

Consultation

ED3 Sector Specific Methodology Consultation – Finance Annex

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We are consulting on the financial framework methodology we will apply for the electricity distribution sector in the ED3 price control which will run from 1 April 2028 to 31 March 2033. We would like views from stakeholders with an interest in the regulation of energy networks. We would particularly welcome responses from groups representing consumers of electricity. We would also welcome responses from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at [ofgem.gov.uk/consultations](https://www.ofgem.gov.uk/consultations). If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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1. Introduction

- 1.1 The costs of operating and developing the Electricity Distribution (ED) networks include the financing costs that the network companies incur. Consumers ultimately pay for these costs. These include the returns that we allow for debt and equity capital invested into network companies. We use incentives to encourage network companies to drive down costs and improve service quality. These incentives, as well as the ability for a company to make decisions around its actual capital structure, mean that a company's actual return can be higher or lower than its allowed return.
- 1.2 We set a financial framework and associated policies and methodologies for price controls that are broadly stable and predictable over time. This broad regulatory stability gives investors the confidence to continue to invest in the sector. It also helps us to achieve a low cost of capital without constraining our ability to act in the interests of consumers by adapting to changing circumstances and through adopting best practice.
- 1.3 We have sought to maintain stability of the financial framework through our ED3 Framework Decision,¹ published in April 2025. In our Framework Decision, we noted that our approach to estimating the cost of capital and assessing financeability would be substantially in line with our proposed approach set out in our RIIO-3 Sector Specific Methodology Decision (RIIO-3 SSMD).
- 1.4 We aim to keep the financial policies and methodologies stable, where appropriate. However, we are also cognisant that appropriate evolution, particularly to deal with macro developments that create new challenges or where updates to best practice can be identified, is likely to underpin regulatory credibility and support the ongoing attractiveness of investment in the sector.
- 1.5 Distribution Network Operators (DNOs) will play a critical role as the demand for, and generation of, electricity grows to support the energy transition. We are clear that DNOs need to build out the grid that supports energy efficiency, timely connections, low carbon technology and flexibility. This will mean that a step-change in investment is needed for the sector to deliver on ambitious targets. While the sectoral challenges differ to those faced by the gas and electricity transmission sectors, our RIIO-3 Draft Determinations published in July 2025 have set out a financial framework that represents an attractive investment proposition. It also delivers for consumers and supports the

¹ ED3 Framework Decision, [Framework decision: electricity distribution price control \(ED3\) | Ofgem](#)

transition to net zero. Our starting point in this SSMC is to propose the application of that framework and its principles to ED3 so that DNOs can benefit from the same predictability and stability that encourages investment. We can alter that framework where we see evidence or macroeconomic conditions that merit different approaches being more appropriate for ED3, however we see significant benefit in proposing a similar foundational approach in this consultation.

- 1.6 In that vein, we are consulting on adopting similar methodological approaches for our cost of capital allowances, financeability assessment, corporation tax allowances and financial resilience measures as those set out in our RIIO-3 Draft Determinations.
- 1.7 We are consulting more broadly on the topic of regulatory depreciation. We expect ED3 to be an important pivotal moment for ambitious investment and delivery plans. These should be supported by appropriate policies that support the recovery of DNO costs, our key aims being:
- to allocate costs fairly between current and future consumers (sometimes referred to as intergenerational fairness); and
 - to ensure that company revenues reflect the licensee's need to make sustainable economic investments.
- 1.8 We welcome views from stakeholders on our existing regulatory depreciation levers and suggestions for further methodological adjustments. More broadly, we welcome stakeholder responses on our financial framework proposals so that we can refine our ED3 approach.

2. Allowed return on debt

Background

The role of the allowed return on debt

- 2.1 The allowed return on debt is an estimation of the return debt investors expect from an efficiently run company. The allowance considers debt raised in prior price control periods in addition to new debt to be raised during the current price control period. It is an important feature to enable companies to have sufficient resources to raise and service debt capital to meet investment requirements.
- 2.2 The cost of debt allowance is funded by consumer bills. To meet our primary statutory duty to protect the interests of existing and future customers,² it is vital that the allowance is structured to incentivise efficient financing outcomes and that shareholders, not consumers, bear the risks and rewards associated with actual financing decisions made by companies.
- 2.3 In our RIIO-3 SSMD,³ we stated that we would set the cost of debt allowance based on a network licensee adopting the notional capital structure incurring forecast efficient average sector debt costs.
- 2.4 The notional capital structure assumes that companies finance activities with a combination of fixed rate and index-linked debt (ILD) and adopt a set level of gearing. We will reassess these assumptions as part of this price control determination.

Summary of the ED3 Framework Decision

- 2.5 In our Framework Decision we signalled that our cost of capital methodology will be vital in ensuring DNOs can efficiently raise the scale of capital required to meet their investment plans. We stated that we will further assess our proposed changes to the calculation of allowed returns and the consideration of investability and financeability as set out in our RIIO-3 SSMD. We noted that we will test the introduction of these changes in ED3 as part of our considerations on the suitability of the overall financial framework.
- 2.6 In our RIIO-3 SSMD, we made a range of methodological improvements that we anticipate are likely to be relevant to the ED sector. Those related to setting the allowed return on debt include:

² Electricity Act 1989, Section 3A, <https://www.legislation.gov.uk/ukpga/1989/29/section/3A>

³ RIIO-3 Sector Specific Methodology Decision – Finance Annex, https://www.ofgem.gov.uk/sites/default/files/2024-07/RIIO-3_SSMD_Finance_Annex.pdf

- updates to best practice when calculating the cost of capital, building on the 2023 UK Regulators Network (UKRN) Guidance;
- the payment of an element of the debt allowance in nominal terms to address the inflation leverage effect; and
- implementing a RAV (Regulatory Asset Value)-weighted approach to setting the cost of debt allowance.

2.7 As discussed in further detail in Chapter 3, the UKRN Guidance makes recommendations as to how regulators should approach setting the cost of capital. Recommendation 8 of the UKRN Guidance states that regulators should estimate an allowance for an efficient company under the notional financial structure, with actual debt costs suitably benchmarked against other market evidence. Overall, we agree with recommendation 8, which is also in line with our RIIO-3 SSMD. We discuss our proposed approach in further detail in the paragraphs below.

Proposed approach for ED3

Benchmark index selection

- 2.8 A key consideration in formulation of the allowance is the management of market uncertainty with respect to future debt costs. In line with our RIIO-ED2 and RIIO-3 SSMD, we propose the indexation of the allowance to mitigate this uncertainty. We do not consider there are any compelling reasons to not utilise an indexation-based approach.
- 2.9 In terms of the benchmark index selection, we propose using the average of iBoxx £ Non-Financials A 10+ (ISIN reference: DE000A0JY837) and iBoxx £ Non-Financials BBB 10+ (ISIN reference: DE000A0JZAH1) indices. We consider that this index choice is a suitable proxy for macro-changes in network debt costs and is a broad representative index. We believe it is a reasonable expectation that an efficient operator adopting the notional capital structure can borrow at a rate broadly consistent with the index.
- 2.10 In our RIIO-ED2 the benchmark index we used was iBoxx £ Utilities 10+. The iBoxx £ Utilities 10+ has been impacted by sectorial and issuer specific events in the Water sector. We consider the current volatility inherent in the iBoxx Utilities index, driven by causal factors largely distinct from the electricity and gas sectors, increases the risk that the index performance, and thus the allowance, could become misaligned to efficient energy network company costs. We think that using an average of the iBoxx £ Non-Financials A 10+ and iBoxx £ Non-Financials BBB 10+ indices, where the Water sector represents a smaller

proportion of the overall composition in line with our proposed approach for RIIO-3 DDs would help mitigate this risk.

Additional cost of borrowing

- 2.11 We intend to continue to provide allowances for additional costs of borrowing which we would expect to be incurred by an efficient operator adopting the notional capital structure. We will review and if appropriate update the methodology that underpins these allowances in line with our approach to RIIO-3, considering new and previously submitted evidence. We will ask companies to provide relevant data such as daily cash balances and Revolving Credit Facilities (RCFs) in their Business Plans.
- 2.12 We are not currently considering any further additional allowances. The current additional allowances consist of transaction costs, liquidity/RCF costs, cost of carry and the Consumer Prices Index including owner occupiers' housing costs (CPIH) basis risk mitigation allowances. We are proposing to merge the cost of carry and liquidity/RCF cost into a single additional borrowing allowance called the liquidity allowance as the sizing of cash balances and RCFs are likely to be driven by common causal factors. We consider there to be an underlying negative correlation between the relative amount of cash held and the size of RCFs.

Infrequent issuer premium

- 2.13 We intend to consider an infrequent issuer premium including whether such an allowance should be provided, the size of the allowance and the issuance threshold at which this allowance is provided.

Inflation treatment

- 2.14 The cost of debt allowance for RIIO-ED2 utilised a trailing average methodology. At each measurement point of the trailing average, this was deflated by a long run assumption of CPIH, being the year five Office for Budget Responsibility (OBR) forecast prevailing at that point. The long run assumption has typically aligned to 2%.
- 2.15 In its 2024 report, the OBR stated that the long-run wedge between CPIH and Consumer Price Index (CPI) is assumed to be 0.4%. This implies that the 2% inflation assumption (anchored to the Bank of England's CPI target) may understate long-term CPIH expectations. In light of this and as mentioned in our RIIO-3 DDs we will review whether an adjustment to the inflation assumption is warranted to reflect the OBR's long-run wedge for SSMD.

