three DNOs and NGGT are forecast to underspend their Totex allowances for RIIO-1. These underspends do not appear to have come at the expense of delivering the required outputs (see below). **This points to improved efficiency on the part of the network companies.** ... So far in RIIO-1, and based on the latest forecasts for the rest of the period, it appears that the **framework has been successful at driving improved output delivery for customers.** ... Overall, there is evidence that **network companies** across all four sectors **have been responding to the intended incentives of RIIO.**"

**Figure 2.1: Opening slide of Keynote Presentation at Ofgem Future Networks event**



Source: Ofgem at [https://www.ofgem.gov.uk/system/files/docs/2018/03/riio2\\_launch\\_event\\_slides\\_final320pm\\_22march.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/03/riio2_launch_event_slides_final320pm_22march.pdf)

- 2.2.10 RIIO is designed to put consumers at the heart of network companies' decision making, by motivating them to deliver better services at a reduced cost. The RIIO framework has delivered real benefits for consumers. As noted in Ofgem's RIIO-2 Framework Consultation:

*"This has resulted in handing back over £5bn to consumers in the form of lower network charges on bills."<sup>21</sup>*

## 2.3 Areas of concern raised by Ofgem

- 2.3.1 Ofgem has repeatedly indicated that it believes returns under RIIO-1 have been too high, and do not wholly derive from efficiency savings that would benefit consumers.<sup>22</sup>
- 2.3.2 Ofgem implicitly accepts that observing outperformance does not in itself reveal anything – incentive-based regimes are intended to incentivise this to the benefit of consumers. The key question is how any outperformance is achieved.
- 2.3.3 Data from 2017-18 annual reports suggest that RIIO-1 will result in underspends in electricity transmission and gas and electricity distribution, as illustrated in Table 2.2.

<sup>21</sup> "RIIO-2 Framework Consultation", Ofgem, March 2018, paragraph 2.18

<sup>22</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, paragraphs 10.53-10.54 (2<sup>nd</sup> occurrence due to Ofgem document paragraph numbering error)

**Table 2.2: Data on under- and over-spends in gas and electricity under RIIO-1:**

	Since start of RIIO-1 <sup>1</sup>				Full RIIO-1 forecast <sup>2</sup>			
	Allowance	Actual	Difference		Allowance	Actual & Forecast	Difference	
	£m	£m	£m	%	£m	£m	£m	%
Gas Transmission	<b>1,869.7</b>	<b>1,842.5</b>	<b>-27.2</b>	<b>-1.45%</b>	<b>3,037</b>	<b>3,187.9</b>	<b>150.9</b>	<b>4.97%</b>
Electricity Transmission	<b>10,472</b>	<b>8,265</b>	<b>-2,207</b>	<b>-21.1%</b>	<b>18,203</b>	<b>15,953</b>	<b>-2,555</b>	<b>-12%</b>
Gas Distribution	<b>11,581</b>	<b>9,875</b>	<b>-1,706</b>	<b>-14.7%</b>	<b>18,226</b>	<b>16,144</b>	<b>-2,082</b>	<b>-11.4%</b>
Electricity Distribution	<b>10,926</b>	<b>10,242</b>	<b>-684</b>	<b>-6%</b>	<b>27,847</b>	<b>26,554</b>	<b>-1,293</b>	<b>-5%</b>

Note: <sup>1</sup> Cumulative figures are from start of respective RIIO period to 2017/18 Annual Report. Five years of data are available for gas distribution and transmission, but only three years of data are available for electricity distribution. Two years into RIIO-GD1 there was an average 14.6% underspend and a forecast 12.5% underspend for the rest of the price control period across GDNs. Data for electricity transmission is from 2016-2017 annual report.

<sup>2</sup> Forecast figures are forecast for the entirety of the respective RIIO period.

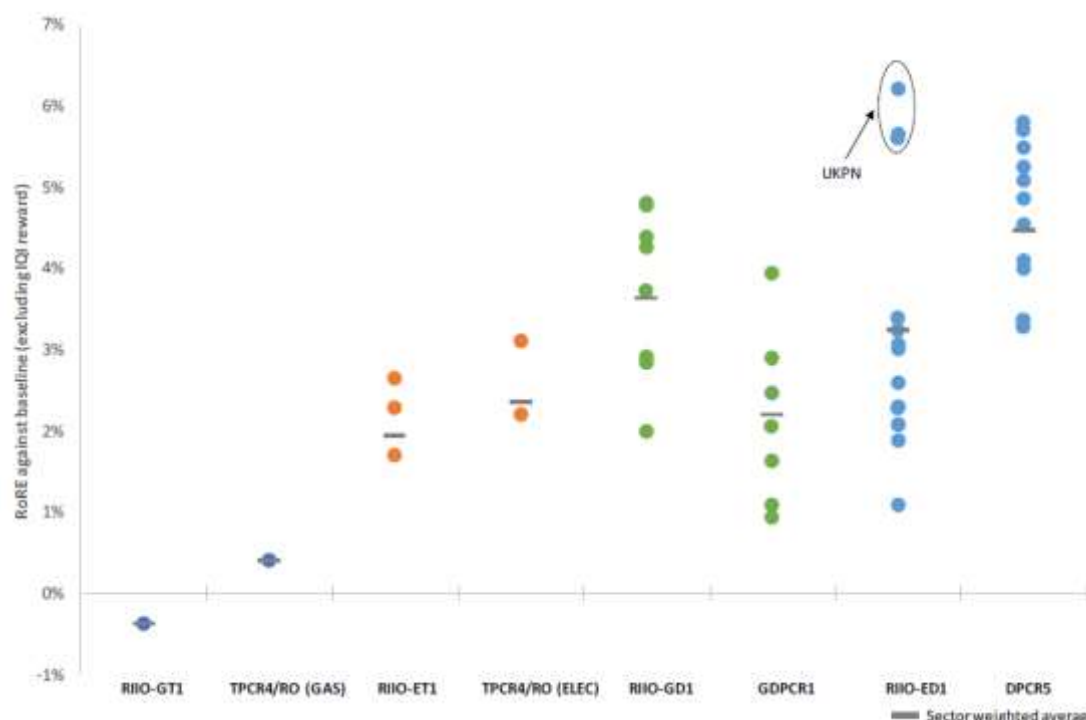
Source: RIIO-ED1 Annual Report 2017-2018, *Ofgem*, March 2019, RIIO-ET1 Annual Report 2017-2018, *Ofgem*, March 2019, RIIO-GD1 Annual Report 2017-2018, *Ofgem*, March 2019 and RIIO-GT1 Annual Report 2017-2018, *Ofgem*, March 2019

- 2.3.4 However, these high-level figures do not provide clarity around either the drivers of the underspends nor the degree of variation both between the sectors and between network companies within individual sectors. Understanding these points is important so that issues can be properly identified and thus addressed appropriately at both sector and company level.

#### **Returns have fallen from the previous price control**

- 2.3.5 Ofgem contextualises performance as return on regulatory equity (RoRE) and uses it to compare performance between different operators, as well as between different price controls. As illustrated in
- 2.3.6 Figure 2.2, with the exception of gas distribution, RoRE outperformance in RIIO-1 to date is lower than in the previous price control.

**Figure 2.2: Forecast RoRE performance above the allowed return on equity – RIIO and RPI-X price controls**



Notes: CEPA's estimates for RIIO-1 are based on data from the 2016/17 RIIO Annual Reports. The estimates do not include any returns or penalties earned through the IQI "additional income". The closer a company is to Ofgem's view of costs (or the further below it), the higher the incentive rate and additional income rewards it would receive. As a corollary, the more inflated a company's forecasts are compared to Ofgem's view, the less it could hope to profit from such inflation, because their incentive rates would be lower, and they would face an income penalty.

Source: CEPA, "Review of the RIIO framework and RIIO-1 performance", Final report to Ofgem, March 2018, page 23.

- 2.3.7 While the RORE is higher under GD1 compared to the previous price control, this is driven by an underspend in repex (replacement expenditure) and more specifically by restructuring in their repex workflow to prioritise more lower-cost work than Ofgem had assumed, such as the HSE mandated iron mains repex programme.<sup>23</sup> Ofgem should be able to use the changes in delivery of the repex programme in RIIO-GD1, which came about through changes in the HSE policy, to drive a more efficient programme for the remaining years of the programme (out to 2030). Equally, the differential between RIIO-ED1 and DPCR5 is even more striking when accounting for the distorting effect of UKPN's results.

### Returns in different sectors have been driven by different factors

- 2.3.8 Self-evidently returns vary across sectors. More importantly, the drivers of returns vary across sectors and between companies. This does not sustain a general conclusion as to overall returns. For example, returns on regulatory equity ignore that actual financing costs may be higher than have been assumed (e.g. as regards WPD). As set out in our March 2018 response, actual real price effects have led to higher returns for transmission and gas distribution companies.
- 2.3.9 Ofgem forecasts a regulatory asset value (RAV) weighted average total RoRE at the respective period ends of 9.15% in the electricity distribution sector<sup>24</sup>, 10.09% for the

<sup>23</sup> "Review of the RIIO Framework and RIIO-1 Performance", CEPA, March 2018, paragraph 2.5

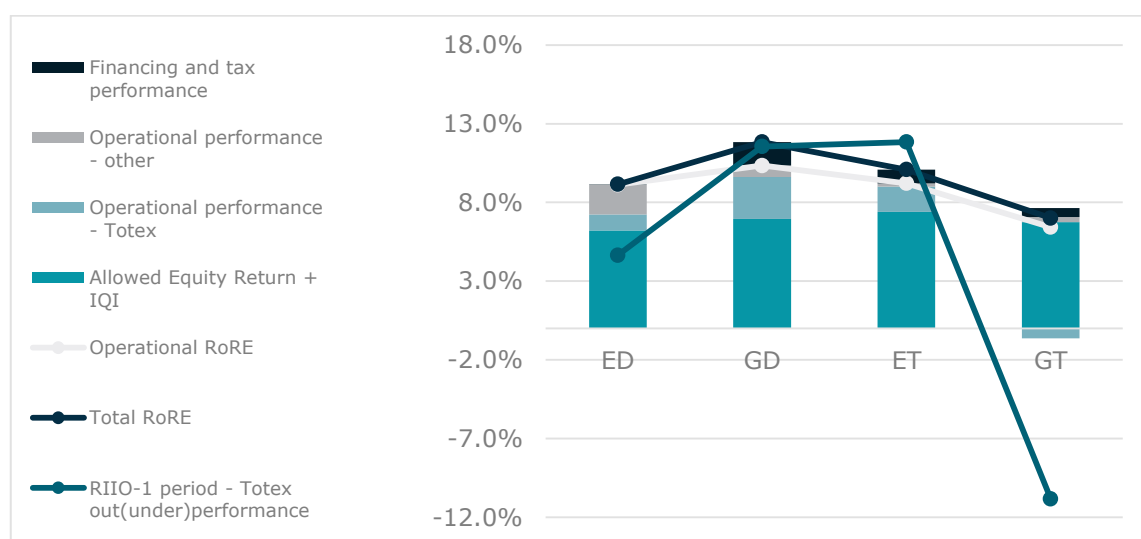
<sup>24</sup> "RIIO-ED1 Annual Report 2017-2018", Ofgem, March 2019, Executive Summary



electricity transmission sector<sup>25</sup> and 11.84% for the gas distribution sector.<sup>26</sup> As illustrated in Figure 2.3, the drivers of these forecast returns are very different in each case.

- 2.3.10 There are three important points to make in interpreting these results. Firstly, the majority of the outperformance (over base cost of equity and IQI) in gas transmission and electricity distribution is derived from incentive and reward programmes rather than underspend. Therefore, where companies have made larger returns this has actually been of direct benefit to consumers. For example, in the electricity distribution sector, RoRE outperformance is driven primarily by outperformance under the incentive schemes. More specifically, IIS accounts for 46% of RoRE outperformance against the baseline.<sup>27</sup> The IIS has brought significant benefits to consumers, as they are now experiencing fewer and shorter interruptions. However this outperformance also comes at a cost to the companies.
- 2.3.11 Secondly, where companies have outperformed on underspend much of this is caused by real price effects (discussed below at paragraph 2.4.2 and 2.4.3). The uncertain economic climate along with other decision-making variables, such as negotiating contracts and trialling new techniques, have also resulted in delayed investment. For example, UKPN's underspend (also noted below at paragraph 2.3.13) is largely due to delayed investment in replacing and refurbishing equipment and lower than anticipated costs for managing network reinforcement, because the forecast level of loading on the network did not materialise.<sup>28</sup>
- 2.3.12 Thirdly, the impact of efficient debt financing needs to be taken into account. WPD is a special case since it is bound by a different moving average debt indexation methodology than other DNOs, which has reduced its return by a 0.8% over RIIO-1. It is important that Ofgem includes debt financing under/over performance to get the full picture of company return performance.

**Figure 2.3: Sources of RoRE performance against the baseline across four sectors**



Source: RIIO-ED1 Annual Report 2017-2018, RIIO-ET1 Annual Report 2017-2018, RIIO-GD1 Annual Report 2017-2018, RIIO-GT1 Annual Report 2017-2018

<sup>25</sup> Supporting data file to Regulatory financial performance annex to RIIO-1 Annual Reports - 2017-18

<sup>26</sup> Supporting data file to Regulatory financial performance annex to RIIO-1 Annual Reports - 2017-18

<sup>27</sup> We have calculated this figure based on data in the appendix of the 2017/18 annual report for ED1. This figure excludes both the cost of equity and the IQI reward.

<sup>28</sup> Network reinforcement has been delayed by UKPN and is now expected to take place later in the price control. The delays have been, at least in part, the result of negotiating with suppliers to create a more efficient supplier network, which should ultimately benefit customers. "RIIO-ED1 Annual Report 2016-2017", Ofgem, December 2017, page 44, paragraph A3.25.

- 2.3.13 Taking a closer look within the different sectors, returns are not uniform among network operators. Within the electricity distribution sector, Ofgem stated RoRE ranges from 6.51% to 11.63%.<sup>29</sup> Average returns to date under ED1 are largely driven by UKPN's higher returns. Taking out UKPN, which has an underspend of 14%, the average underspend of the industry is forecast to be 5%<sup>30</sup>, with the estimated average RoRE falling to 8.87%. Moreover, UKPN's current returns are likely to be overstated due to built-in uncertainty mechanisms discussed below that permit revenue to be clawed back in pre-determined circumstances.
- 2.3.14 As mentioned above, the main driver of increased returns in the electricity transmission sector is the Totex underspend. Although the industry average underspend is 12%, underspends among TOs vary from 3% to 15%.<sup>31</sup> Looking closer at the eight-year forecast for the gas distribution sector, there seems great variability in the Totex outperformance. Although the industry average is 11.4%, individual companies' underspend varies from 1.1% to 19%.<sup>32</sup>
- 2.3.15 Accordingly, it is inappropriate to draw generalised conclusions that returns have been too high in RIIO-1: the specific reasons for enhanced returns need to be analysed by sector and assessed as to whether the reasons for the returns are valid and have also benefitted consumers.

### **It is too early to know what returns will be at the end of RIIO-1**

- 2.3.16 Moreover, these figures are not necessarily reflective of the actual returns network companies will receive at the end of the price control. As noted in our response to the March 2018 consultation, there are limitations in the forecasts used, as they are based on only two years for ED1 and four years for GD1, ET1 and GT1 for an eight-year framework. As noted by Ofgem, forecasts are inherently subject to a degree of uncertainty.
- 2.3.17 The estimates also do not account for the re-opener mechanisms that could reduce Totex allowances. Ofgem reserves the right to adjust its set allowances for cost categories where there was significant uncertainty about expenditure requirements at the time of setting allowances, and therefore the estimates do not account for potential adjustments that Ofgem can make at the end of the RIIO-1 price control. For example, there is a re-opener mechanism in ED1<sup>33</sup> for load related expenditure<sup>34</sup> that allows Ofgem to return underspend to consumers when load demand on the networks (and the associated network reinforcement) is lower than anticipated.<sup>35</sup> (A view of underspend on non-load related expenditure should also be made).
- 2.3.18 Ofgem clearly regards RIIO-1 as being over-generous and unnecessarily rewarding network companies.<sup>36</sup> Accordingly, any process to address the supposed weaknesses of RIIO-1 must begin with a clear view on how companies will ultimately be rewarded under RIIO-1. However, Ofgem fails to start with a clear picture of the returns network companies are

<sup>29</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, figure 3.2 – see appendix 3.

<sup>30</sup> "RIIO-ED1 Annual Report 2017-2018", *Ofgem*, March 2019, table 3.1

<sup>31</sup> "RIIO-ET1 Annual Report 2017-2018", *Ofgem*, March 2019, table 16

<sup>32</sup> "RIIO-GD1 Annual Report 2017-2018", *Ofgem*, March 2019, table 3.3

<sup>33</sup> Re-openers are provisions to re-set the revenue allowances (or the parameters that give rise to revenue allowances) for specific costs at a given date and/or upon crossing a pre-determined threshold.

<sup>34</sup> Load related expenditure is defined as the investment required to accommodate new and changing patterns of customers' electricity use.

<sup>35</sup> Similarly, if there was material overspend, allowances can be adjusted upwards to ensure appropriate investment by the DNOs to meet the demands on the network (See "RIIO-ED1 Annual Report 2016-2017", *Ofgem*, December 2017, page 23, paragraph 4.31). For the load related expenditure re-opener, the threshold is  $\pm 20\%$  of the load related expenditure baseline and for the amount above/below the threshold to be greater than 1% of base revenue (See "Decision on close out methodologies for the DPCR5 Price Control", *Ofgem*, June 2016, page 22, paragraph 3.4 (3)).

<sup>36</sup> "RIIO-2 Sector Specific Methodology", *Ofgem*, December 2018, paragraphs 10.53-10.54 (2<sup>nd</sup> occurrence due to Ofgem document paragraph numbering error)

making under the relevant RIIO-1 price controls. Such clarity is essential before Ofgem advances a range of complex measures to solve perceived problems.

- 2.3.19 This year's annual reports is the first time Ofgem has published any information which provides a full picture of the network returns currently being earned under RIIO-1, including an assessment of full financing costs for the first time. WPD tried to encourage this with our RIIO Accounts publication in which we demonstrated that in 2017/18 we earned 6.3% overall against an allowed Cost of Equity of 6.4%. Our performance has been recognised as frontier performing and thus we believe this to be a low return for an efficiently run, top performing network operator.
- 2.3.20 Ofgem should focus on RoRE numbers for each company that includes all variables, such as debt financing costs, and the potential close out methodologies which are yet to be finalised for any of the sectors. This transparency would help to ensure customers and stakeholders are aware of any issues in RIIO-1, and therefore are better able to assess whether the proposed measures in RIIO-2 solve the problem they are meant to address.

## **2.4 Implications for RIIO-2**

- 2.4.1 Notwithstanding the above, there are clearly areas for improvement for RIIO. These were set out in our previous response to the March 2018 consultation, and briefly reiterated below.

### **Forecasting errors**

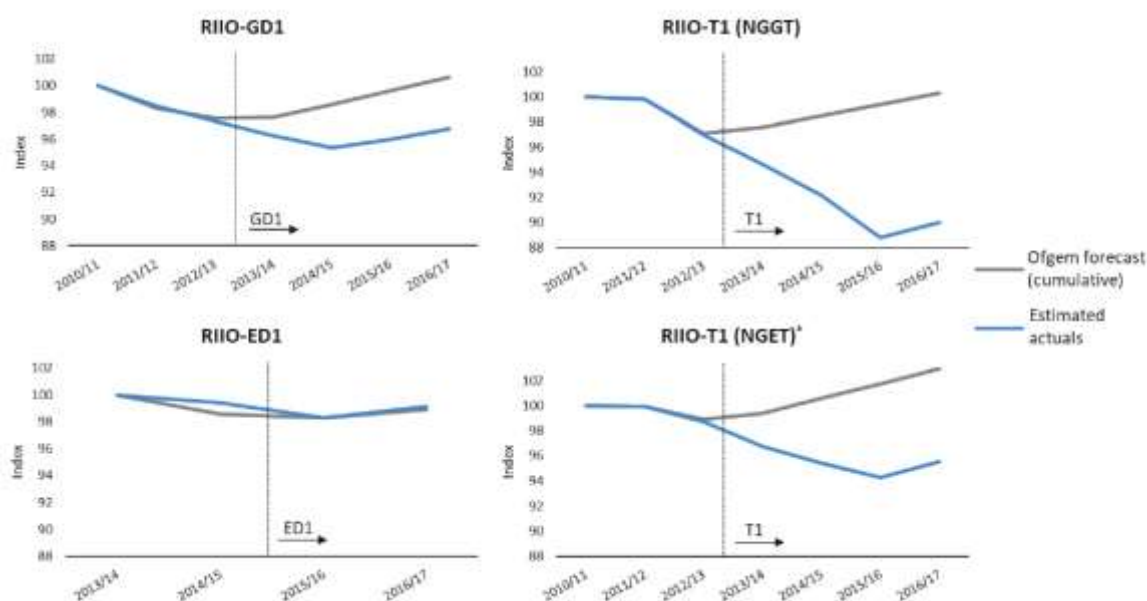
- 2.4.2 Ofgem used Real Price Effects to forecast inflation above the Retail Price Index (RPI) in RIIO-1. As illustrated in Figure 2.4 below, price inflation has been lower than expected and this has had a material impact on companies' costs and returns in certain sectors.<sup>37</sup>
- 2.4.3 According to CEPA's review, RPEs account for 80 basis points of additional RoRE for ET1, 40 basis points of additional RoRE for GT1, 70 basis points for GD1, and had a neutral impact on RoRE for ED1 over the years that the price control has been in place.<sup>38</sup>

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<sup>37</sup> "RIIO-2 Framework Consultation", *Ofgem*, March 2018, paragraph 6.26

<sup>38</sup> "Review of the RIIO Framework and RIIO-1 Performance", *CEPA*, March 2018, paragraph 2.5.1

**Figure 2.4: Indices used in Ofgem's RPE methodology-assumptions in RIIO-1 and outturn values**



- 2.4.4 While there was no systematic allowance outperformance in ED1, the underspends in GD1 and T1 are partly attributable to lower RPEs than those originally allowed by Ofgem. This suggests that some form of recalibration would be appropriate in RIIO-2.

#### Calibration of targets

- 2.4.5 Network operators have been incentivised to outperform against output targets. This has allowed them to earn higher returns under the associated incentive schemes. For example, in the electricity distribution sector, IIS is responsible for 1.59% of the industry RoRE, and in the gas distribution sector network operators have earned rewards under the NTS exit capacity incentive scheme.<sup>39, 40</sup>
- 2.4.6 The fact that certain RIIO-1 targets have been exceeded allows recalibration for RIIO-2. This will lead to more challenging output targets that can push the frontier of performance further.

<sup>39</sup> "Review of the RIIO Framework and RIIO-1 Performance", CEPA, March 2018, paragraph 3.2

<sup>40</sup> There is variability in GDNs' performance, which varies from no outperformance to 38 RoRE basis points outperformance, (see "Review of the RIIO Framework and RIIO-1 Performance", CEPA, March 2018, Annex C.2).

## 3 Approach to RIIO-2

### SUMMARY

Ofgem is proposing large-scale revisions. We find this surprising given the success of RIIO-1 as discussed in Section 2. From the perspective of an electricity distribution network which is still less than half way through its planned eight-year period, we are keen that precedents are not set that constrain decisions in RIIO-ED2 at this early stage.

RIIO is a complex regime, and so it is all the more important not to look at each element or scheme piecemeal, but rather to look at impacts in total. For example, the combined impact of Return Adjustment Mechanisms (RAMs) adjustments for allowed versus expected returns, along with the other weakened incentives proposed by Ofgem in RIIO-2, particularly the likelihood of lower Totex retention ratios, will substantially reduce financial incentives for cost efficiency and ODI (Outcome Delivery Incentives) and PCD (Price Control Deliverables) rewards and penalties.

Similarly, with respect to the financing package Ofgem is proposing a number of significant changes for RIIO-2 including lower cost of equity, expected vs allowed returns adjustment, CPIH vs RPI which also change the fundamental dynamics of the price control. These are considered in more detail in Section 4.

We have concerns that we elaborate in this chapter around: (a) processes; (b) consistency of proposals with Ofgem's objectives; and (c) unintended consequences.

### 3.1 Introduction

- 3.1.1 Ofgem's large-scale proposals apply across the board from stakeholder engagement to incentive structures to financeability. In the context of the success of RIIO-1 (as described in Section 2) we view such a broad overhaul of the price control unnecessary.
- 3.1.2 Any significant adjustments, such as those proposed for RIIO-2, require careful consideration, thorough analysis and timely engagement with a broad range of stakeholders. In the context of Ofgem's proposals we have concerns about:
  - (a) the processes used in developing these proposals;
  - (b) the internal consistency of the proposals with Ofgem's objectives; and
  - (c) the scope for unintended consequences, that do not appear to have been considered.
- 3.1.3 From the perspective of an electricity distribution network which is still less than half way through its planned eight-year period, we are keen that precedents are not set that constrain decisions in RIIO-ED2 at this early stage.

### 3.2 Process

- 3.2.1 WPD assumes that Ofgem wishes to incentivise high quality business plans that achieve good outcomes for consumers. However, this can only be done if there is clarity as to how the incentives will operate before companies put in detailed business plans. WPD believes Ofgem's current proposals as to how the business plan process will operate and be

implemented in practice, lack clarity. For example, it is difficult to put forward proposals for alternative targets without clarity on the precise returns that companies will be allowed to achieve (i.e. the expected RoRE range that companies can expect from the different reward and penalty schemes), how incentive schemes will operate, what funding will be available for innovation and the precise outputs that will be remunerated. This is particularly evident with regard to Ofgem's decision to reduce the number of output categories from six to three without consulting widely with stakeholders. It would be in all parties' interests (including consumers') if these points were clarified prior to business plan submission.

- 3.2.2 Moreover, without clarity as to Ofgem's potential RoRE expectations, it is very challenging to understand all of the component parts and how they work together. Ofgem should set out its view on potential RoRE ranges under the proposals made, which would help to understand how the package has been built up.

**Changes to the number of outputs should have been subject to broad stakeholder engagement**

- 3.2.3 Outputs are at the heart of RIIO, and these must be informed by customers and other stakeholders. Ofgem's proposals to reduce the current six output categories to the proposed three outcome categories in RIIO-2 would go against evidence of what would be in customer interests, as well as removing granularity and clarity.
- 3.2.4 Ofgem has decided to do this without consulting wider stakeholders. Feedback provided by licensees during Ofgem working groups appears to have been ignored. Recent stakeholder engagement carried out by WPD in 2018 supported the continuation of the six categories, with the possibility of subdividing environmental activities further into the impact of licensees' activities on the environment and activities to enable a lower carbon future. Stakeholders have thus indicated that they wish for more granularity on outputs, not less.
- 3.2.5 The types of output now envisaged by Ofgem – licence conditions, output delivery incentives (ODIs) and price control deliverables (PCDs) – do not cover all the commitments licensees will be making to their stakeholders. Licence conditions will mandate activities, ODIs will be measures that are associated with rewards/penalties or reputational league tables, and PCDs will be associated with ring fenced projects/programmes that have volume drivers or claw back mechanisms.
- 3.2.6 Within Business Plans, licensees commit to delivering a range of outputs for customers, many of which will not be captured by the proposed new output categories. These are discussed in paragraph 5.1.20 onwards.
- 3.2.7 More generally, the categorisation of outputs must have regard to grouping together those that essentially drive towards aligned outcomes. Ofgem's unilateral decision to move from six output categories to three had the stated purpose of making them *"...as intuitive and simple as possible, reducing overlap and potential confusion..."*<sup>41</sup> A significant number of existing network company commitments would potentially fall into more than one of the categories, introducing confusion, with no clear benefit to customers.
- 3.2.8 Ofgem's framework appears to be focussed on where it considers financial controls are required to limit company rewards for outperformance, rather than clearly measuring and incentivising delivery against the wide range of outputs that consumers are receiving.

<sup>41</sup> "RIIO-ET Policy working Group", Ofgem, August 2018, slide 7 (available at: [https://www.ofgem.gov.uk/system/files/docs/2018/10/riio2\\_-\\_et\\_stakeholder\\_working\\_group\\_1\\_1.pdf](https://www.ofgem.gov.uk/system/files/docs/2018/10/riio2_-_et_stakeholder_working_group_1_1.pdf))

- 3.2.9 Without rigorously defining the outputs that customers value and framing the RIIO-2 regulatory regime around these in sufficient granularity and clarity, the regime will lack the incentive properties to deliver the best value to customers in the widest sense beyond simply cost. It would be in all parties' interests (including consumers) if all of these points were clarified prior to business plan submission.

### **Dealing with whole system outcomes under RIIO-2**

- 3.2.10 On the issue of delivering the best whole system solution for consumers, we are disappointed by the lack of clarity on how costs could be transferred between network licensees across different sectors. The way the industry operates must respond to changing technology and ways in which consumers use and generate energy. Incentives for whole system outcomes will be a critical part of RIIO-2. WPD is leading the way in DSO (Distribution System Operator) evolution and is therefore concerned by the lack of detailed information on the responsibilities and reward mechanism for the ESO (Electricity System Operator) at this stage of the process. There is a danger that insufficient clarity could lead to the ESO defining its own processes using BSUoS (Balancing Use of System) as a catch all to recover costs incurred.
- 3.2.11 Through ENA Open Networks<sup>42</sup> we are producing evidence on market models and where responsibilities are best allocated between ESO and DSO entities. The outcomes of this work and subsequent BEIS/Ofgem decisions should feed into the ESO price control framework. Even in a two-year price control arrangement, the current RIIO-2 strategy risks allowing the ESO to set precedents for how functions and costs are allocated independently to Open Networks, with such precedents becoming hard to unpick for RIIO-ED2.

### **RPE indexation requires more development before it can be recommended**

- 3.2.12 RPE indexation has been proposed without any evidence of clear analysis and thinking on how this would be undertaken and the potential implications of such a change. As RIIO-1 has demonstrated some form of RPE indexation is required, but it should only be introduced if sufficiently accurate (and exogenous) indices can be found. This is not an easy task. Taking the labour cost index as an example, energy networks have more unionised labour forces than the economy as a whole, where labour costs are typically more rigid in respect to wide labour market trends. However, narrowing the index down to say, public utilities, endangers the exogeneity of the index since energy network employees will begin to make up a material component of the index.
- 3.2.13 RPE indexation is, therefore, in principle a helpful innovation for RIIO-2 provided that the indices are relevant (i.e. relevant to unionised energy network labour forces), accurate, and exogenous (i.e. not dominated by the energy networks themselves).<sup>43</sup> Consulting on the introduction of such an approach should only occur once these questions have been examined and the viability of the proposal ascertained.

## **3.3 Consistency**

- 3.3.1 It is important to view the framework for RIIO-2 in the round if we want to understand how the individual aspects will interact and thus the overall effect that they will have on network operators and outcomes for consumers. We feel that there is currently no clear overarching effort to balance overall risks and incentives, so that network operators have the ability and

<sup>42</sup> The Open Networks Project is an energy industry initiative to transform the way energy networks work, underpinning the delivery of the smart grid. It will develop a more detailed view of the required transition from DNO to DSO including the impacts on existing organisation capability.

<sup>43</sup> This is an area where we intend to conduct further research to ensure that appropriate indices are used. As always, we would be happy to share such research with Ofgem to help develop its understanding and thinking on this issue.

incentives to achieve higher returns for high performance. In our view, the incentives and innovation part of RIIO-2 is largely missing and merging output categories risks compromising output deliverables. Moreover, key elements of the proposals seem likely to blunt incentives to perform.

- 3.3.2 We question the consistency of the RIIO-2 proposals with Ofgem's overall RIIO principle of incentivisation. This is evident in a number of areas, such as reduced Totex sharing factors and RAMs that we discuss below. But it is also apparent in Ofgem's decision to shorten the regulatory period from eight to five years.

#### **Length of the price control**

- 3.3.3 WPD believes that the longer price control has contributed to (and continues to contribute to) the success of ED1. Ofgem's decision to reduce the term of energy network price controls from eight to five years is aimed at reducing the potential for forecasting errors and the associated consequences. Reducing the length of the price control reduces the length of time over which forecasts need to be made (thereby, reducing some of the uncertainty), and ensures that when forecast errors are made (either to the benefit or detriment of consumers) the price control can be re-calibrated sooner, reducing the period over which such errors will impact.
- 3.3.4 While this taken in isolation may seem to be a reasonable step in response to the supposedly excessive returns in RIIO-1, it has implications for other aspects of the price control, such as incentives.
- 3.3.5 We believe, therefore, that shortening the price control period raises two issues of consistency:
- resetting allowances and targets after five rather than eight years is counter to the objective of building incentives;
  - in the context of a stated strategy of reducing the scope for and impact of forecasting error (see 3.4.9 below), for example through indexation and re-openers, the value of the shorter price control becomes more questionable.

#### **RIIO-2 incentives need to be looked at as a whole**

- 3.3.6 The fact that the RIIO regime is a package means that individual components cannot be looked at in isolation. Rather the incentive properties of the whole price control need to be fully understood. We are concerned that various overlays of risk sharing in the regulatory regime will lead to a cumulative weakening of incentives overall for companies. This is exemplified by Ofgem's proposed Risk Adjustment Mechanism (RAMs) that, by adjusting the total return of the company after all other incentive and sharing mechanisms (other than possibly debt indexation), weaken the overall incentives on the companies across the entirety of their operations. The reasons for this are explained below.
- 3.3.7 At a high level, in RIIO-2 there are two critical interactions:
- RAMs vs. Totex risk sharing: since RAMs adjust equity returns, any efficiency cost saving will be subject to firstly the Totex sharing mechanism and secondly RAMs;
  - RAMs vs. Price Control Deliverables (PCDs) and Output Delivery Incentives (ODIs): similarly, any penalties or rewards under PCDs or ODIs will feed into equity returns and be subject to RAMs;



- 3.3.8 Accordingly, RAMs, coupled with the shortening of the price control period, can be expected to reduce incentives to outperform on either costs or outputs. Reducing returns by removing incentives can be expected to lead to higher costs and thus prices. Moreover, this debate is not about no cost sharing, RIIO-2 will feature some form of Totex sharing mechanism such that companies will retain only a percentage of any efficiency cost savings they make.

#### **Asset resilience proposals lack development**

- 3.3.9 In Chapter 6 of the Consultation Document, Ofgem elaborates on its proposals for addressing asset resilience through the concept of monetised risk – or more specifically Network Asset Risk Metrics (NARM). We are concerned that these proposals cut across existing developing approaches to Network Output Measurement (NOMs). This also introduces complexity, whilst simultaneously removing clarity from the granularity of reporting. More detail, along with our proposals, is in paragraphs 5.1.131 onwards.

### **3.4 Unintended consequences**

- 3.4.1 Ofgem needs to be aware of unintended consequences from any of its proposed actions, otherwise in seeking to address an apparent weakness of RIIO-1, RIIO-2 will simply create different problems.

#### **Dampening of incentive effects**

- 3.4.2 In the absence of competitive markets, regulatory incentives are the impetus for companies to provide the output and deliverables that customers want, whilst at the same time seeking cost efficiencies. Over the long term, network operators have incentives to drive down costs to the benefit of consumers, with price controls then being re-set at each price control based on past and benchmarked performance.
- 3.4.3 As discussed in Section 2, RIIO-1 has successfully built up a sophisticated package of incentives to do this. These include incentives to produce a high-quality business plan, incentives to deliver outputs, incentives to seek and develop innovative solutions; and all in the context of minimising Totex. These incentives have resulted in the intended behaviour and have generated (and continue to generate) significant improvements for consumers under RIIO-1.
- 3.4.4 However, as highlighted in paragraphs 3.3.6 to 3.3.8 above, we are concerned that RIIO-2 proposals will have the unintended effect of undermining these.

#### **Output incentives**

- 3.4.5 Ofgem's document introduces a discussion of whether financially incentivised output targets should be:
- Static;
  - Dynamic-absolute; or
  - Dynamic-relative.
- 3.4.6 We see distinct dis-incentive properties with Ofgem's dynamic approach that are not reflected in Ofgem's comparative analysis:<sup>44</sup>

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<sup>44</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, page 29.

- (a) Dynamic-absolute incentives appear to envisage that targets are updated year-on-year in response to company performance (e.g. made more stretching whenever a company achieves its targets). This will drastically dilute incentives for companies to improve when they know that targets will be tightened in the next year. In effect, the rewards will be limited to within one year. This is counter to the whole approach of a five or eight-year regulatory period that drives medium to long term incentives.
- (b) Dynamic-relative incentives appear to envisage that targets move depending on companies' relative performance. Such an incentive structure robs companies of any certainty of the level of financial reward that they will receive from their planned initiatives, thus undermining business cases for improvements that could be beneficial to customers.

3.4.7 In RIIO-1, known (albeit reducing) paths for targets set at the start of the period have served customers well and provide certainty to companies. Accordingly, we see no reason for change – especially to methods that risk undermining existing incentive properties. By the time companies get to RIIO-ED2 Ofgem will have at least 4-5 years of regulatory reported data on costs and outputs from RIIO-ED1 plus five years of comparable data for DPCR5. This will provide good information about companies' relative performance. In addition, the reduction in the regulatory period from eight to five years (albeit something that WPD disagrees with) will allow earlier recalibration of targets every five years in the event of a material mis-forecast. Taken together, these new developments will enable Ofgem to set accurate and stable targets for RIIO-2.

3.4.8 Whatever incentive regime Ofgem eventually decides on, it will be important that there is total clarity in good time before companies are required to submit business plans. Ofgem's approach has yet to be determined in relation to a wide range of issues, including cost/efficiency assessment, many of the outputs and incentive mechanisms, and a number of the detailed parameters of the finance parameters. Whilst the RIIO-T2/GD2 strategy consultation document signals Ofgem will consult further on some of these issues later in the year, a number of them will not be determined until after business plans are submitted. This indicates that companies will be submitting their business plans to stakeholders and Ofgem without having full transparency on the rules and expectations. It will therefore be left to companies to make proposals on these issues either before or at business plan submission. This appears to place significantly higher risks on companies at this stage of the RIIO-T2 and GD2 price controls. WPD would expect substantially more transparency for RIIO-ED2, akin to the details provided in the RIIO-ED1 strategy consultation document, along with a similar timetable and review process.

#### **Indexation of Real Price Effects will not necessarily reduce risk**

3.4.9 Ofgem has also indicated a desire to remove the potential for forecast errors wherever possible by using indexation:<sup>45</sup>

*"We propose to use indexation rather than making forecasts wherever feasible."*

3.4.10 Concerns over forecast errors in inflation expectations specifically and a desire to avoid network companies earning higher returns from Real Price Effects (RPEs) created by such forecast errors have led Ofgem to propose introducing indexation of RPEs. As discussed above, failure to accurately forecast RPEs has been a significant reason that transmission and gas distribution companies have thus far underspent against Totex targets in RIIO-1. In

<sup>45</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, paragraph 1.13

RIIO-2 indexation of RPEs, if correctly calibrated, will have the benefit of ensuring companies are not making windfall gains or losses from real price movements beyond their control.

- 3.4.11 However, RPE indexation will not reduce the cost of equity for the companies. This is because RPEs are a counter-cyclical risk for companies. In a strong macro-economy, when company profitability and investor returns will have a positive outlook, labour and other material prices are also likely to be rising. It follows that (in the absence of RPE indexation) energy company costs will be under upward pressure at a time when equity markets would also be expected to be buoyant. Similarly, the reverse is true at times of a weak macro-economy – thus contributing to the defensive nature of energy company investments within an investor's portfolio. Introduction of RPE indexation will remove an element of this defensive value of energy networks to investors, and so potentially increase slightly the cost of equity.

#### **Lack of flexibility for changes in government policy**

- 3.4.12 Future changes to government policy may require additional activity or investment that will not be captured or incentivised in Ofgem's current RIIO-2 proposals. This was an issue for WPD in RIIO-1 in respect of rail electrification. In RIIO-2 this could become an issue in respect of the need for expenditure to cover a whole host of matters, such as changes in government policy on the environment, electric vehicle take-up or to guard against risks to network security.<sup>46</sup> As these requirements could arise at any point during the price control, it is important to retain uncertainty mechanisms for this work. Options for doing this are covered in paragraph 5.1.159 to 5.1.161 (in the example of cyber-security, but more generally applicable).

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<sup>46</sup> Energy networks include assets deemed to be Critical National Infrastructure (CNI).

## 4 Issues relating to profitability, risk and reward and financing

### SUMMARY

WPD is concerned by Ofgem's financial proposals. Despite the detailed work still required (including work on specifying the risks that will be borne by companies in RIIO-2), we note that Ofgem has proposed the lowest ever Weighted Average Cost of Capital (WACC) set by a UK economic regulator, significantly lower than that proposed by Ofwat for PR19. We believe there to be fundamental flaws with Ofgem's evaluation of the cost of equity

Financeability is the most reliable cost of equity cross-check that Ofgem has at its disposal. This metric should take centre stage in verifying the CAPM estimate, or at least determining where in the wide range of CAPM possibilities Ofgem's determined cost of equity should lie.

Ofgem is the only UK regulator to adjust the Allowed Return (AR) of equity down by 50 basis points below the Expected Return (ER) by arguing that there is a systematic expectation by investors that they will be able to outperform the allowed cost of equity by this margin. We believe this adjustment from the ER to the AR is invalid in a well-designed price control determination. Moreover, in any incentive-based regime, higher returns are required to reward efficiency, innovation and the delivery of outputs, with more demanding targets consequently being set in subsequent price controls.

It is also not at all clear how the ER/AR adjustment should be calibrated. Making an arbitrary adjustment based on possible outperformance in previous regulatory periods is inappropriate since RIIO-2 will make changes to the regulatory regime in a way that will affect expectations. This is especially true since none of the methodologies for closing out the existing RIIO-1 price controls have yet been consulted on by Ofgem, and without this RIIO-1 returns cannot be systematically evaluated.

Ofgem needs to make explicit the RoRE range it is targeting for good and bad performance, and where in this range the expected and allowed returns lie. This is essential in order to ensure that there is no inconsistency in approach between the incentive regime and the allowed cost of equity relative to the expectations.

### 4.1 Introduction

#### 4.1.1 Ofgem has a statutory duty to ensure financeability of licensees:

*In performing their duties under subsections (1B) and (1C) The Secretary of State or the Authority shall have regard to*

*(a) ...*

*(b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under this Part the Utilities Act 2000 or Part 2*

or 3 of the Energy Act 2004, Part 2 or 5 of the Energy Act 2008 or Section 4, Part 2, Sections 26 to 29 of the Energy Act 2010 or Part 2 of the Energy Act 2013.<sup>47</sup>

- 4.1.2 This is more than just a legal obligation for the protection of investors. RIIO-2 can only be successful for consumers if it incorporates a cost of equity and cost of debt that will incentivise investment by being acceptable to investors to ensure:
- (a) investors receive a fair return on their equity capital, with the capital reflecting accumulated capital investment over many decades and requirements to maintain a high level of capital investment; and
  - (b) continuing financeability of the companies to maintain<sup>48</sup> their debt platforms required for efficient financing structures.
- 4.1.3 Both will be achieved by Ofgem setting the correct cost of equity and cost of debt given the level of risk accepted by investors. Unfortunately, WPD has serious concerns as regards Ofgem's current RIIO-2 proposals.
- 4.1.4 The prime objective of defining the cost of equity is to provide an adequate return to investors through either dividends or capital growth. The cost of equity is estimated using the CAPM to calibrate the company cost of equity against total market returns from dividends and capital growth. However, in doing this the cost of equity must also allow the company to maintain the consistent cashflow required:
- (a) to fund its operations (at least for a reasonably efficient network operator);
  - (b) to meet its debt obligations (at least for the notional financing structure); and
  - (c) to support a long-term dividend stream consistent with investor expectations for companies with low to moderate long-term growth expectations.
- 4.1.5 There should therefore be consistency between the CAPM and financeability approaches. A correctly set CAPM – calibrated against the right assumptions for investor expectations on returns from capital growth and dividends – will be consistent with financeability. In practice, because of the ambiguity and inaccuracy of the calibration of the CAPM – particularly the measurement of the total market return and company betas where there is considerable divergence of views<sup>49</sup> – financeability issues may emerge that will need to be addressed.
- 4.1.6 Although we are grateful to Ofgem for beginning to make some constructive ideas on how to address these issues (which we discuss in detail in the next section), these are only temporary fixes. Ofgem's immediate switch to CPIH, suggestions that companies change capitalisation or depreciation rates, or the proposal for a cashflow floor are all capable of generating additional cash in the short term. However, this simply makes the financeability problem greater in the long term. For the long term, Ofgem appears to rely on its Option B mantra that financeability issues can be addressed by "*put[ting] the onus on companies to take appropriate action*".<sup>50</sup> This effectively only increases the volatility in equity returns, and

<sup>47</sup> Electricity Act 1989, Section 3A (2).

<sup>48</sup> That is, to service existing debt, replenish expiring debt and add new debt when required, all in the context of an efficient financial structure mirroring the notional structure assumed by Ofgem.

<sup>49</sup> For example, Ofgem's RIIO-2 TMR (CPI real) estimate of 6.25-6.75% compares to Oxera's range of 7.0-7.5% (Oxera "Review of RIIO-2 financial issues – Rates of return used by investment managers", January 2019, see Figure 1). Oxera also points out that Ofgem's RIIO-2 equity beta estimate of 0.3-0.5 draws on a UKRN report that employs a very unconventional quarterly frequency dataset, using a GARCH estimator which is also unconventional for beta estimation ("Review of RIIO-2 financial issues: The estimation of beta and gearing", Oxera, January 2019), which they believe substantially under estimates energy network betas.

<sup>50</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, paragraph 10.63 (1<sup>st</sup> occurrence due to Ofgem document paragraph numbering error) and 10.15 (2<sup>nd</sup> occurrence due to Ofgem document paragraph numbering error)

consequently increases the cost of equity. This is because investors will be required to increase their investments at precisely the time when returns are already low.

- 4.1.7 This in turn highlights whether Ofgem can reasonably conclude with certainty that the estimated cost of equity has now fallen to an unprecedented low of 3-4% RPI real. Work done by Oxera on behalf of the sector<sup>51</sup> shows that this is not the case. Whilst Ofgem reinforces its belief in its CAPM calculations by its “cross-checks”, these themselves are also misleading (as we also discuss in paragraphs 4.2.5 to 4.2.11).
- 4.1.8 The most reliable cost of equity cross-check that Ofgem has at its disposal is the financeability of the sector at Ofgem’s assumed cost of equity. Accordingly, this test should be the principle assessment in verifying the CAPM estimate, or at least determining where in the wide range of CAPM possibilities Ofgem’s determined cost of equity should lie.
- 4.1.9 In the remainder of this chapter we consider Ofgem’s proposals for RIIO-2 under the following headings:
- (a) overall return;
  - (b) financing; and
  - (c) allocation of risk and reward.
- 4.1.10 In each case, we also highlight why certain of Ofgem’s proposals would be inappropriate for RIIO-ED2.

## 4.2 Overall return

- 4.2.1 Ofgem has contended throughout the development of the RIIO-2 price control that energy networks are low risk and should therefore be a low return industry.<sup>52</sup> WPD disagrees. Ofgem itself has highlighted the risks associated with the industry through its approach to RIIO-2. Specifically, Ofgem has committed to reducing the price control period from eight years to five, primarily due to the ever changing, unpredictable nature of the energy industry. By highlighting the volatility of the energy sector, Ofgem must accept that in fact, it is not a low risk environment in which energy network companies are operating, with each sector having a different risk profile based on future challenges e.g. electric vehicles and electrification of heat for ED, and as such, they should be rewarded/incentivised accordingly. Ofgem is moving the industry ever closer towards developing a price control that leaves energy network companies with a real risk of becoming unfinanceable.
- 4.2.2 Under RIIO-2 Ofgem is proposing to make substantive changes to the overall return. Of key concern are:
- (a) **The reduction in the allowed return on equity from 6-7%<sup>53</sup> to 3% (expected return 3-4%) (RPI real, post-tax):** the magnitude of the proposed reduction in the cost of equity lacks justification. Ofgem refers to the cost of equity as the expected return in RIIO-2.

<sup>51</sup> Oxera, “The Estimation of Beta and Gearing”, March 2019; Oxera, “Asset Risk Premium and Debt Risk Premium”, March 2019.

<sup>52</sup> “RIIO-2 Sector Specific Methodology”, Ofgem, December 2018, paragraph 11.20: “Networks are relatively low-risk businesses because they are monopolies subject to price control with a high degree of certainty on their future revenues. This protects them from demand risk. Networks do, however, face a degree of delivery risk if they overspend their allowances, or fail to meet service targets.”

<sup>53</sup> Specifically, 7.0% (ET), 6.8% (GT), 6.7% (GD), 6.4% (WPD) and 6.0% (ED apart from WPD).

- (b) **The distinction between the Expected Return (ER) and the Allowed Return (AR):** Ofgem argues that there is a gap between companies' expected returns (ER) and their allowed returns (AR), which justifies a reduction in allowed returns. Not only does the way in which the differential has been calculated lack rigour, but also, and more importantly, the entire proposal lacks justification.

#### ***Reduction in the cost of equity***

- 4.2.3 Despite the detailed work still required (including work on specifying the additional and changing risks that will be borne by companies in RII0-2), we note that Ofgem has proposed the lowest ever cost of equity and cost of debt set by a UK economic regulator, significantly lower than that proposed by Ofwat for PR19.<sup>54</sup> We do not understand the rationale for the significant reduction.
- 4.2.4 The first concern is the magnitude of the reduction in the cost of equity – the expected return. We believe there to be fundamental flaws with each of Ofgem's steps leading to its proposed reduction in the cost of equity:
- Ofgem has changed the long-term assumptions used to calibrate the Capital Asset Pricing Model (CAPM) – principally the expected total market return (TMR) to equity holders and the sector betas.<sup>55</sup> Whilst we agree with Ofgem that the TMR assumption should be set by reference to long-run average outturns, we have significant disagreements about how these averages should be calculated and what quantitative evidence should be relied upon.
  - Ofgem then seeks to justify its CAPM results by arguing that it is consistent with "cross checks" from recent evidence on Market to Asset Ratios (MARs), forecasts of investment managers and advisers, and returns bid by investors (e.g. off-shore transmission operators (OFTOs)). We believe that these cross-checks are far from compelling, for reasons explained below. As we explain in paragraphs 4.1.5 to 4.1.8, financeability is a better cross-check that Ofgem should be using.
  - Finally, Ofgem further adjust the allowed cost of equity down by 50 basis points by arguing that there is a systematic expectation by investors that they will be able to outperform the allowed cost of equity by this margin. We believe this adjustment from the ER to the AR is invalid in a well-designed price control determination (see paragraphs 4.2.20 to 4.2.30 below).
- 4.2.5 As regards to the calibration of the CAPM, Oxera's work for the ENA<sup>56</sup> (in reports attached to this submission) has looked at a number of areas where Ofgem's analysis is flawed. This includes that:
- Ofgem's reduction in the TMR is based in part on spurious sources such as FCA (Financial Conduct Authority) prescribed projection rates, designed to ensure that consumers are not harmed by overly optimistic projections by investment companies. These cannot be regarded as market expectations;

<sup>54</sup> Ofwat PR19 cost of equity is 4% real RPI, compared to Ofgem's 3-4%.

<sup>55</sup> The CAPM can be written as  $R_i = RFR + \beta_i \times ERP$ , where  $R_i$  is the expected return on equity,  $\beta_i$  is equity beta for the firm in question that measures the volatility in its returns relative to equity market averages (i.e. its systematic risk), and ERP is the equity risk premium (which is the total market return less the risk free rate). This can be re-written as  $R_i = (1 - \beta_i) \times RFR + \beta_i TMR$ . It is clear, therefore, that correctly estimating beta and TMR are key to correctly estimating the cost of equity.

<sup>56</sup> Oxera, "The Estimation of Beta and Gearing", March 2019; Oxera, "Asset Risk Premium and Debt Risk Premium", March 2019.

- Ofgem uses a negative real risk free rate based on index linked gilts. It is well known that this rate is an under-estimate of the true risk-free rate due to an excess demand imbalance from obligations on pension funds which depresses yields;<sup>57</sup>
- Ofgem's asset beta range of 0.3-0.5 is heavily influenced by UKRN work based on only two water companies. This ignores highly relevant evidence on the betas of European energy networks that is also consistent with National Grid's empirically estimated beta, and also uses a time series that ignores structural breaks that occurred in UK utilities around 2008, as well as changes in leverage. In addition, Ofgem's range is influenced by non-standard approaches to beta estimation;<sup>58</sup>
- Ofgem's cost of equity is inconsistent with evidence from the debt market and/or is unable to compensate investors for the relative risk of holding equity rather than debt in the same asset. This provides further evidence that the combination of assumptions used for the CAPM parameters is extreme, and that one or more of the parameters should be revised upwards.<sup>59</sup>

4.2.6 Ofgem has failed to provide a full explanation of why the cost of equity should be reduced so significantly if it were to be setting the price control now. There is also no explanation as to why energy network asset betas should now be substantially lower. Ofgem's stance on this is particularly puzzling since the UKRN analysis that it in part relies upon is a long time series of quarterly data (i.e. it is not dependent on recent data showing a lower beta).

4.2.7 As regards the so-called "cross-checks", none of these provide a robust basis to verify Ofgem's conclusions on the cost of equity. As Ofgem itself recognises, MARs are dominated by investors' long-term expectations well beyond the next price control. Furthermore, transaction prices for privately held shares are affected by a control premium, or even a "winner's curse" in a bidding process,<sup>60</sup> whilst MARs for publicly listed utility companies are volatile and premiums seen over the 2015-2017 period have disappeared.<sup>61</sup>

4.2.8 Another "cross check" deployed by Ofgem are projected rates of return used by investment managers when marketing financial products. Oxera's report for the ENA "Rates of return used by investment managers"<sup>62</sup> explains why TMR forecasts published by investment managers, and forecast assumptions prescribed by the FCA for the purposes of marketing retail financial products, will understate the expected market returns.

4.2.9 Ofgem's main "cross check" appears to be the equity Internal Rate of Return (IRR) for winning bidders in the OFTO competitions. Here Ofgem looks at firstly the decline in expected equity returns from OFTO bidders, and secondly at the current expected level of return. Ofgem calculates that there has been a three-percentage point decline in the cost of equity for these projects from 2011 to 2018.<sup>63</sup>

4.2.10 This decline, however, should not necessarily be taken as evidence of the decline in the cost of equity of markets generally nor energy networks in particular. It can equally be interpreted as investors becoming comfortable in their understanding of the mechanics and risks of OFTO investments. Given the structural differences in the ED, GD and T companies compared with OFTOs, along with the different legacy nature of the businesses, this is not a

<sup>57</sup> See, for example, NERA, "Cost of equity indexation using Risk Free Rate: a report for ENA", March 2019, p. 4. For underlying sources see: (1) The Pensions Regulator, DB Landscape November 2018; and (2) HM DMO Quarterly Review Oct-Dec 2018.

<sup>58</sup> Oxera, "Review of RIIO-2 finance issues: The estimation of beta and gearing", March 2019.

<sup>59</sup> Oxera, "Review of RIIO-2 finance issues: Asset risk premium and debt risk premium", March 2019.

<sup>60</sup> UKRN, "Estimating the cost of capital for implementation of price controls by UK Regulators", Appendix J, March 2018.

<sup>61</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, Figure 11.

<sup>62</sup> Oxera, "Review of RIIO-2 finance issues: Rates of return used by investment managers", March 2019.

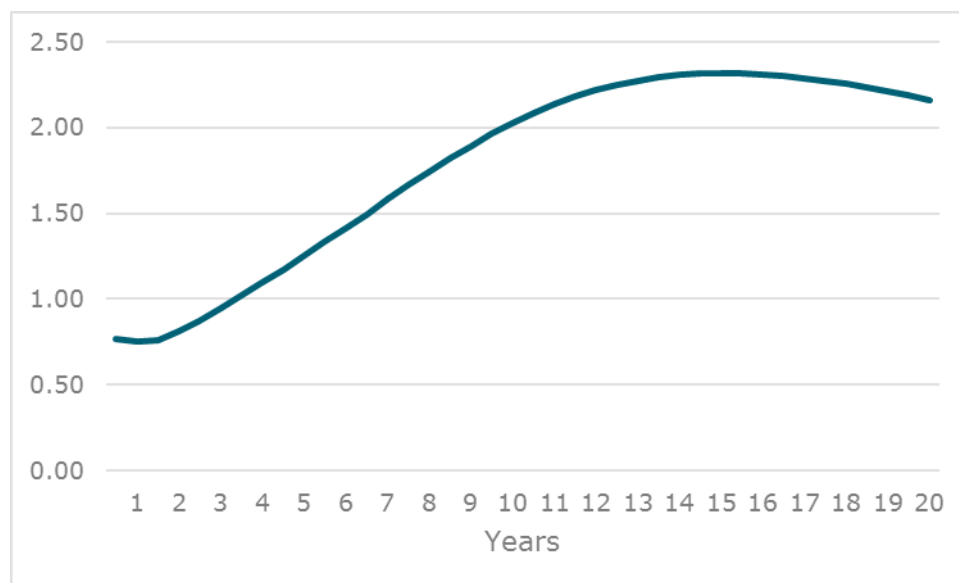
<sup>63</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, Figure 14.



like for like comparison.

- 4.2.11 Ofgem calculates that the latest 2017/18 OFTO projects (only three) appear to be yielding an average post-tax nominal equity IRR of 7.2%, and concludes this supports Ofgem's CAPM range of 6-7% post tax nominal cost of equity (i.e. 3-4% RPI real).<sup>64</sup> The first point to make is that 7.2% is nevertheless above Ofgem's proposed range of 6-7%. Furthermore, when we look at the average discount rates used by OFTO-investing infrastructure funds to value their infrastructure investments we see that 7.2% is the low end of a range extending up to 7.9% or, in the case of 3i Infrastructure, up to 10.2%.<sup>65</sup> However, even this low end is of questionable relevance. In the case of BBGI SICAV Ofgem's quoted discount figure of 7.2% is the low end of a range from 7.2-9.5% with a weighted average of 7.45%.<sup>66</sup>
- 4.2.12 Ofgem argues that OFTO investments should be relatively low risk within these funds (especially in the case of 3i Infrastructure), but there is no evidence to support this as infrastructure itself tends to be regarded as a low risk long-term investment. It follows that these discount rates of 7.2-10.2% support a real RPI post-tax cost of equity of 4.0-6.9%,<sup>67</sup> compared to Ofgem's range of 3-4%.
- 4.2.13 More fundamentally, WPD questions the legitimacy of these funds as benchmarks of equity risk in energy networks more generally. As Ofgem itself recognises, all the infrastructure funds listed are closed end funds.<sup>68</sup> Closed end funds have a limited investment horizon that will typically be shorter than the generality of investors in energy networks. Current interest rate yield curves show an expectation that rates will rise reaching a peak in 15-20 years – see Figure 4.1. It is to be expected, therefore, that these closed end funds will use a lower discount rate than would be appropriate to investors in the generality of energy networks.

**Figure 4.1: Forward curve of UK gilt rates**



Source: Bank of England

- 4.2.14 Finally, if Ofgem continues to propose a sudden and large reduction in the cost of equity, other parameters of the WACC calculation will take on proportionally greater significance. This will include details of the debt indexation mechanism.

<sup>64</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, Figure 14.

<sup>65</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, Figure 14.

<sup>66</sup> "Annual Results Presentation", BBGI, March 2018, page 21, (available at: <http://www.bb-gi.com/~media/Files/B/BBGI/Attachments/PDFs/bbgi-2017-annual-results-presentation-update-09042018.pdf>)

<sup>67</sup> Deflating by Fisher's equation, using Ofgem's RPI assumptions of 3.07%; i.e.  $(1+0.072)/(1+0.0307)=1.040$  and  $(1+0.102)/(1+0.0307)=1.069$ .

<sup>68</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, para 3.139

- 4.2.15 The use of the iBoxx A/BBB should be reflective of a company's ratings and weighted as such. It is possible there should be more weighting towards BBB, particularly if the RIIO-2 settlement is likely to have a negative impact to ratings due to the financeability issues it has raised.
- 4.2.16 Furthermore, in previous regulatory decisions (by all regulators) debt issuance costs have received only a cursory analysis. However, as the WACC declines these costs will become an increasingly important component requiring a full bottom-up analysis of:
- New debt issuance premiums;
  - Professional fees for corporate finance and legal professionals;
  - Audit fees;
  - IPA (Issuing and Payment Agent) fees;
  - Rating agency fees;
  - Arrangement fees;
  - Roadshow costs; and
  - Bookrunner and underwriter fees.
- 4.2.17 In addition, the true cost of other components of the overall debt platforms costs need to be explicitly quantified. For example, the true costs of maintaining essential revolving credit facilities has never been explicitly included in the regulatory financing cost base, but if Ofgem intends to proceed with its proposal, it must now be considered in a more rigorous analysis of the liquidity margins that are needed in practice by companies. Currently the cost of debt methodology takes no explicit account of these cost of debt factors.
- 4.2.18 These factors should all be taken into account in calibrating a regulatory debt index. They are not offset by any so-called utility "halo" benefit claimed by CEPA's earlier reports. Work by NERA has clearly shown that any estimates of a such a factor result from CEPA's use of the coupon as its measure of the cost of debt, CEPA's failure to correctly control for bonds' rating at issue, and in the case of indexed linked debt most of the outperformance is from before 2010 when the index linked market was distorted by the New Pension Regulation.
- 4.2.19 As a final issue of cost of debt, we find it surprising that there is no reference to the current RIIO-1 inconsistency of indexation formulae between ET, GT, GD and WPD (the fast track ED company) on the one hand, and all other (slow-track) EDs. This is a substantive issue for WPD as all the other DNOs benefit from a higher allowed cost of debt than WPD – not because WPD is inefficient, but simply due to its allowed debt not being calculated using the "tromboning" mechanisms adopted by Ofgem for the slow-track DNOs, which would have better aligned with the actual cost of debt WPD incurs. (The average tenor of WPD debt broadly aligns with that of the other ED companies.)

### ***Distinction between the Expected Return and the Allowed Return***

- 4.2.20 The ENA has commissioned a report from Frontier Economics that looks at this issue in detail.<sup>69</sup> The first point to note from Frontier's research is that reducing the AR (Allowed

<sup>69</sup> Frontier Economics, "Adjusting Baseline Returns for Anticipated Outperformance: An assessment of Ofgem's proposals", March 2019.

Return) below the ER (Expected Return) is counter to existing regulatory practice, whereby regulators typically “aim-up” the cost of capital. This approach has been endorsed by both regulators and the CMA.<sup>70</sup> The reason for this is that if the cost of equity is set too high shareholders will be over-rewarded and customers will pay more than they should. However, this can be regarded as a necessary cost of ensuring that there are sufficient incentives to invest, because if the cost of equity is set too low, there may be underinvestment or potentially costly financial distress. Most importantly, it is difficult for a regulator to reduce the risks of underinvestment within a regulatory period. Ofgem is now attempting to reverse this logic, and consequently will risk underinvestment and/or financeability of the companies.

- 4.2.21 The reduction of the AR below the ER lacks (i) theoretical relevance; and (ii) empirical underpinning. So far as WPD is aware, this proposal has never been implemented by any UK sectoral regulator in any price control.
- 4.2.22 The theoretical argument for an AR below the ER is that information asymmetries mean that investors expect to outperform the allowed return in the settlement, either through outperforming the Totex forecasts, or various payments under cost efficiency and output incentive regimes.
- 4.2.23 However, in a well-designed RIIO-2 this should not happen – the risks of over/underperformance should be equally balanced around the allowed return, undermining the theoretical justification for the ER - AR distinction. Moreover, any incentive based regulatory regime should yield higher returns as an incentive to cut costs, innovate and deliver the outputs demanded by consumers.
- 4.2.24 Even if the theoretical basis for an ER - AR adjustment was to be accepted (which it should not be), it is not at all clear how the adjustment should be calibrated. Making an arbitrary adjustment based on outperformance in previous regulatory periods is wholly inappropriate since RIIO-2 will make changes to the regulatory regime in a way that will affect expectations, including fundamental changes to risk sharing. This is especially true since none of the methodologies for closing out the existing RIIO-1 price controls have yet been finalised by Ofgem.
- 4.2.25 It follows that Ofgem’s analysis in the Finance Annex (Appendix 4) from prior energy sector regimes, and more so from regimes in the water sector, does not seem sensible. Even if RIIO-1 performance were to be used as relevant evidence, Ofgem needs to undertake a much more comprehensive analysis taking account of all close-out adjustments that will be made at the end of the period.
- 4.2.26 In addition, Appendix 4 excludes the over/under recovery of debt costs in the RoRE computations even though the equity return is absolutely benefited or hurt by such over or under recovery of debt costs. WPD is expected to under-recover approximately £175-240m over RIIO-ED1, which brings the expected return down by around 0.8%, and WPD is the only fast-tracked company in RIIO-ED1 and we are meeting all of our outputs.
- 4.2.27 In the consultation Ofgem says it will use “regulatory discretion” and makes a “working assumption” that the adjustment should be equivalent to the difference between the mid-point and low end of the expected cost of equity range. However, this working assumption bears no relation to Ofgem’s justification of counterbalancing supposed information asymmetries.

<sup>70</sup>

For example, see Competition Commission, A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd), September 2007. See page 49., [https://webarchive.nationalarchives.gov.uk/20111202214947/http://www.competition-commission.org.uk/rep\\_pub/reports/2007/fulltext/532.pdf](https://webarchive.nationalarchives.gov.uk/20111202214947/http://www.competition-commission.org.uk/rep_pub/reports/2007/fulltext/532.pdf)

4.2.28 Based on our assessment of the published RIIO-T2/GD2 proposals, we consider RoRE ranges are likely to be skewed to the downside, given the limited upsides in the proposed incentive package and Ofgem's proposals for Totex sharing factors and Output Delivery Incentives (ODIs). For example:

- The indicative matrix for business plan categorisation is asymmetric by fixing the Totex penalties for poor quality plans (1% and 2% for low value and poor value costs respectively), but only offering these percentages as "maximum" rewards for the equivalent good quality plans, with the total being split (i.e. diluted) between the companies with good quality plans. As we understand the proposals, this asymmetry and dilution will be particularly severe in sectors with larger numbers of companies (e.g. ED).<sup>71</sup>
- ODIs for RIIO-T2 and RIIO-GD2 appear to be mostly either penalty only or reputation incentives, with few offering rewards, and those that do appear to offer significantly less than the opportunities in RIIO-1. Reputation incentives do not reward shareholders in terms of greater profits. For example, for RIIO-T2 Ofgem's ODI proposals are a mixture of "reward and penalty" (e.g. coordination and information sharing incentives to enable whole system outcomes<sup>72</sup>) and "penalty only" (e.g. TO's timely connections<sup>73</sup>). There are no "reward only" ODIs. This suggests that the package of ODIs in all sectors may be skewed to the downside.
- Ofgem highlights the barriers to whole system integration as being appropriate incentives, information, behaviours and processes. Its proposed solutions include: (i) use of the Business Plan incentive requiring evidence of solid plans and processes for joint planning with other network companies, including comprehensive engagement with and endorsement with stakeholders; and (ii) introducing a coordination and information sharing incentive with penalties/rewards for additional analysis/cooperation with other companies. The potential threshold for reward under the above needs to be considered in the context of the whole system licence condition that Ofgem is currently consulting on which sets as a baseline that companies must "take all appropriate steps to engage, coordinate and share information including, where appropriate, with other stakeholders." Accordingly, there is a risk that these incentives will be penalty driven rather than reward driven as compliance with the licence condition is a baseline.