- 2.16 Use of a long run assumption to deflate the cost of debt allowance means the real allowance does not adjust for short term inflationary spikes or troughs and only adjusts if there is a structural shift in long run expectations. This means the real cost of debt allowance remains invariant to outturn inflation. However, because the nominal cost on fixed rate debt does not change with inflation, when outturn inflation rises, the real cost of fixed rate debt falls. The reverse is also true in periods where inflation falls below long run assumptions. This generates a mismatch between the allowed return on debt and the cost of debt incurred where inflation deviates from long run expectations. This mismatch generates out or underperformance potential for equity. We refer to this as "the effect" for simplicity in the text below.
- 2.17 It should be noted the extent of out or underperformance risk varies significantly by licensee due to differences in the proportion of fixed versus ILD in their respective capital structures. For ILD, the nominal cost is linked with outturn inflation and the real cost is held constant. This means an increased proportion of ILD reduces or removes the potential mismatch risk between the allowance and the real cost of debt incurred.
- 2.18 At the closure of the Inflation Call for Input,⁴ we stated that we intended to consult, via the RIIO-3 SSMC process, on three possible options for amending the cost of debt allowance mechanism to address the impact of higher inflation.
- 2.19 In our RIIO-3 SSMD we decided to implement Option 1: Nominal allowance for fixed debt rate and apply this in proportion to the notional capital structure fixed rate debt assumption.
- 2.20 At present the cost of debt allowance is set and recovered from customers in real terms. The inflationary element of returns is earned indirectly via the indexation of the RAV by outturn inflation.
- 2.21 Under Option 1, the cost of debt allowance for fixed rate debt would be provided in a nominal rather than real terms. To effect this change, a portion of RAV, aligned to the notional fixed rate debt assumption, would be delinked from outturn inflation to avoid compensating investors twice. The indexation of the RAV for ILD and equity would be unaffected.
- 2.22 In mathematical form, the proposals for RAV indexation and the cost of debt allowance under this option were:

⁴ Call For Input - Impact of high inflation on the network price control operation – Conclusion and Next Steps document, Paragraph 3.1, <https://www.ofgem.gov.uk/call-for-input/call-input-impact-high-inflation-network-price-control-operation>

$$\text{Proposed RAV Indexation} = \text{Opening RAV} * (\text{CPIH} * (1 - \text{FRD NA}))$$

$$\text{Proposed CoD Allowance} = (\text{Nominal FRD allowance} * \text{FRD NA}) + (\text{Real ILD allowance} * \text{ILD NA})$$

where:

- RAV means Opening Regulatory Asset Value (Reg Year T);
- CPIH means average of the CPIH Monthly Price Index readings (Reg Year T) / Average of the CPIH Monthly Price Index readings (Reg Year T-1);
- FRD means fixed rated debt;
- ILD means Index-Linked Debt;
- NA means Notional Assumption, the quantum of debt assumed to be financed by the referenced instrument; and
- Real means deflated by Long Run Inflation Assumption (prevailing 5th year CPIH OBR forecast at each index reading) approximately 2%.

2.23 We are considering following the same approach to RAV indexation for ED3.

2.24 As we noted in our RIIO-3 DDs we do not consider a transition mechanism is required. We consider the inflation leverage effect currently presents a risk of consumer detriment. A delay to implementation would potentially result in consumers being exposed to this risk for longer than necessary. We also do not consider there to be evidence of a detrimental impact to financial resilience to an average efficient company adopting a notional capital structure from implementing Option 1.

Calibration

2.25 In our RIIO-3 SSMD, we decided to continue to conduct a calibration approach that considers forecast average efficient debt costs.

2.26 In line with our RIIO-3 SSMD, we are considering excluding most derivatives from the calibration given:

- we consider that the debt allowance can reasonably be achieved using standard debt instruments;
- derivative use varies between licensees and is likely to reflect company-specific risk management decisions. We consider that the costs and benefits should be borne by equity investors;
- assessing derivatives at a single point in time introduces a material risk of gaming. Specifically, companies could be incentivised to enter derivative contracts shortly before the calibration exercise, deliberately shaping cash

flows to inflate apparent costs. This could result in higher allowances being set than would otherwise be justified. Such behaviour would undermine the integrity of the calibration process. Moreover, forecasting future derivative use is inherently uncertain, making it difficult to assess whether any observed positions are representative or opportunistic; and

- the exercise to assess the overall value/efficiency of derivatives over the full term would add significant complexity and amplify the time and resource burden of the calibration exercise and would not likely achieve a robust result due to informational asymmetry and subjectivity associated with defining efficiency. It would be inappropriate to test efficiency based on the pricing achieved relative to market alone. An efficiency test would also need to consider other features including risk transfer, structure (such as tenor, seniority, instrument type) and timing of origination in the context of consumer interest.

2.27 We are also considering excluding the following instruments from consideration in the calibration exercise:

- liquidity facilities, RCFs and overdrafts (as these are considered in the additional costs of borrowing);
- intercompany loans other than back-to-back arrangements (as these do not generally represent commercial terms/pricing available from third parties);
- subordinated instruments, such as 'Class B' debt; and
- instruments with insufficient data to model.

2.28 Where a company issues non-GBP debt and this is swapped back to GBP via a cross-currency swap, we intend to consider the swapped GBP rate within the calibration.

2.29 In RIIO-ED2 an unweighted trailing average of the cost of debt index was adopted. In our RIIO-3 SSMD we decided to introduce RAV-weighted assessment for all ET networks but retain the unweighted approach for Gas networks. We considered that introducing a RAV-weighting approach for Electricity Transmission (ET) would reflect a natural evolution of the methodology. We also considered that the new approach offers better assurance that consumers will pay a fair price for capital while providing the necessary flexibility to address greater totex variability and rate volatility. We are considering the application of the same approach to weighting the average for ED networks as we introduced for ET networks in our RIIO-3 SSMD. We propose the following approach:

- within the trailing average window, each year's spot rate is weighted by the amount of (nominal) RAV additions;
- refinancing is assumed to occur to RAV additions from before the trailing average window and to the original opening RAV balance at the start of the analytical period; and
- the opening balance RAV is refinanced assuming an even distribution per year. So, if a 17-year average tenor is assumed, then each year 1/17th of the original opening balance RAV is refinanced again. We anticipate this would ordinarily be aligned to the length of the trailing average assumed.

2.30 In mathematical form, we propose the following approach to the ED RAV weighting of the trailing average:

$$KdFRD_t = \frac{([Opening\ RAV_{2015/16} \times IBATA_{t-1}] + [\sum_{i=2015/16}^{t-1} IBAFY_t \times (DRAV_t + DRAV_{t-17})])}{Closing\ RAV_{t-1}} + KdUP$$

where:

- KdFRD means the nominal allowed return on debt;
- IBATA means the simple 17-year Trailing Average of IBAFY;
- IBAFY means the "iBoxx average", variable value obtained as an arithmetic average of the daily nominal value of the iBoxx £ Non-Financials A 10+ and iBoxx £ Non-Financials BBB 10+ corporate indices bond yield;
- DRAV means the difference between the closing nominal RAV and the opening nominal RAV; and
- KdUP means the combined calibration uplift and additional borrowing cost uplift.

2.31 The length of the trailing average selected has been previously driven primarily by the calibration exercise. As a result of the weighting of the allowance, we intend for this assumption to become more consistent between price controls.

2.32 In line with our RIIO-3 DDs we propose using a RAV-weighted trailing average with an appropriate calibration adjustment for ED. We recommend starting the RAV weighting from the start of RIIO-ED1 with an assumed refinancing period aligned to the trailing average assumption. We consider it reasonable to maximise the use of available data and a refinancing assumption aligned to the trailing average to minimise complexity.

Consultation questions on the allowed return on debt

- FQ1. Do stakeholders consider there to be good reasons (as defined in 3.13) to deviate from the overall approach set out under the UKRN Guidance⁵ recommendation 8?
- FQ2. Do stakeholders agree with our proposal to use a combination of the iBoxx £ Non-Financials A 10+ and iBoxx £ Non-Financials BBB 10+ indices rather than the iBoxx £ Utilities 10+ index?
- FQ3. Do stakeholders consider it reasonable to adjust our long-term CPIH inflation forecast to the latest OBR assumption?
- FQ4. Do stakeholders have any objections to our proposed approach to apply Inflation Option 1 (as defined in 2.19)?
- FQ5. Do stakeholders have new evidence for us to consider in our review of the additional cost of borrowing allowances or infrequent issuer premium?
- FQ6. Do stakeholders agree with our proposed RAV-weighted approach for calibrating the index for ED networks?
- FQ7. Do stakeholders wish to propose any other alternatives to the approach for setting the allowed return on debt for ED3?

⁵ UKRN guidance for regulators on the methodology for setting the cost of capital, <https://ukrn.org.uk/publications/ukrn-guidance-on-the-methodology-for-setting-the-cost-of-capital/>

3. Allowed return on equity

Background

The role of the allowed return on equity

- 3.1 The allowed return on equity is an estimation of the return required to attract and retain sufficient equity capital, in this case within the network companies in the ED sector. As a result, when setting an allowed return, we generally base this on our assessment of the 'required return' or 'cost' of this equity.
- 3.2 The allowed return on equity is a significant part of the price control settlement and forms the basis of what equity investors can expect to earn in compensation for providing the capital that the sector needs to fund and sustain investment in network infrastructure (assuming alignment with the notional capital structure, efficient financing, and on-target operational performance).
- 3.3 The allowed return on equity is funded via consumer bills. To further our principal statutory objective to protect the interests of existing and future consumers, it is vital that the allowance set is a fair rate to ensure adequate and timely investment in Great Britain's energy networks that delivers for consumers.
- 3.4 At the same time, attracting equity capital is a key factor in securing the step-change increase in investment in infrastructure that underpins key government policy objectives in areas such as the transition to net zero, climate resilience and energy security. We must set an allowance that contributes to an overall regulatory model that provides certainty and assurance to investors that projects are viable, investible, and deliverable.
- 3.5 The allowed return on equity in our RIIO-ED2 price controls was set in CPIH-real terms (assuming an estimated level of CPIH over the price control). Equity investors earn the inflationary element of their allowed return on equity through annual indexation of the equity portion of the RAV⁶ at outturn levels of CPIH.

Summary of ED3 Framework Decision

- 3.6 In our Framework Decision we signalled that our cost of capital methodology will be vital in ensuring DNOs can efficiently raise the scale of capital required to meet their investment plans. We stated that we will further assess our proposed changes to the calculation of allowed returns and the consideration of investability and financeability as set out in our RIIO-3 SSMD. We noted that we

⁶ At the notional capital structure.

will test the introduction of these changes in ED3 as part of our considerations on the suitability of the overall financial framework.

- 3.7 In our RIIO-3 SSMD, we made a range of methodological improvements that we anticipate are likely to be relevant to the ED sector. Those related to setting the allowed return on equity include:
- updates to best practice when calculating the cost of capital using the Capital Asset Pricing Model (CAPM), building on the 2023 UKRN Guidance;⁷ and
 - the consideration of 'investability' to better understand whether the allowed return on equity and overall ED3 package represents an attractive investment proposition.

UKRN Guidance recommendations

- 3.8 In our RIIO-3 Framework Decision⁸ we flagged that we would incorporate the relevant UKRN Guidance recommendations into our methodology for estimating the cost of equity that are appropriate for the Gas Distribution (GD), Gas Transmission (GT) and ET sectors. We also consider this proposal appropriate for ED sector.
- 3.9 In November 2021, the government asked Ofwat, Ofgem and Ofcom to work together, through the UKRN, to identify areas where there was already significant alignment in cost of capital methodologies and areas where further alignment could be achieved. To meet this challenge, the UKRN formed a taskforce of Ofwat, Ofgem, Ofcom, the Civil Aviation Authority (CAA), Office of Rail and Road (ORR) and the Utility Regulator of Northern Ireland (UREGNI).
- 3.10 Following the publication of draft guidance and a period of consultation with industry, the UKRN taskforce published its guidance on the methodology for setting the cost of capital in March 2023. The guidance makes nine recommendations for application in future cost of capital decisions to ensure greater transparency and consistency in decisions and to reduce the uncertainty associated with final price control outcomes.
- 3.11 We consider the recommendations contained within the UKRN Guidance to be substantially in line with the methodological approach used in the preceding RIIO-2 and RIIO-ED2 price controls.