4.2.29 Frontier Economics<sup>74</sup> also provide their own detailed critique of Ofgem's proposed downward adjustment to allowed returns. Frontier explain the CMA's regulatory precedent for "aiming-up" rather than "aiming-down" the allowed return in order to ensure that consumers receive the benefit from investment. They also explain how Ofgem has:

- misrepresented the historical data on past outperformance by selectively concentrating on more recent periods;
- ignored reasons why outperformance in RIIO-2 is less likely than RIIO-1 (not least because of the shorter duration, tighter calibration of targets, dynamic target setting, lower incentive rates and RAMs); and
- appear not to consider that price caps target can and have been set symmetrically.

<sup>71</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Table 2.

<sup>72</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, paras 5.29 to 5.30.

<sup>73</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Electricity Transmission Annex, paras 3.56 to 3.59.

<sup>74</sup> Frontier Economics, "Adjusting Baseline Returns for Anticipated Outperformance: An assessment of Ofgem's proposals", March 2019.

4.2.30 However, irrespective of the balance of possibilities for under or over performance, Ofgem seems to imply that taking the bottom end of the expected CAPM range is acceptable since the resulting AR remains within the range. The implication is that this is still an acceptable return for investors. However, this is a mis-characterisation of the CAPM cost of equity range. The range in fact represents uncertainty over the CAPM inputs – not an acceptable range for investors. The bottom end of this range is only acceptable as a cost of equity if all the low-end assumptions that support this figure are also simultaneously valid. It can in no way be considered a central estimate of the AR, which is built on an entirely different justification of expected asymmetries in the regulatory incentives.

### ***Balance of rewards and penalties are inconsistent with AR vs. ER***

4.2.31 A major inconsistency in Ofgem's proposals is:

- On the one hand, Ofgem states that expected returns (ER) are above allowed returns (AR);
- On the other, the weight of its proposals point to the reverse.

4.2.32 For example, as described above, ODIs for RIIO-T2 and RIIO-GD2 are mostly either penalty only or reputation incentives, with few offering rewards, and those that do offer rewards, appear to offer significantly less than the opportunities in RIIO-1. This suggests that the package of ODIs in all sectors may be skewed to the downside.

4.2.33 A further example exists in Ofgem's NARM suggestion that "where a company fails to deliver its output target, we propose that it will lose the associated cost allowance. If the company fails to justify its under-delivery, we propose that it will be penalised by an amount equivalent to the monetised risk benefit that consumers have lost as a result of under-delivery in excess of the cost allowances clawed back".<sup>75</sup> Where companies over-deliver Ofgem is suggesting that they are exposed to the Totex Incentive Mechanism (unless material consumer value can be demonstrated and then cost neutrality may apply). This is clearly a skewed incentive with downside penalty being more onerous than the cost recovery available for over-delivery of outputs benefiting consumers. This imbalance needs to be addressed.<sup>76</sup>

4.2.34 Ofgem needs to make explicit the RoRE range it is targeting for good and bad performance, and where in this range the expected and allowed returns lie. This is essential in order to ensure that there is no inconsistency in approach between the incentive regime and the allowed cost of equity relative to the expectations.

## **4.3 Financing**

4.3.1 We remain of the view that Ofgem should adequately consider its statutory duty to ensure the financing of the individual licensees and so its Option B (onus entirely on the company to find solution to any financeability issue – even if it is directly caused by the magnitude of the allowed cost of equity reduction) is not a legitimate option, and is one which serves only to increase the risk to equity and consequently the cost of equity.

4.3.2 Ofgem recognises that:

<sup>75</sup> "RIIO-2 Sector Specific Methodology", *Ofgem*, December 2018, paragraph 6.40 of the Consultation Document.

<sup>76</sup> In paragraphs 5.1.131 to 5.1.136 we make our own proposal for a symmetric approach to NARMs rewards and penalties.

*"... if the cost of debt falls more slowly than the cost of equity ( ... ), then the reduction to company cashflows due to a lower cost of equity may affect its ability to make interest payments. In the absence of some offsetting action from the companies or Ofgem, this could impact ratings. A sharp reduction in the cost of equity in RIIO-2 therefore could, in the absence of some offsetting action, make it more challenging for companies to maintain strong credit ratings."*<sup>77</sup>

- 4.3.3 We discuss below Ofgem's proposal for "offsetting action". However, our principal point is that financeability should not be a trigger for such action, but rather it should be one of the critical cross checks of whether the allowed cost of equity is correct, allowing for debt gearing within a reasonable range around Ofgem's notional gearing assumption.
- 4.3.4 In the short term this risk is masked by Ofgem's decision to move from RPI to CPIH indexation of the RAV. We have two concerns with this immediate switch. Firstly, Ofgem has not provided any assurance in its proposals that this switch will indeed be NPV-neutral with respect to true-ups between RPI and CPIH forecasts and indexation.
- 4.3.5 Secondly, the cash flow benefit from a notionally higher CPIH WACC compared to an RPI WACC provides only a short to medium term easing of financing constraints that will dwindle over time with lower RAV growth – providing even less cash to service debt in the long term. The underlying issue is that in the long-term a 4% CPIH real cost of equity could challenge companies' current credit ratings.
- 4.3.6 Ofgem's principal proposal for its own action to address the financeability risk is what it calls a Liquidity Based Cash Flow Floor. This is also only a temporary solution – essentially a mechanism whereby if a company's debt servicing problems triggers a Cash Support Status (CSS), dividends are locked up and any additional funds required are temporarily bought forward in higher customer charges spread across the sector (Cash Top Up – CTU), and eventually repaid to customers by the company at an interest rate equal to the WACC.
- 4.3.7 The ENA has commissioned a detailed report from KPMG to assess Ofgem's proposal for the cashflow floor mechanism, and WPD support the conclusions of this report:<sup>78</sup>
- Ofgem's proposed mechanism appears to be a response to licensee financeability risk created by Ofgem's own decision to materially reduce the cost of equity, rather than a response to any identified market failure. Good regulation should focus on addressing market failures.
  - A cashflow floor intervention would be inconsistent with the outcome of a competitive market (which good regulation is intended to mimic). In a competitive market where there is perceived to be a risk that cashflows will be insufficient to finance the operation, the required equity return would adjust. In the context here, the required return on equity would not fall to such a level as to endanger financeability.
  - KPMG's stylised modelling shows that the mechanism proposed by Ofgem, which essentially brings revenue forward, can only improve liquidity of a company in the short term. It will not improve the creditworthiness of a business on a sustainable basis over the medium term.
  - If short term liquidity were the issue that Ofgem is seeking to solve by the cashflow floor mechanism, then it should be expected that financial markets themselves could provide

<sup>77</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, Finance Annex, paragraphs 4.4 to 4.5.

<sup>78</sup> KPMG, "Assessment of Ofgem's Cashflow Floor Proposals", March 2019.

an equivalent solution (e.g. through temporarily extending liquidity to the company), provided that the company was inherently solvent over the medium term. In this case Ofgem's mechanism would be redundant.

- If Ofgem is concerned about a medium-term risk to financeability, the proposed cashflow floor mechanism will not provide a solution – this can only be done by revisiting the required equity return in the light of the financeability risk.
- It becomes apparent, therefore, that the proposed cash floor mechanism undermines the role of financeability as a cross-check and necessary constraint on Ofgem's overall cost of capital determination.
- Finally, the cashflow floor is likely to have negative implications for incentives. This will happen when, in the knowledge that annual debt service is protected by the mechanism, there will be a reduced incentive for lenders to monitor companies where financial or operational performance is deteriorating.

4.3.8 As highlighted in the KPMG report, the introduction of a cashflow floor would also run contrary to the general approach to tax policy and the regulation of financial markets, where typically the aim is to avoid favouring one type of capital over another.

4.3.9 Therefore, our concerns are that:

- The cashflow floor implicitly assumes that any financing problems are due to a company's profligate dividend policy, rather than Ofgem's insufficient regulated return on equity.
- It assumes that any financeability issues are temporary. Shifting revenues forward is at the expense of future profits and will not address the financeability problem in the long term (as shown by KPMG's stylistic modelling referenced above).
- It gives Ofgem the perception that it can set a low cost of equity without having to be concerned about the downside risk to company financeability. However, investors will perceive the risk of a dividend lock-up as a pure downside risk to their return on equity and be unwilling to provide any equity injection, thus exacerbating the problem even in the short term.
- There is a risk of contagion if one company in the sector fails financially. Placing an additional financial obligation on all other companies in the sector, potentially puts at risk financing of other weaker companies.
- Ofgem asserts that the cashflow floor will "provide stronger credit support than other variants as it should protect against payment default".<sup>79</sup> This may be true if only one company required support in an otherwise financially strong sector. However, the scheme is exposed to risk of contagion if sectoral trends mean a number of companies require support, creating additional cash demands on the remaining companies to support the scheme. Indeed, if the main risk factors are the cost of capital being set too low or RIIO being redesigned so that operators face asymmetric risks, then the likelihood is multiple operators will face financing issues at similar times, when network operators' cash flows are also needed to fund major operating and capital

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<sup>79</sup> "RIIO-2 Sector Specific Methodology", Ofgem, December 2018, 3.59., paragraph 10.5 (first bullet point (2<sup>nd</sup> occurrence due to Ofgem document paragraph numbering error)).



expenditure programmes. The scheme, if implemented, will contribute to a negative credit outlook for the sector.

- It does not seem appropriate that customers of all companies should contribute to the CTU. If a company's CSS is the result of an over ambitious business plan, customers of other companies would be paying for a benefit received by customers of the CSS company.
- Ofgem propose to escalate the CTU by more than the WACC in the event that a company has a high gearing (relative to notional). This seems to move away from the concept that companies are free to choose their own financial structures, which has always been a fundamental principle of economic regulation in the UK – allowing companies to innovate in funding models – but strictly at the risk of their own shareholders.

4.3.10 The key to any financeability risk should be to encourage equity investment through a realistic cost of equity. The Liquidity Based Cash Floor does the opposite of this by threatening a dividend lock-up.

## **4.4 Allocation of risk and reward**

4.4.1 Ofgem's proposals for RIIO-2 have fundamental implications for the allocation of risk and reward, and the consequential strength of incentives for the sector. We focus on two of these:

- (a) blended sharing factors; and
- (b) Returns Adjustment Mechanism (RAM).

### ***Blended sharing factors***

4.4.2 Sharing factors for Totex are an important part of the energy network sector regulatory regime. As well as being important to the incentive properties of the regime (discussed above), they are also important in determining the balance of risk and reward between companies and customers. As such, we strongly support their retention.

4.4.3 If Ofgem is going to abolish the IQI then some other approach will be required to set these factors. In principle, Ofgem's methodology for blended sharing factors, whereby the strength of the sharing factor relates to the robustness of the underlying expenditure forecast, has theoretical appeal.

4.4.4 In practice, the strength of the sharing factor will be critical. As Ofgem correctly say:

*"If we set the sharing factors too low, the 'price' consumers have to bear when companies underspend may be higher than required. If we set sharing factors too high, then companies may not invest effort in finding cost efficiencies or may choose to capitalise expenditure when it is not in consumers' benefit".*<sup>80</sup>

4.4.5 We agree with this characterisation of the issue but conclude that it should suggest to Ofgem a presumption on sharing factors over 50%. To see this, consider the consequences of respectively setting the sharing factors either too high or too low:

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"RIIO-2 Sector Specific Methodology", Ofgem, December 2018, paragraph 9.58



- Setting sharing factors high will mean that companies are highly incentivised to seek efficiencies. Companies will retain a high proportion of the benefit in the existing price control, but upon entering the new price control targets will be reset passing the whole of the benefit to consumers in a lower allowed revenue for the company. In the long-term, consumers will unambiguously benefit from more efficient companies;
- Setting sharing factors too low will be a temporary loss to consumers if the company achieves higher savings, and a temporary gain to consumers if the company fails to make expected savings. This is a symmetrical effect and if the Totex targets have been accurately set will represent neither an expected gain or loss to consumers. Further, it is only a temporary benefit or loss until the end of the price control when allowed revenue will be reset. Most importantly, the companies will not have been exposed to strong incentives to make efficiency savings and this will be an enduring loss to consumers perpetuating into the next price control period.

4.4.6 Ofgem should be more concerned about incentivising long term efficiency than to distributing money back to consumers at the earliest opportunity.

4.4.7 Finally, heading into RIIO-2 Ofgem will have gathered significant historical cost, volume and output data from the Licensees under previous price controls. Ofgem should be able to utilise this data, at both a totex and disaggregated level, to gain assurance over the levels of expected cost for specific outputs. It is only likely to be new costs, which were previously covered by uncertainty mechanisms in RIIO-1, where the level of assurance on either volumes or unit costs may differ. This again challenges the need for different sharing factors on different cost activities.

#### ***Returns Adjustment Mechanisms (RAM)***

4.4.8 RAMs have both incentive and risk allocation properties. We have already discussed how RAMs will dull incentives – especially since they penalise the combined impact of efficiency, service quality, innovation – accentuated with a shorter price cap length (see paragraph 4.4.26).

4.4.9 We are surprised that Ofgem is proposing to introduce RAMs at this time. As we have already discussed in Section 2 much of the perceived out-performance issue of RIIO-1 was associated with RPEs. RIIO-2 will introduce indexation of these effects, as well as a shorter price control, and so largely remove this source of forecasting error. This will reduce the need for RAMs, and certainly for relative performance (Class 2) RAMs where RPEs would previously have been responsible for the sector out-performing as a whole.

4.4.10 We are particularly concerned about Ofgem’s proposals for “anchoring” the returns adjustment around a sector average performance so that relative rather than absolute performance is rewarded. Conceptually relative performance assessments may be appealing to try to synthesise rivalry between companies as would exist in a traditional market; companies that perform better win customers, gain market share and thereby increase their revenue. In theory, a similar outcome can be created through performance measures that allow top performing companies to earn higher revenues. The success of such a mechanism depends on how it is structured (e.g. what is the benchmark for performance and how the reward/penalty balance operates) and how it interacts with the incentives created by the broader regulatory framework. Setting fixed targets based upon comparative assessment can provide challenging targets, with the added benefit that companies have clarity on what is required to deliver outperformance. The use of relative assessment and the proposal for anchoring should be avoided.

- 4.4.11 Therefore, if RAMs are to be introduced, we are of the view that companies should be rewarded for absolute (Class 1), and not relative (Class 2) performance. An absolute incentive target allows companies to make investments based on more certainty as to the likely returns. Investors are ultimately interested in absolute return. They are not primarily interested in relative return compared to peers within a part of the UK energy network sector. The lack of such certainty on absolute return in a relative scheme may attempt to mimic a competitive market between energy networks, but also may easily undermine the investment case by increasing risk (since it will make returns less certain, and less under the control of one company), and in turn raise the underlying cost of equity in these networks.
- 4.4.12 Moreover, depending on system design, poor performing companies may lower the relative benchmark giving windfall gains to average performance companies. Conversely, if a company benefits from a change to its own local operating environment that is unavailable to other companies, the benchmark will be raised penalising all other companies.<sup>81</sup>
- 4.4.13 Ofgem should also be aware that since ODI (Outcome Delivery Incentives) and PCD (Price Control Deliverables) rewards/penalties will be included within the returns captured by RAMs, the reward pot needs to be larger where relative performance against an anchor is used, because outperformance is more difficult and uncertain compared to an absolute scheme. This is because network operators will need to perform against an uncertain moving target that is not visible in advance of their making decisions. Similarly, more favourable sharing ratios will be required on the Totex Incentive Mechanism in order to counteract the compounding effect of RAMs.
- 4.4.14 For the reasons given above we prefer an absolute scheme. If, however, Ofgem still wish to introduce a relative scheme there are other issues of detail that need to be addressed. Ofgem notes concerns that anchoring could have a disproportionate impact on individual companies that are not performing significantly above their allowed return in a sector that is significantly outperforming expectations, and so propose options for further adjustment:<sup>82</sup>
- Option 1: Only adjust downward companies outperforming sector average upper threshold; or only adjust upwards companies underperforming sector average lower threshold;
  - Option 2: Not adjusting any company downward below its base cost of equity or not adjusting companies upwards if they perform above their base cost of equity (Ofgem's preferred approach).
- 4.4.15 Whilst we appreciate Ofgem's attempt to ameliorate the disproportionate impact identified on companies whose performance does not match that of the rest of the sector, both these adjustments as described by Ofgem are problematic for incentives at the boundary of where adjustments take place. For example, consider a company making a pre-adjustment RoRE of 4% against an illustrative cost of equity of 3%,<sup>83</sup> in a sector where the average performance is 8% against an upper threshold of 6%. The relative adjustment stipulates that returns are adjusted down by a factor of a quarter, in order to bring the sector average back down to 6%. For the poor performing company, under Option 2, this would mean an adjustment from 4% back to 3% (its cost of equity). However, this would be the same return allowed to the company whatever its unadjusted performance is anywhere within the range of 3-4%, thus

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<sup>81</sup> For example, this may be a favourable change to the local labour market that will not be picked up by national indexation of labour costs RPEs, and so will provide a windfall gain to the company operating in that local area, at the expense of all other companies.

<sup>82</sup> "RIIO-2 Sector Specific Methodology", *Ofgem*, December 2018, paragraph 10.79.

<sup>83</sup> We use a 3% cost of equity since it aligns with Ofgem's illustrative examples of RAMs – this does not indicate any agreement.

removing all incentives for the company (in any of the Totex, PCD or ODI schemes) whenever its overall RoRE is within this range. A similar effect could occur under Option 1.

4.4.16 Perhaps in recognition of these points, Ofgem envisages that the RAM will be activated when returns for the company or the sector exceed (or fall short) of a threshold. Setting any such threshold is key. If the threshold is set too low, it will undermine the incentives for companies to achieve efficiencies and improve their performance (to the detriment of the consumer). If the threshold is set too high, it becomes redundant. Ofgem has not provided any indication of the RoRE range anticipated for RIIO-2, apart from suggesting the RAMs, which are set at +/- 3 percentage points of RoRE, are “unlikely to be triggered” and so can be regarded as a fail-safe. Ofgem still needs to provide a robust justification of this range.

4.4.17 Whilst we understand that Ofgem’s numerical examples of how RAMs would work are illustrative, we have undertaken some modelling to show the overall impact that a RAMs approach would have on incentives. We have modelled the combined impact of Ofgem’s proposals for Totex sharing and RAMs. Details of the model are provided in Appendix 1. We have assumed a central figure of 32.5% for the blended Totex sharing rate.<sup>84</sup> For RAMs, we have assumed the same parameters as Ofgem for illustrative purposes.<sup>85</sup> We have calibrated the model on the 14 DNO licensees with data for 2016/17.

4.4.18 The model calculates the increase in return (after both Totex and RAM adjustments) that an individual company (we take EMID for illustrative purposes) would receive if it were to make a cost saving (with costs for all other companies held constant). We then calculate an “incentive factor” as:

$$\text{Incentive factor} = \frac{\text{Increase in return after all regulatory adjustments}}{\text{Saving in totex generated}}$$

4.4.19 An incentive factor of one would mean that the company retains all the cost savings it makes, whilst a factor of zero would mean it receives no benefit. Table 4.1 shows a sample of our results for the three different RAMs options discussed by Ofgem:

- (a) Class 1 Individual Sculpting: where a 50% adjustment is applied to the returns of the company when it exceeds a +/-3% threshold, and a further 25% when it exceeds a +/-4.5% intense threshold. This is an absolute adjustment independent of the performance of any other companies;
- (b) Class 2 Industry Average Sculpting: where either a 50% or 75% adjustment is applied to returns of companies when the industry average return passes the defined thresholds. Accordingly, the adjustment is dependent on industry average performance; and
- (c) Class 2 Anchoring: where company returns are scaled up or down whenever the industry average returns passes the defined thresholds. This is thus a relative performance adjustment.

4.4.20 For example, within the threshold before RAM adjustments apply, reducing costs by £1 leads to 32.5p benefits for the network operator under all three scenarios. With individual and average sculpting, this falls to 16.25p above the first upper threshold and then 8.125p under the second. With anchoring, where returns are scaled back to (or up to) the upper (lower)

<sup>84</sup> Ofgem is proposing setting a 15-50% range for each cost component.

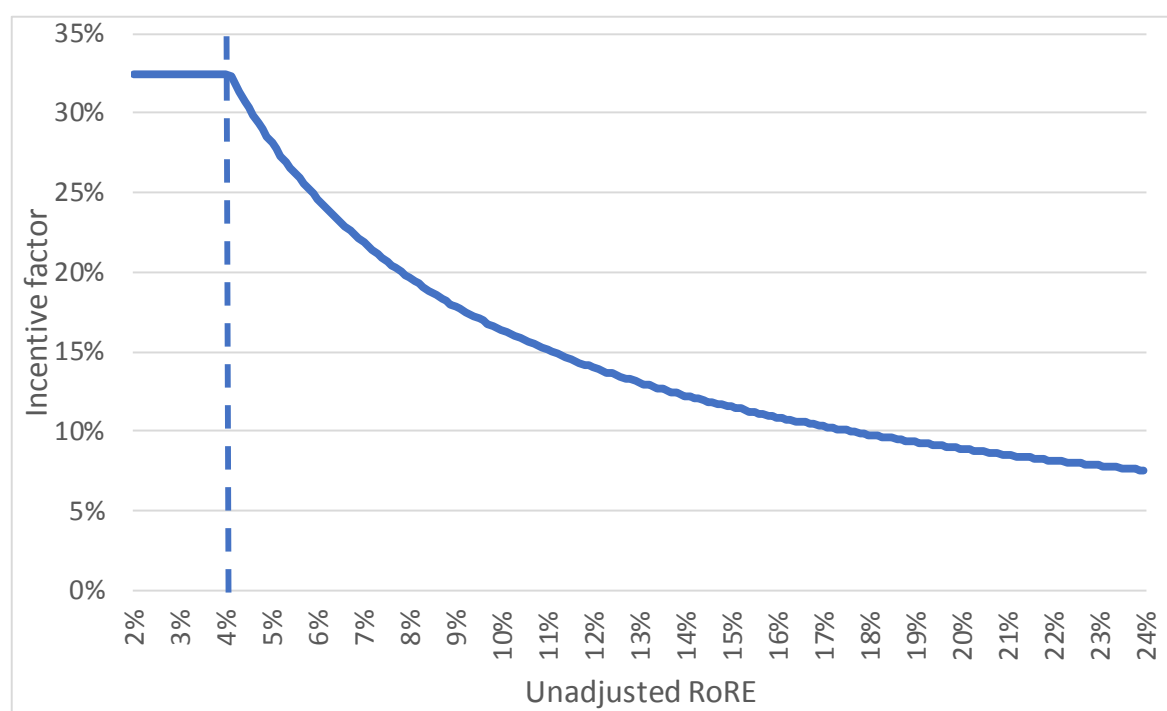
<sup>85</sup> Cost of capital of 3%, thresholds of +/-3%, intense thresholds of +/-4.5%, sharing rate of 50%, intense sharing rate of 75%.

threshold, and the incentive factor decreases the higher the return made by the individual company.

**Table 4.1: Incentive factors**

Company/sector performance	Class 1: Individual Sculpting	Class 2: Industry Average Sculpting	Class 2: Anchoring <sup>86</sup>
Below intense upper threshold	8.1%	8.1%	See chart
Below upper threshold	16.3%	16.3%	
Within threshold	32.5%	32.5%	32.5%
Above upper threshold	16.3%	16.3%	See chart
Above intense upper threshold	8.1%	8.1%	

**Figure 4.2: Incentive factor for Class 2 Anchoring for EMID**



Note: In the example in this graph (EMID based on 2016/7 data) the incentive factor declines from a RoRE of only 4% (compared to the threshold of 6%). This is because EMID's RoRE is underperforming the sector average by 2% - as the sector average is being pulled up by outperformance on Totex mostly by LPN, SPN and EPN (related to delayed expenditure by these companies).

- 4.4.23 These results show the disincentive properties of overlaying a RAMs scheme (of any type) on energy networks. Any RAMs approach will reduce incentives for the sector to outperform.
- 4.4.24 However, under Class 2 RAMs there is an additional disincentive that will apply to companies in a sector where a small group of individual companies is skewing the average return above the threshold through action such as delaying expenditure. In this situation all companies in the sector potentially will be penalised by hitting the RAMs threshold at a lower level as shown in

**Figure 4.2 above (e.g. 4% instead of 6%). We understand that it is not Ofgem's intention to apply a higher RoRE reduction to a good performing company if the**

<sup>86</sup> Anchoring is the name of Ofgem's proposal for relative RAMs adjustments (i.e. companies' adjusted returns relative to sector average returns).

**average is distorted by a company that has achieved a higher RoRE through delaying expenditure or some other means not related to performance. However, as shown in**

- 4.4.25 Figure 4.2 this is what will happen under Class 2 schemes as presently proposed.
- 4.4.26 Table 4.2 shows the sharing rates used in RIIO-1 and also Ofwat's PR19. All are materially above those effectively proposed by Ofgem for RIIO-2.

**Table 4.2: Incentive factors for RIIO-1 and PR19**

	Proportion of Totex over/underspend retained by company
Ofgem: RIIO-ET1	47-50%
Ofgem: RIIO-GT1	44%
Ofgem: RIIO-ED1 – fast track	70%
Ofgem: RIIO-ED1 – slow track	53-58%
Ofgem: RIIO-GD1	63-64%
Ofwat: PR19 standard ratio for a business plan with forecasts aligned to Ofwat's view <sup>87</sup>	50%

Source: Ofgem and Ofwat.

- 4.4.27 Ofgem is proposing setting a 15-50% range for each cost component in calculating the blended average. We believe these rates to be too low. Ofgem's proposed RIIO-2 combined cost retention rates provide extremely weak incentives for companies not only to seek cost efficiencies, but also to perform through other proposed RIIO-2 incentives with financial rewards and/or penalties, namely PCDs and ODIs. This is because network operators keep little of any gains, and substantially less than was the case under RIIO-1 or PR19 for aligned forecasts. Table 4.1 above shows that under Ofgem's RIIO-2 proposals companies will retain between 8.1% and 32.5% of any cost savings. As highlighted in Table 4.2 this compares to between 44% and 70% retained in RIIO-1.
- 4.4.28 On top of this, the proposed shortening of the price control period to five years will further dampen incentives, since all possibility for over or underperformance will be reset with only five years and not eight. This effectively reduces all incentives by at least a further 37.5%.<sup>88</sup> The reduction may potentially be more than this as typically a larger proportion of the Totex incentive may be expected to occur in years 6-8, since we would expect the cumulative benefit of efficiency savings to become larger in later years.
- 4.4.29 WPD is concerned about the combined impact of RAMs along with the other weakened incentives proposed by Ofgem in RIIO-2. These changes would substantially reduce and possibly eliminate company incentives for cost efficiency and output delivery, particularly since achieving continuous performance improvements is challenging.
- 4.4.30 To conclude, we believe that, if Ofgem is intent upon a RAM scheme, it should always be an absolute performance design. Alternatively, the unintended negative consequences of RAMs could be ameliorated by reducing the adjustment factors in the RAMs from the illustrative assumptions currently used by Ofgem (50% and 75% for the standard and intense adjustment) to 25% and 50% respectively. We would strongly recommend that, if RAMs are to be introduced, Ofgem uses these lower percentages.

<sup>87</sup>

"PR19 final methodology webinar", Ofwat, 13 December 2017, page 16  
Three years out of eight (3/8 = 37.5%).

<sup>88</sup>

## 5 Responses to the consultation questions

### 5.1 Cross Sector

#### *Output categories questions*

**CSQ1. Do you have any view on our proposed approach for considering the extent to which a successful appeal has consequences, if any, on other components of the price control?**

- 5.1.1 The consequences of an appeal made to the Competition and Markets Authority should remain self-contained to the scope of the appeal.
- 5.1.2 If there are any consequential issues associated with the area being considered in an appeal then these should be incorporated within appeals proceedings. There should not be any post appeal adjustments for areas of the price control not considered during the appeal.
- 5.1.3 The appeal itself should consider maintaining a coherent regulatory settlement and therefore it is inappropriate for Ofgem to carry out additional adjustments to the price control arrangements not covered by the appeal.
- 5.1.4 The impact of any successful appeal should not be extended to any other licensee, unless that licensee has been specifically identified as potentially being impacted by an appeal. This will allow the potentially affected licensee to be involved in the appeals process, providing any supporting evidence necessary. It is wholly unacceptable for a licensee to be affected by an appeal, where it has not been directly involved with the appeals process.

**CSQ2. Do you agree with our proposed three new output categories?**

- 5.1.5 For the reasons set out at paragraphs 3.2.3 to 3.2.9, WPD does not support this change.
- 5.1.6 We have previously identified concerns about the potential confusion that will be caused for stakeholders in transitioning from the six RIIO-1 output categories to the proposed three outcome categories.
- 5.1.7 We are particularly concerned with the process that has been followed to arrive at this proposal, as there has been no previous formal industry-wide consultation with stakeholders on the change.
- 5.1.8 If following robust consultation and agreement from stakeholders, still Ofgem wish to move to three categories, both Ofgem and licensees should work towards ensuring that stakeholders understand what is covered by each of the new outcome categories.
- 5.1.9 The language describing the outputs/outcomes needs to be clarified. The terms 'outputs' and 'outcomes' appear to be used interchangeably. Going forward we propose that the term 'outcomes' should be used consistently, when describing the three generic delivery requirements. This will avoid confusion with 'Output Delivery Incentives' which will be focussed on specific measures (such as IIS in ED).
- 5.1.10 The outcomes should be described consistently. The following illustrates differences within the consultation document (differences are shown with underlining). In paragraph 2.9 of the consultation document the following descriptions are used:

- Improving the consumer and network user experience: Network companies must deliver a high quality and reliable service to all network users and consumers, including those that are in vulnerable situations.
- Supporting the energy system transition: Network companies must enable the transition to a low carbon, consumer-focussed energy system.
- Improving the network and its operation: Network companies must deliver a safe, sustainable and resilient network that is more responsive to change.

5.1.11 In the diagram associated with paragraph 4.6 the following descriptions are used

- Meet the needs of consumers and network users: Network companies must deliver a high quality and reliable service to all network users and consumers, including those that are in vulnerable situations.
- Deliver an environmentally sustainable network: Network companies must enable the transition towards a smart, flexible, low cost and low carbon energy system for all consumers and network users.
- Maintain a safe and resilient network: Network companies must deliver a safe and resilient network that is efficient and responsive to change.

5.1.12 We assume that the descriptions in paragraph 4.6 are the most recent versions of the outcomes and therefore make the following comments with reference to those.

5.1.13 The language of the outcomes appears to give instructions or obligations rather than describe what consumers receive. This is demonstrated by considering the use of the word 'must'. The word 'must' implies an obligation, with some form of consequence. This will not apply in all cases and therefore we propose the removal of the word 'must' and slight restructuring of the wording.

5.1.14 Furthermore, there are references to 'all'. It may be impractical or prohibitively expensive to meet the requirements in all circumstances or for all customers. We therefore propose that the word 'all' is removed.

5.1.15 The inclusion of 'low cost' within the transition requirements, suggests that networks are currently not low cost and that part of the energy system transition is to make them low cost in the future. We suggest that 'low cost' is removed in the transition requirements because efficiency is covered by 'maintain a safe and resilient network'.

5.1.16 The environmental requirements do not consider the impacts of licensees' activities on the environment (e.g. SF6 leakage, fluid cable leakage); they are solely focussed on the energy transition. We therefore suggest the addition of 'manage the impact of their activities on the environment'.

5.1.17 These changes result in the following proposed outcomes:

- Meet the needs of consumers and network users: Network companies deliver a high quality and reliable service to network users and consumers, including those that are in vulnerable situations.

- Deliver an environmentally sustainable network: Network companies manage the impact of their activities on the environment and enable the transition towards a smart, flexible and low carbon energy system for consumers and network users.
- Maintain a safe and resilient network: Network companies deliver a safe and resilient network that is efficient and responsive to change.

**CSQ3. Are there any other outcomes currently not captured within the three output categories which we should consider including?**

- 5.1.18 In the response to CSQ2 we highlight that the environmental requirements do not consider the impacts of licensees' activities on the environment (e.g. SF6 leakage, fluid cable leakage); they are solely focussed on energy transition.
- 5.1.19 We therefore suggest the addition of 'manage the impact of their activities on the environment' to the 'Deliver an environmentally sustainable network' outcome.
- 5.1.20 Within Business Plans, licensees commit to delivering a range of outputs for customers, many of which will not be captured by the proposed three element regulatory framework. For example:
- The specific WPD commitment to contact priority service register customers every two years to ensure records are kept up to date goes beyond the licence obligation to establish and maintain a priority service register; and
  - The specific WPD commitment to deal with 70% of complaints within one day is not covered by the complaints metric used within the Broad Measure of Customer Satisfaction ODI.
- 5.1.21 In addition, if PCDs are applied to numerous activities with forecast volumes, this restricts any flexibility licensees have for varying delivery of work programmes in response to changing network needs. There is therefore, as a minimum, a need for a fourth type of output, possibly called 'Additional Business Plan Commitments/Wider Commitments', which captures the extra activities and measures that licensees agree to deliver for their stakeholders. These may continue to be bespoke to licensees and continue to sit outside of regulatory incentives and clawback mechanisms.

**CSQ4. Do you agree with our proposed overarching framework for licence obligations, price control deliverables and output delivery incentives?**

- 5.1.22 The framework of the three elements needs further clarification to ensure that companies and stakeholders are clear on what each element covers and how it operates. This especially applies to Price Control Deliverables (PCDs).
- 5.1.23 The scope of application of PCDs is unclear.
- 5.1.24 In paragraph 4.20, Ofgem states that PCDs will not be applied to all cost categories. However, it also states that PCDs will be applied where there are clear deliverables identified. This suggests that any investment category that has volumes associated with it could fall under the PCD mechanism. Further clarification is required on the types of deliverable to be covered by PCDs.
- 5.1.25 Paragraph 4.21 suggests that PCD mechanisms will have an end of period assessment of delivery; which implies that close out calculations will be made to adjust for variance to forecasts. If PCDs are applied to all activity with forecast volumes, this restricts any



flexibility licensees have for varying delivery of work programmes in response to changing network need.

- 5.1.26 Furthermore, there is no suggestion of how any over-delivery (driven by network need) would be treated. There is a risk that under-delivery will be clawed back, but additional delivery will not be remunerated.
- 5.1.27 Having numerous close out assessments also adds complexity to the price control and would impact the timing of Revenue Adjustment Mechanisms (RAMs), assuming that close out adjustments for PCDs would need to be concluded ahead of any RAMs calculation.
- 5.1.28 Having the word 'Output' describing incentives could lead to confusion with outcomes. Given that there are changes being made to output categories, it may be prudent to remove the reference to 'Output' with the categorisation and simply call them 'Delivery Incentives'.
- 5.1.29 It is unclear whether Network Asset Risk Measures (NARMs) will be treated as PCDs or ODIs. NARMs will have clearly identified activity volumes with associated funding within the baseline allowances and therefore could be treated as PCDs. However, the NARMs processes described in chapter 6 suggest that there will be an asymmetric incentive arrangement with penalties potentially exceeding allowances; this leads to NARMs being an incentive rather than a deliverable. In the sector specific gas distribution methodology annex, the table associated with paragraph 5.5 shows NARMs as being both an ODI and PCD. How can one activity be covered by two separate mechanisms?

**CSQ5. Do you agree with our proposals to introduce dynamic and relative incentives, where appropriate? Are there any additional considerations not captured in our proposed framework which you think we should take into account?**

- 5.1.30 No. WPD does not support these proposals. See paragraphs 3.4.5 to 3.4.8 above.

#### **Progressive improvements**

- 5.1.31 We accept that, where progressive performance improvement is required, targets should not be static for the whole duration of the price control.
- 5.1.32 To achieve this progression, a pre-determined glide path is preferred because this gives greater visibility of future targets and allows companies time to plan progressive improvement programmes.
- 5.1.33 Any rebasing during the price control should be avoided because it does not give visibility of longer-term target objectives.

#### **Target setting**

- 5.1.34 The approach to setting targets is dependent on how similar the measures/activities are.
- 5.1.35 Where the measures are directly comparable (e.g. for customer service) all companies can be assigned the same target.
- 5.1.36 However, where network topography is an influencing factor on performance, targets should be based upon benchmarks that take network differences into account. For example, it would be inappropriate to give a company with a network constructed of overhead lines the same target as one with an underground cable network (because there would be different impacts of weather on performance).

- 5.1.37 Whether the targets are the same or based upon some form of benchmarking, both require a review of industry wide performance and for the targets to be set relative to that performance.

### **Performance Assessment**

- 5.1.38 Performance assessment should be based upon the licensee's own performance compared to the target. Having established challenging (and progressive) targets that represent relative performance, there should be clarity on how the performance of a licensee is rewarded.
- 5.1.39 There should not be any relative performance assessment to determine the amount of reward or penalty. Licensees do not have any control over the response taken by other companies and therefore they should not be influenced by their activity or inactivity. This issue is discussed further in chapter 3.
- 5.1.40 The focus should be on setting appropriately challenging targets, not adjusting potential rewards/penalties through relative performance assessment.

### **Framework table**

- 5.1.41 The following comments relate to the overarching framework table presented on page 29 of the consultation.

#### *Difference between Dynamic-absolute and Dynamic-relative targets*

- 5.1.42 Details of the two options for the dynamic-absolute and dynamic-relative targets are unclear.
- Both state that targets are set at the start of the price control.
  - Missing text from the dynamic-absolute option means that it not possible to determine whether both sets of targets are based upon the same source
    - Dynamic-absolute states 'either based on a company's own performance'
    - Dynamic-relative states 'either based on a company's own performance and/or frontier company'
  - Both state that the targets evolve to take account of sector performance
    - Dynamic-absolute states 'Evolve to take account of improvements in company's and/or sector performance'
    - Dynamic-relative states 'Evolve during the period to take account of improvements in performance across the sector'
  - Dynamic-absolute states that 'design implicitly assumes that year-on-year performance is achievable'. No equivalent comment for Dynamic-relative indicating that the latter may not lead to year-on-year improvements.
- 5.1.43 The cons cited for dynamic-absolute is that it does not capture sector-wide improvements in performance, but its description clearly states that it does (or at least can).
- 5.1.44 It is unclear whether dynamic-absolute refers to targets that only change relative to a company's own performance.

- 5.1.45 It is also unclear whether dynamic-absolute refers to targets that are set only at the start of the price control and have a specified glide path for the evolution of the targets.
- 5.1.46 It is unclear whether a dynamic-relative target at the start of the price control is based upon the company's own performance or sector performance, because reference is made to both the company and frontier company.
- 5.1.47 It is unclear why dynamic-relative references using the frontier company as the basis for relative targets; the targets could be based upon various criteria such as average, median, lower quartile, etc.

#### *Static Rewards*

- 5.1.48 One of the cons cited against static rewards relates to the ability to set targets at the right level of rewards. It suggests that there is a potential risk of significant outperformance as a result. It fails to recognise that incorrectly set targets could also lead to significantly under rewarding good performance.

#### *Static Penalties*

- 5.1.49 One of the cons cited relates to competition not being driven in the sector. This may be the case where the static targets are set using the company's own performance, but where static targets are set based upon sector performance there is competition because companies will try to outperform each other. For example, RIIO-ED1 customer satisfaction survey targets were set at 8.2 based upon industry performance; all companies have exceeded this target by competing against each other in order to be top of the league table.

#### *Dynamic Rewards*

- 5.1.50 A missing con from the dynamic rewards section is the lack of predictability of outcome for licensees.
- 5.1.51 A company may significantly outperform a target through adopting innovative practices and consequently may expect an appropriate level of reward. Relative assessment would dilute the level of this reward if other companies have made a similar level of improvement. This dilution is unknown until after the closure of performance assessment, removing any certainty about the level of the reward available.
- 5.1.52 This uncertainty makes it difficult to justify any proposed improvement investment because the benefits cannot be defined with certainty.

### **CSQ6. Do you agree with our proposals to allow network operators to propose bespoke outputs, in collaboration with their User Groups/ Customer Challenge Groups?**

- 5.1.53 Yes. Companies should be able to identify bespoke PCDs, given network topology, history and stakeholder support.
- 5.1.54 As discussed in the response to CSQ4 there is a need for further clarification on PCDs and their application to ensure that licensees only submit PCDs that would be acceptable.
- 5.1.55 There should be an option to submit PCDs that will start during a price control, rather than immediately at the start of the price control, because there could be emerging government legislation that could lead to a need to start work at some point in the future. It is unclear

from paragraph 4.41 whether this also includes proposing new PCDs during a price control or only making those proposals as part of initial business plan submissions.

**CSQ7. When assessing proposals for bespoke financial ODIs, are there any additional considerations not captured which we should be taking into account?**

- 5.1.56 The fourth criterion referred to in paragraph 4.39 checks the extent to which an independent measure is available. In many cases, bespoke ODIs (by their bespoke nature) will not have an independent measure available. Does this mean that any bespoke ODI without an independent measure would be rejected?
- 5.1.57 It may be prudent to include an alternative where the licensee provides the assurance of how performance will be measured.
- 5.1.58 This would thus revise fourth bullet in paragraph 4.39 as follows:
- The extent to which an independent measure (or assurance of the accuracy of the measure) of the existing level of service that consumers receive is available, and the degree to which the target level being proposed represents an improvement on this.

***Enabling whole system solutions questions***

**CSQ8. Do you feel we have defined the problem correctly?**

- 5.1.59 Whilst we agree that the four areas identified (incentives, information, behaviour and processes) are all areas that need to be addressed to enable greater whole system thinking and coordination, significant work is already underway. Via both the Open Networks project and within company actions, processes have been revised to seek whole electricity system solutions, use non-asset solutions and to identify and improve the data needed to support these processes.

**CSQ9. What views do you have on our proposed approach to adopt a narrow focus for whole systems in the RIIO-2 price control, as set out above?**

- 5.1.60 The potential changes in transport and heat are likely to have a significant impact on electricity networks and the electricity system as a whole, particularly if both move towards using electricity. Hence, whilst we understand the need to have a defined boundary to the scope of RIIO-2, there needs to be recognition of the impact other areas can have.
- 5.1.61 The industry often seems to use the terms “electricity networks” and “electricity system” interchangeably. The “electricity system” naturally incorporates generation and end use as well as networks. Changes in transport and heat will have significant impact on the electricity system not just networks. For example accessing end use flexibility can reduce the amount of network investment, but more significantly can reduce the amount of generation (and reserve) needed.

**CSQ10. Where might there be benefits through adopting a broader scope for some mechanisms? Please provide evidence.**

- 5.1.62 See response to CSQ9. In addition, a network solution (either flexibility or conventional build) that reduces the need for additional generating capacity should be able to access these savings. Our FREEDOM innovation project sets out:

... “The cost of ensuring continued security of supply with intermittent low carbon power runs into £billions per year if demand flexibility is not part of the solution. The Freedom Project has shown that by using smart control to manage flexible demand, it

is possible to significantly reduce energy systems costs by as much as £15 billion per year.”

**CSQ11. Do you have reasons and evidence to support or reject any of the possible mechanisms outlined in this chapter? Do you have views on how they should be designed to protect the interests of consumers?**

- 5.1.63 All of them have the potential to help address the potential barriers to whole system outcomes.

**CSQ12. Which of the possible mechanisms we have outlined above could pose regulatory risk, such as additionality payments or incentivising the wrong behaviour?**

- 5.1.64 All the suggested mechanisms improve the process of delivering whole system outcomes and hence improve the incentives to do so.

**CSQ13. Are there obstacles to transferring revenues between networks that disincentivise networks from using a coordinated solution (please give details and suggest any changes or solutions)?**

- 5.1.65 At present the only mechanism for transferring funds that has been successfully applied is the use of BSUoS to fund distribution activity to save balancing service costs. There is a degree of uncertainty as to whether such an approach can, or should, be used where the distribution activity would involve the installation of network assets requiring long term funding.
- 5.1.66 Funding routes are needed where lower cost solutions can be delivered to transmission network issues (particularly those for SQSS compliance) which require the transfer of TNUoS funds from the transmission system owner to distribution networks. In these circumstances, the regulatory funding and outputs should remain the responsibility of the transmission company.

**CSQ14. Can you recommend approaches that would better balance financial incentives between networks to enable whole system solutions?**

- 5.1.67 See response to CSQ13.

**CSQ15. Are there other mechanisms that we have not identified that we should consider (please give details)?**

- 5.1.68 None that we are aware of.

**CSQ16. Are there any additional framework-level whole system barriers or unlocked benefits, and if so, any price control mechanisms to address these?**

- 5.1.69 None that we are aware of.

**CSQ17. Are there any sector specific whole system barriers or unlocked benefits, and if so, any sector-specific price control mechanisms to address these?**

- 5.1.70 None that we are aware of.

**CSQ18. Which of the proposed mechanisms would be most suitable in circumstances where a broader definition of whole system is likely to deliver benefits to network consumers?**

- 5.1.71 Where action is needed on electricity networks to deliver benefits on other energy sectors then the whole system discretionary funding approach is likely to have the most flexibility to deal with this wider range of issues.

***Asset resilience questions***

**CSQ19. Do you agree with our proposals to use monetised risk as the primary basis for network companies to justify their investment proposals for their asset management activities?**

- 5.1.72 No. There are a number of issues that need to be resolved in order for monetised risk to be used as the primary basis for network company business plan justifications.
- 5.1.73 In paragraph 6.12, Ofgem states that companies have developed and implemented common methodologies to calculate monetised risk, but in footnote 28 Ofgem identifies that a number of sectors are still in the process of rebasing original RIIO-1 targets into monetised risk. This means that those sectors have not yet established RIIO-1 targets in terms of monetised risk and consequently there has not been any reporting or analysis in term of monetised risk. There is no track record or evidence in these sectors that the methodologies operate as intended. It is therefore inappropriate to consider using untested methodologies as the primary base for justification of business plan proposals.
- 5.1.74 The electricity distribution sector is in a slightly more advanced position having used common approaches for reporting for a number of years. Through application, licensees are gaining a greater knowledge of parameter and calculation sensitivities within the monetised risk measures. Whilst the measures are providing a good indication of delivery, there is a need to review the results in order to validate that the correct balance exists between asset categories.
- 5.1.75 Furthermore, the RIIO-1 licence obligations in electricity distribution that led to the development of the Common Network Asset Indices Methodology did not require that they were suitable for cost benefit analysis (CBA). Whilst they are suitable for reporting, comparison and communication of progress, further work is required to ensure that they produce the correct results for CBAs and hence provide the appropriate justification for investment proposals.
- 5.1.76 In paragraph 6.19, Ofgem has constrained the scope of NARMs to the asset categories covered by existing RIIO-1 NOMs methodologies (for ET, GT and GD sectors). In paragraph 6.20, there is a potential extension to the scope being considered in the ED sector, but this review is at an early stage and it may not be appropriate to extend NARMs to all asset categories. Ofgem therefore cannot rely upon monetised risk as being the primary basis for network business plan justification for asset categories not covered by NARMs. Alternative assessment and review is required.
- 5.1.77 If monetised risk is to be used, we propose that it forms part of a tool box of assessment approaches, rather than being the primary basis of justification.

**CSQ20. Do you agree with our proposals to define outputs for all sectors using a relative measure of risk?**

- 5.1.78 Yes. The use of a relative measure based upon specified activity and associated cost allowances provides a clear framework for assessing the delivery of the activity.

- 5.1.79 In RIIO-1, the electricity distribution sector has a relative measure associated with asset replacement and refurbishment activities for a sub-set of asset categories. Only asset replacement and refurbishment activities on those asset categories contribute to the delivery of the target. This ensures that the deliverables are ring fenced and the level of delivery can be clearly identified. This enables Ofgem to hold companies to account for delivery.
- 5.1.80 Absolute targets do not provide this level of ring fencing, because any change to the risk factors can influence the absolute risk. This means that under some circumstances, targets can be delivered without actually carrying out the specified activity. Conversely, external risk factors could increase the overall levels of absolute risk, making it virtually impossible for licensees to deliver the targets without excessively exceeding their original agreed activity volumes.
- 5.1.81 Using a relative target tied to defined allowances also enables an incentive rate to be established for any valuation of over/under delivery. We propose that any such incentive rate should be based upon the macro measures of the total allowances provided for the activity and the total monetised risk being delivered, giving a single £ per monetised risk point rate.

**CSQ21. Do you agree with our proposals for defining outputs using a long-term measure of the monetised risk benefit delivered through companies' investments?**

- 5.1.82 No. The use of long-term measure of risk will add complexity and reduce granularity for establishing targets and reporting progress.
- 5.1.83 Whilst long-term risk is appropriate for the assessment of cost benefit analysis, it does not need to be used for setting targets and measuring delivery.
- 5.1.84 Below, we consider the use of long-term risk in two applications: for cost benefit analysis and for use as an outputs measure.

**Using long-term monetised risk benefit for Cost Benefit Analysis (CBA)**

- 5.1.85 At any point in time there is a probability of failure of an asset and an associated consequence of that failure, which, if the consequence is measured in financial terms, can provide a measure of monetised risk.
- 5.1.86 A value of risk for every future year can be determined by considering the probability of failure and consequence of failure at that point in time. The total current risk of keeping the asset on the network is the sum of the Net Present Value (NPV) of all the future years of monetised risk.
- 5.1.87 Interventions on the asset will change the future risk profile. For example, replacing the asset in 10 years will reduce the probability of failure and this will remain at a lower level until the new asset starts to deteriorate. The risk profile associated with the intervention can be used to determine the NPV of future risk with the intervention.
- 5.1.88 The difference between the without intervention NPV risk and the with intervention NPV risk provides the NPV risk benefit of carrying out that specific intervention.
- 5.1.89 This benefit can be compared to the NPV cost associated with the intervention, to determine whether there is a positive cost benefit.
- 5.1.90 Alternative interventions can be considered (e.g. replace after 15, 20, 25 years). Each will lead to a different with intervention NPV risk position and different NPV of expenditure leading to a consequently different cost benefit, allowing the best option to be determined.

- 5.1.91 The use of long-term monetised risk is therefore a useful tool to illustrate that a cost-effective solution is being proposed.
- 5.1.92 However, it is impracticable to carry out such detailed assessments for every asset, especially for distribution networks where there are hundreds of thousands of assets included in the output measures.
- 5.1.93 It is therefore suggested that CBAs using monetised risk should only be used to demonstrate benefits associated with typical activities within high volume programmes of work, rather than provide a CBA (with multiple options) for every asset/intervention.

### **Using long-term monetised risk benefit in output measures**

#### *Complexity*

- 5.1.94 Figure 1 on page 44 of the consultation illustrates that the relative measure of risk is determined by comparing the monetised risk without intervention to the monetised risk with intervention.
- 5.1.95 The current RIIO-1 NOMs methodologies that use this approach consider the values of the 'in-year' risk at the end of the price control. This means that the probability of failure and consequence of failure for the year representing the end of RIIO-1 are used.
- 5.1.96 This single calculation for each asset means that, although volumes are high, it is practical to calculate the values for distribution networks.
- 5.1.97 However, moving to a measure based upon whole lifetime risk would require every asset to have a future risk value calculated from the sum of the discounted present values of all future 'in-year' risks. This significantly increases the amount of calculation that is required.
- 5.1.98 This more complex calculation would have to be carried out for the all the assets without intervention and for all the interventions carried out during the price control.
- 5.1.99 This is an unnecessary complication of the metric, because delivery can be monitored and assessed using the 'in-year' risk position.

#### *Loss of granularity*

- 5.1.100 Within the ED sector in RIIO-1, the use of an 'in-year' value of monetised risk allows reporting of assets against the probability of failure and consequence of failure.
- 5.1.101 This allows the assets to be placed with a 5x4 matrix with assets in the HI5/C4 band having the highest risk and assets in the HI1/C1 band having the lowest risk.

**Table 5.1: 5x4 Matrix Used for ED Network Asset Secondary Deliverable reporting**

	HI 1	HI 2	HI 3	HI 4	HI 5
C1					
C2					
C3					
C4					

Source: Based upon matrixes in RIGs Annex D data templates.

- 5.1.102 Moving to a long-term measure of future risk collapses this into a one-dimensional measure. This is because the total future risk is derived from the NPV of the all future 'in-year'



monetised risk values and the probability and consequence elements cannot be separated out.

**Table 5.2: 5x1 Risk Matrix**

	R1	R2	R3	R4	R5

- 5.1.103 This loss of granularity would remove the ability for licensees to demonstrate whether it is the health of assets or consequence of failure that make them higher risk.

**CSQ22. Do you agree with our proposed approach to setting allowances and outputs?**

- 5.1.104 We have significant concerns about monetised risk metric being used for benchmarking business plan forecasts.
- 5.1.105 We also have concerns about Ofgem's expectation that stakeholders should set monetised risk objectives.
- 5.1.106 In our response to CSQ27, we highlight the issues with regard to using monetised risk as the primary means of justifying investment proposals.

**Setting Allowances Based Upon Justified Proposals**

- 5.1.107 Allowances should be provided for justified proposals. The justification should be able to be provided through the use of monetised risk measures or via other means of justification (which could be associated with either a legal obligation or environmental directive).
- 5.1.108 Once allowances are set, the targets should be clearly linked to the allowances so that both the delivery targets and associated costs are ring-fenced. This allows appropriate incentive rates to be determined as we describe in our response to CSQ28.

**Setting Monetised Risk Objectives**

- 5.1.109 We value the input of stakeholders into objectives and WPD has a track record of extensive and comprehensive stakeholder engagement.
- 5.1.110 We are, however, unclear on how Ofgem expects licensees to communicate monetised risk measures to stakeholders. Monetised risk measures are a complex set of metrics and require more detailed knowledge in order to provide direction.
- 5.1.111 Stakeholders can relate to issues that directly impact them such as customer service or supply interruptions, but concepts of total future network risks will be more difficult engage on.

**Benchmarking Company Proposals**

- 5.1.112 We are concerned about using the benchmarking of monetised risk as a means of revising company proposals.
- 5.1.113 Ofgem expects that licensees will provide justification and associated CBAs supporting investment proposals. This evidence should be reviewed in order to determine whether the licensees have provided adequate justification.

- 5.1.114 Monetised risk is a combination of the probability of failure and the consequence of failure. A licensee with a high density of customers may have a greater consequence of failure than a licensee with a more sparsely populated network. This means that the pounds per risk would be lower for the licensee with the high density of customers. Benchmarking could suggest that the investment proposals for the sparsely populated licensee are of lower benefit (and benchmarking threshold could reject these investments), but the investment proposals may still be cost beneficial and justified for that licensee. Benchmarking could incorrectly adjust volumes for the sparsely populated licensee.

**CSQ23. Do you have views on the proposed options for the funding of work programme spanning across price control periods?**

- 5.1.115 We are concerned about potential cash flow issues, price control complexity and perverse 'start/stop' behaviour that proposal option 1 could introduce.
- 5.1.116 We recognise that Ofgem has an issue in holding to account companies that have projects spanning price controls and we propose that Ofgem uses the concept of partial output delivery to assess whether projects have been progressed rather than withholding allowances. This is similar to option 2 but would need to fund all partial output delivery not just 'some'.

**Price controls are a continuum**

- 5.1.117 Most licensee investment programmes are a continuum (especially in gas and electricity distribution where there are higher volumes of lower cost assets). Established regulatory reporting rules require costs to be reported in the year incurred and activity counted when the work is completed. Inevitably there can be multi-year expenditure with an associated output delivered in the final year of the project. Where higher volumes of projects are carried out, the effect of the timing mis-match between expenditure and delivery is smoothed out and it can be assumed that the expenditure within a price control period represents the activity volumes in a price control period (i.e. mis-matches at the start of a price control cancel out the mis-matches at the end).
- 5.1.118 It is inappropriate to consider any with-holding of allowances for high volume activity.

**Alternative proposal for low volume, high value projects**

- 5.1.119 For lower volume, higher value projects the timing mis-match may be more evident, but for such projects it is less onerous to provide explanations of progress due to the lower volumes. It is therefore possible to evaluate the progress towards outputs and award appropriate output credits for partial completion.
- 5.1.120 The mechanism could be based upon the following elements:
- Ring fenced funding for partial projects
  - Full allowances provided for the partial elements
  - Non-risk measures (such as input volumes) used to determine the 'partial output'
  - Non-risk measures to be used for close-out assessment parameters.
  - Claw back of non-delivered elements based upon non-delivery of specified input volumes.

- 5.1.121 To limit the amount of analysis required and price control complexity such analysis should be limited to projects of material value. In RIIO-ED1, a high value projects threshold of £25m was used.

#### **Cash flow issues**

- 5.1.122 Any withholding of allowances for a subset of projects will lead to delayed recovery of funds. Given that close out processes take up to two years to conclude and then adjustments are applied to the remainder of the next price control, revenue income could be delayed by up to 10 years (assuming RIIO-3 is a five-year price control). Depending upon the number and value of projects spanning the price control boundaries there could be a significant impact on cashflow, especially where higher value materials need to be procured at the start of projects.
- 5.1.123 There could also be issues for the interaction with the Totex Incentive Mechanism where licensees would be overspending relative to allowances. Some form of ring-fencing of logged up costs would need to be put in place to ensure that they were excluded from the sharing factor applied to genuine overspends.

#### **Complex close out process**

- 5.1.124 Any withholding of allowances for a subset of projects will be dependent upon the timing of the projects put forward in business plan proposals. This assumes that all the projects will proceed as originally planned. In reality, some of these may be advanced and delivered within the price control period, and others originally planned to be completed within the period (and given an allowance within Totex) being delayed and spanning the price controls. All these projects would need to be assessed to determine the ex-post allowance adjustments. This would be a complex close out process which would be burdensome for distribution licensees and Ofgem.

#### **Perverse outcome – stop/start behaviour**

- 5.1.125 An unintended consequence of the proposal (especially option 1) could be stop/start investment behaviour where licensees defer projects to the next price control or advance projects into the current price control (to prevent them spanning price control periods). This will result in limited activity being carried out near the transition between price controls, followed by a ramp up and a ramp down before the end. Such fluctuations in delivery would under-utilise insourced workforce and lead to higher contractor costs (where they charge more to cover the leaner periods). Such outcomes would result in inefficient delivery.

#### **CSQ24. Do you have any views on the options and proposals for dealing with deviation of delivery from output targets?**

- 5.1.126 The asymmetric nature of the proposals, where the proposed downside risk for licensees is much greater than the upside opportunity, increases the risk on licensees. This is not being recognised within the cost of capital.
- 5.1.127 We agree that there should be an incentive for licensees to deliver the investment proposals that have been funded through allowances. However, we also recognise that requirements can change over a price-control period and that this may result in more or less output being delivered.
- 5.1.128 Where companies deliver more, there should be an opportunity for the companies to justify that this was necessary and be fully funded for the costs incurred. We agree with the over-

delivery proposals that licensees should be subject to the Totex Incentive Mechanism, if they can't justify the over-delivery.

- 5.1.129 Where companies deliver less, it is right that customers receive a refund. We do not agree with using the monetised risk value as the valuation mechanism for unjustified under-delivery. Many of the monetised risk measures are at early stages of maturity. We therefore suggest that under-delivery should be valued at the associated cost allowances, which reflects the cost savings achieved as a result of the non-delivery.

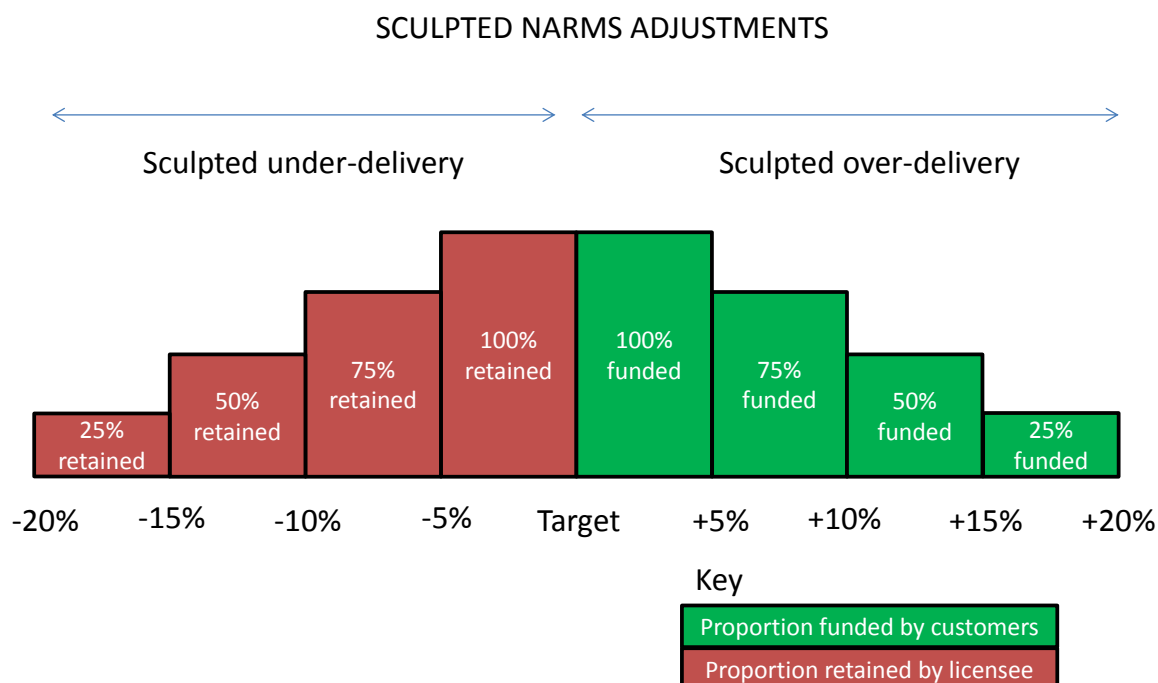
**Alternative proposal: use of deadbands**

- 5.1.130 The Ofgem RIIO-1 NOMs Incentive Methodology recognises the use of a deadband around the target. The proposals for RIIO-2 are silent on the use of deadbands. One alternative option is to allow licensees to vary delivery around the target, with no upside or downside adjustment being made for performance within the deadband.

**Alternative proposal: sculpted adjustment**

- 5.1.131 If Ofgem is to pursue the NARM concept, we believe work needs to be done to:
- Ensure consistency between parameters compared to existing NOMs measures developed in RIIO-1;
  - Ensure appropriate use of whole life risk within CBA and/or NARM metrics, without introducing unnecessary complication; and
  - Ensure any NARMs incentive regime balances both penalties and rewards.
- 5.1.132 The following proposal seeks to simplify the overall complexity of NARMs close out, whilst still providing licensees an incentive to deliver against output targets.
- 5.1.133 Rather than having different approaches to the valuation of over/under delivery, a sculpted approach using a consistent valuation rate could be applied (as described below). This is based upon valuation bands that reduce as the variance from target increases.
- 5.1.134 Within the first band 100% could be funded for over-delivery and 100% retained for under-delivery. In subsequent bands, lower percentages could apply as illustrated in the diagram below.

**Figure 5.1: Alternative proposals for Sculpted NARMS**



5.1.135 This has the advantage of incentivising the licensees to deliver within a band around the targets.

5.1.136 It removes the need for detailed justification being provided by licensees and analysed by Ofgem; simplifying close out requirements. The only close out requirements would be the value of delivery and the incentive rate to be applied for over/under delivery, which for simplicity could be based on cost allowances.

**CSQ25. Do you have any views on the interaction of the NARM mechanism with other funding mechanisms?**

5.1.137 The proposal to use a 'relative' target allows greater control of what investment activity is related to the delivery of the target.

5.1.138 Paragraph 6.43 makes reference to double counting of load related activity with asset replacement. If the relative target only includes the impact of asset replacement activity, then the only activity that should count towards the delivery of the target is asset replacement. By keeping consistent the activities that contribute to the target and the delivery assessment, there should be no double counting.

5.1.139 There are however some replacement activities that may have special arrangements in place and these may overlap. For example, if option 2 for projects that span a price control is pursued then those activities that are subject to the logging up should be excluded from being compared to Totex and any delivery be assessed outside of the NARMS mechanism.

**CSQ26. Do you have any views on ring-fencing of certain projects and activities with separate funding and PCDs? Do you have any views on the type of project or activity that might be ring-fenced for these purposes?**

5.1.140 In ED RII0-1 there is an overlap between High Value Projects (HVPs), associated with asset replacement, and asset replacement contributing to Network Asset Secondary Deliverable (NASD) targets. Consequently, close out adjustments are being developed to avoid double counting.

- 5.1.141 Close out of RIIO-1 would have been simpler if there had not been any overlap. This could have been resolved by not including the contribution from HVPs in the NASD targets. In this case it would have been more appropriate to have the HVPs ring fenced, with their own price control deliverables.
- 5.1.142 Depending upon the decision on how to treat costs for projects that span across price control boundaries, it may be necessary to ring fence the projects, their costs and any partial delivery output measures (such as input volumes).

### ***Workforce resilience question***

**CSQ27. Where companies include a sustainable workforce strategy as part of their business plans, what measures do you think could be established to hold companies to account for delivering these plans, without distorting optimal resourcing decisions?**

- 5.1.143 WPD is encouraged that Ofgem acknowledges the challenges facing network companies in attracting, developing and retaining a sustainable workforce with the right technical skills to run our business effectively and we agree that workforce resilience is firmly the responsibility of our business. We agree that our sustainable workforce strategy should be included as part of the wider business plan, considering that the strategy would be measured as part of the Business Plan Incentive. We will continue to take on board any input from our stakeholders from User Groups, Customer Engagement Groups and Ofgem's Consumer Challenge Group. We accept that a collaborative approach to encourage school leavers, college leavers, and technical graduates into the industry is required and WPD has already been successfully involved in such collaboration. Additional work for schools and colleges is required, however this is a UK issue within industries that require students with science, technology, engineering and mathematics subjects that needs to be addressed by Government through careers information, advice and guidance, and the curriculum.
- 5.1.144 We question how effective planning for at least 10 years following the RIIO-2 period can be within our business plan. Our workforce resilience strategy does and will look at longer periods than RIIO-2, but this has uncertainty and the potential for significant changes, and we would not want to reduce our flexibility by being tied to this arbitrary forecast.
- 5.1.145 Based on previous experience, multi-skilling does not give increased productivity or flexibility within our field-based teams. We recruit, train and develop our workforce to be as productive and resilient as possible within the environment in which we operate.
- 5.1.146 WPD would not want any specific KPIs or milestones regarding a sustainable workforce strategy. Our concern is that achieving the targets will inevitably become the prime focus and not the resilience of our workforce, which requires flexibility to make optimal resourcing decisions.