⁷ UKRN guidance for regulators on the methodology for setting the cost of capital, https://ukrn.org.uk/app/uploads/2023/03/CoC-guidance_22.03.23.pdf

⁸ Future Systems and Network Regulation: Framework Decision Overview, Paragraph 7.6, <https://www.ofgem.gov.uk/sites/default/files/2023-10/FSNR%20Overview%20Document%20Final.pdf>

- 3.12 In line with both the spirit and the letter of the original request from the Government, Ofgem's Gas and Electricity Markets Authority (GEMA) has committed to having regard to the recommendations in the guidance in its future price control decisions where this is permitted by its statutory duties, and to deviate only where it considers there are good reasons to depart from these recommendations.
- 3.13 We consider there to be benefits from following the UKRN Guidance recommendations unless there is good reason not to. We consider stability, consistency and predictability provided by this approach will allow investors to have ongoing confidence in the regulatory framework, ultimately helping to keep the cost of capital for the sector as low as possible. Given these factors, it is important to clarify our operating definition of 'good reasons' to deviate from this approach. When deciding whether there are 'good reasons' to depart from the UKRN Guidance, we are likely to place lower weight on evidence that was considered in the UKRN Guidance review itself or price controls which pre-dated it such as RIIO-2. 'Good reasons' to depart from the UKRN Guidance are more likely to arise from material new evidence which was not considered in those processes.
- 3.14 In the paragraphs below, we lay out the key UKRN Guidance recommendations and how we expect these to apply to the estimation of the cost of equity in the next price control period.
- 3.15 We invite stakeholders to provide feedback on our recommendations in response to this consultation, including identifying areas where stakeholders believe either, we have misapplied the UKRN Guidance recommendations or there are 'good reasons' not to follow the UKRN Guidance recommendations.

Proposed approach for ED3

- 3.16 In line with our proposed approach in RIIO-3 SSMD, we are considering following a 'multi-step' approach, similar to the approach used in our RIIO-ED2.
- 3.17 Step 1 of the process would be to assess the market cost of capital using the CAPM. In Step 2, we would consider a range of factors to ensure that our Step 1 estimate is sufficient but not excessive. This would include a range of cross checks and any other evidence related to investability.
- 3.18 In Step 3 we assess if expected returns match our best estimate of the cost of capital.

Step 1: The Capital Asset Pricing Model cost of equity calculations

- 3.19 The cost of equity is not directly observable - it is a forward-looking assessment of the opportunity cost for investors. Calculating an appropriate cost of equity involves an assessment of the risks being taken by investors in energy network companies and the associated level of return required to compensate for those risks.
- 3.20 UKRN Guidance recommendation 2 suggests that since the cost of equity is not directly observable, it must be estimated using a widely accepted method. The recommendation is that regulators should continue to use the CAPM as their primary approach for estimating the cost of equity.
- 3.21 Use of the CAPM as the primary tool for estimating the cost of equity is well established in regulatory, finance and investment practice, and is in line with the RIIO-ED2 and RIIO-3 price control methodology. We propose to continue to estimate the allowed return on equity based primarily on the output of an appropriately calibrated CAPM calculation.
- 3.22 The CAPM has three inputs, all of which need to be estimated to calculate the cost of equity for energy networks and set an appropriate allowed return on equity for the price controls:
- the Risk-Free Rate (RFR);
 - the Total Market Return (TMR);⁹ and
 - the Equity Beta (β).
- 3.23 These inputs are combined in the following way to estimate the cost of equity:
- $$COE = RFR + \beta * (TMR - RFR)$$
- 3.24 When estimating these parameters, we will typically use methodologies consistent with a long investment horizon. As we are using historical data to estimate a forward-looking cost, this requires careful consideration and the application of regulatory judgement.
- 3.25 In line with the approach taken for the RIIO-3 price controls, we are planning to 'index' the allowed return on equity on an annual basis, updating the allowance to reflect changes in the RFR. Our proposed methodology for indexing the allowed return on equity is discussed further at Paragraphs 3.38 and 3.39.38.

⁹ Alternatively, the CAPM can use an estimate of the Equity Risk Premium input instead of calculating this metric as the estimate of the TMR minus the estimate of the RFR. We discuss our preferred approach below at Paragraph 3.433.43.

Estimating the RFR

- 3.26 The RFR is, in theory, the rate of return required to invest at zero risk. In practice, no investment is truly risk-free, so this hypothetical risk-free rate of return must be estimated.
- 3.27 It is common practice to use the yield (ie annual rate of return to maturity) on extremely low-risk investment instruments as a proxy for the RFR. Previous price controls and appeals to the Competition and Markets Authority (CMA) have considered which low-risk instrument or instruments provide the best proxy for the RFR, and whether further adjustments would lead to a more accurate estimate.
- 3.28 UKRN Guidance Recommendation 3 states that regulators should use recent yields on the index-linked gilts (ILG), with a maturity which matches the assumed investment horizon for their sector to estimate the RFR. The UKRN Guidance highlights that recently there has been a debate as to whether real government bonds alone provide a sufficient proxy for the RFR. However, their recommendation remains that to estimate the RFR, regulators should use recent yields on ILGs, with a maturity which matched the assumed investment horizon for their sector.
- 3.29 Recent regulatory price controls, and most directly the CMA's Redetermination of PR19,¹⁰ have considered whether ILGs alone are the best proxy for the RFR. In the appeal of RIIO-2, the CMA concluded that Ofgem's decision to rely solely on ILG yields when estimating the RFR was 'not wrong'.¹¹ While ILGs are generally considered to be a very close proxy for the hypothetical RFR, questions have been raised on issues such as whether the RFR should be a 'market' rate at which participants can both borrow and lend or whether ILG prices (which move inversely to yields) include value that investors ascribe to these instruments over and above their proximity to being 'risk-free'. This value is often described as a 'convenience yield', which may reflect attractive characteristics specific to government bonds, such as money-like functionality or their widespread acceptance as collateral in financial transactions.
- 3.30 As further described in our RIIO-3 DDs, ILGs differ from conventional gilts in that both the semi-annual coupon payments and the principal payment are

¹⁰ PR19 Redetermination – Final Report, Paragraphs 9.123-9.144, https://assets.publishing.service.gov.uk/media/60702370e90e076f5589bb8f/Final_Report_---_web_version_-_CMA.pdf

¹¹ 8 CMA Final Determinations: Volume 2A: Joined Grounds: Cost of equity (2021) - para 5.63, https://assets.publishing.service.gov.uk/media/617fe5468fa8f52980d93209/ELMA_Final_Determination_Vol_2A_publication.pdf

adjusted in line with movements in the RPI, which means they have no inflation risk. United Kingdom Debt Management Data shows that ILGs in issue, range from around £11 billion to £18 billion depending on the maturity year meaning there is very low liquidity risk. The S&P Global rating agency rate the UK "AA/A-1+" meaning default risk is very low.¹² This combination of no inflation risk and very low default risk and low liquidity risk is why we consider using ILGs as the best available proxy of a risk-free instrument.

- 3.31 Supported by the CMA's assessment of the RIIO-2 approach and the UKRN's Guidance recommendation, and in the absence of observing material new evidence on this matter, we continue to view ILGs as the most appropriate proxy for the RFR. As a result, we are not proposing to use alternative proxies such as AAA non-government bonds, SONIA swap rates, nominal gilts or international government bonds.
- 3.32 In line with the RIIO-3 approach, we propose to base our estimate of the RFR on the one-month (October, daily) average of 20-year ILG yields. If we were setting an RFR for the entire control period, there may have been a benefit from basing our estimate of the RFR on a longer-average of ILG yield data to avoid potentially 'locking in' short-term volatility for the whole length of the control. As the RFR will be updated annually to index the cost of equity (see Paragraphs 3.38 and 3.39 below), we consider a one month average to be appropriate.
- 3.33 We do not anticipate a need to adjust this figure to take account of implied forward rates. As discussed by the CMA in the Redetermination of PR19, such 'forward rate adjustments' do not seem to provide a more accurate estimate of future spot rates than current spot rates¹³ and so are likely to impair rather than improve our estimate of the RFR. In addition, indexing the cost of equity should negate any potential benefit from attempting to imply market expectations of future rates.

Setting the RFR in CPIH-real terms

- 3.34 ILGs are RPI-real instruments, meaning both the coupon payment and the principal repayment are adjusted based on the Retail Price Index (RPI). The RFR is set in CPIH-real terms, a measure of inflation that includes owner occupiers' housing costs and council tax. To use ILGs as a proxy for the RFR, we must

¹² S&P Global United Kingdom 'AA/A-1+' Ratings Affirmed, [United Kingdom 'AA/A-1+' Ratings Affirmed; Outlook | S&P Global Ratings](#)

¹³ PR19 Redetermination – Final Report, Paragraphs, 9.228 - 9.234, [Final Report --- web version - CMA.pdf](#)

adjust their yields to CPIH-real terms by estimating the difference between future CPIH and RPI inflation, often referred to as the inflation 'wedge'.

- 3.35 Estimating the CPIH-RPI 'wedge' on a forward-looking basis is complicated by two main factors:
- as of 21 March 2017, CPIH became the Office of National Statistics' (ONS) lead inflation index. However, estimates of future CPIH inflation are less readily available than other national statistics such as the CPI; and
 - the RPI and its derivatives have been assessed against the Code of Practice for Official Statistics and found not to meet the required standard for designation as National Statistics. As a result, the calculation of RPI will be brought in-line with the calculation of CPIH from February 2030, at which point CPIH and RPI inflation rates will be identical. As 20-year ILGs will remain in issue through this transition process, we must consider how investors are including the impact of this change within current ILG prices.
- 3.36 In our RIIO-3 SSMD we stated that we would estimate the wedge using official forecasts of RPI and CPIH from the OBR up to the point of Consultation (assumed to be February 2030)¹⁴ and that no wedge will be applied for the remaining years until the maturity of the 20-year ILG. We decided to address the lack of CPIH forecasts by utilising forecasts of CPI from reputable sources such as HM Treasury (HMT) or the OBR as a proxy until such time as reliable CPIH forecasts are available.
- 3.37 We propose that we continue to adjust RPI-real ILG yields to CPIH-real terms for ED3 based on a 'wedge' calculated primarily using the official forecast methodology described in our RIIO-3 SSMD. In its 2024 report, the OBR stated that the long-run wedge between CPIH and CPI is assumed to be 0.4%. This implies that the 2% inflation assumption (anchored in the Bank of England's CPI target) may understate long-term CPIH expectations. Considering this, we will review whether an adjustment to the inflation assumption and inflation wedge is warranted to reflect the OBR's long-run wedge.