### ***Physical security questions***

**CSQ28. Do you agree with maintaining the existing scope of costs that fall under Physical Security, i.e. costs associated with the PSUP works mandated by government? Please explain your reasons and suggest alternative definitions you believe should be considered.**

- 5.1.147 Yes. The scope of costs for physical security mandated by Government should be kept separate from other security works (e.g. which may arise from increased risk of trespass).

- 5.1.148 Both activities should be recognised as valid activities to carry out, but RIIO-2 Business Plan submissions should show the costs separately. This enables the PSUP work to be ring-fenced to allow the operation of uncertainty mechanisms/re-openers.

**CSQ29. Do you agree with our proposed approach of ex ante allowances for PSUP works mandated by government? Please explain your reasons and suggest alternative approaches you believe should be considered.**

- 5.1.149 Yes. Where licensees are aware of works that will be required in RIIO-2, these should be funded ex-ante.
- 5.1.150 Due to the uncertainties associated with future government policy following Brexit, there needs to be some form of re-opener/logging up mechanism to provide funding for further requirements that are mandated during the RIIO-2 period.

**CSQ30. Do you agree with our proposal to include a reopener mechanism to deal with costs associated with changes in investment required due to government-mandated changes to the PSUP?**

- 5.1.151 Yes. Future changes to government policy may require additional security measures to be installed. These requirements could arise at any point during the price control, therefore it is important to retain uncertainty mechanisms for PSUP work. There are, however, a number of options available.
- 5.1.152 One option is to use re-openers, where new requirements are assessed either during the price control or at the end of the price control, or both.
- 5.1.153 An alternative is to have a logging up mechanism, where specific reopener windows are not required, reducing administrative burden. Additional costs are separately identified and reported. No allowances are provided during the RIIO-2 price control and an end of period review determines the value of revenues that are applied to RIIO-3 to cover the work carried out in RIIO-2.
- 5.1.154 A third option is to have a mechanism similar to that used for Undergrounding in Areas of Natural Beauty (in Electricity Distribution) where an overall allowance limit is determined for the RIIO-2 price control. Additional expenditure up to this limit is automatically funded through the annual iteration process. This could work in tandem with an end of period true up for costs that exceed the RIIO-2 allowance limit.

**CSQ31. We would also welcome views on the frequency that is required for any reopener, e.g. should there be one window for applications during RIIO-2 and, if so, when?**

- 5.1.155 If re-openers are to be used, there should be two windows for assessment of requirements.
- 5.1.156 The first window should be during the price control and timed to be at the start of the third year of RIIO-2. Leaving this later would start to overlap with RIIO-3 business plan developments and submissions.
- 5.1.157 The second window should be after the price control concludes, where an assessment is carried out as part of close out for RIIO-2. This would allow licensees to make a case for additional funding to cover additional security requirements that materialise during the latter years of RIIO-2.

### ***Cyber resilience questions***

**CSQ32. Do you agree with the scope of costs that are proposed to fall under cyber resilience, i.e. costs for cyber resilience which are (1) incurred as a direct result of the introduction of the NIS Regulations, and (2) above 'business-as-usual' activities? Please explain your reasons and suggest further or alternative costs you believe should be considered.**

- 5.1.158 We agree that costs associated with longer term strategic investments can be planned and assessed using the proposed mechanism provided that the specific requirements are clear and set out ahead of the price control i.e. changing infrastructure/architecture, implementing controls, installing monitoring systems etc. These costs may arise as a result of the introduction of the Network and Information System (NIS) regulations, but there is also a potential for additional costs to meet a European Code or other applicable legislation if the requirements differ to NIS.
- 5.1.159 To account for the dynamic nature of the cyber security landscape an additional uncertainty mechanism is required to allow us to recover costs associated with proactively responding to changing threats and reactively responding to unforeseeable or low probability/high risk cyber-attacks in an effective and timely manner. The recovery of costs associated with both situations should require the licensee to demonstrate that it has mitigated the risk to the best of its ability and/or that the event was reasonably unforeseeable/beyond the licensee's control.
- 5.1.160 The interaction between physical security and cyber security measures also needs to be considered. In some instances cyber risks can be mitigated by deploying physical security solutions and vice versa.

**CSQ33. Do you agree with our proposed approach of ex ante "use-it or lose-it" allowances? Please explain your reasons and suggest alternative approaches you believe should be considered.**

- 5.1.161 Yes, where licensees are aware of works that will be required in RIIO-2, these should be funded ex ante. However, the fast-changing threat landscape means that the risks in this area are dynamic and priorities can change rapidly. We must have the facility to respond quickly and appropriately, introducing additional controls when and where necessary to defend Network and Information Systems and limit the impact to the essential service. Some form of re-opener/logging up mechanism is required to facilitate the reprioritisation of funds when supported with appropriate evidence that the action taken was more effective and efficient.

**CSQ34. Do you agree with our proposal to include a re-opener mechanism for cyber resilience costs? Please also provide your views on the design of the re-opener mechanism.**

- 5.1.162 We agree with the proposal to include a re-opener mechanism for cyber resilience costs. There is currently too much uncertainty around the requirements for Cyber Security in the UK Energy Sector introduced under the NIS Regulations and also potentially under a new European Code for Energy Cyber Security to produce a certain strategic investment plan. In addition, the outcome of the ENA Open Networks Project is likely to require significant changes to our existing Network and Information systems to facilitate interconnectivity, innovation and data exchange. Only when these requirements are understood and agreed will we be able to take a holistic view and assess the strategic investment required to develop System solutions that are secure by design and that deliver an overall security posture in line with regulatory requirements.



5.1.163 Future changes to government policy may require additional cyber security measures to be taken - it has been made clear that the intention is to ratchet up cyber security levels over a period of time. These requirements could arise at any point during the price control, therefore it is important to provide uncertainty mechanisms for cyber security. There are however a number of options available:

- One option is to use re-openers, where new requirements are assessed either during the price control or at the end of the price control, or both.
- An alternative is to have a logging up mechanism, avoiding the need for reopener windows and reducing administrative burden. Additional costs would need to be separately identified and reported. This logging up could supplement ex-ante allowances with a true up at the end of the RIIO-2 price control.
- An overall cost allowance limit determined for the RIIO-2 price control, where expenditure up to this limit is automatically funded through the annual iteration process. This could run in tandem with the two approaches above.

### ***Real price effects questions***

#### **CSQ35. Do you have any views on our proposed factors to consider in deciding on appropriate input price indices? Do you have any evidence justifying the need for RPEs and any initial views on appropriate price indices?**

- 5.1.164 Key principles that are important features of the RIIO framework include mechanisms which flex to encourage responsive delivery of changing customer requirements and minimise potential for windfall gains or losses, such as indexation of RPEs.
- 5.1.165 Despite the significant impact on their cost base, network companies have limited to no ability to influence RPEs particularly in times of political and economic uncertainty, since they cannot control underlying volatility in material costs and local markets.
- 5.1.166 Ofgem's annual reports<sup>89</sup> recognise that RPEs exist in our sectors and hence companies must be able to cover these costs in a timely manner to avoid any additional costs or risks being added to the RIIO-2 price controls.

#### **CSQ36. Do you agree with our initial views to retain notional cost structures in RIIO-2, where this is an option?**

- 5.1.167 Through the RIIO-2 work to date, Ofgem has stated the industry is going through a period of significant change. As such the use of notional cost structures in RIIO-ED2 may well be less relevant with companies taking different approaches to in-sourcing and outsourcing for example, along with more significant changes with networks taking different solutions to network problems for example DSOs implementing different capex/opex solutions to constraint issues. As such the use of notional cost structures can only be considered after Ofgem has published its strategy decision for particular sectors and companies have proposed solutions for delivery. Some relevant issues as regards choice of indices are discussed at paragraph 4.4.18.

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<sup>89</sup> See Figure 2.4.

**CSQ37. Do you agree with our initial views to update allowances for RPEs annually and to include a forecast of RPEs in allowances? Do you have any other comments on the implementation of RPE indexation?**

- 5.1.168 Updating RPEs annually would ensure that any impact is fed into the price control more immediately than making an adjustment at the end of the price control. The only downside of this is the added complexity it would add to an already quite constrained annual iteration process and the overall objective of simplifying RIIO.
- 5.1.169 Over a number of past price controls Ofgem has attempted to develop indices which would accurately track the cost pressures faced by the sector on a year-to-year basis. To date most measures have only been suitable for indicating the long-term direction of travel.
- 5.1.170 Therefore, any indexation of RPEs and the selection of relevant indices must be carefully assessed to avoid adding more risk to network companies when compared with a fixed allowance over a 5-year price control. Any additional risks would impact the cost of capital.

***Ongoing efficiency questions***

**CSQ38. Do you agree with our proposal to use the EU KLEMS dataset to assess UK productivity trends? What other sources of evidence could we use?**

- 5.1.171 The EU KLEMS dataset has been consistently used by Ofgem in RIIO-1 for assessing productivity trends.
- 5.1.172 In the assessment of proposed ongoing efficiency assumptions, using trends indicated by EU KLEMS data, careful consideration should be given to the selection of industry sectors for the comparison dataset, the timeframe selected and the impact of the time lag of EU KLEMS data.
- 5.1.173 Alongside this data, reference should also be made to productivity information from the Office of National Statistics and forecasts from the Office of Budget Responsibility.

***Managing the risk of asset stranding questions***

**CSQ39. Do you think there is a need for a utilisation incentive at the sectoral level? If so, how do you think the incentive would operate coherently with the proposed RIIO-2 price control framework for that sector?**

- 5.1.174 No. The potential case for introducing a utilisation incentive is being linked to asset stranding. This implies that the purpose of the incentive would be to drive licensees to utilise under-utilised assets to gain a reward or be penalised for not doing so.
- 5.1.175 The existing networks have evolved over many years and the use of those networks may have changed. For example, infrastructure established for heavy industry may now be being under-utilised where the industry has been replaced by housing. Conversely, networks in rural areas designed for lighter loads may need to be reinforced to allow the export of distributed generation. Reinforcement requirements can be managed, and alternative flexibility solutions considered to provide additional capacity, but there is little that can be done to impact the utilisation of under-utilised networks, because falling demand is beyond the control of licensees.
- 5.1.176 The applicability of a utilisation incentive to manage asset stranding is therefore not appropriate. In addition, there is no connection made in the proposals between utilisation and losses. Highly utilised networks are also inefficient e.g. our SOHN Innovation report suggests utilisation levels of circa 20% are optimal for cables.

- 5.1.177 We agree that there is little evidence that a utilisation incentive could be effectively responded to on electricity networks due to changes in customer behaviour driven by changes in technology.

**CSQ40. Do you have any views on our direction of travel with regard to anticipatory investment?**

- 5.1.178 We agree that an appropriate level of CBA support is needed for anticipatory investment and wherever possible there should be a degree of user commitment where the work can be associated with particular users.
- 5.1.179 We agree that where there is highly anticipatory investment being considered that this will need joint working including Ofgem, BEIS and other relevant government departments to ensure that it will help meet government objectives.
- 5.1.180 It is positive that Ofgem is considering the need for and benefits of anticipatory investment, but the proposals being made will add significant regulatory burden and risk-sharing proposals introduce a treatment boundary which will require enhanced monitoring to determine success factors and avoid mis-representation by licensees.

**Spectrum of anticipation**

- 5.1.181 Ofgem recognises that there is a spectrum of anticipation with some projects having a greater certainty of need than more highly anticipatory projects.
- 5.1.182 No proposals are made for what constitutes 'more certain need' and 'highly anticipatory', therefore it is currently unclear where the boundary lies and what types of project would fall into each category.

**'Higher hurdles' test (for projects with more certain need)**

- 5.1.183 In paragraph 7.30, Ofgem is proposing to require licensees to provide a substantial amount of supporting evidence for projects with more certain need.
- 5.1.184 No materiality on project value is suggested and therefore the proposals could apply equally to all projects. This gives us cause for concern because the provision of substantial evidence for higher volumes of projects carried out on distribution networks introduces significant regulatory burden for distribution licensees.
- 5.1.185 We accept that greater scrutiny of higher value projects may be necessary some projects and therefore suggest that a materiality value (of, say, £25m) is used to determine which projects require the greater burden of evidence.

**Proposed joint working group for 'highly anticipatory' investment**

- 5.1.186 Ofgem suggests that the purpose of establishing a joint working group would be to allow joint working between Ofgem, government and other relevant parties to consider the merits of proposals for highly anticipatory investment across all sectors.
- 5.1.187 This implies that the group would discuss and review any proposals being put forward by licensees, acting in some way as an 'pre-approvals' board, with Ofgem retaining the final decision on whether allowances are provided.

- 5.1.188 If such a group was to be established, it should also consider the policy decisions being made that could lead to the need for anticipatory investment. This could be driven by either central government policy or regional development plans.
- 5.1.189 The Electricity Networks Strategy Group (ENSG) was established in response to the government setting renewable energy goals, providing a context to the activities of the ENSG. Without equivalent goals for the proposed working group, the scope of considerations is undefined. It would be more appropriate to have the work of the group focussed on the anticipatory works required to deliver a specific government objective. Without this, there is a risk that the review group will have no focus.

### **Risk-sharing projects**

- 5.1.190 The introduction of separate treatment for some projects requires enhanced monitoring to determine success factors and avoid mis-representation of projects by licensees. More details are provided in responses to CSQ49- CSQ51.

### **CSQ41. What type of projects may be appropriate for a risk-sharing approach?**

- 5.1.191 The introduction of a different risk sharing arrangement introduces a boundary issue within the price control mechanism. Previous price control arrangements have identified that treatment boundaries can lead to unintended consequences (for example, Totex was introduced to avoid different treatment of Capex and Opex leading to licencees favouring different types of costs).
- 5.1.192 Ofgem has previously tried to remove boundary issues. Introducing new boundaries increases the risks for companies (where there is a subjective assessment of delivery) and consumers (where companies potentially earn higher returns for work that could be included in base allowances).
- 5.1.193 The introduction of any different treatment will require enhanced monitoring to provide assurances to licensees of the assessment of delivery and avoid mis-representation by licensees. Monitoring is discussed more in the response to CSQ50.
- 5.1.194 The types of project that could be considered within this category would need to be separable and associated with a specific anticipatory need. For example, this could be a new electricity link to an island where there are future plans being proposed to electrify all the heating.

### **CSQ42. How can we best facilitate risk-sharing approaches for high-value anticipatory investments?**

- 5.1.195 We are unclear what benefits over that delivered via the 'joint working' approach would be achieved by the risk sharing approach, particularly given the difficulty in identifying which projects would be suitable for the treatment.
- 5.1.196 In paragraph 7.43, bullet one, Ofgem proposes that the risk-sharing approach would require some form of measures (trigger points) to determine whether the project is likely to provide a net benefit to consumers. Since the investment is 'highly anticipatory' those benefits may not arise within a price control and therefore how the success of project is assessed needs to be defined, particularly where the benefit will arise in future price controls. Without these success factors it would be difficult for both the licensee to demonstrate successful delivery and for Ofgem to assess whether the delivery warrants a higher return.

- 5.1.197 Licensees will make anticipatory investments based upon the evidence available to them at the time of proposing projects. Any milestones for the monitoring of success should be related to the aspects of the projects within the control of the licensees.
- 5.1.198 External circumstances may change. Changes to circumstances beyond the control of the licensees should not penalise companies if network use is not as forecast, especially if the anticipatory investment is made in good faith and informed by forecasts by central or regional government.
- 5.1.199 The milestones could, if necessary, include reviews of the continued need for the anticipatory investment at staging points during a project. The reviews could either confirm that the original plans remain appropriate, revise the plans because forecasts have changed or stop the project if the anticipatory requirement has gone away.
- 5.1.200 Good project governance should not be penalised. Where a licensee reassesses the need and stops a project because circumstances have changed, the decision could be viewed as a success because the licensee has avoided installing assets that would be stranded. Costs associated with the project to date would be funded as a success.

**CSQ43. How can we guard against network companies proposing risk-sharing arrangements for project they may have undertaken as business as usual?**

- 5.1.201 Any projects proposed for the mechanism should be clearly separable and linked to a specific anticipatory need.
- 5.1.202 Projects which are influenced by a number of drivers are by their nature more certain and should therefore be funded under business as usual arrangements.

***Innovation questions***

**CSQ44. Do you agree with our proposals to encourage more innovation as BAU?**

- 5.1.203 Yes. Engineering by its very nature is highly innovative. There are countless examples of where new equipment, systems or processes are employed to improve established practice. Dedicated innovation funding should only be used where the risk is unacceptably high or where benefits accrue beyond the network licensee (for example consumers or generators).

**CSQ45. Do you agree with our proposals to remove the IRM for RIIO-2?**

- 5.1.204 Yes. IRM was designed to support innovation rollout within longer price control periods.

**CSQ46. Do you agree with our proposals to introduce a new network innovation funding pot, in place of the Network Innovation Competition, that will have a sharper focus on strategic energy system transition challenges?**

- 5.1.205 The NIC (unlike the NIA) is already focused more on delivering low carbon outcomes. A return to eligibility criteria based on updated Low Carbon Networks Fund (LCNF) governance would be appropriate. There is however little evidence to support a need for "calls" against specific challenges. A defining success measure of LCNF Tier 2 and subsequently NIC has been the breadth and diversity of large projects (that have been implemented as a result).

**CSQ47. Do you have any views on our proposals for raising innovation funds?**

- 5.1.206 BSUoS could be used to fund the replacement for NIC. Alternatively, the LCNF Tier 2 mechanism arrangements could be re-implemented where DNOs collect funding through DUoS.

**CSQ48. Do you think there is a continued need for the NIA within RIIO-2? In consultation responses, we would welcome information about what projects NIA may be used to fund, why these could not be funded through Totex allowances and what the benefits of these projects would be.**

- 5.1.207 There is a continued need for an NIA allowance to fund projects that would otherwise not proceed. This is particularly the case for low Technology Readiness Level or highly innovative projects. It can take up to a decade to progress a concept from Research through to BaU adoption. The NIA allowance is also an important factor to ensure network licensees have specific funding to maintain small teams of engineers with sufficient time/space to innovate. Removing NIA would result in far fewer and lower risk projects, focusing mostly on delivering short term benefits. Such a move could significantly impact the development of new solutions through UK SMEs, many of whom are biased towards earlier stage research, development and demonstration.

**CSQ49. If we were to retain the NIA, what measures could be introduced to better track the benefits delivered?**

- 5.1.208 This is not necessary. Successive reviews of IFI, LCNF and NIA programmes have shown significant return on investment from innovation funding mechanisms. Network Licensees regularly and transparently report project progress and outcomes.

**CSQ50. Do you agree with our proposals for electricity distribution companies prior to the commencement of RIIO-ED2?**

- 5.1.209 Yes.

### ***Competition questions***

**CSQ51. Have we set out an appropriate set of models for both late and early competition to explore further?**

- 5.1.210 Yes.

**CSQ52. Do you agree with the proposed criteria we have set out for assessing the suitability of late competition models? Would you suggest any other criteria, and if so, why?**

- 5.1.211 Yes. New, separable and high value (£100 million) are sufficient criteria provided the potential providers are also assessed for their ability to deliver the project to time/specification as part of the competitive process.

**CSQ53. Do you have any views on the costs and benefits we have used for our draft impact assessment on late competition?**

- 5.1.212 Whilst the costs used appear reasonable, comparison to the savings found in the OFTO regime may not be representative as this was a new area of work. Many of the projects that will be subject to this regime will be of a more traditional nature and hence the potential savings lower.

**CSQ54. Are there any considerations for a specific sector we should include in our IA?**

- 5.1.213 None that we are aware of.

**CSQ55. What are your views on the potential issues we have raised in relation to early competition? How would you propose mitigating any issues and why? Are there additional issues you would raise?**

- 5.1.214 Deliverability – in addition to the issues of requiring consents, there is also the issue of ensuring that the potential provider of the solution has the capabilities to deliver. Delays at this stage of the project can have serious consequences for subsequent costs. There needs to be a clear process to assess the capability of the provider.

**CSQ56. Are there other potential drawbacks of early competition?**

- 5.1.215 None that we are aware of.

**CSQ57. Do you consider that there are any existing examples of early competition (including international examples or examples from other sectors) which demonstrate models of early competition that could generate consumer benefit in the GB context?**

- 5.1.216 None that we are aware of.

**CSQ58. What are your views on the advantages and disadvantages of the high-level approaches to early competition outlined? How would you recommend mitigating any disadvantages?**

- 5.1.217 Whilst the two-stage approach may result in a wider range of potential solutions being identified, we do not believe that this would outweigh the risk of delay and additional costs that are likely to result from the handover between stage one and stage two.

**CSQ59. Do you have any views on the potential criteria for identifying projects for early competition discussed above? Would you suggest any other criteria, and if so, why?**

- 5.1.218 The time criticality and potential for a range of solutions are the most important particularly as the two-stage approach is likely to result in an extended timescale.

**CSQ60. Do you agree with the criteria we have set out for assessing who should run competitions? Based on these criteria, which institution do you consider is best placed to run early and late competitions?**

- 5.1.219 We agree with the criteria outlined. At transmission level we believe that the ESO would be best placed, however at the distribution level the network company would be best placed with some additional safeguards to address any conflicts of interest.

**CSQ61. Do you agree with how we have described native competition? Do you agree we should explore the proposals described above to enhance the use of native competition? Are there any other aspects we should consider?**

- 5.1.220 Whilst the processes described to improve 'native' competition may provide benefits to customers, given the increase in administration and further interfaces in delivery this is only likely for higher value projects. Hence, consideration needs to be given to a likely project value where the additional activity is more likely to be outweighed by potential savings.

**CSQ62. How do you think competition undertaken by network companies should be incentivised? Is the use of Totex the best approach? Will this ensure a level playing field between network and non-network solutions including the deployment of flexibility services?**

- 5.1.221 Totex gives a level playing field in assessing network and non-network solutions and hence is an appropriate incentive.

**CSQ63. What views do you have on an approach where Totex allowances would be based on costs revealed through competition, with a margin or fee for the competition-running entity?**

- 5.1.222 This is partly dependent on the extent to which it is envisaged that this process would be used. It can be difficult to sustain a process of continuous tenders unless a large proportion of those result in success for the tenderer. There is a risk with the approach described that tenderers will submit high prices due to the lower chance of success, if competition is merely used as a price finder.

**CSQ64. Do you think the ESO could have a role to play in facilitating competition in the gas sectors?**

- 5.1.223 Whilst the ESO needs to consider issues taking account of the impact of other energy sectors, we believe that its role should be focused on the electricity network and associated markets.

***Business plan and Totex incentives questions***

**CSQ65. What are your views on our proposed approach to establishing a business plan incentive?**

**Asymmetrical incentive**

- 5.1.224 Please refer to chapter 3 of our response for our overall views on Ofgem's approach to RIIO-2. The asymmetric nature of the proposed incentive arrangement does not provide sufficient incentive for companies to put forward rigorous and ambitious plans.
- 5.1.225 It is clear that poor quality, higher cost plans will be subject a defined penalty (either 1% or 2% of Totex).
- 5.1.226 However, the amount of reward available for ambitious and efficient plans is unknown. It is dependent upon the number of companies that assessed as having 'good value' or 'value' plans. Ofgem suggests that this introduces a competitive element, but we consider that it is likely to have a diluting effect on the attractiveness of the reward.
- 5.1.227 Ofgem cites one of the reasons for introducing the dilution effect is to avoid many companies obtaining a 'good value' rating. However, there is a limited risk of many companies being awarded the 'good value' rating for costs because of the way in which costs will be assessed using benchmarks. It will not be possible for all companies to be classified as 'good' for costs, particularly if Ofgem pursues establishing the reference as being at a stretching position compared to the industry average.
- 5.1.228 The incentive should be symmetrical, with a fixed 2% reward being provided for 'good value' plans.

**Companies vs Licences**

- 5.1.229 It is unclear from the proposals whether the assessment of the business plan incentive is based upon licensees or holding companies.
- 5.1.230 The narrative in the consultation uses the word 'companies', but should this be licence areas?
- 5.1.231 For example, WPD holds the licence for four licensed areas. Is it intended that three licence areas could be assessed as 'good value' and the fourth are could be assessed as 'merely offering value'?



### Derivation of 1% or 2% penalty

- 5.1.232 Appendix 3 of the consultation provides an illustration of how the reward proportions would be derived. The following points are made with reference to the illustration which is reproduced below:

#### Case 1: two companies in the Value category

	Company 1	Company 2	Max per category
Value	0.5% of totex	0.5% of totex	1% of totex

#### Case 2: one company in the Value category and another in the Good Value category:

	Company 1	Company 2	Max per category (incremental, per company)
Good Value		1% of totex	1% of totex
Value	0.5% of totex	0.5% of totex	1% of totex
Total reward	0.5% of totex	1.5% of totex	2% of totex

- 5.1.233 This illustration suggests that 'value' reward is based upon a maximum of 1% of Totex and 'good value' is based upon a maximum of 1% of Totex which together gives an overall 2% of Totex.
- 5.1.234 In Case 1 there are two companies in the 'value' category, so the 1% pot gets split into two giving each company 0.5% reward.
- 5.1.235 In Case 2, one of the companies is in the 'good value' category. This company obtains the full reward for the 'good value' element (1%) and shares the reward for the 'value' element (0.5%) giving 1.5% overall.
- 5.1.236 The only case where a licensee can obtain a maximum reward of 2% of Totex is if the licensee is the only one that is in the 'good value' category with no others in either the 'good value' or 'value' categories.
- 5.1.237 This makes the reward incentive prone to dilution, especially for sectors where there are higher numbers of companies/licensees such as in electricity distribution.
- 5.1.238 The following table shows the scale of dilution assuming all holding companies/licensees achieve the 'good value' status.

**Table 5.3: Dilution of reward under the Business Plan Incentive**

Sector	No of companies	Diluted reward	No of licensees	Diluted reward
<b>Gas Transmission</b>	1	2%	1	2%
<b>Electricity Transmission</b>	3	0.67%	3	0.67%
<b>Gas Distribution</b>	4	0.50%	8	0.25%
<b>Electricity Distribution</b>	6	0.33%	14	0.14%

- 5.1.239 For Gas Transmission there is only one company, so there is no risk of dilution.
- 5.1.240 For Electricity Distribution there are 14 licensees, which means that the range of reward for a 'good value' business plan is 0.14% - 2.0% of Totex compared to the penalty for 'poor value' being fixed at 2%.

- 5.1.241 We accept that it is highly unlikely that all companies within a sector will be granted 'good value' status, but with more licensees competing there is a much lower likelihood that a single licensee will be the only one in any reward band, which means that dilution is likely to occur for distribution companies, particularly electricity distribution.
- 5.1.242 The use of the dilution principle for both gas distribution and electricity distribution licensees significantly reduces the attractiveness of rewards.
- 5.1.243 Rewards should be a fixed percentage and symmetrical with the penalty structure.

**CSQ66. Under the blended sharing factor approach, should the scope of stage 2 evaluation of cost assessment be based on the entire Totex or only on cost items that we consider we can baseline with high confidence?**

- 5.1.244 It depends. If the ranges to be used for assessing the cost forecasts remain as currently proposed in Appendix 3 (i.e. with a very narrow 'average' range of 1 – 1.04), then the stage 2 assessment should only consider those costs where there is high confidence (i.e. Option 1).
- 5.1.245 If however, a more representative 'average' range is used (as we propose in response to CSQ77), the full scope of costs could be used.

**CSQ67. What should be the method for categorising cost forecast as High, Medium or Low? Are the indicative boundaries of 1.0 (High to Medium) and 1.04 (Medium to Low) appropriate?**

- 5.1.246 Paragraph 9.13, bullet three makes reference to Ofgem assigning a score for a company's submitted costs. Appendix 3 provides the following table which suggests that if a company's cost submissions are greater than 4% higher than Ofgem's view then the costs will be considered to be poor.

**Table 5.4: Ofgem categorisation of cost forecast quality**

Ratio (X): a company's forecast divided by Ofgem's forecast	$X \leq 1$	$1 < X \leq 1.04$	$X > 1.04$
Category	Good	Average	Poor

Source: Ofgem, Consultation document, Appendix 3

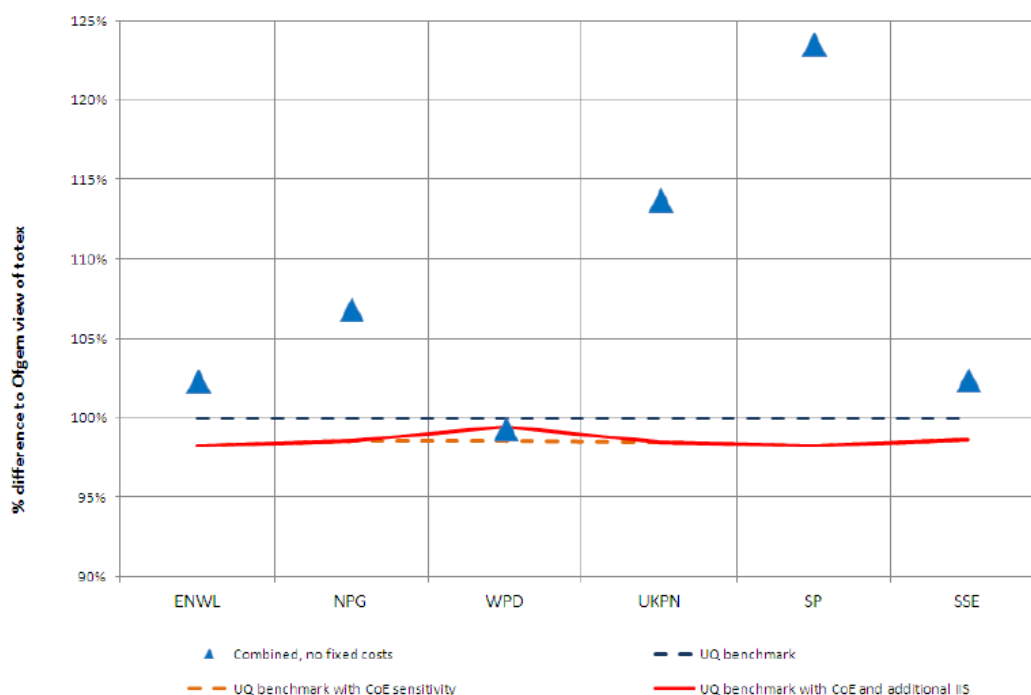
- 5.1.247 Ofgem states that this point represents the average IQI breakeven point and suggests that it is reasonable to use as it reflects possible inaccuracies in Ofgem's forecasts and is the point at which penalties would start to apply under IQI.
- 5.1.248 Ofgem is proposing a fixed 1% of Totex penalty for low value, which is far more significant than the penalty values associated with the breakeven point of the IQI. This suggests that the Medium to Low threshold should be higher than 4%.

**Benchmarking Bias in Ofgem's view**

- 5.1.249 In previous price controls, Ofgem's view of costs has been informed by selecting certain benchmark parameters, some of which are based upon medians, but many of which are based on more stretching views such as upper quartile. This means that Ofgem's view is already biased towards lower costs.
- 5.1.250 The above categorisations suggest that a plan has 'good' costs where the licensee submits costs that are lower than the Ofgem view (based on stretching costs).

- 5.1.251 For a plan to be average, there is a narrow band proposed, between Ofgem's view and 4% higher. This means that a licensee will probably have to submit better than average costs to be classified as 'average'.
- 5.1.252 Due to the nature of Ofgem's benchmarking, the majority of submitted plans will therefore fall above the 1.04 ratio.
- 5.1.253 This means that most companies will be biased towards a 'poor' rating, rather than an 'average' rating.
- 5.1.254 This bias can be illustrated with reference to historical Ofgem analysis. The chart below is taken from Ofgem's fast track assessment of RIIO-ED1 business plans. WPD is the only company below 100% and would therefore be classed as 'good', ENWL and SSE are between 100% and 104%; half of the ownership groups NPG, UKPN and SP are all above 104% (representing half of the licensed entities).

**Figure 5.2: Graph of submitted total expenditure versus our view of the efficient level, by DNO group**



Source: Ofgem

- 5.1.255 From inspection of the results in the chart, a value of around 1.10 would seem more appropriate for the medium to low boundary.
- 5.1.256 We suggest that the 'average' range should truly span the average of submitted costs, such that if lower limit of 100% represents the upper quartile of costs, the upper limit should represent the lower quartile of costs. This will lead to an expanded 'average' range with only those companies with worse than lower quartile costs being classified as 'poor'. This would be a more balanced assessment approach.
- 5.1.257 There is a significant risk that all the components of the evaluation are leading towards more companies incurring a penalty. The benchmarking bias in Ofgem's view of cost forecasts compounds the asymmetric nature of the proposed Business Plan Incentive.

**CSQ68. What should be the range for the business plan reward/penalty? Is the range of  $\pm 2\%$  of Totex equivalent appropriate for incentivising high quality and ambitious business plan submissions (e.g. Value or Good Value)?**

- 5.1.258 Irrespective of what the value is, it is important that the Business Plan provides a symmetrical incentive, otherwise it will be perceived as being biased towards penalising companies, even those with an average view of costs.
- 5.1.259 The rewards should be fixed and be equivalent to the penalty values.
- 5.1.260 In RIIO-1, licensees were provided with the incentive of being fast tracked, with 2.5% of Totex being available as a reward. The proposals to have a 2% limit is broadly in line with previous arrangements, provided all companies are given the opportunity to achieve the reward without dilution.
- 5.1.261 The RIIO-2 document does not clearly set out what the pay-off/reward is for an ambitious business plan. The categorisation appears to depend on factors outside of a companies' control i.e. the outcome is decided by what others have also said in their plans.