Indexing the cost of equity via updating the RFR

- 3.38 In line with the approach used during RIIO-ED2, we continue to view an annual update of the estimate of the RFR to be the simplest and most effective way to

¹⁴ OBR The long-run difference between RPI and CPI inflation, [The long-run difference between RPI and CPI inflation - Office for Budget Responsibility](#)

index the cost of equity. This should ensure that allowed returns on equity remain in line with relevant market rates.

- 3.39 We propose to update the RFR used within our CAPM calculation annually (in relation to both the RFR and the calculation of the Equity Risk Premium (ERP) as the TMR minus the RFR) based on the one-month (October, daily) average of 20-year ILG yields, plus our assessment of the appropriate RPI-CPIH 'wedge'.

Estimating the TMR

- 3.40 The TMR is an estimate of the return that investors expect for taking the market-average level of risk.
- 3.41 The CAPM calculation requires an estimate of the ERP, the additional return over the RFR that investors expect for taking the market-average level of risk. Regulators often calculate the ERP as the difference between the TMR and the RFR (ie $ERP = TMR - RFR$). An alternative approach would be to estimate the ERP directly. The choice of estimating the TMR or ERP for the CAPM takes into consideration which metric is more stable over time and so is more likely to be a useful proxy for future expectations.
- 3.42 The TMR used for calculating the ERP in the CAPM is typically estimated using long-run historical averages of relevant broad equity indexes as the best proxy for long-term future expectations. The TMR can also be estimated using forward-looking methodologies such as surveys of the expectations of professional investors, or via a combination of historical and forward-looking methodologies.

Proposed approach to estimating the ERP

- 3.43 UKRN Guidance recommendation 4 states that regulators should estimate the ERP within the CAPM as the difference between TMR and the RFR. The UKRN Guidance notes that there is significant alignment amongst regulators in the overall approach to the TMR/ERP, namely that in recent determinations UK regulators assume greater stability in the TMR and therefore estimate it directly from historical equity returns data.¹⁵ The UKRN Guidance recommends that in the interests of maintaining consistency across sectors and across time, continuing with this approach remains preferable.

¹⁵ For further discussion of whether the ERP or TMR is the more stable input, see Wright, Burns, Mason and Pickford (2018), [Estimating the cost of capital for implementation of price controls by UK Regulators](#) (the '2018 UKRN Guidance'), Section 4.4

- 3.44 In ED3, we propose to continue to estimate the TMR rather than the ERP and propose to calculate the ERP as TMR – RFR and not to adjust our estimates up or down to reflect current market conditions.

Proposed approach to adjusting for inflation

- 3.45 In relation to the use of historical inflation data, our proposed approach is in line with the UKRN Guidance and our RIIO-3 methodology. For the period of 1900-1949 (which predates the collection of RPI, CPI or CPIH data), we consider the Consumption Expenditure Deflator (CED) to be more appropriate than the Cost of Living Index (COLI), on account of its more realistic treatment of weights applied to consumed goods. For the period 1950-1987, regulators generally consider now that relying on backcast CPI or CPIH data is likely to be preferable to using RPI data (including RPI data that has been adjusted for the 'formula effect').¹⁶ From 1988 onwards, sufficient data exists to directly observe rates of CPI and CPIH inflation.
- 3.46 This combination of inflation datasets would be different to that used in RIIO-ED2 – with ONS backcast data for the 1950-1987 period generally considered to be superior to the CPI-backcast data contained within the Bank of England's 'Millennium' dataset that underpinned the RIIO-2 estimates.

Proposed approach to calculating the TMR

- 3.47 The UKRN Guidance notes that all regulators place weight on historical ex post approaches and many of them on historical ex ante methods. Some regulators have also considered forward-looking evidence in their most recent decisions. The UKRN Guidance recommends that the TMR should be primarily based on historical ex post and historical ex ante evidence.
- 3.48 In line with the UKRN Guidance, we propose to continue to estimate the TMR via assessment of long-run historical returns,¹⁷ and propose to consider a range of appropriate timeframes, averaging methodologies and potential adjustments in order to use historical data to provide an effective forward-looking estimate of the TMR.
- 3.49 Reflecting the UKRN Guidance recommendation, as well as recent relevant precedent such as the CMA's Redetermination of PR19,¹⁸ we propose to give

¹⁶ The formula effect represents that impact of the differences between the calculation methods of RPI and CPI. Methodological changes to RPI over time has meant the size of the formula effect has been inconsistent.

¹⁷ We anticipate using the most up-to-date Dimson, Marsh and Staunton (DMS) returns dataset when calculating historical returns.

¹⁸ CMA PR19 Redetermination – Final Report, Paragraphs, 9.339 - 9.361, [Final Report --- web version - CMA.pdf](#)

equal weight to both historical ex post and historical ex ante analysis when estimating the TMR.

- 3.50 In line with our RIIIO-3 SSMD and DDs, we propose to base our estimate of the ex post TMR on the 1-year arithmetic average of historical returns from the Dimson, Marsh and Staunton (DMS) dataset.
- 3.51 In our RIIIO-3 SSMD, we proposed to base the ex ante TMR on a version of the decompositional approach which was also used by the CMA in the redetermination of PR19. The decompositional approach uses latest DMS data on historical average dividend yield and adds this to the historical average of dividend growth. We adjust this data from its geometric terms into an equivalent arithmetic average. This adjustment used the same approach as our ex post TMR methodology and was an uplift of 1.65% based on our analysis of half of the variance of log real returns. In line with the approach used by the CMA we made a -0.35% adjustment to reflect DMS's use of COLI rather than CED inflation data when calculating real returns. We also applied a -0.10% adjustment to reflect serial correlation between the 1-yr, 10-yr and 20-yr holding period returns. We recognised there are conflicting views around the presence of serial correlation in the data and note the difficulties of proving or disproving this with a statistically significant level of accuracy.
- 3.52 DMS now provides the necessary data for the ex ante calculation in nominal terms, whereas previously this data had been provided only in real terms. This means we can now deflate both ex ante and ex post nominal data using the same inflation series.
- 3.53 We propose not to continue to make a serial correlation adjustment to the ex ante TMR estimate. We recognised that there are conflicting views as to the presence of serial correlation and noted difficulties in proving or disproving this with a statistically significant level of accuracy.

Estimating Beta (β)

- 3.54 The CAPM that we use to estimate the cost of equity assumes that risks that are specific to an investment, or set of investments, can be diversified away - meaning that investors do not require compensation for exposure to these 'specific' or 'non-systematic' risks. The risk exposure that remains is unavoidable or 'systematic' and cannot be diversified away and so investors require compensation for exposure to this risk. The most commonly referenced systematic risk is exposure to the general performance of the economy.

- 3.55 Beta is the measure of an assets exposure to undiversifiable systematic risk, relative to the average exposure of assets in the market. The average exposure to systematic risk is defined as a beta of one. Regulators typically use the covariance of price movement of listed companies' shares and the average price movement of relevant equities indices to estimate beta (either directly for listed companies or indirectly where listed companies are used as proxies for unlisted companies).

Asset Beta (β_a)

- 3.56 The relative systematic risk faced by investors in an asset is called the asset beta. In practical terms, investors typically invest in debt and equity securities which are able to call on the returns earned by a firm's assets (rather than investing directly into the assets themselves). As a result, the asset beta (β_a) can be split into equity beta (β_e), the exposure of shareholders to systematic risk, and debt beta (β_d), the exposure of debt investors to systematic risk. To calculate the asset beta, we weight the debt beta by the proportion of debt (g) or 'gearing' in the capital structure and the equity by the proportion of equity ($1-g$) in the capital structure, as shown below.

$$\beta_a = (g \cdot \beta_d) + (1 - g) \cdot \beta_e$$

Equity Beta

- 3.57 We can rearrange the asset beta formula to solve for equity beta.

$$\beta_e = (\beta_a - (g \cdot \beta_d)) / (1 - g)$$

- 3.58 As shown by this reformulation and supported by financial theory, adding debt to the capital structure of an asset increases equity holders' exposure to systematic risks. Combining asset beta and the impact of gearing gives us the equity beta, a measure of the exposure of shareholders in a firm to systematic risk. Equity beta is the input required within the CAPM. Equity betas are typically the most straightforward to observe, while asset beta is generally inferred from equity beta by adjusting for gearing and making an assumption about debt beta.
- 3.59 Regulators typically measure 'raw' equity betas from market data of comparators that either individually or collectively are assumed to have a similar underlying exposure to systematic risk (ie a similar asset beta). In line with common regulatory practice, this raw equity beta data is then 'de-gearred' (based on net debt to enterprise value) to strip out the impact of the level of debt within the capital structure of each firm (assuming a zero debt beta) to find an unlevered asset beta. This unlevered asset beta is then combined with an

assumption around debt beta to allow regulators to compare the asset betas of relevant comparators.

- 3.60 This asset beta is then 're-gearred' to assumed levels of debt in line with the notional capital structure used in the price control (based on the regulatory gearing definition). This gives us the equity beta at the notional capital structure that is a required input of the CAPM when estimating the cost of equity.
- 3.61 The measurement of raw equity betas requires statistical analysis. This can take the form of relatively simple 'Ordinary Least Squares' (OLS) regressions or can involve more advanced statistical analysis techniques such as Generalised Autoregressive Conditional Heteroskedasticity (GARCH) methodologies.
- 3.62 When conducting beta analysis, regulators must choose both an overall approach and consider the most appropriate calibration of analysis - for example, whether to use daily, weekly or monthly price data and over what historical timeframe to measure beta. There is no single approach that is recognised as most appropriate for all circumstances and judgement is necessary. For example, longer-term data may provide more datapoints and so improve statistical reliability. Longer-term data may also give more comprehensive and reliable insight into a firm's beta over a business cycle. Conversely, shorter-term data may be more representative of the forward-looking exposure to systematic risks that we are looking to include in our estimate.
- 3.63 It is important that regulators consider whether there have been material changes to systematic exposure of a firm within the timeframe of the data being analysed. For example, if a firm had previously sold a business division with a particularly high or low exposure to systematic risk relative to the average exposure of the remaining operations, only data from the point of sale of this division is likely to be useful in estimating the appropriate beta for the firm on a forward-looking basis.

Debt beta

- 3.64 Debt beta is a measure of the exposure of debt holders in a firm to systematic risk. Debt beta is generally more difficult to measure than equity beta. Debt securities do not tend to trade in the same liquid fashion as listed equities, and so the quality of bond return data is likely to make accurate debt beta analysis difficult.
- 3.65 Regulators, economic advisors and financial market participants have used a range of direct and indirect ways to estimate debt beta. Recent precedent

indicates that regulators have generally incorporated a relatively small debt beta figure in their cost of equity analysis. Since 2019, debt beta assumptions in regulatory price controls have ranged from 0.05 to 0.125.¹⁹ In their PR19 redetermination the CMA estimated debt beta to be in a range of 0.05 to 0.10.²⁰

Proposed methodology to setting beta parameter

- 3.66 Recommendation 5 of the UKRN Guidance suggests that regulators should estimate equity beta for the notionally capitalised company using comparable listed companies and standard regression techniques (ie OLS). The UKRN Guidance also notes that where the listed comparator has different gearing to the notional company, regulators should continue to de-lever and re-lever the raw equity beta.
- 3.67 We agree with the UKRN Guidance recommendation which is in line with the RIIO-ED2 approach. We propose to base our beta analysis on OLS regressions of relevant listed comparators, de-gearing data to make asset beta comparisons before re-gearing to the notional capital structure to estimate an appropriate equity beta input for the CAPM cost of equity.
- 3.68 We propose to consider a range of timeframes and frequencies when analysing equity beta data. We intend to weight data based on regulatory judgement and will confirm the exact calibration of our calculations on the basis of the evidence considered.
- 3.69 We expect to utilise comparator firms such as listed UK energy and water networks, which were included in RIIO-ED2 beta assessment, as we continue to believe that these firms are likely to be representative of the core risks faced by GB energy networks. However, as we flagged in our RIIO-3 SSMD, we may consider including a broader set of comparable companies such as relevant European utility comparators in addition to UK Water companies and National Grid plc, if there is sufficient evidence that these, either individually or in aggregate, allow us to calculate a more accurate estimate of the beta that is appropriate for energy networks.

Choosing a point estimate for the allowed return on capital

- 3.70 Inputs into the CAPM may be expressed as a range, depending on the breadth of evidence that is included when making the estimation. Where ranges are used as inputs into the CAPM, this will naturally lead to there being a high and low

¹⁹ [UKRN 2023 Cost of Capital Report](#), Tables 2 and 3

²⁰ CMA PR19 Redetermination – Final Report, Table 9-18, [Final Report --- web version - CMA.pdf](#)

estimate for the cost of equity. GEMA is required to set a single cost of equity at a notional level of gearing to be applied in relevant licensees. If we have estimated the cost of equity initially as a range, we must choose a point in that range as the allowed return on equity.

- 3.71 The UKRN Guidance recommendation 6 suggests that the RFR, TMR and (re-levered) equity beta assumptions should be combined using the CAPM to produce a cost of equity range. The mid-point of the range should be used as the central estimate for the CAPM cost of equity.
- 3.72 Our central assumption is that the allowed return on equity should match our assessment of the cost of equity. If we do utilise a range for one or more of the CAPM inputs, we will calculate the associated high and low range cost of equity estimates and anticipate the midpoint of this range will represent our best estimate of the cost of equity, which will be used to set the allowed return on equity.

Step 2: Checking our Step 1 estimate is neither excessive nor insufficient

- 3.73 In our RIIO-3 SSMD we introduced the concept of 'investability' to both signal and ensure that we are conscious of the potential challenges that the sectors could face in this and future price controls - particularly in relation to the challenges associated with supporting the security of supply, network resilience and the achievement of GB's net zero targets.
- 3.74 We said we would consider investability in several ways: equity financeability primarily measured via cross-checks to our Step-1 - CAPM-based estimate of the cost of equity; the need for additional cross-checks; the assessment of additional risk factors; picking a point estimate from the cost of equity range; and assessing equity issuance costs.

The use of cross-checks

- 3.75 Recommendation 7 of the UKRN Guidance suggests that cross checks may be used to sense check the CAPM derived point estimate. However, the Guidance recommends that regulators should only deviate from the mid-point of the CAPM cost of equity range if there are strong reasons to do so.
- 3.76 We agree with this recommendation. We propose to use a range of cross checks to assess whether our CAPM-based estimate is materially out of line relative to estimates suggested by relevant market data and other estimation methodologies.

- 3.77 In our RIIO-3 SSMD we said that the key to our use of cross checks is ensuring that we treat both consumers and investors fairly when setting allowed returns. This is a particularly difficult challenge in RIIO-3 and ED3, as any new investors into the sector will require current returns to match the market cost of equity. While we normally consider likely returns on a 'through cycle' basis, this may cause issues if there is a disconnect with our 'through cycle' estimate and current market required rates of return. Using a balanced suite of cross-checks would help us to ensure that our estimated cost of equity is broadly in-line with current market requirements.
- 3.78 In our RIIO-3 SSMD we proposed the use of following cross-checks:
- a Market-Asset-Ratio (MAR) cross check on implied cost of equity;
 - an Offshore Transmission Operator (OFTO) implied returns cross-check;
 - investment manager TMR forecasts; and
 - infrastructure fund implied equity IRRs.
- 3.79 We propose to continue to use cross-checks for the purpose of ED3 price controls, and we expect that most of these cross-checks will remain relevant. We welcome stakeholders' evidence on this approach, and whether alternatives to the current cross-checks should also be considered.
- 3.80 We will continue to work with stakeholders at the later stages of the process to ensure that the ED3 package is sufficiently attractive to investors while maintaining low costs to consumers.

Step 3: Expected versus allowed returns

- 3.81 We would only expect to make a 'Step 3' adjustment if future decisions in relation to the design of the price control led to an intentional and material skew in expected outcomes relative to allowed returns.
- 3.82 In assessing changes in risk, it is vital that we do so on a 'net' basis. In other words, we must assess the overall change in risk, including new or updated mitigations used throughout the price control package. The presence of individual asymmetric risks within the package is not a reason to provide additional returns. It is the aggregated balance of the whole price control that should influence the associated balancing of overall risk and reward.
- 3.83 We will further calibrate our methodology for setting the allowed return after the overall price control package has been established, we have analysed business plans and the expected outcome 'in the round' is better understood.

Consultation questions on the allowed return on equity

FQ8. Do stakeholders agree with our interpretation and proposed application of UKRN Recommendations 2 to 7?

FQ9. Do stakeholders agree with the methodology for calculating the CAPM parameters: RFR, TMR and beta?

FQ10. Do stakeholders agree with us using our proposed RIIIO-3 beta comparators for ED3?

FQ11. Do stakeholders agree with our proposed set of cross checks in Step 2?

FQ12. Do stakeholders agree that our proposed allowed return on equity ensures the investability of the sector?

4. Weighted Average Cost of Capital (WACC) allowance

Background

4.1 The total allowed return for companies in this price control is calculated as a WACC. The allowed WACC consists of three inputs:

- the allowed return on debt;
- the allowed return on equity; and
- the relative weights of debt and equity.

4.2 The WACC calculation combines the allowed returns on debt and equity according to the following formula:²¹

$$WACC = Kd * g + Ke * (1 - g)$$

4.3 In regulatory price controls the mix of debt and equity capital are referenced in terms of the weight of debt within the capital structure, known as 'gearing'. Regulators typically set price controls with reference to a notional level of gearing, although this level and the associated allowed return can then be varied depending on circumstances relating to individual companies or network types.

4.4 The level of gearing is also used within the calculation of the allowed return on equity. As discussed at Paragraph 3.60, the equity beta, and so the overall cost of equity, rises with the level of gearing.

4.5 In addition to defining the amount of gearing, the notional structure can be more explicit about the types of debt used within an overall gearing assumption. In this way, the notional capital structure can reflect both the proportion and the type of debt we assume that companies utilise when setting our allowed return on capital.

Proposed approach for ED3

4.6 Notional capital structures are widely used in regulatory price controls and this approach was a central feature of the RIIO-2 controls.

4.7 The notional capital structure is conceptually distinct from the actual capital structures used by companies, which is a choice for company management and owners, within licence condition boundaries. In setting allowed returns based on a notional capital structure, regulators allow companies the flexibility to make decisions on capital structure that are appropriate for each individual business

²¹ Where Kd is the allowed return on debt, Ke is the allowed return on equity and g is the weight of debt within the capital structure, also known as gearing.

subject to financial resilience requirements. This approach ensures that management and owners remain responsible for the risks and rewards of the actual capital structure and financing decisions, and that the outcome of these independent decisions does not impact consumers.

- 4.8 Recommendation 1 of the UKRN Guidance notes that regulators should continue to estimate the allowed rate of return in price controls based on the WACC for a notionally financed firm within their sector. We agree with this recommendation and propose to set WACC-based allowed returns and assess financeability²² with reference to a notional capital structure.
- 4.9 Recommendation 9 of the UKRN Guidance states that the notional gearing assumption should reflect the regulator's assessment of the balance of risks facing the regulated company, a wide range of benchmarks on gearing levels and overall regulatory policy objectives - not just the gearing level of the actual company (or companies) in question. We agree with this recommendation and note that several factors, including the anticipated pace and quantum of investment, market commentary such as from credit rating agencies and the availability of equity versus debt capital, should be taken into account when setting the gearing assumption within the notional capital structure.
- 4.10 We currently expect gearing levels in these price controls to remain consistent with those used in RIIO-ED2 which was 60% for all DNOs. However, this will be subject to the confirmation of company specific investment plans.
- 4.11 We are considering our approach to the application of notional gearing levels during the course of the price control. Currently, notional levels of gearing are assumed at the beginning of the price control and are allowed to flex on the basis of cash generation over the course of the price control period. As an alternative we consider notional capital structure remains constant in each year of the price control and that variables such as net issuance of debt and equity are varied in order to achieve this.

Consultation questions on allowed WACC

FQ13. Do stakeholders consider there to be good reasons to deviate from the respective approaches set out under UKRN Recommendations 1 and 9?

FQ14. Do stakeholders consider there to be good reasons to deviate from the notional gearing assumption applied to ED companies in the RIIO-ED2 price controls?

²² For further discussion of our approach to assessing financeability, please see Chapter 5.

FQ15. Do stakeholders consider there to be good reasons to maintain notional gearing levels for each year of the price control? Do stakeholders have a preference for how this assumption is managed within the price control process?

5. Debt Financeability

Background

- 5.1 GEMA is required to have regard to the need to secure that network companies are able to finance the activities which are the subject of obligations imposed by or under a range of legislation.²³ The assessments we perform to discharge this duty are often referred to as assessments of 'financeability'.
- 5.2 We assess the financeability of energy networks on the basis of an efficient licensee adopting the notional capital structure (the proposed notional capital structure is described in Paragraphs 4.7 to 4.11). This is to ensure that consumers are protected from risk associated with actual financing decisions that licensees and their shareholders have made. Consistent with previous price controls, we consider it appropriate that the risks and rewards arising from financing decisions reside with investors.
- 5.3 The energy networks operate large portfolios of long-life infrastructure. This type of infrastructure is well suited to debt-based financing. In RIIO-ED2 we assumed 60% notional gearing which means that 60% of the notional capital structure for the networks is derived from debt financing. This is a level which we considered balances efficient financing costs with the alignment of interests and the financial resilience that comes from significant levels of equity capital.
- 5.4 Debt capital and equity capital have different characteristics. Most notably, debt capital typically comes with explicit service costs in the form of interest on loans or coupon payments on bonds. In general, these debt service costs cannot be avoided or changed without significant additional costs. Equity financing costs are less tangible and more flexible. For example, investors may choose to forego dividend returns in a period if a company requires that capital to fund growth or improve financial resilience.
- 5.5 Combined, these issues lead the financeability assessment to focus primarily on whether the price control package in-the-round puts licensees (at the notional capital structure) in a position whether they can service reasonable debt costs and maintain financial metrics that would be associated with an appropriate credit rating range.