**CSQ69. Do you agree with our assessment of the IQI? (If not please provide your reasons). Do you agree with our proposal to remove the IQI?**

- 5.1.262 Ofgem states in the consultation document that sharing factors for Totex outperformance or underperformance should reflect how much confidence Ofgem has in its ability to set baseline costs independently from company forecasts and that where Ofgem has high confidence companies should have stronger incentives to beat the allowances.
- 5.1.263 By the time companies get to RIIO-ED2 Ofgem will have at least 4-5 years of regulatory reported data on costs and outputs from EIIO-ED1 plus five years of comparable data for DPCR5 which provides good information about company performance. Within the distribution sectors, in particular, Ofgem can use the extensive and detailed network reported data to compare the relative performance of companies over a number of years which should provide more confidence in the data they have to set the next price controls.
- 5.1.264 The first bullet of paragraph 9.30 suggests that licensees have the opportunity to bias Ofgem's views of costs. This may be evident in other sectors, but within electricity distribution comprehensive disaggregated data has been reported for many years and therefore there is a wealth of evidence available to Ofgem to assess business plans more rigorously. This is assisted by there being fourteen datasets giving opportunity to identify how the range of incurred historic costs compares to forecasts for RIIO-ED2. The opportunity for Ofgem to determine a more representative view of future costs exists irrespective of whether the IQI is retained or replaced by the Business Plan Incentive.
- 5.1.265 The IQI mechanism and 25%/75% interpolation should be retained.

**CSQ70. Do you have views on the effectiveness of the blended sharing factors approach and in particular the incentive it provides on companies to submit more rigorous Totex submissions?**

- 5.1.266 Ofgem proposes to introduce blended sharing factors to reflect the strength of confidence Ofgem has in setting cost allowances. As highlighted in the response to CSQ69 Ofgem has at its disposal a wealth of historic data that it can use across a wide range of investment drivers.
- 5.1.267 Paragraph 9.40 suggests that Ofgem expects the blending to be company specific, determined by a company's plan. In electricity distribution, this may only apply in limited

cases where a licensee is carrying out a unique investment but, for higher volume activities, existing disaggregated data provides a good reference for forecast costs.

- 5.1.268 For electricity distribution, most low confidence baselines will be common across all licensees, therefore it is the type of investment that will drive high/low confidence rather than anything specific within an individual company's submission.
- 5.1.269 In order to determine the "high confidence" and "low confidence" categories, Ofgem needs to consider the availability of existing data and whether the types of activity will be substantively changing in RIIO-2 when compared to RIIO-1. For example, asset replacement activities are unlikely to change in scope and work content, but new areas such as DSO activities may have less representative cost history.
- 5.1.270 It is important that Ofgem is transparent in specifying which existing cost areas it believes are "high confidence" and "low confidence" ahead of business plan submissions (based upon reference data already available). This will inform licensees where they need to provide additional information to justify forecasts for low confidence areas.
- 5.1.271 It is also important that double adjustments are avoided. This is particularly relevant to where Price Control Deliverables (PCD) are being used to deal with uncertainty. Any cost areas subject to PCD adjustments must be excluded from the determination of any blended sharing factor. Without doing so, the blended sharing factor will weaken the efficiency incentive, even though an adjustment for uncertainty already exists.
- 5.1.272 Ofgem suggests that forecasting accuracy is the reason for weakening the sharing factors in RIIO-2. This concern about forecast data should be addressed by getting better reference data and using historical evidence rather than weakening the incentive to drive efficiency during the price control. The package in total appears to be weakening the role for incentives, which goes completely against the grain to other regulators.
- 5.1.273 In respect of the actual level of incentives that Ofgem are proposing, WPD has concerns that are explained in paragraphs 4.4.2 to 4.4.6 above. Ofgem should be expecting sharing factors over 50% (rather than the proposed range of 15-50%). To see this, consider the consequences of respectively setting the sharing factors either too high or too low:
- Setting sharing factors high will mean that companies are highly incentivised to seek efficiencies. Companies will retain a high proportion of the benefit in the existing price control, but upon entering the new price control targets will be reset passing the whole of the benefit to consumers in a lower allowed revenue for the company. In the long-term, consumers will unambiguously benefit from more efficient companies;
  - Setting sharing factors too low will be a temporary loss to consumers if the company achieves higher savings, and a temporary gain to consumers if the company fails to make expected savings. This is a symmetrical effect and if the Totex targets have been accurately set will represent neither an expected gain nor loss to consumers. Further, it is only a temporary benefit or loss until the end of the price control when allowed revenue will be reset. Most importantly, the companies will not have been exposed to strong incentives to make efficiency savings, and this will be an enduring loss to consumers perpetuating into the next price control period.
- 5.1.274 Essentially there are asymmetric consequences in setting sharing factors too high vs. too low that mean Ofgem should be more concerned about incentivising long term efficiency than with distributing back money back to consumers at the earliest opportunity.

**CSQ71. Do you agree with our assessment of the blended sharing factor in comparison to the Ofwat cost sharing mechanism? If not, please provide your reasons.**

- 5.1.275 Ofgem suggests (in paragraph 9.54) that it perceives that cost ambition is best dealt with through upfront incentives. Our responses to the proposed Business Plan Incentive highlight the negative bias of this incentive, making the up-front incentive a penalty avoidance incentive rather than a positive reward incentive.
- 5.1.276 The use of blended sharing factors (which could be similar for all licensees) removes any form of cost ambition reward associated with the sharing factors, compounding the limited opportunity for rewards.
- 5.1.277 Ofwat's approach of having higher sharing factors where a licensee proposes a more stretching business plan, which is similar to Ofgem's IQI approach, gives an added incentive for cost ambition. Removing the cost ambition element from sharing factors dilutes the incentive for licensees to put forward low cost plans.
- 5.1.278 We also reiterate the points above (see 3.4.7), that Ofgem will have good cost information for DPCR5 and RIIO-1, so we do not agree that the Ofwat approach should score a low for ability to set a sharing factor based on an independent view of costs. This is the key point of difference between the Ofwat approach and the blended sharing factor approach.

**CSQ72. Considering the blended sharing factor, what are your views on the factors (e.g. predictability, ability to effectively deal with uncertainty) or evidence that could be used to distinguish between costs that can be baselined with high confidence and other costs?**

- 5.1.279 These are reasonable areas to consider, but only the last one (quality of evidence) is company specific.
- (a) Predictability depends upon the availability of representative costs for defined areas of investment, which will be common to all licensees,
  - (b) Dealing with uncertainty will in most cases be defined by common price control deliverable mechanisms,
  - (c) Quality of evidence will be licensee specific and thus may re-categorise the classification of "low confidence" to "high confidence" where the licensee provides sufficient justification for cost forecasts.

**CSQ73. Do you have any views on the level of cost disaggregation we should apply to calculate the blended sharing factors approach on (regulatory reporting pack level or another level)?**

- 5.1.280 If the decision is made to pursue blended sharing factors then the disaggregation should be based upon the disaggregation available in historic data submissions.
- 5.1.281 There are various levels that this could be disaggregated down to:

- (a) PCFM cost categories
- (b) Prime cost drivers (e.g. asset replacement, faults, reinforcement)
- (c) Activities within the prime cost driver (e.g. replace switchgear, replace transformers)

5.1.282 The degree to which disaggregation is necessary will be determined by whether there is any additional benefit of subdividing down to the next level. We would anticipate that in most cases disaggregating to prime cost drivers should suffice.

5.1.283 Any disaggregated analysis used for blended sharing factors must recognise that the overall cost allowances may not be determined by detailed disaggregated analysis alone. For example, in RIIO-ED1, cost allowances for slow track licensees were determined from a combination of 50% determined by disaggregation and 50% determined by top down Totex analysis. When such combined analysis is used for setting allowances it may not be appropriate to consider using blended sharing factors.

**CSQ74. Do you have any views on whether the proposed business plan incentive coupled with the blended sharing factor will drive the right behaviours?**

5.1.284 As we discuss in the response to CSQ71, removing the cost ambition element from sharing factors dilutes the incentive for licensees to put forward low cost plans.

**CSQ75. What views do you have on our assessment of the sharing factor ranges?**

5.1.285 The proposed upper limit of 50% is lower than the values used for a number of sectors in RIIO-1 and in other regulated sectors.

5.1.286 The statement made in paragraph 9.60 is incorrect. For example, in GD a sharing factor of 65% is used where the GD licensees forecast aligns with Ofgem's view, for ED (slow track) this is 60%. It was only Transmission that had a sharing factor of 50%. Selectively basing proposals or making statements solely on the RIIO-T1 settlement is misleading and should be avoided.

5.1.287 The GD IQI matrix published in the RIIO-GD1: Final Proposals - Supporting document - Cost efficiency is shown below:

**Table 10.1: IQI matrix**

1. NWO bid: benchmark ratio	90.0	95.0	100.0	105.0	107.0	110.0	115.0	118.0	122.0
2. Efficiency Incentive	67%	66%	65%	64%	64%	63%	63%	62%	61%
3. Allowed expenditure	97.5	98.8	100.0	101.3	101.8	102.5	103.8	104.5	105.5
4. Additional income	4.1	3.3	2.5	1.7	1.3	0.8	0.0	-0.6	-1.3
Actual expenditure	Total Reward								
85	12.4	12.4	12.3	12.1	12.0	11.9	11.7	11.5	11.3
90	9.1	9.1	9.0	8.9	8.8	8.8	8.6	8.4	8.2
95	5.8	5.8	5.8	5.7	5.7	5.6	5.4	5.3	5.2
100	2.4	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.1
105	-0.9	-0.8	-0.7	-0.7	-0.7	-0.7	-0.8	-0.9	-1.0
107	-2.3	-2.1	-2.1	-2.0	-2.0	-2.0	-2.1	-2.1	-2.2
110	-4.3	-4.1	-4.0	-3.9	-3.9	-3.9	-3.9	-4.0	-4.0
115	-7.6	-7.4	-7.3	-7.1	-7.1	-7.1	-7.1	-7.1	-7.1
118	-9.6	-9.4	-9.2	-9.1	-9.0	-9.0	-8.9	-8.9	-8.9
122	-12.3	-12.0	-11.8	-11.6	-11.6	-11.5	-11.4	-11.4	-11.4

5.1.288 The ED (slow track) IQI matrix published in the RIIO-ED1: Final determinations for the slow-track electricity distribution companies Business plan expenditure assessment document is shown below

**Table 2.8: IQI matrix**

DNO:Ofgem Ratio	90	95	100	105	110	115	120	125	130
Efficiency Incentive	65%	63%	60%	58%	55%	53%	50%	48%	45%
Additional income (£/100m)	3.1	2.4	1.7	0.9	0.1	-0.8	-1.8	-2.8	-3.9
Rewards & Penalties									
Allowed expenditure	97.50	98.75	100.00	101.25	102.50	103.75	105.00	106.25	107.50
Actual Exp									
90	7.95	7.9	7.7	7.4	7.0	6.4	5.7	4.9	4.0
95	4.7	4.76	4.7	4.5	4.2	3.8	3.2	2.5	1.7
100	1.5	1.6	1.7	1.6	1.5	1.1	0.7	0.1	-0.6
105	-1.8	-1.5	-1.3	-1.2	-1.3	-1.5	-1.8	-2.2	-2.8
110	-5.1	-4.6	-4.3	-4.1	-4.1	-4.1	-4.3	-4.6	-5.1
115	-8.3	-7.7	-7.3	-7.0	-6.8	-6.7	-6.8	-7.0	-7.3
120	-11.6	-10.9	-10.3	-9.9	-9.6	-9.4	-9.3	-9.4	-9.6
125	-14.8	-14.0	-13.3	-12.7	-12.3	-12.0	-11.8	-11.7	-11.8
130	-18.1	-17.1	-16.3	-15.6	-15.1	-14.6	-14.3	-14.1	-14.1
135	-21.3	-20.2	-19.3	-18.5	-17.8	-17.2	-16.8	-16.5	-16.3
140	-24.6	-23.4	-22.3	-21.4	-20.6	-19.9	-19.3	-18.9	-18.6
145	-27.8	-26.5	-25.3	-24.2	-23.3	-22.5	-21.8	-21.2	-20.8
150	-31.1	-29.6	-28.3	-27.1	-26.1	-25.1	-24.3	-23.6	-23.1

5.1.289 The T IQI matrix published in the RIIO-T1: Final Proposals for National Grid Electricity Transmission and National Grid Gas is shown below:

**Table A1.2: RIIO-T1 IQI matrix**

IQI Ratio	100	105	110	115	120	125	130	135
Efficiency Incentive	50%	49%	48%	46%	45%	44%	43%	41%
Additional income (£/100m)	2.5	1.9	1.2	0.5	-0.3	-1.0	-1.8	-2.6
Rewards & Penalties								
Allowed expenditure	100.00	101.25	102.50	103.75	105.00	106.25	107.50	108.75
Actual Expenditure								
85	10.0	9.8	9.5	9.2	8.8	8.3	7.8	7.2
90	7.5	7.3	7.1	6.8	6.5	6.1	5.6	5.1
95	5.0	4.9	4.8	4.5	4.3	3.9	3.5	3.0
100	2.5	2.5	2.4	2.2	2.0	1.7	1.4	1.0
105	0.0	0.0	0.0	-0.1	-0.3	-0.5	-0.8	-1.1
110	-2.5	-2.4	-2.4	-2.4	-2.5	-2.7	-2.9	-3.2
115	-5.0	-4.8	-4.8	-4.7	-4.8	-4.8	-5.0	-5.2
120	-7.5	-7.3	-7.1	-7.0	-7.0	-7.0	-7.1	-7.3
125	-10.0	-9.7	-9.5	-9.3	-9.3	-9.2	-9.3	-9.3
130	-12.5	-12.2	-11.9	-11.7	-11.5	-11.4	-11.4	-11.4
135	-15.0	-14.6	-14.3	-14.0	-13.8	-13.6	-13.5	-13.5
140	-17.5	-17.0	-16.6	-16.3	-16.0	-15.8	-15.6	-15.5
145	-20.0	-19.5	-19.0	-18.6	-18.3	-18.0	-17.8	-17.6

5.1.290 In RIIO-ED1, WPD obtained a fast track sharing factor of 70%. This provides a strong incentive for the identification of additional costs savings and should form the upper limit.

5.1.291 It can be observed from the three IQI matrices for RIIO-1 that high cost submissions of 30% more than Ofgem's view attracted sharing factors of ~58% in GD, 45% in ED and 43% in T. These could be taken as being representative of licensees where there are significant "low certainty" costs. These sharing factor values (representing the lower limit) are higher than or only marginally below the proposed RIIO-2 upper limit. This suggests that the overall range proposed for RIIO-2 is spanning values that are too low.



**CSQ76. Are there any other factors that you think we should take into account in the design of sharing factors?**

- 5.1.292 Providing a strong incentive for licensees to deliver efficiency improvements during the price control reveals lower costs that can be used to inform allowances for subsequent price controls. Incentives for efficiency improvement should not be weakened.

**CSQ77. Do you have any evidence on the scope for productivity improvements in the different sectors?**

- 5.1.293 While significant reductions in costs have been achieved through the RPI-X regulatory approach and RIIIO-1 framework, ongoing business improvements continue to be sought. The availability of a strong sharing factor provides a strong incentive for companies to innovate and evolve.

**CSQ78. Do you have views on whether adjustments to sharing factor levels after the price control is set are desirable or necessary?**

- 5.1.294 Sharing Factors should remain intact for the duration of the price control. Reviewing elements of the package in isolation adds significant risks to the package.

**CSQ79. Under which circumstance do you consider such adjustments should take place?**

- 5.1.295 None.

**CSQ80. When do you consider an adjusted sharing factor should be calculated?**

- 5.1.296 The sharing factor should only be calculated during a price control setting process. It should be considered as part of the overall package.

***Ensuring fair returns questions***

**CSQ81. Do you agree with our comparative assessment of RAMs set out in Appendix 4?**

- 5.1.297 It is not clear that the latest RAMs are demonstrably in the interest of customers. The dampening effect the mechanisms could have on incentives to innovate and drive efficiencies is not clearly assessed, and as we show in paragraphs 3.3.6 to 3.3.8 and 4.4.16 to 4.4.21 the disincentive properties of RAMs dilute the incentive properties of Totex, ODIs, PCDs and all other incentive schemes
- 5.1.298 It is not clear why Ofgem is proposing the use of RAMs when there are already proposed measures that reduce the possibility of over-performance due to forecasting error, such as RPE indexation and shortening the price control period.
- 5.1.299 In addition, it is not clear how Ofgem justifies its proposals for different approaches to each sector, and how this would apply to electricity distribution.
- 5.1.300 Overall, it is not clear how Ofgem has determined the +/-3% range is appropriate for the RAMs. A full detailed review of the RIIIO-2 proposals is required to determine what this range should be. This is discussed further in paragraphs 4.4.8 to 4.4.29.

**CSQ82. Do you agree with our proposal not to give further consideration to using discretionary adjustments?**

- 5.1.301 No. For ED2 this would have to be further considered once the detail of the price control is established.

**CSQ83. Do you agree with our proposal to introduce an individual performance-based adjustment approach (Class 1) for the transmission sectors?**

- 5.1.302 No comment on transmission specific proposal, we have not looked at the detail for this sector

**CSQ84. Do you agree with our proposal to introduce a sector average-based adjustment approach (Class 2) for the GD sector?**

- 5.1.303 No comment on GD specific proposal, we have not looked at the detail for this sector

**CSQ85. Do you agree with our proposal we should not adjust companies downward if they perform below their base cost of equity or upwards if they perform above their base cost of equity?**

- 5.1.304 Adjusting elements of the price control during a period effectively reopens the price control, adding regulatory risk to the package.

**CSQ86. Would a return adjustment threshold of  $\pm 300$ bps RoRE achieve a good balance between providing scope for companies to outperform and ensuring return levels are fair?**

- 5.1.305 Overall, it is not clear how Ofgem has determined the  $\pm 3\%$  range is appropriate for the RAMs. A full detailed review of the RIIO-2 proposals is required to determine what this range should be. This should be done on a rigorous analytical basis (for example using a fully documented Monte Carlo analysis).
- 5.1.306 If a price control is correctly calibrated, with adequate assessment of business plans and mechanisms for setting and adjusting allowances, then it should already balance fair returns and the incentive to outperform without the need for Returns Adjustment Mechanisms. All Returns Adjustment Mechanisms introduce a reduction in the incentive to outperform and result in a level of inequality, where the best performing companies may be penalised whereas penalties for the worst performing companies are reduced.

**CSQ87. What are your views on the proposed use of RoRE as a return adjustment metric? Would it be suitable for the gas and electricity transmission sectors and the gas distribution sector?**

- 5.1.307 If such a metric is to be used more widely then it must be fully disclosed and include all regulatory elements, such as cost of debt, tax, etc. It should also not be a one size fits all answer, but be relevant to the sector.
- 5.1.308 As stated above, there is much debate around the calculation of RoRE – which items are included and how to calculate those items. Calculation of RoRE for the RIIO-2 period before the conclusion of the price control period will inevitably require the inclusion of forecast performance, and therefore introduces risks and volatility into the RoRE calculation, which in turn introduces risks and volatility into any RAM calculations using RoRE as an input.

**CSQ88. Should we include financial performance within the scope of return adjustments? If not, what is the rationale for excluding financial performance?**

- 5.1.309 No, in the event that any scheme is introduced there is no case for it extending beyond Return on Regulated Equity, since this is the area of operation that Ofgem is seeking to incentivise.

**CSQ89. Should we implement adjustments through a 'true-up' as part of the annual iteration process or at the end of the price control as part of the close-out process?**

- 5.1.310 It is fundamental that the RIIO package is kept as simple as possible to ensure all stakeholders can understand the processes.
- 5.1.311 Including adjustments as part of the Annual Iteration Process ensures timely implementation of any impact of changes. However, due to the profiling of spend and performance over the whole RIIO-2 period, the annual process will need to take account of forecasts for the whole period, adding complexity. Complexity of any process needs to be considered before considering whether updates can be delivered within the existing AIP window, along with all other work.
- 5.1.312 If calculation of RIIO-2 adjustments under RAMs is only be done once total returns for the entire RIIO-2 price control are known, network operators will have to proceed to raise investment and make decisions around strategy and expenditure for RIIO-3, without knowing what their actual eventual return for the RIIO-2 period will be. This adds significant risk for investors, as well as adding uncertainty for the amount of future capex that can be funded through RIIO-2 related cashflow. This has not been considered in Ofgem's assessment of RAMs.
- 5.1.313 The alternative, making adjustments on an annual basis based on annual returns, is likely to increase price volatility as adjustments reflect the re-profiling of work and varying performance against incentives. Calculation of RoRE for the RIIO-2 period before the conclusion of the price control period will inevitably require the inclusion of forecast performance, and therefore introduces risks and volatility into the RoRE calculation, which in turn introduces risks and volatility into any RAM calculations using RoRE as an input. Any such approach would add complexity to the price control and is still likely to result in true ups to reflect the outcome of close out mechanisms after the end of the price control.
- 5.1.314 It therefore does not appear that either of these options provide a satisfactory approach.

***RIIO-2 Achieving a reasonable balance questions***

**CSQ90. Do you agree with our assessment of the measures we have identified to make the price control more accurate?**

- 5.1.315 Changing the parameters in the price control does not make the price control more accurate. One of the issues flagged by Ofgem is around asymmetric information, but this issue is reduced by utilising the historical RIIO-1 information to set benchmarks and baselines.
- 5.1.316 A number of the changes are still early in their design. So, for example, whilst indexation may be considered a simplification, the actual index to be used is not known and there remains a risk that the proposals could be more complex.
- 5.1.317 With the limited information on the calibration of the overall package, the need for the cashflow floor mechanism it is still not clear, and further analysis is required to determine whether it offers any meaningful protection.

**CSQ91. Are there other measures we should take to improve the accuracy of the price control?**

- 5.1.318 Many of the measures being proposed by Ofgem are proposed to mitigate forecasting errors. In earlier Ofgem presentations/meetings Jonathan Brearley has publicly stated there will always be issues with forecasting. So, it is not clear whether the additional proposals, with the added complexities really resolve the issues. A number of mechanisms in RIIO-ED1 require close out adjustments which may well resolve a number of the issues flagged by Ofgem, yet the role for price control close outs are not even recognised in the review of RIIO-1 performance. Obviously, any issues with the forecasting errors are addressed, in part, by the shortening of the price control period from eight to five years, although this weakens incentives (see paragraph 4.4.27). Moreover, as regards to RIIO-ED1, only UKPN is achieving materially higher returns and these are attributed to areas that are subject to uncertainty mechanisms and will be subject to a close-out adjustments (see paragraph 1.2.5).

**CSQ92. Are there other steps we could take to simplify the price controls, without significantly affecting the accuracy of the control?**

- 5.1.319 WPD is concerned that Ofgem is proposing a whole suite of changes without addressing whether experience in RIIO-1 confirms they are all required. The proliferation of 'control' mechanisms, proposed in the consultation will lead to the consequences of making price control more complex, increasing asymmetric regulatory risk and reducing incentives to reduce costs, innovate and deliver outputs.

**CSQ93. Do you agree with our consideration of the risks facing these companies? Do you think the measures we are proposing will mitigate these risks? Does the expected level of return indicated by our proposals reflect these risks?**

- 5.1.320 No. Ofgem's assessment of risks appear to be very one sided. For example, there is no reference to under recovery of costs in RIIO-1 such as debt costs which WPD has faced during RIIO-ED1 which was not anticipated at the time of the price control. Nor has Ofgem considered all the additional costs that WPD and other DNOs are incurring in addressing the transition from being a DNO to DSO (as highlighted both in our response to the March 2018 Consultation and our response to the December 2017 Consultation on a potential RIIO-ED1 Mid-Period Review).
- 5.1.321 Over the forthcoming years the energy sector is potentially going to see a great deal of change in order to address the issue of carbon reduction. With this change comes increased risk that other regulatory sectors will not see. This risk needs to be recognised in order to encourage the required investment.

**CSQ94. Have we achieved a reasonable balance with our proposals in seeking to achieve an accurate price control with return adjustment mechanisms only being used as a failsafe? Should we instead have a simpler price control and put more reliance on return adjustment mechanisms?**

- 5.1.322 Without more transparency on Ofgem's expected RoRE for the RIIO 2 price controls it is not evident whether the return adjustment mechanisms will only be used as a failsafe. The complexity of the RIIO-2 proposals and more importantly the interactions between the relevant mechanisms needs to be further analysed and understood.

**CSQ95. Have we achieved a reasonable balance in our proposals in considering return adjustment mechanisms alongside the expected-allowed return wedge? Should we instead only rely on one mechanism? What additional value would this bring?**

- 5.1.323 We fundamentally disagree with the expected-allowed return wedge. This is particularly the case as none of the existing RII0-1 price controls have currently closed out we do not believe there is relevant information under the current price controls to justify the wedge (see further 1.2.5). Previous evidence has also shown that such a wedge, if incorrect, can work to the detriment of the customer (see Frontier Economics paper).

**CSQ96. Have we got the right focus on the areas that are of most value to consumers?**

- 5.1.324 Based on our latest stakeholder engagement customers welcomed the continuation of the six output categories since they understood the outcomes as part of the price control. It is not evident that Ofgem has tested its proposals with customers (see further Section 3.2).

**CSQ97. Are we proposing a methodology that allows us to achieve a reasonable balance between the interests of different consumer groups, including between the generality of consumer and those groups that are poorly served/most vulnerable? Are we missing any group?**

- 5.1.325 Ofgem's overall proposals appear to cover a range of stakeholders. As we have flagged in Section 3.2, there are a number of outputs which do not cover all the commitments licensees will be making to their stakeholders. We think it is important for Ofgem to consider these outputs and how they are recognised/covered/represented within the scope of the RII0-2 proposals.

**CSQ98. Are we proposing a methodology that allows us to achieve a reasonable balance between the interests of existing and future consumers?**

- 5.1.326 A particular issue here is how Ofgem proposes to implement the move from RPI to CPIH. Ofgem has stated the impact of this change will be NPV neutral, but without further detail on the time period Ofgem is considering and more details of the mechanics behind this policy change it is difficult to assess the impact of this change on both current and future consumers. The Moody's paper on GD2 (14<sup>th</sup> February 2019) further questions this NPV neutral view and regards it as NPV negative. We are still waiting on definite evidence of this neutrality in Ofgem's documentation/analysis.

### ***Preliminary impact assessment questions***

**CSQ99. What are your views on the approach we are proposing for assessing impact of our RII0-2 proposals?**

- 5.1.327 As highlighted in various responses there is inadequate detail across all the proposals at this stage in the process to be able to complete a full impact assessment. WPD has serious concerns on a number of points, as described in detail in this response.

**CSQ100. What are your views on the assumptions we have made in our assessment to date?**

- 5.1.328 Overall Ofgem's proposals appear to have selected the lowest common denominator for networks to deliver. Whilst the argument is based upon avoiding overfunding there also needs to be a recognition that this will lead to a very basic "vanilla" service from networks. Whilst Ofgem talks about ODIs and other incentives potentially incentivising companies the argument is that customers do not necessarily want the lowest levels of service. Ofgem

refers to “fair returns”, but we should also be considering a “fair price control” which delivers what stakeholders request as part of the baseline plans. Nothing in the impact assessment seems to recognise this.

- 5.1.329 With regards to the IA, the common assumption is that networks will always outperform Totex. The existing price control framework is set to be challenging by using benchmarked data. It is also designed to incentivise (through sharing factors) the identification of further efficiencies. Consequently, the outturn of lower costs should not be a surprise. Ofgem should therefore be testing RIIO-2 principles against the benefits RIIO-ED1 is providing. It should also be factoring in the stated intention of simplifying the RIIO-2 price controls.

**CSQ101. What are your views on the uncertainties we have identified for the purpose of this assessment?**

- 5.1.330 Ofgem should critically consider the uncertainty over its allowed cost of equity, and the risk that this is (a) too low to incentivise new investment; and (b) endangers financeability of one or more licensees.

**CSQ102. What additional evidence should we consider as part of our ongoing assessment?**

- 5.1.331 Ofgem needs to consider the following evidence as part of its ongoing impact assessment:
- (a) Performance under all the individual RIIO price controls, factoring in the full financing costs and also the expectations for the RIIO-1 close out methodologies; and
  - (b) Increase in risk due to changes required to network operation to enable the transition to a lower carbon future.

## **5.2 Finance questions**

### ***Cost of debt questions***

**FQ1. Do you support our proposal to retain full indexation as the methodology for setting cost of debt allowances?**

- 5.2.1 WPD supports full indexation provided the index is well calibrated to capture the true debt costs of a network company. As we stated in our response to the March 2018 framework consultation the index must accurately capture the efficient cost of debt for companies as a whole in the relevant network sector, given their expected credit rating, capital requirements, maturity profiles, issuing costs and cost of carry. This requires the index and the averaging method to be properly calibrated (unlike WPD’s 10 year trailing average used in RIIO-ED1 that fails to capture the true debt costs of the company).
- 5.2.2 The debt allowance should be sufficient to recover other debt costs not included within the iBoxx index such as transaction and liquidity costs. This has not been adequately looked at in the past but takes on greater significance as the overall cost of capital falls. We provide a fuller discussion of this important issue in the main part of our response at paragraph 4.2.16.

**FQ2. Do you agree with our proposal to not share debt out-or-under performance within each year?**

- 5.2.3 We agree, companies should be incentivised to obtain the most efficient financing. However, WPD has also always argued that under/over recovery of debt costs needs to be included in the RoRE calculation. Additional debt costs not recovered through the allowance affect actual returns to equity, and it makes no sense to ignore this.

**FQ3. Do you have any views on the next steps outlined in Finance annex paragraphs 2.22 to 2.25 for assessing the appropriateness of expected cost of debt allowances for full indexation?**

- 5.2.4 We agree with this programme but stress the importance of finding the correct index and averaging method. The Trailing average period should reflect the maturity profile of the company's debt. In RIIO-ED1, WPD has seen significant under performance to date against the cost of debt allowance and we are forecasting for this to continue for the remainder of the price control period. This is mainly due to the incorrect trailing average period being set by Ofgem. This underperformance would have been less material if WPD had been awarded the trombone profile as used by the slow track companies. Therefore the cost of debt must be correctly calibrated to the company's debt profile. Additionally, the use of the iBoxx A/BBB should be reflective of a company's ratings and weighted as such. It is possible there should be more weighting towards BBB, particularly if the RIIO-2 settlement is likely to have a negative impact to ratings due to the financeability issues it has raised.
- 5.2.5 As shown in the NERA report<sup>90</sup> and discussed in paragraph 4.2.18, we believe there is no evidence to support a halo effect and it would be incorrect to adjust the index downwards for this or offset against other financing costs. Transaction and liquidity costs are material and should be explicitly included as part of the allowance.

**FQ4. Do you have a preference, or any relevant evidence, regarding the options for deflating the nominal iBoxx as discussed in Finance annex paragraph 2.14? Are there other options that you think we should consider?**

- 5.2.6 We feel that any mechanism which relies on an expected RPI-CPIH wedge without a wedge true up mechanism has the potential to be materially inaccurate.
- 5.2.7 If CPIH is to be used then the method should be kept simple, e.g. deflate using a forecast of CPIH as provided by the OBR then true up for the actual CPIH when known. This would then be in line with how nominal revenues are calculated and could be done as part of the AIP.
- 5.2.8 In practice we believe use of CPI would be preferable over CPIH. The two indices are closely aligned, but forecasts for CPI are available from at least three accepted sources (HMT, OBR and the Bank of England) aiding transparency without any need for taking account of the CPI-CPIH wedge.

***Risk-free rate questions***

**FQ5. Do you agree with our proposal to index the cost of equity to the risk-free rate only (the first option presented in the March consultation)?**

- 5.2.9 Whilst we understand what Ofgem is attempting and largely agree with indexing the cost of equity, we have concerns with the current proposal. At a high level we are concerned with the use of the index linked government gilt (currently providing negative real yields) as a proxy for the risk-free rate.
- 5.2.10 A rational investor without constraints such as hedge requirements, would not accept a negative return. The index link gilt is not a proxy for the risk-free rate as this is highly distorted by the pensions market. The core investor in any index bonds/gilts would be one that has a position to hedge – such as a pension scheme. Due to the requirements of pension funds to hold highly rated assets, and those in particular that align with the UK method of pension indexation and discounting, the demand significantly outstrips the supply

<sup>90</sup> NERA, "Cost of debt at RIIO-2: a report for ENA", March 2019.

of index linked gilts and therefore the yield is artificially low and not reflective of a true risk-free market rate.