²³ Ofgem's principal statutory objective is to protect the interests of existing and future gas and electricity consumers. Ofgem also has a range of secondary duties including its duty to have regard to the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed on them (See section 3A(2)(b) of the Electricity Act 1989).

- 5.6 Our debt financeability assessment is used at the last stage of the setting the allowed return on debt process to ensure that, when all the individual components of our determination are taken together (including totex, allowed return, notional gearing, depreciation and capitalisation), an efficient operator adopting the notional capital structure can generate cashflows sufficient to meet its debt financing needs.
- 5.7 In our Framework Decision²⁴ we noted that we will further assess our proposed changes to the calculation of allowed returns and the consideration of investability and financeability as set out in our RIIO-3 SSMD and that we recognise the importance of balancing financeability and intergenerational fairness. We said that DNOs will need to consider any potential gaps in their revenues and financing and how to best maintain their credit ratings, while fairly balancing the cost of assets over time. We said it is important that we undertake our own robust assessment of available data and evidence.

Proposed approach for ED3

- 5.8 In order to assess debt financeability we propose to adopt an approach that is similar to that adopted for RIIO-3 DDs. We intend to conduct an in-the-round assessment that targets an efficient licensee adopting the notional capital structure broadly achieving comfortable investment grade credit quality. Within this assessment we plan to consider:
- financial projections from our financial model(s);
 - the implied Moody's methodology rating (as this is the most transparent and therefore replicable methodology of the three rating agencies that we currently rely upon);
 - the strength of quantitative metrics for credit quality, particularly those emphasised by credit rating agencies or that are under pressure;
 - the strength of other metrics and qualitative factors; and
 - stress testing results.
- 5.9 We also intend that our financeability testing should consider financial ratios on the basis of both baseline totex allowances and additional totex allowed through variant ex post expenditure.
- 5.10 In our RIIO-3 SSMD we said we will proceed with the proposal to incorporate long-term modelling into the financeability assessment, an approach that was

²⁴ [Framework decision: electricity distribution price control \(ED3\) | Ofgem](#)

generally supported by the network companies. We further mentioned that we are evaluating two approaches, economic form modelling (which was utilised in the RIIO-ED2 price control)²⁵ or an extended form of the Price Control Financial Model (PCFM). In RIIO-3 DDs we proceeded with the extended form of the PCFM. We propose to proceed with incorporating long-term modelling into the financeability assessment for ED3.

- 5.11 We continue to consider the overall financeability framework to be appropriate for the coming price controls. However, we are open to considering whether a broader assessment may be necessary and has benefits for consumers. We invite views and evidence on how this could be assessed.
- 5.12 Incremental improvements we could make to the assessment of financeability could include:
- changing the way we calculate simulated credit ratios (for example, using the forecast sector average cost of debt rather than the cost of debt allowance in our analysis to avoid an unintended consequence whereby an upwards calibration adjustment designed to provide more headroom results in an adverse movement in financeability metrics);
 - including additional credit ratios in our analysis utilised by S&P and Fitch;
 - assessing broader indicators of equity cost, such as dividend yield expectations; and
 - assessing the appropriate equity issuance cost allowance.
- 5.13 In line with the UKRN Guidance recommendations, we do not consider 'aiming-up' of the allowed return on capital to be in consumers' interest. In the event financeability constraints are identified, we could consider a number of financeability 'levers'. We welcome evidence on levers that would support financeability in this scenario without imposing inappropriate additional cost on consumers. This could include, but is not limited to:
- changing the gearing assumption;
 - reducing the dividend assumption, if appropriate; and
 - adjusting capitalisation and/or regulatory depreciation rates.
- 5.14 We encourage stakeholders to submit relevant evidence in relation to our existing financeability assessment approach and any potential incremental improvements.

²⁵RIIO-ED2 FD Finance Annex Document Paragraphs 5.60-5.63, [RIIO-ED2 Final Determinations Finance Annex.pdf](#)

Consultation questions on debt financeability

FQ16. What, if any, improvements should Ofgem make to its proposed approach to the assessment of financeability in the next price control?

FQ17. What evidence, if any, should Ofgem consider in relation to expanding its assessment of financeability?

FQ18. What evidence, if any, should Ofgem consider in relation to expanding financeability 'levers'?

6. Financial resilience

Background

- 6.1 Financial resilience is the ability for companies to withstand shocks to their financial position and/or manage the risk of financial difficulty in a downside shock situation. The overarching objective is to protect consumers from the adverse consequences of licensees' financial distress, which include higher costs of capital and potential impact on service quality associated with companies with poor resilience.
- 6.2 Our RIIIO-3 Draft Determination position was to reinforce the existing financial resilience provisions and implement a suite of measures. These include requiring licensees to have at least two investment grade credit ratings, adding 75% gearing as additional dividend lock-up trigger, and amending the Availability of Resources (AOR) certificate so that licensees confirm sufficiency of financial resources to cover the price control period (or minimum three years).
- 6.3 Companies in the ED sector face similar risks and challenges to companies in the gas and electricity transmission sectors and therefore require an equivalent degree of financial resilience provisions. Our ED3 Framework Decision recognised this as well as the importance of a consistent approach for financial resilience across the sectors.

Proposed approach for ED3

- 6.4 Our analysis in the RIIIO-3 process highlighted some evidence of potential harm in the sector due to weak financial resilience. The conclusions of the analysis apply to ED companies as well and, therefore, we intend to implement a set of financial resilience measures similar to the ones proposed in RIIIO-3 Draft Determinations. We consider that these would ensure appropriate levels of protection for consumers from downside risks as the business environment for the ED sector evolves.
- 6.5 The set of financial resilience measures, on which we would welcome feedback from stakeholders, comprises:
- measure 1: amend the licence conditions to "require" licensees to maintain more than one investment grade credit rating at all times rather than "use reasonable endeavours" or "take all appropriate steps";
 - measure 2: amend the existing dividend / distributions lock-up trigger to be the earlier of reaching BBB-/Baa3 with a negative watch / outlook or 75% actual regulatory gearing; and

- measure 3: amend the availability of financial resources conditions to require company board certification to state that, based on agreed assumptions, the licensee envisages sufficiency of financial resources to cover the entire price control or a minimum of three years ahead.
- 6.6 Measure 1 aims to bring the licence conditions in line with comparable UK regulated sectors and provide greater certainty to investors around the condition than the current "reasonable endeavours" statement.
- 6.7 Measure 2 is intended to align distribution lock-ups with existing market expectations around gearing covenants. The proposed lock-up trigger at 75% actual regulatory gearing is supported by Moody's guidance for maximum gearing level for a Baa1 rated energy network company.
- 6.8 Measure 3 enables higher visibility into the longer-term viability of the licensee and its ability to deliver its statutory and regulatory commitments for the entirety of the price control period. It also allows for stronger early warning signal for risks to financial resilience which affords Ofgem to intervene more promptly if appropriate.
- 6.9 In addition, we propose to include references to stress testing in the wording of the availability of financial resources certificates. This is to ensure that the licensee explicitly states that it has undertaken stress testing analysis prior to issuing the financial resources certificate, rather than implying stress testing as it currently stands.
- 6.10 We propose adopting the measures above as part of the ED3 price control setting process, however we note that there is an ongoing wider review of the licence conditions related to the financial ring-fence.²⁶ It is possible that these measures, and other financial resilience measures, may be introduced prior to the start of ED3. We will consult on any financial resilience licence modifications ahead of ED3 via the upcoming Ring Fence Review consultation.
- 6.11 Overall, we consider the proposed set of financial resilience measures as consistent with our reasonable expectations for a responsible and financially sound licensee. We also believe that this achieves the right balance between best practice across the regulatory landscape for measures that improve existing financial resilience requirements to protect against the downsides that consumers could bear, but which do not introduce disproportionate incremental costs.

²⁶ [Energy networks ring-fence review: call for input conclusion | Ofgem](#)

Consultation questions on financial resilience

FQ19. Do stakeholders have views on the proposed financial resilience measures?

7. Depreciation

Background

- 7.1 When networks incur expenditure, some of it is earned as revenue in the same year as the spend is incurred, and the remainder is added to the company's RAV. These assets are then paid back to networks over a period of years, which we term depreciation. Depreciation is a significant component of overall network allowed revenues. It is also commonly referred to as 'RAV depreciation' or 'allowed depreciation'.
- 7.2 Our key aims in setting regulatory depreciation policies are to:
- allocate costs fairly between current and future consumers (sometimes referred to as intergenerational fairness); and
 - ensure that company revenues reflect the licensee's need to make sustainable economic investments.
- 7.3 The key principle for intergenerational fairness is that the rate of depreciation should be set so that different generations and types of consumers pay network charges broadly in proportion to the value of network services they receive.
- 7.4 Simultaneously, networks should be able to recover their costs over a reasonable period that allows them to operate efficiently on a notional basis.
- 7.5 Our main levers for regulatory depreciation policies are:
- setting the number of years over which the RAV is paid back to networks (also referred to as asset lives);
 - setting the method of how depreciation is calculated; and
 - setting the capitalisation rates which determine how much expenditure is earned as in-year revenue and how much is added to the RAV and paid back over a number of years.

Asset lives

- 7.6 In our RIIO-ED1 Final Determinations, we decided that the RAVs should transition from a 20-year straight-line asset life (as at 31 March 2015) to a 45-year straight-line asset life (by 31 March 2023). British Gas Trading (BGT) appealed against this decision to the CMA, arguing that GEMA had erred in deciding to introduce transitional arrangements in relation to its change in asset life policy. The CMA determined that GEMA was not wrong on any of the statutory grounds advanced by BGT to implement a transition between 20-year

and 45-year asset lives rather than moving to 45-year asset lives immediately.²⁷ We decided to maintain this decision for RIIO-ED2 and stated that we would consider the appropriate depreciation lifetime at the next price control, consistent with regulatory best practice.

- 7.7 DNOs highlighted to us in RIIO-ED2 that the transition from a 20-year to 45-year asset life could cause a drop in annual cash flows in future price control periods. This is due to declining revenues from the shorter-lived asset base while revenues for the longer-lived assets gradually increase.