- 5.2.11 Negative real rates are a phenomenon in numerous economies brought about by unorthodox monetary policies such as Quantitative Easing. This position is exacerbated in the UK due to the requirement of pension funds to hold highly rated assets and those in particular that align with the UK method of pension indexation and discounting. As a result, the potential demand (c.£1.8trn of pension liabilities) significantly outstrips the supply of index linked gilts (c.£430bn nominal issuance with a market value at 31st December 2018 of c.£660bn) and therefore the yield is artificially lowered still further. A rational non-financial investor without constraints, such as hedge requirements, would not accept a negative real return and therefore the index linked gilt is not a suitable proxy for the risk-free in this context where Ofgem is seeking to attract capital to meet the policy objective of developing low-carbon networks.<sup>91</sup>
- 5.2.12 Ofgem should be using a risk-free rate based on what would be required by a rational investor unconstrained by hedging requirements. In the long term-term this should be related to the expected rate of GDP growth. We understand that this provides problems for cost of equity indexation, but it remains the conceptually correct approach.<sup>92</sup>

**FQ6. Do you agree with using the 20-year real zero-coupon gilt rate (Bank of England database series IUDLRZC) for the risk-free rate?**

- 5.2.13 As stated in the answer to FQ5 we do not agree with the proposed use of this index.
- 5.2.14 If Ofgem is intent on using a UK government debt as a proxy for the risk free rate, we refer to a NERA report looking at this issue on behalf of the ENA.<sup>93</sup> NERA are clear that Ofgem needs to allow sufficient headroom in the indexation process to protect companies from financeability problems in the event that the risk-free rate measure declines, so reducing the cost of equity. NERA estimate that for a typical company the AICR (adjusted interest cover ratio) will fall by 0.10 in response to a risk-free rate decline of 150 bps.
- 5.2.15 NERA also recommends using a 20-year nominal gilt as a stable and objective measure, with a real rate subsequently derived from a CPI forecast (three potential sources being HMT, OBR of the Bank of England target). The use of a nominal gilt reduces the distortion caused by the supply-demand balance cited above for real gilts.

**FQ7. Do you agree with using the October month average of the Bank of England database series IUDLRZC to set the risk-free rate ahead of each financial year?**

- 5.2.16 Ofgem should consider the advantages of using an annual average with an end of year true-up, in order to give a more accurate annual measure for the purpose of cost of equity indexation. This would then provide some protection if October was an anomalous month due to external factors outside of the control of companies.

**FQ8. Do you agree with our proposal to derive CPIH real from RPI-linked gilts by adding an expected RPI-CPIH wedge?**

- 5.2.17 As discussed above in response to FQ6, we prefer an alternative solution using a nominal risk-free rate and then deflating using a forecast of CPI which could then (if required) be trued up for the actual CPIH when known as with the cost of debt index.

<sup>91</sup> The Pensions Regulator, DB Landscape November 2018; and HM DMO Quarterly Review, Oct-Dec 2018

<sup>92</sup> NERA, "Cost of Equity Indexation using Risk Free Rate, A report for ENA", March 2019.

<sup>93</sup> NERA, "Cost of Equity Indexation using Risk Free Rate, A report for ENA", March 2019.



### ***TMR questions***

**FQ9. Do you have any views on our assessment of the issues stakeholders raised with us regarding outturn inflation, expected inflation, and the calculation of arithmetic uplift (from geometric returns)?**

- 5.2.18 Ofgem should use the upper end of the range for the uplift of 2%, as the criteria cited to lower that uplift by up to 1% do not exist. It cannot be assumed the returns will be predictable under Ofgem's model and it cannot be assumed that volatility will be less going forward.

**FQ10. Do you have any views on our interpretation of the UKRN Study regarding the TMR of 6-7% in CPI terms and our 6.25% to 6.75% CPIH real working assumption range based on the range of evidence?**

- 5.2.19 We feel that the way that the TMR has been calculated in the UKRN study is incorrect. As discussed in the NERA paper 'Review of UKRN Report Recommendations on TMR' of 20th November 2018, the UKRN TMR range of 6-7% in CPI terms is flawed as the CPI dataset used does not provide a reliable measure of historical CPI inflation. This has been acknowledged by the ONS and academic research. Furthermore, the NERA paper 'Further evidence on the TMR' of November 2018 shows that a forward looking TMR in the range 6.5-7.1% in RPI terms is more appropriate.<sup>94</sup> This would give a CPIH range of approximately 7.5-8%.<sup>95</sup>
- 5.2.20 Both the papers referenced above were submitted to Ofgem by the ENA on 30th November 2018.

**FQ11. Do you have any views on our reconciliation of the UKRN Study to previous advice received on TMR as outlined at Finance annex appendix 2?**

- 5.2.21 The arithmetic uplift should be 2%, not 1%; and it appears the 1% change in RPI vs. CPI was not factored into the TMR under a switch to CPI. All previous ranges cited (from the 2003 and 2006 studies, which used 100 years of data) suggested a real TMR range of 6.5% - 7.5% on an RPI basis, which would equate to a 9.5 – 10.5% nominal TMR.
- 5.2.22 Ofgem is now proposing to use a 6% real TMR on a CPI basis, or the equivalent of 8.5% nominal, which is not even in the low end of the prior range. It is not reasonable to assume that return expectations have changed so drastically in the last 10 years compared to the last 100 years to drive this proposed outcome from Ofgem.

### ***Equity beta questions***

**FQ12. Do you have any views on our assessment of the issues that stakeholders raised regarding beta estimation, including the consideration of: all UK outturn data, different data frequencies, long-run sample periods, advanced econometric techniques, de-gearing and re-gearing, and the focus on UK companies?**

- 5.2.23 WPD is cautious on applying the historical beta for the sector going forward. The net impact of the changes that Ofgem is proposing to the regulation (which we outline in the core of our response at section 4.2 is negative to equity holders who we will be taking on more risk than they have under historical price controls. Also the sector is entering a period of significant change due to required reductions in carbon usage and increase in electrification. These areas require greater investment, but at the same time create greater uncertainty and

<sup>94</sup> NERA, "Further Evidence on the TMR", November 2019.

<sup>95</sup> NERA, "Review of UKRN Report Recommendations on TMR", November 2019.

consequently risk. Therefore, the beta required under these new price controls should be higher than the historical beta's experienced under prior regulations.

- 5.2.24 For example, the way Ofgem is proposing to handle financeability is for the companies to deal with it themselves by restricting dividends, requiring equity injections, limiting additional debt issuances and payments to related parties or adjusting the depreciation and capitalisation rates if necessary. The first four proposals, which are negative to equity holders, are permanent, while adjusting capitalisation or depreciation rates, which are positive, are simply timing adjustments.
- 5.2.25 Ofgem needs to understand that it is putting more risk on the equity shareholders with the proposed changes and that has to feed its way into the CAPM model appropriately. Ofgem's beta estimate proposals simply don't account for this fundamental point.
- 5.2.26 Ofgem has to ensure that the beta used is relevant to each individual sector and can be adjusted as required due to differing objectives and risks as outlined above.
- 5.2.27 We provide more detailed comments on the estimation techniques for beta in response to FQ13 and FQ14.

**FQ13. What is your view on Dr Robertson's report?**

- 5.2.28 Dr. Robertson's paper provides a clear articulation of the application of GARCH estimation, and justification of why in the presence of heteroscedasticity of a type that would be captured by a GARCH model, GARCH estimation in theory will provide more precise estimates of beta. However, it is important to be clear that even in situations of heteroscedasticity of a type that would be captured by a GARCH model, the traditional OLS estimators used by regulators remain unbiased and statistically consistent, and in practice (as shown in the Indepen report - see below - there is little difference when both estimators are applied to the same data sample over a structurally stable period).
- 5.2.29 In practice the challenge to estimation of beta is dealing with the variation in beta over time. The GARCH model described by Dr. Robertson captures one way in which beta may vary, but this is essentially limited to autoregressive processes in the covariance structures of the variables. Under this model beta can vary but only around a long-term level. Dr. Robertson points out that estimation of a GARCH model will enable forecasting the return of beta to its (unconditional) long run level, but in practice this will be over a very short period and so will be of little value to the forecast of beta in a 5-year price control.
- 5.2.30 The GARCH model does not capture the more important structural break changes in beta that have been identified by others, including Indepen, that we discuss in response to FQ12 below.
- 5.2.31 Whilst GARCH will provide a more statistically precise estimation in a period where beta varies around a long-term level, it will not do so over a period in which there are structural changes in the level of beta of the form that are not captured by its underlying model. This means that, just like OLS, GARCH can only be applied to structurally stable subsamples of the data where there has been no change in the underlying long-term level of beta. This will include not only changes to the way the sector is operated or regulated, but also changes to the companies themselves such as acquisition and divestment activities, or changes in financial structure including debt gearing. If these subsamples are too small, it is arguable whether the additional parameter estimation requirement of GARCH (i.e. loss of degrees of freedom) relative to OLS make it a better estimation technique.

5.2.32 In summary we have concerns over Dr. Robertson's final recommendation of "... estimating beta over say ten years of daily data and constructing forecast using weighted average of conditional (short run) and unconditional (long run) estimates." A default assumption of 10 years of data is likely to cut across changes in company gearing levels, company acquisitions and divestments, not to mention possible structural changes in the sector is operated or regulated. Furthermore, weighting of conditional (short run) and unconditional (long run) estimates will add little in the context of the need to forecast a beta for a 5-year price control period. Essentially it is only the long run level that will be relevant.

**FQ14. What is your view on Indepen's report?**

5.2.33 Indepen's report provides a good discussion around the important issues in determination of an appropriate beta. We agree with some of Indepen's findings:

- emphasis on the importance of identifying structural breaks, such that these do not contaminate sample periods for beta estimation;
- given that structural breaks are important, daily or weekly data is preferable to monthly or quarterly data which requires a longer time period; and
- finding that, for equivalent datasets, OLS and GARCH estimates are numerically similar.

5.2.34 However, we do not agree that a relevant data period can be extended to 10 years. Irrespective of whether there have been structural step changes over this period (of the type that would be identified by a Chow test), over a decade there will almost certainly have been changes in individual company's corporate and financial structure that would make estimation of either a fixed beta, or one that changes around a long-term value (as in a GARCH model) inappropriate.

5.2.35 We also support the more detailed critique of Indepen's report found in Oxera's report to the ENA "The estimation of beta and gearing".<sup>96</sup>

5.2.36 Our strong is to remain with regulatory precedent of estimating betas over a 2-5 year daily sample – as supported by Oxera. This should be done to avoid structural breaks or other known changes in risk profile.

**FQ15. What is your view of the proposed Ofgem approach with respect to beta?**

5.2.37 As shown by Oxera,<sup>97</sup> Ofgem's RIIO-2 asset beta estimate of 0.3-0.5 draws on a UKRN report that employs a very unconventional quarterly frequency dataset, using a GARCH estimator which is also unconventional for beta estimation, which they believe substantially under-estimates energy network betas.

5.2.38 Ofgem has proposed a notional equity beta range of 0.646 – 0.762 for RIIO-2. In comparison, the equity beta for RIIO-1 and the previous price control was between 0.9 and 0.95. This would imply that companies are now significantly less risky than before. However, as discussed above, many of the mechanisms proposed under the RIIO-2 framework increase the risk to equity investors. For example, many of the proposals made by Ofgem to tackle financeability such as restricting dividends, equity injections and refinancing debt increase the risk to equity investors. Also, the cashflow floor mechanism again shifts risk

<sup>96</sup> Oxera, "Review of RIIO-2 finance issues: The estimation of beta and gearing", March 2019.

<sup>97</sup> Oxera, "Review of RIIO-2 finance issues: The estimation of beta and gearing", March 2019.

onto equity investors from debt investors. This added to the significant period of greater uncertainty due to the required technological changes can only increase risk for investors.

### ***Cross-checking the CAPM-implied cost of equity questions***

#### **FQ16. Do you agree with our proposal to cross-check CAPM in this way?**

- 5.2.39 We do not agree with the proposal. We cover the inadequacy of Ofgem's cross-checks in the main section of our response – see paragraphs 4.2.7 to 4.2.13 Ofgem's cross checks should focus on the long-term financeability of the network companies.

#### **FQ17. Do you agree that the cross-checks support the CAPM-implied range and lend support that the range can be narrowed to 4-5% on a CPIH basis?**

- 5.2.40 We believe that the Ofgem data published to date does not support the 4-5% range. We cover the inadequacy of Ofgem's cross-checks in the main section of our response – see paragraphs 4.2.7 to 4.2.13.
- 5.2.41 We particularly bring to Ofgem's attention Oxera's report to the ENA "Rates of return used by investment managers".<sup>98</sup> This report explains why TMR forecasts published by investment managers, and forecast assumptions prescribed by the FCA for the purposes of marketing retail financial products, will understate the expected market returns.

#### **FQ18. Are there other cross-checks that we should consider? If so, do you have a proposed approach?**

- 5.2.42 As stated above Ofgem's cross checks should focus on the long-term financeability of the network companies.
- 5.2.43 An additional important cross-check is raised by Oxera in their report to the ENA "Asset and debt risk premiums".<sup>99</sup> Oxera show that Ofgem's cost of equity determination fails the cross-check of maintaining sufficient margin between the asset risk premium and the debt risk premium to compensate equity investors for the additional risk of equity. This suggests that the combination of assumptions used in the CAPM is extreme, and that one or more should be revised upwards to provide a consistent market-based result for the cost of equity.
- 5.2.44 As a supplementary, Ofgem could collect data on nominal returns being earned in other regulated utility jurisdictions (US, Canada, Europe, Australia, etc.).

### ***Expected and allowed return questions***

#### **FQ19. Do you agree with our proposal to distinguish between allowed returns and expected returns as proposed in Step 3?**

- 5.2.45 No, under a well calibrated price control, we do not believe that these mechanisms are required. We discuss this in the main section of our response – see paragraphs 4.2.20 to 4.2.30.
- 5.2.46 As yet there is no clear modelling of how the RIIO-2 package will perform in the round, however it has been indicated by Ofgem that the potential for outperformance in RIIO-2 will be much diminished. The more likely scenario is that there are more areas where companies can underperform. The allowed cost of equity should be set as the minimum return on equity an investor would expect from their investment. Any additional rewards (or penalties) should

<sup>98</sup> Oxera, "Review of RIIO-2 finance issues: Rates of return used by investment managers", March 2019.

<sup>99</sup> Oxera, "Review of RIIO-2 finance issues: Asset and debt risk premiums", March 2019.

be earned through management expertise. To adjust this downwards in advance for possible outperformance undermines the RIIO concept. It is inappropriate to set a downwards adjustment to RIIO-2 cost of equity for outperformance seen in RIIO-1 as the parameters will have got tighter.

- 5.2.47 A well calibrated price control should include adequate mechanisms for setting and adjusting allowances. If this is done correctly, there should be no need to distinguish between allowed returns and expected returns. There is also the risk that any adjustment for expected returns will duplicate other mechanisms and companies will be exposed to a double count.
- 5.2.48 The ENA has commissioned a report from Frontier Economics that looks at this issue in detail.<sup>100</sup> Frontier clearly show that reducing the AR below the ER is totally counter to regulatory practice, whereby regulators “aim-up” the cost of capital. The reason for this is explained in the following quotation from the Competition Commission in relation to price controls for Heathrow and Gatwick Airports:

*“Given the uncertainties in cost of capital estimates, we considered the cost of setting an allowed WACC that was too high or too low. If the WACC is set too high then the airports’ shareholders will be over-rewarded and customers will pay more than they should. However, we consider it a necessary cost to airport users of ensuring that there are sufficient incentives to invest, because if the WACC is set too low, there may be underinvestment from BAA or potentially costly financial distress...Given the significance to customers of timely investment at Heathrow and Gatwick, we have given particular weight to the cost of setting the allowed WACC too low. Most importantly, we note that it is difficult for a regulator to reduce the risks of underinvestment within a regulatory period.”<sup>101</sup>*

- 5.2.49 Frontier Economics also provide a detailed critique of how Ofgem has misrepresented the historical data on past outperformance, and the reasons why outperformance in RIIO-2 is less likely than RIIO-1.
- 5.2.50 There is a real danger that this mechanism will make companies less attractive to equity investors and will struggle to finance their businesses.

**FQ20. Does Finance annex appendix 4 accurately capture the reported outperformance of price controls?**

- 5.2.51 No, we discuss this in the main section of our response – see paragraph 4.2.26 to 4.2.27.
- 5.2.52 We re-iterate that Appendix 4 excludes the over/under recovery of debt costs in the RoRE computations even though the equity return is absolutely benefited or hurt by such over or under recovery of debt costs. WPD is expected to under-recover approximately £175m over RIIO-ED1 due to the incorrect calibration of the cost of debt, and WPD is the only fast-tracked company in ED1 and it is meeting all of its outputs.

<sup>100</sup> Frontier Economics, “Adjusting Baseline Returns for Anticipated Outperformance: An assessment of Ofgem’s proposals”, March 2019.

<sup>101</sup> Competition Commission, A report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd), September 2007. See page 49., [https://webarchive.nationalarchives.gov.uk/20111202214947/http://www.competition-commission.org.uk/rep\\_pub/reports/2007/fulltext/532.pdf](https://webarchive.nationalarchives.gov.uk/20111202214947/http://www.competition-commission.org.uk/rep_pub/reports/2007/fulltext/532.pdf)

**FQ21. Is there any other outperformance information that we should consider? We welcome information from stakeholders in light of any gaps or issues with the reported outperformance as per Finance annex appendix 4.**

- 5.2.53 We further note that as yet, Ofgem has not yet developed a clear measure that consistently shows any under or over performance for RIIO-1. Further work is required with Ofgem to develop the RoRE/RFPR.
- 5.2.54 Additionally, the forecast RORE numbers in appendix 4 do not include the impact of any potential RIIO-1 closeout mechanisms that may reduce returns.

### ***Financeability questions***

**FQ22. What is your view on our proposed approach to assessing financeability? How should Ofgem approach quantitative and qualitative aspects of the financeability assessment? In your view, what are the relevant quantitative and qualitative aspects?**

- 5.2.55 Ofgem should be looking to meet their statutory requirement at ensuring companies are financeable at the offset and not focus on safety nets.
- 5.2.56 WPD is concerned that the switch from RPI to CPIH, and the short-term increase in cashflows that this generates, is masking the impact on financeability of the significant reduction to the cost of capital. Financeability should be assessed under both RPI and CPIH.
- 5.2.57 We question whether the index adopted should be used consistently through all inflationary measures in the price control – revenue, RAV, cost of equity and cost of debt.

**FQ23. Do you agree with the possible measures companies could take for addressing financeability? Are there any additional measures we should consider?**

- 5.2.58 The more onus Ofgem puts on the companies to address financeability, the higher the equity risk premium needs to be as the equity owner will be taking much more risk than they are now, with a consequentially higher Beta.
- 5.2.59 The financeability measures suggested in Ofgem's consultation document at paragraph 4.16 are not realistic. Adjustment of capitalisation and depreciation rates are simply timing adjustments and accelerate cashflows from future price control periods. These are not long term financeability measures.

**FQ24. Do you agree with the objectives and principles set out for the design of a cashflow floor?**

- 5.2.60 We feel that the price control should be well calibrated in the round and provide companies with a financeable position. If this is done, a cashflow floor should not be required.
- 5.2.61 The ENA has commissioned a detailed report from KPMG to assess Ofgem's proposal for the cashflow floor mechanism, and WPD support the conclusions of this report:<sup>102</sup>
- Ofgem's proposed mechanism appears to be a response to licensee financeability risk created by Ofgem's own decision to materially reduce the cost of equity, rather than a response to any identified market failure. Good regulation should focus on addressing market failures.

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<sup>102</sup> KPMG, "Assessment of Ofgem's Cashflow Floor Proposals", March 2019.

- A cashflow floor intervention would be inconsistent with the outcome of a competitive market (which good regulation is intended to mimic). In a competitive market where there is perceived to be a risk that cashflows will be insufficient to finance the operation, the required equity return would adjust. In the context here, the required return on equity would not fall to such a level as to endanger financeability.
- KPMG's stylised modelling shows that the mechanism proposed by Ofgem, which essentially brings revenue forward, can only improve liquidity of a company in the short term. It will not improve the creditworthiness of a business on a sustainable basis over the medium term.
- If short term liquidity were the issue that Ofgem is seeking to solve by the cashflow floor mechanism, then it should be expected that financial markets themselves could provide an equivalent solution (e.g. through temporarily extending liquidity to the company), provided that the company was inherently solvent over the medium term. In this case Ofgem's mechanism would be redundant.
- If Ofgem is concerned about a medium-term risk to financeability, the proposed cashflow floor mechanism will not provide a solution – this can only be done by revisiting the required equity return in the light of the financeability risk.
- It becomes apparent, therefore, that the proposed cash floor mechanism undermines the role of financeability as a cross-check and necessary constraint on Ofgem's overall cost of capital determination.
- Finally, the cashflow floor is likely to have negative implications for incentives. This will happen when, in the knowledge that annual debt service is protected by the mechanism, there will be a reduced incentive for lenders to monitor companies where financial or operational performance is deteriorating.

**FQ25. Do you support our inclusion of and focus on Variant 3 of the cashflow floor as most likely to meet the main objectives?**

- 5.2.62 Variant 3 suffers from all of the issues identified above in response to FQ24. Variant 3 is clearly a short term liquidity solution that only shifts revenues between periods. It will not solve any fundamental long term financeability issue in the industry. In a well calibrated regulatory regime such a measure should not be necessary (as indeed it is not included in any other UK regulatory regime).
- 5.2.63 Any statement (such as in 4.25 of the Finance Annex to the consultation document) 'would not be exposed to any changes in rating agency ratio definitions or metrics' is unlikely to be accurate. If such a trigger was hit then a ratings downgrade would most likely follow, therefore making it more expensive/difficult to recover from this negative position. This has in part already been demonstrated by the recent Moody's downgrade of Wales and West Utility.

***Corporation tax questions***

**FQ26. Do you support our proposal that companies should seek to obtain the "Fair Tax Mark" certification?**

- 5.2.64 It is not clear what concerns there are regarding the network companies' tax affairs or which stakeholders are behind this proposal. It would be helpful to understand any such concerns and look at ways to address them directly. WPD is very supportive in stakeholders and investors understanding the tax position of companies, but we feel that obtaining the "Fair

Tax Mark” certification is only an indication that a group “pays the right amount of tax at the right time in the right place” based on certain high-level criteria as determined by that organisation.

5.2.65 We understand that there is very little uptake of the “Fair Tax Mark” certification and we are not aware of any interest shown by our stakeholders in it in the past. It should be noted that the ‘fair tax mark’ is simply a third-party accreditation, not an HMRC accreditation. Companies have to publish tax strategies and are audited in far greater detail by HMRC than this third-party review.

5.2.66 We believe it is in the best interest of customers for companies to optimize their tax positions, but at the same time explore ways to expand current tax disclosures to be more informative and transparent to stakeholders. There is a tax table within the RFPR which Ofgem has indicated it intends to publish.

**FQ27. Is there another method to secure tax legitimacy other than the “Fair Tax Mark” certification? Could we build upon the Finance Acts (2016 and 2009) with regards to the requirement for companies to publish a tax strategy and appoint a Senior Accounting Officer?**

5.2.67 It would be useful if Ofgem could explain their definition of “tax legitimacy” and what they are looking to achieve above the current disclosures that are made. It should be noted that the network companies are UK resident companies and are not the focus of much of the recent initiatives on tax transparency that are really aimed at international group structures.

**FQ28. For Option A, how should a tax re-opener mechanism be triggered? Is there a materiality threshold that we should use when considering the difference between allowances and taxes actually paid to HMRC? If so – what might this be?**

5.2.68 It is disappointing that Ofgem are still retaining Option C, which imposes only downside risk on the company. A decision should be made whether to use Option A or Option B.

5.2.69 Option A should set out a clear method of calculation of the tax allowance and set out how the allowance would change based on over or under-performance against other financial criteria.

5.2.70 Option B should be pass-through for the tax payable on the network companies’ taxable profits before group relief, i.e. network companies should be looked at on a standalone basis and not be affected by the way in which their groups are structured. Option B should also set out clear guidelines as to what adjustments are required to calculate a company’s taxable profits from its regulated business. Using Option B may help to alleviate concerns regarding “tax legitimacy” as companies would only be reimbursed for the tax that they pay.

5.2.71 If the intention of Ofgem is to fund the tax liability as a “pass through” cost, then it would seem logical to have a trigger mechanism to ensure that the liability is funded on a timely basis, i.e. not wait until the end of the 5-year period.

5.2.72 The system should also use effective tax rates, not taxes paid, to ensure future customers pay for all of the taxes due on current operations. Using book effective tax rates evenly distributes tax burdens between current and future customers.

5.2.73 A re-opener mechanism should be unnecessary if Ofgem sets up the regime correctly.



### ***RAV indexation (CPIH) questions***

#### **FQ29. What is your view on our proposal for an immediate switch to CPIH from the beginning of RIIO-2 for the purposes of RAV indexation and calculation of allowed return?**

- 5.2.74 In principle an immediate switch to CPIH is acceptable provided that it is done in a way that ensures NPV-neutrality. The Moody's paper of 14<sup>th</sup> February entitled "Credit quality likely to weaken in RIIO-GD2 regulatory period" considers this switch to be NPV negative due to the way Ofgem has estimated TMR on a CPIH basis. Ofgem is yet to provide definite evidence as to the neutrality of such a move.
- 5.2.75 Furthermore, in their paper Moody's consider that without the switch to CPIH, the notional company's AICR would fall to a level that would not be consistent with an investment grade rating. It should be recognised by Ofgem that although a switch to CPIH eases companies' short term financeability following any sharp reduction in the cost of equity, it will only put pressure on long term financeability. It is not appropriate for Ofgem to rely on the switch from RPI to CPIH to improve the financeability of the RIIO-2 package or to justify lower allowed returns. It would appear in section 6.6 of the finance annex that Ofgem are partially justifying a reduction in cost of capital by the switch to CPIH.
- 5.2.76 As yet, Ofgem has not provided a full impact assessment of the switch. Ofgem has proposed the use of a forecast RPI-CPIH wedge for both the calculation of the cost of debt index and also the indexation of the risk free rate. Companies are then exposed to the risk that the outturn wedge could be different to the forecast if there is no wedge true up. Additional financing costs associated with issuing CPIH linked debt should be considered.
- 5.2.77 Also forecast Totex allowances would need to include an appropriate adjustment to ensure nominal costs can be recovered.

#### **FQ30. Is there a better way to secure NPV-neutrality in light of the difficulties we identify with a true-up?**

- 5.2.78 We feel that any mechanism which relies on an expected RPI-CPIH wedge without a wedge true up mechanism has the potential to be materially inaccurate, and compromise NPV neutrality. Forecast CPIH trued up for actual CPIH would be the simplest mechanism. Ofgem has both MOD and TRU as annual true-up mechanisms already.

### ***Regulatory depreciation question***

#### **FQ31. Do you have any specific views or evidence relating to useful economic lives of network assets that may impact the assessment of appropriate depreciation rates?**

- 5.2.79 No, based on the diligence that was performed on this issue in preparation for RIIO-ED1, we consider that the 45 years established in RIIO-ED1 as a proxy for economic life is maintained in RIIO-ED2 unless changes are needed for financeability reasons. However, WPD considers that changes should not need to be adapted purely for financeability reasons - one should address why these financeability issues arise.

### ***Capitalisation rates question***

#### **FQ32. Do you agree with our proposed approach to consider capitalisation rates following receipt of company business plans?**

- 5.2.80 Yes, capitalisation rates should be viewed as part of the company specific business plans and be judged in terms of overall value for money to customers and overall financeability of the companies.

### ***Notional gearing question***

#### **FQ33. Do you have any comments on the working assumption for notional gearing of 60%, or on the underlying issues we identify above?**

- 5.2.81 We see no reason for Ofgem to change the level of notional gearing for DNOs from the current 65%.

### ***Notional equity issuance costs question***

#### **FQ34. Do you agree with our proposed approach to consider notional equity issuance costs in light of RIIO-2 business plans and notional gearing?**

- 5.2.82 Yes, 5% cost of equity issuances is reasonable.

### ***Pension funding question***

#### **FQ35. Do you agree that for RIIO-2 we align transmission and gas distribution with electricity distribution and treat Admin and PPF costs as part of Totex?**

- 5.2.83 Yes, should be consistent across the sub-sectors.

### ***Directly Remunerated Services question***

#### **FQ36. Do you have any views on the categories of Directly Remunerated Services and their proposed treatment for RIIO-2?**

- 5.2.84 This section in the Finance Annexe does not specifically deal with Electricity Distribution. However, we support the proposed alignment of DRS1 to treat Sole-use Connections in the same way as is current the case in electricity distribution. There are a number of other ED categories which do not apply to any of the other networks, for example those relating to metering which would need to be retained in RIIO-2.
- 5.2.85 We note that the other networks have DRS6. Emergency Services for the provision of emergency services by one licensee to or on behalf of another, which could be applied to Electricity Distribution.
- 5.2.86 The anticipated increase in whole system solutions may require electricity distribution to provide directly remunerated services to the Electricity Transmission Operators or the Electricity System Operator. This may necessitate the introduction of new DRS categories. We would urge Ofgem to consider removing the direction of DRS categories from the licences of network operators and have them defined in RIGs. This will allow changes to DRS categories to be made without the need for licence changes allowing new DRS activities to be more readily captured within regulatory reporting.

### ***Disposal of assets question***

#### **FQ37. Do you have any views on the potential treatment of financial proceeds or fair value transfers of asset (including land) disposals for RIIO-2?**

- 5.2.87 We are in favour of retaining the RIIO-ED1 current arrangement, where cash proceeds from both disposal of assets and scrap income are netted off against Totex in the year in which they're received. This means there is both incentive on the licensee to maximise this and thus benefit to the consumer, as through the current TIM arrangements (and assuming TIM continues in a similar way in RIIO-ED2) both licensee and consumer will benefit through a share of the underspend.
- 5.2.88 The current arrangement in RIIO-ED1 is straightforward to administer, whilst the process in RIIO-GD1 with a 5-year delay appears more difficult to administer.
- 5.2.89 With regards to amounts recovered from third parties, including insurance companies, in respect of damage to the network, we do not consider this as similar to disposal of assets. Rather this is recovering costs that would otherwise not have been incurred by the business in rectifying the damage. If there is any scrap arising out of the repair, this is dealt with in the same way as other scrap.
- 5.2.90 We have no comments on how fair value is established if there are transfers within the licensee group.

### **5.3 Electricity system operator questions**

#### ***ESO roles and principles questions***

##### **ESOQ1. Do you agree with our proposal to maintain the current roles and principles framework for RIIO-2?**

- 5.3.1 Yes, whilst the principles and separated roles of the ESO have not been in place very long, they appear to be appropriate.

##### **ESOQ2. Do you agree with our proposals to keep the ESO's code administration, EMR delivery body, data administration, and revenue collection functions in place for RIIO-2? Do you believe that any of these functions (or any other functions) should be opened up to competition, either now or in future?**

- 5.3.2 Yes.

##### **ESOQ3. Do you consider the ESO is best-placed to run early and late competitions?**

- 5.3.3 Yes, in terms of competitions associated with the transmission network but if such an approach is expanded to the distribution network then the DSO would be best placed.

#### ***Price control process questions***

##### **ESOQ4. Do you agree with our proposal to move to a two-year business planning cycled price control process for the ESO? If not, please outline your preferred alternative, noting any key features (e.g. uncertainty mechanisms or re-openers) that should be included.**

- 5.3.4 We agree that a two-year business planning cycle where the ESO develops its plan in line with its longer term vision is appropriate given the rapidly changing environment in system operation and the development of DSO functionality.

**ESOQ5. What stakeholder engagement mechanisms should be put in place for the ESO's business planning and ongoing scrutiny of its performance? Do you agree with our proposal to maintain, and build upon, the role of the Performance Panel?**

- 5.3.5 The development of forward plans in consultation with users and the use of a performance panel appears appropriate where the requirement of the ESO may change rapidly.

***ESO output and incentives questions***

**ESOQ6. Do you agree with our proposed approach of using evaluative, ex-ante incentives arrangements for the ESO?**

- 5.3.6 Yes.

**ESOQ7. Do you agree that we should continue to apply a single 'pot' of incentives to the ESO, and that this should be a symmetrical positive/negative amount? If not, why not?**

- 5.3.7 Yes, incentive single pot will ensure the ESO balances its activities across all activities in its forward plan and the incentive should be symmetrical. We recognise that the size of the incentive will be limited due to the small asset base of the ESO.

***ESO cost assessment questions***

**ESOQ8. Do you agree with our proposed approach to assessing the costs of the ESO under RIIO-2? Do you think we should assess costs on an activity-by-activity basis? How would you go about defining the activity categories? Are there alternative approaches we should consider?**

- 5.3.8 Yes, we agree that an activity by activity-based approach to assessing costs is appropriate and that the categories suggested by the ESO are appropriate as they are sufficiently separate to avoid significant overlap.

**ESOQ9. Do you consider the types of cost assessment activities we outline in this chapter are the right ones? Are there additional activities you think we should consider?**

- 5.3.9 We agree with your proposed cost assessment activities to ensure the efficiency of the ESO business plan.

***ESO finance questions***

**ESOQ10. Do you agree with our proposed remuneration model for the ESO under RIIO-2? Do you think it provides the right incentives for the ESO to deliver value for money for consumers and the energy system? Are there other models you think are better suited?**

- 5.3.10 Given the nature of the ESO it is difficult to establish a remuneration model that ensures it is adequately financed whilst giving an effective incentive to keep cost efficient. On balance, with appropriate challenge from the performance panel and incentives, the cost pass through plus a margin is probably the most appropriate.

**ESOQ11. Are there any risks associated with our proposed remuneration model that you do not think have been effectively captured and addressed? Do you think that we should put in place any of the mechanisms intended to provide additional security to the ESO outlined in this chapter – e.g. parent company guarantee, insurance premium, industry escrow or capital facility?**

- 5.3.11 Whilst the ESO is part of National Grid plc, a parent company guarantee would be appropriate to cover the risk of the ESO not being able to cover its costs.