Depreciation method

- 7.8 To date, depreciation has been set for DNOs on a straightline basis, meaning that costs are recovered evenly over the asset life, this is consistent with intergenerational fairness.
- 7.9 Typically, we have set either straightline or sum of digits depreciation methods across different RIIO and ED price controls, however we may apply different methodologies where there is evidence that they support our depreciation policy aims. For example, we have proposed in our RIIO-3 Draft Determinations a sum-of-digits approach for new RIIO-GD3 assets to recognise the uncertain future of gas networks and our net zero targets.

Capitalisation rates

- 7.10 In general, the regulatory capitalisation rate broadly reflects the split of capital expenditure (capex) and operating expenditure (opex) expected over the price control. We often refer to this split as the "natural capitalisation rate". Setting this rate accurately ensures that charges over time are fair to both existing and future consumers.
- 7.11 Capitalisation rates therefore influence the value of RAV that is then depreciated over the asset life period. In RIIO-ED2 we used two separate buckets to assess capitalisation rates. These two buckets were: (1) ex ante (variant and non-variant) expenditure, and (2) ex post (variant) expenditure. We set RIIO-ED2 capitalisation rates for these two buckets using the estimated natural capitalisation rates as a guide.

Proposed approach for ED3

- 7.12 Regulatory depreciation will be a key area of focus for ED3 and the growing role of DNOs in the future of our energy system. The greater need for flexible

²⁷ [British Gas Trading Limited v The Gas and Electricity Markets Authority, Final Determination](#)

electricity distribution in the coming decades will mean that DNOs need to deliver ambitious investment plans. It will also be necessary to ensure the costs of investment are fairly distributed to consumers over appropriate lengths of time. The current appropriate length of time is 45-years, which is what we consider is broadly reflective of the technical asset life of a DNOs network.

- 7.13 Depreciation policies, while changeable over time, can also have impacts on cash flows over multiple price control periods. Our ED3 policies should therefore be set with a longer term view in mind.
- 7.14 Equally, it is also important that our depreciation policies are not considered in isolation but rather viewed in the context of the ED3 framework as a whole. For example, our depreciation policies should be considered against other measures that could adjust network cash flows (such as the proposed implementation of Inflation Option 1 as set out in Chapter 2).
- 7.15 We are therefore consulting more broadly on the topic of regulatory depreciation. We welcome views and evidence from stakeholders on how we approach regulatory depreciation for ED3 and future price control periods.
- 7.16 We seek stakeholders' views and evidence on the merits of and potential methodological considerations around asset lives, depreciation calculation methods and capitalisation rates. We also welcome suggestions on new methodological approaches that could be considered.
- 7.17 We are also commissioning a review of depreciation to help bolster our evidence base as we develop our thinking for our SSMD and Draft Determinations.

Consultation questions on depreciation

- FQ20. Do stakeholders have views on our application of asset lives for ED3?
- FQ21. Do stakeholders have views on depreciation methodologies that could be adopted for ED3?
- FQ22. Do stakeholders have views on our use of capitalisation rates?
- FQ23. Do stakeholders have views on technical asset lives and depreciation periods?
- FQ24. Are there new methodological approaches that could be considered for ED3?

8. Corporation tax

Background

- 8.1 RIIO-ED2 approached corporation tax by providing a notional allowance with additional protections, building on the approach from RIIO-ED1.
- 8.2 This approach provides a tax allowance to licensees based on a notional efficient company, operating on a standalone basis, with notional levels of gearing.
- 8.3 The aim of this approach is to provide a reasonable tax allowance to compensate licensees for efficient corporation tax costs arising from the regulated business. This approach ensures that licensees are incentivised to manage their tax affairs efficiently. The notional approach has embedded protections to ensure that consumers do not bear a cost for corporation tax which is ultimately not paid by the licensee, and that consumers do not pay for inefficiency arising in the licensee entity as a result of its tax affairs being managed for the benefit of its wider corporate group.
- 8.4 The notional approach allows the licensee and its wider group to manage their tax affairs as they see fit, whilst minimising the risk to consumers of providing an excessive or unnecessary allowance.
- 8.5 This chapter explains the proposed approach for ED3.

Proposed approach for ED3

- 8.6 For ED3 we intend to maintain our corporation tax approach, as established in RIIO-ED1 and refined in RIIO-ED2, making some minor technical changes to update the approach in line with the RIIO-3 approach for the ET, GT and GD sectors.
- 8.7 In line with RIIO-3, we intend to remove the tax clawback glide path featured in RIIO-ED2, as it should no longer be needed.
- 8.8 We intend to update the definitions of Adjusted Net Debt (AND) and Tax Deductible Net Interest (TDNI) in line with the updated definitions used in RIIO-3. These changes primarily reflect changes in accounting standards and tax legislation.
- 8.9 In line with RIIO-3 we intend to update the Price Control Financial Handbook (PCFH) to provide additional clarity on the concept of the notional company, and the triggers for a Tax Review.
- 8.10 In line with RIIO-3 we intend to update the PCFM to encompass the changes in the capital allowances regime which have arisen since RIIO-2.

Consultation questions on corporation tax

FQ25. Do stakeholders agree that the approach to corporation tax should be foundationally aligned with the principles set out in our RIIO-3 Draft Determinations?

9. Return Adjustment Mechanisms (RAMs)

Background

- 9.1 The purpose of RAMs is to provide protection to consumers and investors in the event that network company returns are significantly higher or lower than anticipated at the time of setting the price control. Consumers and investors benefit from the introduction of RAMs as they would be protected against the possibility of unreasonably high or low returns in price controls.
- 9.2 RAMs will help to ensure the fairness of ED3 by protecting consumers and investors against ex post overall returns from network price controls deviating greatly from ex ante expectations.
- 9.3 In RIIO-ED2, we decided to introduce sculpted sharing factor RAMs. We decided that the RAMs will take into account combined performance under the Totex Incentive Mechanism (TIM) and ODIs, and that adjustments under the RAMs will be implemented as part of the close out of RIIO-ED2. We also decided that we would apply symmetry to the upside and downside application of the RAMs thresholds. We also set out the following RAMs threshold trigger levels:
- primary threshold level - 3% plus or minus the baseline allowed return on equity;
 - primary adjustment rate - adjustment of 50% applied to returns above or below the primary threshold level;
 - secondary threshold level - 4% plus or minus the baseline allowed return on equity; and
 - secondary adjustment rate - adjustment of 90% applied to returns above or below the secondary threshold level.

Proposed approach for ED3

- 9.4 We are considering rolling over the existing methodology from our RIIO-3 Draft Determinations unless evidence emerges that merits an alternative approach.

Consultation questions on RAMs

FQ26. Do stakeholders have views or evidence as to why RAMs should or should not continue?

FQ27. Do stakeholders have views or evidence as to whether the RAMs methodology should be amended, such as recalibrating the threshold or rates or including financial performance?

FQ28. Do stakeholders have views or evidence as to whether there should be separate RAMs for 'BAU' parts of the business and specific programmes?

10. Other finance issues

10.1 In this section we consider the following financial issues:

- Pension Scheme Established Deficit (PSED) funding;
- Directly Remunerated Services (DRS);
- amounts recovered from the disposal of assets;
- transparency through RIIIO-3 reporting; and
- Annual Iteration Process (AIP) and financial modelling issues.

10.2 We discuss each of these areas in turn below, outlining the relevant background, setting out our proposals and seeking stakeholder views thereon.

PSED funding

Background

10.3 Our current policy sets a commitment to consumer funding of deficits in defined benefit pension schemes, which were generally in existence before the energy network sector was privatised. To reflect this commitment, our price controls provide a form of pass-through funding by consumers of pension PSEDs in respect of those attributable to service before certain specified cut-off dates. We last updated our policy on this in April 2017.

10.4 The allowed revenue that network companies can recover under this policy is reviewed on a triennial basis as a 'reasonableness review'. We performed this review and set a new established deficit pension allowance effective from 1 April 2024.

10.5 At this review we noted that most schemes are now over 90% funded, with some schemes in surplus. We flagged that we consider that this may be an appropriate time to carry out a review of the policy for funding PSEDs and who should bear the relevant risk in the future. While we have not carried out a review to date, we do not discount doing so in the future.

Proposed approach for ED3

10.6 For the business plans, we expect network companies to assume pension allowances for the relevant portion of PSEDs during the ED3 period that reflect their submission for the 2026 pension reasonableness review.²⁸

²⁸ This will be updated following the outcome of the 2026 pensions reasonable review that will be published November 2026.

DRS

Background

- 10.7 DRS are specific activities of the network companies that are settled outside of the normal regulatory price control. Companies are allowed to charge their customers directly for certain services performed. For instance, a network company may enter into a commercial agreement with a third party such as a telecoms provider to lease out unused space on its grid infrastructure for the placement of satellite dishes or pylons. The telecoms provider would then pay a rental fee directly to the network company, according to the terms of that agreement. These services are “directly remunerated” by the customer rather than through Ordinary Transportation Charges.
- 10.8 The policy intent is to avoid consumers paying for a service for which the network companies have already been remunerated. Costs associated with these services are paid for directly by the specific party (or parties) requiring the service. As such, these costs should not be factored into the network companies’ cost allowances, to avoid double-counting.
- 10.9 Ofgem will forecast the expected revenues and costs from the network company providing these services and reflect these when setting the allowances at the beginning of the price control. Where the actual revenue earned or cost incurred differs from original forecasts, in some cases, it may be appropriate to true-up this difference. The need for a true-up depends on the category of services and whether the costs and revenues are incentivised.
- 10.10 In our RIIO-3 Draft Determination we highlighted that DRS has not been reviewed for some time, and we may consider carrying out a broader review of DRS during the RIIO-3 price control period.

Proposed approach for ED3

- 10.11 We are considering a continuation of the existing DRS policy and methodology for ED3, subject to the outcome of any broader review.

Consultation question on DRS

FQ29. Do stakeholders agree with a continuation of our existing DRS approach and methodology?

Disposal of assets

Background

- 10.12 Where network assets are no longer required, network operators may dispose of or relinquish operational control, subject to consent. They may also recover from third parties any costs in respect of damage to their network. Some of these transactions can include the disposal of land. Consumers should benefit from receiving a share of the proceeds from the sale of assets no longer required.
- 10.13 The financial impact of disposing of assets includes the following:
- cash proceeds of sale at an arm's length transaction to a third-party external to the licensee group;
 - transfer at an arm's length fair market value of assets within the licensee group;
 - cash proceeds of sale of assets as scrap; and
 - amounts recovered from third parties, including insurance companies, in respect of damage to the network.
- 10.14 The Regulatory Instructions and Guidance (RIGs) provide guidance on how companies should report on disposal of assets.

Proposed approach for ED3

- 10.15 We are considering a general continuation of the existing disposal of assets policy and methodology for ED3.

Consultation questions on disposal of assets

FQ30. Do stakeholders agree with a continuation of our existing Disposal of Assets approach and methodology?

Transparency through RIIO-3 reporting

Background

- 10.16 We recognise that it is important that investors in the networks sector can achieve a reasonable return on their invested capital, and dividends are considered an important component of the equity return. As companies adapt to a variety of challenges over the coming years, most obviously the changes required to help meet net zero targets, maintaining best practice in corporate governance measures is likely to become increasingly important.

- 10.17 During the development of both RIIO-ED2 and RIIO-3 we identified several areas where we considered there could be improved transparency through reporting. These included:
- executive pay/remuneration;
 - dividend policy; and
 - corporate governance and ownership.
- 10.18 Our focus on these issues reflected a recommendation to Ofgem from the January 2020 National Audit Office report on electricity networks. This recommended that Ofgem should ensure network companies make it clear how much tax they pay; how executives are rewarded and how this links to quality of service for customers, and how dividend policies ensure companies remain sustainable. Several commentators (such as Citizens Advice) had also drawn attention to high levels of returns and made suggestions for reform.
- 10.19 We introduced new reporting requirements for the disclosure of executive remuneration to a similar level to that required for UK-listed public limited companies and publication of sustainable dividend policies. These new reporting requirements were practically introduced via a new section on Corporate Governance, contained within the RIGs and Regulatory Financial Performance Reporting (RFPR) template.
- 10.20 Ofwat, in its Price Review 2024 (PR24), has asked companies to set out proposed dividend and performance-related executive pay policies for the period 2025-30.
- 10.21 Companies should commit in their dividend policies to clearly explain the payment of any dividend, including the base dividend yield, by reference to delivery of their obligations and commitments to customers, communities and the environment and long-term financial resilience. Based on an early view of allowed revenue in the final methodology, Ofwat considers 4% as a reasonable base dividend yield for the period 2025-30, although it notes certain circumstances where a lower base dividend yield may be appropriate (eg where companies must fund significant investment programmes, address pension funding concerns or operational issues, or improve financial resilience). In relation to the benefits that accrue to equity from the consequences of high inflation, Ofwat maintains the view that these should be retained or reinvested by companies and not distributed as outperformance, thus ensuring that customers benefit through improved supplier resilience and/or enhanced services.

- 10.22 Performance-related executive pay policies should clearly demonstrate that the criteria for awarding short and long-term performance related elements are substantially linked to stretching performance delivery for customers, communities and the environment. Policies should demonstrate how remuneration committees will take appropriate account of company performance overall, and wider compliance issues, as well as performance against specific metrics, when deciding on what, if any, award to make. Further, Ofwat is considering the introduction of a new end-of-period reconciliation mechanism which would allow adjustment of revenue allowances, so that customers no longer fund awards, if companies are unable to demonstrate their decisions reflect Ofwat expectations, including by reference to overall performance.

Proposed approach for ED3

- 10.23 It is important that companies demonstrate with transparency how the decisions they make in declaring and paying distributions, and in awarding executive performance-related pay, take due account of matters that include long-term financial sustainability, delivering for customers and other stakeholder obligations. Fundamental to this is the principle that shareholder distributions and executive performance-related pay should fairly reflect performance, something which is key to helping ensure the legitimacy of the sector.
- 10.24 In this light, Ofgem has a clear expectation that the requirements of the RFPR corporate governance section are met in full and that remuneration and decision making in the interests of consumers and other stakeholders are an integral component of licensees annual reporting.
- 10.25 We will be reviewing and likely consulting separately on the RIGs to highlight the importance of financial resilience reporting and ensure we have a comprehensive suite of early warning indicators for financial resilience issues. We believe that at a minimum we need to have greater scrutiny over the decision making around distributions and licensee groups financial structures. We are also open to views and suggestions on how we should think about and manage the risks of high levels of leverage at MidCo and HoldCo companies that could negatively impact decision making and the resilience of the licensee.

AIP and other financial modelling issues

Background

- 10.26 Each year during the price control values are updated to allow revenue allowances to be recalculated. This means that changes to inputs, such as actual

expenditure, can be reflected in forthcoming company network charges rather than waiting until the next price control.

- 10.27 At each price control we seek improvements to efficiency, simplicity, and flexibility of the process of updating the PCFM annually, recognising that there are trade-offs in some cases.

Improvements to the PCFM

- 10.28 Through price control financial modelling working groups, we intend to improve the PCFM for ED3. We are seeking suggestions for improvement along the following themes:

- enhancing adaptability of the model to handle new policies and mechanisms added and removed through time;
- better documenting PCFM calculations and simplifying where possible; and
- ensuring the PCFM is fit for purpose in a world with modernised regulatory reporting.

- 10.29 We would also like to seek feedback from broader stakeholders on the PCFM and its use cases beyond network companies calculating their allowed revenue.

- 10.30 We expect a continuous development process from a "business plan financial model" (BPFM: used by companies in submission of their business plan) through to a "price control financial model" (PCFM: used in running the ED3 price control). The main functional differences will be scenario analysis capability, "actual debt" financeability analysis, and that the BPFM will not yet have decided policies in some areas.

- 10.31 Indicatively, working groups will commence in early 2026, and the draft business plan financial model released alongside the business plan guidance. We will work with stakeholders to ensure a final BPFM is provided within Q4 of 2026.

Licensee self-publication of allowed revenue and interest on prior year adjustments

- 10.32 Following the start of ED3, we propose to continue self-publication approach to annual updates which we took in RIIO-ED2.

- 10.33 This approach requires licensees to update and publish the PCFM themselves in ED3, in accordance with the licence, PCFM handbook, and related guidance. Licensees are responsible for calculating their own allowed revenue values and publishing the PCFM on their websites with charging statements.

- 10.34 Ofgem will continue to publish a consolidated version for the sector annually and incorporate any modifications to the PCFM and all updates to variable values.

- 10.35 We believe that the self-publication approach taken in RIIO-ED2 has led to efficiencies for networks and Ofgem in the administration of the price control and has enabled licensees to more easily reflect changes to their variable values where those are subject to volatile fluctuations.
- 10.36 Continuing the approach taken in RIIO-ED2, in ED3 we propose to use a single true-up mechanism with a uniform Time Value of Money (TVOM) for all types of prior year adjustments and true-ups, using nominal WACC as the rate.
- 10.37 We believe that the use of a single TVOM in RIIO-ED2 has the benefit of simplicity, and that the nominal WACC is the most appropriate rate to use. Whilst we acknowledge that there are good arguments in support of a short-term cost of debt interest rate for true ups that are separable and low risk (constituting only cash flow timing risk), on balance the bundling of all forms of prior-year adjustments into one pot suggests that WACC may be the more appropriate rate, as WACC would better compensate for delays in funding projects through re-openers, earned incentives, and other values that are uncertain.

Consultation questions on the AIP and other financial modelling issues

- FQ31. Do you agree with our proposal to seek improvements to the PCFM, and do you have suggestions for further improvements?
- FQ32. Do you agree with our proposal to continue with the self-publication approach to annual updates?
- FQ33. Do you agree with our proposal to continue with nominal WACC as the single interest rate for prior year adjustments?

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Appendix 1 Consultation questions

Allowed return on debt

- FQ1. Do stakeholders consider there to be good reasons (as defined in 3.13) to deviate from the overall approach set out under the UKRN Guidance²⁹ recommendation 8?
- FQ2. Do stakeholders agree with our proposal to use a combination of the iBoxx £ Non-Financials A 10+ and iBoxx £ Non-Financials BBB 10+ indices rather than the iBoxx £ Utilities 10+ index?
- FQ3. Do stakeholders consider it reasonable to adjust our long-term CPIH inflation forecast to the latest OBR assumption?
- FQ4. Do stakeholders have any objections to our proposed approach to apply Inflation Option 1 (as defined in 2.19)?
- FQ5. Do stakeholders have new evidence for us to consider in our review of the additional cost of borrowing allowances or infrequent issuer premium?
- FQ6. Do stakeholders agree with our proposed RAV-weighted approach for calibrating the index for ED networks?
- FQ7. Do stakeholders wish to propose any other alternatives to the approach for setting the allowed return on debt for ED3?

Allowed return on equity

- FQ8. Do stakeholders agree with our interpretation and proposed application of UKRN Recommendations 2 to 7?
- FQ9. Do stakeholders agree with the methodology for calculating the CAPM parameters: RFR, TMR and beta?
- FQ10. Do stakeholders agree with us using our proposed RIIIO-3 beta comparators for ED3?
- FQ11. Do stakeholders agree with our proposed set of cross checks in Step 2?
- FQ12. Do stakeholders agree that our proposed allowed return on equity ensures the investability of the sector?

Allowed WACC

- FQ13. Do stakeholders consider there to be good reasons to deviate from the respective approaches set out under UKRN Recommendations 1 and 9?

²⁹ UKRN guidance for regulators on the methodology for setting the cost of capital, <https://ukrn.org.uk/publications/ukrn-guidance-on-the-methodology-for-setting-the-cost-of-capital/>

FQ14. Do stakeholders consider there to be good reasons to deviate from the notional gearing assumption applied to ED companies in the RIIO-ED2 price controls?

FQ15. Do stakeholders consider there to be good reasons to maintain notional gearing levels for each year of the price control? Do stakeholders have a preference for how this assumption is managed within the price control process?

Debt financeability

FQ16. What, if any, improvements should Ofgem make to its proposed approach to the assessment of financeability in the next price control?

FQ17. What evidence, if any, should Ofgem consider in relation to expanding its assessment of financeability?

FQ18. What evidence, if any, should Ofgem consider in relation to expanding financeability 'levers'?

Financial resilience

FQ19. Do stakeholders have views on the proposed financial resilience measures?

Depreciation

FQ20. Do stakeholders have views on our application of asset lives for ED3?

FQ21. Do stakeholders have views on depreciation methodologies that could be adopted for ED3?

FQ22. Do stakeholders have views on our use of capitalisation rates?

FQ23. Do stakeholders have views on technical asset lives and depreciation periods?

FQ24. Are there new methodological approaches that could be considered for ED3?

Corporation tax

FQ25. Do stakeholders agree that the approach to corporation tax should be foundationally aligned with the principles set out in our RIIO-3 Draft Determinations?

RAMs

FQ26. Do stakeholders have views or evidence as to why RAMs should or should not continue?

FQ27. Do stakeholders have views or evidence as to whether the RAMs methodology should be amended, such as recalibrating the threshold or rates or including financial performance?

FQ28. Do stakeholders have views or evidence as to whether there should be separate RAMs for 'BAU' parts of the business and specific programmes?

DRS

FQ29. Do stakeholders agree with a continuation of our existing DRS approach and methodology?

Disposal of assets

FQ30. Do stakeholders agree with a continuation of our existing Disposal of Assets approach and methodology?

AIP and other financial modelling issues

FQ31. Do you agree with our proposal to seek improvements to the PCFM, and do you have suggestions for further improvements?

FQ32. Do you agree with our proposal to continue with the self-publication approach to annual updates?

FQ33. Do you agree with our proposal to continue with nominal WACC as the single interest rate for prior year adjustments?