**ESOQ12. Do you agree with our proposal relating to remove the cost sharing factor? Can you foresee any unintended consequences in doing so, and how could these be mitigated?**

- 5.3.12 We agree that a costs sharing factor could give an undue incentive to focus on cost reduction rather than service improvement.

**ESOQ13. Do you agree with our proposal to introduce a cost disallowance mechanism for demonstrably inefficient costs? What criteria should we apply in considering what constitutes 'demonstrably inefficient'?**

- 5.3.13 Yes, given the proposal to adopt a cost pass through plus margin model, it is appropriate to be able to disallow demonstrably inefficient costs.

### ***ESO innovation questions***

**ESOQ14. Do you agree with our proposals to retain an innovation stimulus for the ESO, but tailor aspects of this innovation stimulus to take account of the nature of the ESO business?**

- 5.3.14 Yes, we agree that the innovation stimulus for the ESO should align where possible to that of the other companies and agree that it would be more appropriate for this to be funded from BSUoS and the level of funding to be related to the absolute level of funding available to the other electricity network companies.

- 5.3.15 The ESO should refrain from running projects that relate to the operation of Distribution Networks (including assessment of consumer behaviours). Such projects are best delivered by DNO.

**ESOQ15. What ESO-specific issues should we consider in the design of the ESO innovation stimulus package?**

- 5.3.16 See response to ESOQ14.

## **5.4 Gas distribution questions**

### ***Chapter 3 questions – Meet the needs of consumers and network users***

#### ***General output questions***

**GDQ1. What are your views on the overall outputs package considered for this output category?**

- 5.4.1 No Comment.

**GDQ2. For each potential output considered (where relevant):**

**a) Is it of benefit to consumers, and why?**

**b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**

**c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**

**d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

- 5.4.2 No Comment.

5.4.3 **GDQ3. What other outputs should we be considering, if any?**

5.4.4 No Comment.

**GDQ4. What are your views on the RIIO-GD1 outputs that we propose to remove?**

**In addition to the above questions, where relevant, please see the supplementary output specific questions below.**

5.4.5 No comment.

***Supplementary output specific questions***

***Consumer vulnerability***

**GDQ5. What activities beyond those outlined in paragraph 3.12 should we consider when defining the role of the network companies in supporting consumers in vulnerable situations?**

5.4.6 In encouraging companies to address vulnerability in the widest and most holistic way possible, including recognising the potentially transient nature of vulnerability, there is a very clear role for network companies to help address fuel poverty. This should therefore be included. Whilst Ofgem is correct to point out that government has the primary role in addressing fuel poverty, where companies can demonstrate a clear link between fuel poverty and their core obligations to support vulnerable customers (in relation to emergencies and outages), then companies should have a responsibility to do so. This role should be defined for companies including, as regards to the delivery of associated actions expected.

5.4.7 WPD's own research in 2016/17 revealed that of those customers in fuel poverty, 43% are also eligible for the Priority Services Register (PSR). Identifying and supporting customers affected by fuel poverty is therefore a key responsibility for network companies. However, it is for them to work with their stakeholders to define how far these responsibilities go and what outcomes they should be expected to deliver.

5.4.8 All network companies should also have a role in not simply identifying consumers in vulnerable situations, but to directly hold this data and keep it up to date. All companies should be expected to maintain a PSR, as this is an integral tool in enabling the other responsibilities that Ofgem has listed, including taking proactive measures to address vulnerability when responding to emergencies.

5.4.9 There should then be a clearly defined role for gas and electricity companies to automatically share PSR data, to improve the customer experience and avoid customers having to register separately with multiple companies.

**GDQ6. Can you provide any evidence that shows how the boundary we have set out for the networks' role in consumer vulnerability could impact the benefits received by consumers in vulnerable situations?**

5.4.10 The additional roles set out above in question GDQ5 are essential. Where they are currently being delivered by electricity network companies they are undoubtedly leading to clear and measurable benefits for customers in vulnerable situations. For WPD, our responsibility to hold and maintain a PSR, led us to make 955,664 proactive contacts to PSR customers in 2016/17, including 170,254 proactive calls to offer information during power cuts. This led to an overall PSR customer satisfaction of 9.2/10.

- 5.4.11 In relation to WPD's role to address fuel poverty, we have worked hard with our stakeholders to define how far we should go in relation to this issue and ensure that we do not go beyond our core responsibilities as a network company. By ensuring we address fuel poverty via schemes primarily driven to identify new customers for the PSR (who would struggle to cope during an outage), we were able to support 15,229 fuel poor customers to directly save £5.4 million a year in 2016/17. These outcomes could be replicated by all network companies in all GB regions, delivering huge benefits for customers in vulnerable situations.
- 5.4.12 An official question has not been posed, but in paragraph 3.19, Ofgem sets out three options in relation to its proposed RIIO-2 consumer vulnerability package, and states: "we are interested in stakeholder views on all three potential packages that we have developed, as well as the individual component parts."
- 5.4.13 WPD agrees that incentives are essential in the area of consumer vulnerability. It can be difficult to describe minimum service expectations if companies are to truly deliver tailored schemes that respond appropriately to the unique vulnerable situations facing its customers. It must be beholden on the companies to engage their own stakeholders and customers effectively in order to design action plans to best meet the specific needs of the vulnerable customers in their regions.

**In relation to section "Table 3: Consumer vulnerability incentives", Ofgem has set out three options for how they could implement a reputational incentive for vulnerability, expressing a preference that CEGs could have an ongoing role to assess if GDNs are delivering best practice initiatives.**

- 5.4.14 The proposed role of CEGs (option 1) in assessing performance in this area is surprising and is not supported by WPD. There is no evidence that CEGs would be best suited for this role. At present the majority of GDNs have appointed CEGs with a maximum of only 1 or 2 defined vulnerability experts. CEGs have also been created with the remit of challenging and scrutinising network companies' business plans and the processes by which they have been built (e.g. the quality of the stakeholder engagement undertaken and whether proposed outputs are sufficiently well justified). This is a very different role to expecting CEG members to carry out industry-wide benchmarking in a specific work delivery area as regards vulnerability (of which the majority of members have no expertise) in order to identify best practice.
- 5.4.15 With regards to option 2, and the introduction of a third-party vulnerability expert to assess GDN performance, this is preferable and would ensure a consistent level of expertise and that the criteria are applied universally to assess all companies. However, it should be noted that Ofgem has recently made changes to the guidance for the Electricity Distribution annual Stakeholder Engagement and Consumer Vulnerability (SECV) Incentive and have removed the inclusion of a third-party expert audit, as this was not deemed sufficiently useful to Ofgem's final expert judging panel for this incentive, who placed a greater value on interviewing companies directly. As such, of the options provided, WPD strongly supports 'option 3' where Ofgem would run an incentive, with GDNs being required to submit overviews of their work. A process would then be defined by Ofgem to assess performance (we would recommend an external, expert judging panel as is used in the SECV incentive). This would bring consistency and alignment between the ways in which gas and electricity distribution companies are assessed, enabling greater cross-sector comparison and potential collaboration. It is a mechanism that has proved successful in electricity distribution.
- 5.4.16 However, WPD strongly advocate that this incentive should be financial, not just reputational. The current incentive model for stakeholder engagement demonstrates that this is a highly successful way to incentivise improved performance. Ofgem's own feedback at this annual

incentive scheme continues to highlight that there has been a significant step-change in the approach of companies in this area as a result of the financial incentive structure. Ofgem's assessment of companies, and associated rewards achieved, has helped to drive up standards in an area where outcomes and benefits for customers can be largely qualitative and difficult to quantitatively value. However, there remains some way to go and there is currently a significant disparity in the different performance levels of companies in relation to addressing consumer vulnerability. Citizens Advice Scotland's recent policy paper '*Pylons, Pipes and People: Energy networks in Scotland and their changing role with consumers*' concluded that the gap in service provision for vulnerable customers is dramatically different depending on where you live in the country. The introduction of a financial incentive (potentially penalty and reward) would help to tackle the considerable differences in effort made by companies and the quality of outcomes achieved. A reputational incentive alone is unlikely to drive this same rate of improvement, given that there will be limited consequences for companies that fail to aim for the most ambitious innovation and maximum value outputs.

### **Consumer vulnerability use-it-or-lose-it allowance**

#### **GDQ7. What is your preference on the two approaches we have outlined to implement the allowance, and why?**

- 5.4.17 WPD supports Ofgem's preference for Option 1, welcoming the flexibility this provides for companies to deliver new ideas throughout the RIIO-2 period, via ongoing engagement with partners. By contrast, Option 2 (which limits funding to proposals only fully specified in the Business Plans) presents a danger by locking-in the areas for innovation at such an early stage in a five-year price review.
- 5.4.18 The funding is intended to drive new and ongoing innovation, which often needs time to develop and respond to changing external factors (e.g. the currently fast-paced changes associated with the transition to smarter energy distribution systems). Furthermore, new innovative ideas may be generated as a result of projects undertaken early within the price control period that may seek to build on these initial outcomes. To lock-down innovation to pre-defined schemes before such projects have been delivered, would risk stifling innovation.
- 5.4.19 If a flexible option is implemented, then funding should only be awarded when clear, predefined outcomes and benefits for customers have been established.

#### **GDQ8. What examples can you provide of initiatives that could be funded through the allowance, and please explain why these activities would not go ahead without specific price control funding?**

- 5.4.20 In the same way as NIA (and previously LCNF) funding has successfully encouraged network companies to develop new innovative ways of working that has laid the ground works for smarter energy systems and helped to facilitate low carbon technologies, there is a similar and related role for innovation funding within the area of consumer vulnerability. For example, funding could enable companies to trial initiatives to ensure that vulnerable customers are not left behind in a smart future, but instead are able to fully participate and access the benefits that this transition may bring.

#### **GDQ9. What is your preference on the three potential options we have outlined for a consumer vulnerability package, and why?**

- 5.4.21 WPD supports Option 3, for a combined package. This will challenge companies to provide the best possible service and innovations that suit the needs of their customers. There must be a clear focus on the achievement of outcomes and benefits for customers in order for



funding to be successfully awarded. It is in keeping with the overall RIIO model that the responsibility should fall with companies to work with their own stakeholders to define appropriate outcomes to deliver and to then co-create outputs by which these will be achieved. Option 3 best enables this.

### ***Fuel Poor Network Extension Scheme***

**GDQ10. What should we include in the FPNES eligibility criteria in RIIO-GD2 to facilitate a well targeted, but effective scheme?**

5.4.22 No Comment.

**GDQ11. How should we incentivise the GDNs to improve the targeting of the FPNES?**

5.4.23 No Comment.

**GDQ12. How can we ensure that the FPNES is better coordinated with other funding sources to provide a whole house solution for the household?**

5.4.24 No Comment.

**GDQ13. What are your views on us requiring or incentivising the GDNs to ensure that households receiving FPNES connections also achieve a target level of energy efficiency?**

5.4.25 No Comment.

**GDQ14. Do you think the value of the FPNES voucher would need to be amended if the targeting of the scheme is increased? Please provide any evidence to support your view.**

5.4.26 No comment.

### ***Guaranteed Standards of Performance***

**GDQ15. What is your preferred option for revising customer payment caps?**

5.4.27 No comment.

**GDQ16. Where, within the consultation ranges, do you think the standard and payment levels should be set?**

5.4.28 No comment.

**GDQ17. Should any existing GSOP exemptions be removed or changed and should any additional exemptions be considered?**

5.4.29 We support Ofgem's view that exemptions should be retained. If exemptions were to be removed, then timescales and payment amounts would need to be revised accordingly.

**GDQ18. Do you support the proposal to make all GSOP payments automatic for RIIO-GD2 and why?**

5.4.30 No, we do not support automatic payments in all cases.

5.4.31 There are some GSOPs such as those in relation to the advance notification of planned supply interruptions where the network company may not be aware that it has failed the guarantee. In this case the network records may be incorrect. In electricity distribution,

DNOs are encouraged to make proactive ex gratia payments if they do become aware that a particular customer or group of customers have not been notified before the customer claims or complains. These payments are reported on the year end regulatory return.

**GDQ19. Are new GSOPs (or amendments to existing GSOPs) required and what might these look like?**

- 5.4.32 WPD does not consider that any changes should be made.

**GDQ20. Should there be a licence condition to prevent standards for the restoration of unplanned interruptions deteriorating (GSOP1)? If so, how should we set the target, and should we take into account geographical differences. Please consider alongside our wider proposed interruptions package.**

- 5.4.33 We agree with Ofgem's position not to introduce a licence condition with a target pass rate.

**GDQ21. Is the existing 90% target pass rate for connections GSOPs still appropriate, if not how should it be revised?**

- 5.4.34 Yes, this is an appropriate safety net level at which Ofgem should consider enforcement action.

**GDQ22. Should licence conditions with target pass rates be introduced for any other GSOPs?**

- 5.4.35 We agree with Ofgem's position not to introduce a licence condition with target pass rates.

***Average restoration time incentive for total unplanned interruptions –***

**GDQ23. What do you think of the proposed new output based on average restoration time for total unplanned interruptions?**

- 5.4.36 No comments on the above. Electricity Distributors operate under the IIS incentive which is well established.

**GDQ24. Should any interruption events be excluded from the average restoration time incentive for total unplanned interruptions, and why?**

- 5.4.37 No comments on the above. Electricity Distributors operate under the IIS incentive which is well established.

**GDQ25. What are your views on separating interruptions that occur in MOBs into a specific output?**

- 5.4.38 No comments on the above. Electricity Distributors operate under the IIS incentive which is well established.

***Chapter 4 questions – Deliver an environmentally sustainable network***

***General output questions***

**GDQ26. What are your views on the overall outputs package considered for this output category?**

- 5.4.39 A focus on decarbonisation of heat and reduction of losses is a good balance of focus. To draw in a wider Business Carbon Footprint and Sustainability focus, a customer facing annual report could be included, based on the format of the electricity DNO Environment and Innovation report.

**GDQ27. For each potential output considered (where relevant):**

**a) Is it of benefit to consumers, and why?**

- 5.4.40 Decarbonisation of heat outputs are of benefit to customers as they help guide and shape the networks in their transition to low carbon energy and ensure we build networks which are ready for the future. The reduction of gas lost outputs is also beneficial as they reduce the volume of energy input into the system and, as a result, the raw material costs passed on to the end customers. They also help the GDNs focus on efficiency.

**b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**

- 5.4.41 Shrinkage – Targets based on the measurement of a volume which is difficult to measure and is based on GDN model estimates can prove problematic. As a result of historic data issues for losses in electricity distribution we have moved away from a measured target and have used strategic elements as the way to assess performance for losses reduction. The DNOs are tasked with developing a new more robust incentive for ED2. Whilst this approach could work for the GDNs, timescale constraints may mean that the strategic elements are adopted in GD2 and any incentive is then developed for GD3.
- 5.4.42 Decarbonisation of Heat – Whilst the role of the GDN is uncertain in the long term, the GDNs should be targeted to produce an Innovation Strategy in the same way as DNOs have done since the start of ED1. The strategy is a useful document as it allows DNOs to frame and predict the long-term future and then amend it as elements change or become clearer. Given the uncertainty identified by GDNs a document which allows them to explore a range of future options could be very useful.

**c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**

- 5.4.43 As detailed in answers to GDQ27, a measured incentive for shrinkage may not be appropriate and a mechanism with reward and penalties could be difficult to operate successfully. Decarbonisation of Heat currently lends itself to a strategic approach whilst the future is unclear.

**d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

- 5.4.44 The Shrinkage Incentive would be best measured using option 3.

**GDQ28. What other outputs should we be considering, if any?**

- 5.4.45 Wider measures of Business Carbon Footprint and Sustainability could be added.

**GDQ29. What are your views on the RII0-GD1 outputs that we propose to remove?**

- 5.4.46 Retaining the Gas Connection work as a licence condition appears reasonable; we agree that there is no need for a specific output in this area.
- 5.4.47 Removal of the Discretionary Reward Scheme appears reasonable. A suite of more focussed rewards or reporting requirements, like the Environment and Innovation report mentioned in GDQ26, would provide a better platform for improvement and any required reward mechanisms.

**GDQ30. What are your views on the priorities we've identified for the gas distribution sector in delivering an environmentally sustainable network? Should**

**measures proposed for electricity and gas transmission, such as BCF reporting and strategies for including in Business Plans, also apply to gas distribution?**

- 5.4.48 The priorities offer a good focus on sustainability but could go further as detailed in our answers to GDQ26&29. BCF reporting and general sustainability targets should be included across all sectors regulated by Ofgem.

**In addition to the above questions, where relevant, please see the supplementary output specific questions below.**

***Supplementary output specific questions***

***Decarbonisation of heat***

**GDQ31. Do you agree with our proposed approaches to funding GDN activities over RIIO-GD2 related to Heat decarbonisation?**

- 5.4.49 No comment.

***Distributed Gas Connections Guide and distributed gas information strategies***

**GDQ32. Are the GDNs' Distributed Gas Connections Guides and distributed gas information strategies helpful and effective? If not, how could they be improved?**

- 5.4.50 No comment.

***Chapter 5 questions – Maintain a safe and resilient network***

***General output questions***

**GDQ33. What are your views on the overall outputs package considered for this output category?**

- 5.4.51 We have provided responses to each specific output proposal in our responses to GDQ37-43.

**GDQ34. For each potential output considered (where relevant):**

**a) Is it of benefit to consumers, and why?**

**b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**

**c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**

**d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

- 5.4.52 We have provided responses to each specific output proposal in our responses to GDQ37-43.

**GDQ35. What other outputs should we be considering, if any?**

- 5.4.53 No comment.

**GDQ36. What are your views on the RIIO-GD1 outputs that we propose to remove?**

**In addition to the above questions, where relevant, please see the supplementary output specific questions below.**

- 5.4.54 It is encouraging to observe that Ofgem is proposing removal of measures that are either not used or do not provide a benefit.

***Supplementary output specific questions***

***Repex***

**GDQ37. What are your thoughts on our proposals for Tier 1 outputs?**

- 5.4.55 Paragraph 5.28 of the GD consultation document states that under-delivery will be subject to claw back and over delivery will not be subject to additional funding. It is assumed that this applies to the overall volume target proposed for Tier 1, not the individual diameter band volumes.
- 5.4.56 There is no proposal provided for which unit cost will be used to carry out any claw back of under-delivery. Will this be specific to the band sizes representing the under-delivery or will it be a blended unit cost representing the weighted average of allowances? We suggest that this should be a blended unit cost, because the measure is based on total volumes across all band sizes and there is a separate adjustment being proposed for band size variance.
- 5.4.57 Paragraph 5.31 of the GD consultation document suggests that adjustments will be made to reflect the change in mix of band sizes. It does not specify whether this will lead to increases in allowances where the band sizes addressed are larger than planned. This adjustment mechanism should provide additional allowances for where larger band sizes are addressed.
- 5.4.58 It is unclear how the assessment of the variance within Tier 1 band delivery will interact with the overall targets for Tier 1 activity.
- 5.4.59 Further clarification is required on whether the main assessment is the delivery of overall volumes, with a supplementary assessment of the band size variance or whether the band size variance is the first adjustment followed by the overall delivery assessment.
- 5.4.60 The following example illustrates the first approach using a blended unit cost for the overall volume adjustment.
- 5.4.61 The table below shows allowances derived from proposed volumes and unit costs. A blended unit cost is derived from total cost / total volumes.

**Table 5.5: Illustrative cost allowances derived from proposed volumes and unit costs**

Band Size	Allowed Volume	Allowed Unit Cost	Allowed Total Cost (£m)
A	10,000	1,000	10
B	5,000	2,000	10
C	2,000	5,000	10
Total	17,000	1,765	30

5.4.62 If the actual total volumes delivered was lower at 14,000, the adjustment for total volumes would be  $(17,000-14,000) \times 1765 = £5.3\text{m}$ . The resultant allowance would be £24.7m.

5.4.63 The following three outcomes illustrate what further adjustments would take place for band size variation:

- Actual outcome 1: a move from larger band sizes to smaller band sizes
- Actual outcome 2: the same ratio between volumes as per the plan.
- Actual outcome 3: a move from smaller band sizes to larger band sizes

5.4.64 Actual outcome 1: a move from larger band sizes to smaller band sizes.

**Table 5.6: A move from larger band sizes to smaller band sizes**

Band Size	Allowed Volume	Allowed Unit Cost	Allowed Total Cost (£m)
A	12,000	1,000	12
B	1,000	2,000	2
C	1,000	5,000	5
Total	14,000		19

5.4.65 This situation would lead to a further reduction of allowances of £5.7m.

5.4.66 Actual outcome 2: the same ratio between volumes as per the plan.

**Table 5.7: The same ratio between volumes as per the plan**

Band Size	Allowed Volume	Allowed Unit Cost	Allowed Total Cost (£m)
A	8,235	1,000	8.2
B	4,118	2,000	8.2
C	1,647	5,000	8.2
Total	14,000		24.7

5.4.67 This situation would not lead to a band size allowance reduction.

5.4.68 Actual outcome 3: a move from smaller band sizes to larger band sizes.

**Table 5.8: A move from smaller band sizes to larger band sizes**

Band Size	Allowed Volume	Allowed Unit Cost	Allowed Total Cost (£m)
A	8,000	1,000	8
B	3,000	2,000	6
C	3,000	5,000	15
Total	14,000		29

5.4.69 This situation would lead to an increase in allowance of £4.3m, counteracting the £5.3m reduction for total volume delivery, giving an overall adjustment of £1m reduction to allowances.

- 5.4.70 This illustration shows that the overall reduction can be determined by simply considering the volumes and band size unit costs. It will allow variation between band sizes (both up and down) and, if necessary, can be capped at the original allowances.
- 5.4.71 The proposals could be implemented with a volume driver for each sub-element with and overall cap to prevent revised allowances exceeding original allowances.

**GDQ38. Do you think we should set an output for replacing non-PE services?**

- 5.4.72 We are not close enough to the detail to suggest whether an output measure is required in order to hold gas companies to account in this investment area.
- 5.4.73 We observe that the replacement of non-PE services is to be included as part of the NARMS mechanism. In paragraph 5.37 bullet three, Ofgem identifies that NARMS provides the flexibility for licensees to manage their assets as they deem to be efficient. It therefore appears that the NARMS process already provides a mechanism to hold companies to account and introducing a separate PCD for replacing non-PE services is unnecessary duplication.
- 5.4.74 If, however, Ofgem pursues either option 1 (PCD) or option 2 (PCD with deadband), then the activities associated with replacing non-PE services should be excluded from NARMS.

**GDQ39. Do you think we should set outputs for asset maintenance repex activities?**

- 5.4.75 We are not close enough to the detail to suggest whether an output measure is required in order to hold gas companies to account in this investment area.
- 5.4.76 We observe that asset maintenance repex activities are to be included as part of the NARMS mechanism. In paragraph 5.37 bullet three, Ofgem identifies that NARMS provides the flexibility for licensees to manage their assets as they deem to be efficient. It therefore appears that the NARMS process already provides a mechanism to hold companies to account and introducing a separate PCD in this area is unnecessary duplication.
- 5.4.77 If, however, Ofgem pursues either option 1 (PCD) or option 2 (PCD with deadband), then the activities associated with asset replacement repex should be excluded from NARMS.
- 5.4.78 We also observe that under options 1 and 2, Ofgem are proposing to set PCDs for each activity under asset maintenance repex. The adoption of these options would add to the regulatory burden and complexity of close out assessments, with close out analysis having to be carried out for each activity category.

**GDQ40. What are your thoughts on not including Mains Replacement Level of Risk Removed, GIBs and fractures as output measures for RIIO-GD2?**

- 5.4.79 We observe the contradiction between the cross-sector proposals for more activities to be assessed using the NARMS approach (based upon risk benefit), whilst the proposal in paragraph 5.39 suggests moving away from using the Mains Replacement Level of Risk Removed.
- 5.4.80 Paragraph 5.40 suggests that the repex stakeholder groups have identified that year-on-year volatility of gas in buildings (GIBs) or fractures is partly driven by external factors such as weather.
- 5.4.81 This means that it is probably not appropriate to set targets for these measures, especially if the volumes are relatively low and susceptible to statistical volatility.

- 5.4.82 Due to the importance of these measures being a lagging indicator of how well the gas distribution companies are working to prevent GIBs and fractures, by replacing assets that could give rise to such situations, it is important to continue to monitor performance. This could allow targets to be set in the future if underlying trends with greater statistical confidence are observed.

**GDQ41. Do you agree with our proposed approach to repex uncertainty mechanisms?**

- 5.4.83 Yes. The proposal to use a volume driver for Tier 2A mains and ductile iron mains is appropriate, especially where there is uncertainty as to volumes. Efficient unit costs should be determined at the start of the price control and these ex ante unit costs used for the uncertainty mechanism. Using fixed ex ante unit costs as the reference provides licensees with the opportunity to seek further efficiencies that can be used to inform RIIO-3.
- 5.4.84 The proposal to use a re-opener mechanism for changes to HSE requirements is appropriate. We would suggest that rather than allowing this to occur at any time, that it is accommodated with an annual window that suits both the licensees and Ofgem with regards to other regulatory commitments, such that re-openers are not taking place at the same time as other regulatory submissions. We would also suggest that the opportunity to have a re-opener is extended to close out assessment after the end of the RIIO-GD2 price control and that both licensees and Ofgem has the opportunity to trigger the re-opener.
- 5.4.85 This means that it is probably not appropriate to set targets for these measures, especially if the volumes are relatively low and susceptible to statistical volatility.

***NTS exit capacity***

**GDQ42. What are your views on our proposal to use final offtake capacity prices rather than T-3 offtake capacity price estimates in the calculation of incentive rewards and penalties in RIIO-GD2?**

- 5.4.86 It appears that the incentive is making gas distribution companies arrange the management of the gas flows on their networks to take advantage of cheaper offtake positions on the transmission network.
- 5.4.87 Such activities require planning and execution and therefore take place ahead of the final offtake, therefore gas distribution companies are making decisions based upon information available at some point before the final offtake.
- 5.4.88 It seems appropriate for the gas distribution companies to be remunerated based upon the information they have used. This could be at T-3 or some other point in time, but such decisions and actions are not instantaneous and therefore using offtake capacity prices could be inappropriate.
- 5.4.89 If T-3 is too long a period ahead of final offtake, some other period such as T-2 or T-1 may be more appropriate.



### ***GDN record keeping***

**GDQ43. Do you consider that an output(s) is necessary:**

**a) for MOBs recording keeping (in the form of a bespoke Price Control Deliverable)?**

**b) for other specific areas of GDN record keeping (if so which areas)?**

**c) to cover GDN record keeping requirements as a whole?**

- 5.4.90 We observe that the Business Plan requirements for Gas Distribution companies specify a range of requirements for record keeping associated with Multiple Occupancy Buildings (MOBs). This includes specific actions that will be required to enhance records.
- 5.4.91 In order for a PCD to be established each element would need to be separately costed so that non-delivery could lead to allowance reductions.
- 5.4.92 The development of systems can involve numerous indirect resources and those resources can impact a number of the deliverables. Accounting for the contribution of indirect costs to the total costs of system development can be complex to identify and account for.
- 5.4.93 Due to this complexity, it may not be appropriate for a PCD to apply to development of record keeping for MOBs.

### ***Chapter 6 questions – Cost assessment***

**GDQ44. Do you agree with our intention to evolve the RIIO-GD1 approach for RIIO-GD2?**

- 5.4.94 The cost assessment techniques adopted for RIIO-1 have evolved over time and therefore represent the collective knowledge of Ofgem, licensees and others that have contributed working groups. It is important that the embedded knowledge and development of the existing cost assessment techniques is not lost.
- 5.4.95 Both licensees and Ofgem will have identified areas where improvements can be made and changes to data being collected in RRP's potentially facilitate enhanced analysis.
- 5.4.96 Starting again with a new approach potentially introduces new issues and errors.
- 5.4.97 Evolving the RIIO-GD1 approach is therefore more appropriate and efficient than developing an entirely new assessment approach.

**GDQ45. Do you have any comments on our initial views for cost assessment, including appropriate cost categories, cost drivers, analysis toolkit and how we combine the analysis?**

- 5.4.98 It may not always be appropriate to choose upper quartile cost as being efficient. The approach adopted should be dependent about the comparability of the underlying data. Where there is potential for variance in work content, it may be appropriate to take a median or average value.
- 5.4.99 An appropriate balance between future and historic costs needs to be considered. Future forecasts may include additional efficiency assumptions and therefore should be the main reference points for analysis. However the validity and achievability of these should be considered in the context of historic costs.

- 5.4.100 Having a toolkit approach is useful to test different approaches, but 'cherry picking' should be avoided so that the resultant cost allowances are sufficient for an efficient company to deliver its obligations and outputs.

**GDQ46. Do you have any views on our proposed options for loss of metering work?**

- 5.4.101 No comment.

**GDQ47. Do you agree with our proposal for implementing symmetrical adjustments for regional or company specific factors?**

- 5.4.102 The approach adopted for regional or company specific factors has to interact with the assumptions made for disaggregated cost assessment.
- 5.4.103 For example, lower unit costs (influenced by company specific factors) should be normalised out of any cost comparisons before being considered as being used for references for efficient expenditure levels. Retaining such bias within benchmarks leads to undervalued efficient costs.

***Chapter 7 questions – Uncertainty mechanisms***

***General uncertainty mechanism questions***

**GDQ48. What are your views on the proposed uncertainty mechanisms and their design?**

- 5.4.104 The proliferation of uncertainty mechanisms should be avoided.
- 5.4.105 Many of the RIIO-2 proposals are leading to the potential for numerous new uncertainty mechanisms. Every PCD will need to have a close out assessment and re-openers will require during period and/or end of period evaluations. All these add complexity and outcomes remain uncertain until up to two years after the close of a price control (given the experience of DPCR5 close out and timetables being developed for RIIO-1 close out). Only uncertainty mechanism that deal with material uncertainty should be adopted and the remainder of variable costs should be incorporated into a 'price control in the round'.

**GDQ49. Are there any additional uncertainty mechanisms that we should consider across the sector and if so, how should these be designed?**

- 5.4.106 No comment - GD licensee specific.

**GDQ50. What are your views on the RIIO-GD1 uncertainty mechanisms we propose to remove?**

- 5.4.107 No comment – GD licensee specific.

***Supplementary uncertainty mechanism specific questions***

***Review of Agency (Xoserve) costs***

**GDQ51. What do you think is the most appropriate approach for funding the GTs' expenditure for Xoserve in RIIO-2 and why?**

- 5.4.108 We consider Option 1, retaining the current approach, is preferable as this provides an allowance to GTs and therefore an incentive to control Xoserv's costs. In the same way Electralink is owned by DNOs, however the costs are recovered through charging users for

the use of the DTN, and shareholders have an incentive to control their costs through approval of their budget.

**GDQ52. If Xoserve takes on any services beyond its core Central Data Service Provider role, how should we treat the costs and risks associated with these additional services through the price control?**

- 5.4.109 Should Xoserve take on any additional services, such as tendering for and providing the central switching service then this should be on a for profit basis outside of the price control, funded by Xoserve. In tendering to provide additional services Xoserve is no different to any other company hoping to gain the contract and therefore should not expect this to be funded. Currently Electralink provides additional services which are not funded by DTN users or shareholders.

## A1 Appendix – Model of RAMs incentive factors

A2 We have modelled the combined impact of Ofgem’s proposals for Totex sharing and RAMs. The results of this modelling is shown in the main report.

A3 We have assumed a central figure of 32.5% for the blended Totex sharing rate.<sup>103</sup> For RAMs we have assumed the same parameters as Ofgem for illustrative purposes.<sup>104</sup>

A4 We have calibrated the model on the 14 DNO licensees with data for 2016/17. The model calculates the increase in return (after both Totex and RAM adjustments) that an individual company (we take EMID for illustrative purposes) would receive if it were to make a cost saving (with costs for all other companies held constant). We then calculate an “incentive factor” as:

$$\text{Incentive factor} = \frac{\text{Increase in return after all regulatory adjustments}}{\text{Saving in totex generated}}$$

A5 An incentive factor of one would mean that the company retains all the cost savings it makes, whilst a factor of zero would mean it receives no benefit.

A6 We calculate the incentive factor in the spreadsheet model by reducing the Totex of Company 6 by 1% and calculating the resulting change in return after the Totex sharing and RAMs adjustments. We then calculate the incentive factor ratio.

A7 The main report shows a sample of our results for the three different RAMs options discussed by Ofgem:

- (a) Class 1 Individual Sculpting: where a 50% adjustment is applied to the returns of the company when it exceeds a +/-3% threshold, and a further 25% when it exceeds a +/-4.5% intense threshold. This is an absolute adjustment independent of the performance of any other companies;
- (b) Class 2 Industry Average Sculpting: where either a 50% or 75% adjustment is applied to returns of companies when the industry average return passes the defined thresholds. So here the adjustment is dependent on industry average performance;
- (c) Class 2 Anchoring: where company returns are scaled up or down whenever the industry average returns passes the defined thresholds, so that the industry average meets that threshold. This is a relative performance adjustment.

A8 The outputs below illustrate cover in turn each of these three RAM options. For each they show the calculation of the incentive factor for each of:

- Within threshold (i.e. within +/-3% of forecast);
- Above (or below) upper (or lower) threshold (i.e. between +/-3% and +/-4.5%);
- Above (or below) upper (or lower) intense threshold (i.e. outside of +/-4.5).

<sup>103</sup> Ofgem is proposing setting a 15-50% range for each cost component in calculated the blended average. We state below that we believe these rates to be too low.

<sup>104</sup> Cost of capital of 3%, thresholds of +/-3%, intense thresholds of +/-4.5%, sharing rate of 50%, intense sharing rate of 75%.