

30th November 2022



RIIO-ED2 FINAL DETERMINATIONS

INITIAL REVIEW

OFGEM'S FINAL DETERMINATION (FD) IS A FURTHER STEP TOWARDS RATE OF RETURN REGULATION LIMITING COMPANY INCENTIVES AND INCREASING THE FLEXIBILITY OF COST ALLOWANCES

Our key observations and reflections on the FDs are as follows.

- **Although Ofgem has reduced its challenge on totex costs, there remains a 12% gap between company and Ofgem view on costs:** This is an upward adjustment of 5.3pp from its draft determination (DD) position. This is driven by Ofgem's reduced challenge on opex costs and to a smaller extent its challenge on capex costs, reflecting its updated cost modelling.
- **Ofgem made changes to its totex modelling resulting in a £1.1bn reduction in efficiency challenge.** This was the result of additional information submitted by DNOs in their DD responses and wider stakeholder feedback. This led to changes in cost drivers within its models and its activity level assessment which are informed by engineering input.
- **Ofgem retains glide-path to 85th percentile but reduces its on-going efficiency challenge to 1.0% (from 1.2%).** Ofgem implicitly removes the uplift for impact of innovation which was mentioned at DD (which was not allowed by the CMA at GD2 or T2). Whilst 1.0% remains a stretching target (especially in the current macroeconomic climate), it is more in line with recent regulatory precedent (including the CMA's decision on GD2).
- **General dampening in incentives from use of RAMs, PCDs, and UMs and reduction in TIM.** Ofgem has reduced the TIM rate from 53-57% at ED1 to 49.3-50% at ED2 reducing the opportunity for companies to financially outperform on totex in RIIO-2 compared to RIIO-1. In addition, the RAM further reduces the incentive to outperform totex by increasing the share of any underperformance and outperformance about certain thresholds. Ofgem has included 37 common UMs and a small number of bespoke UMs, providing companies with material additional totex outside of its base allowances.
- **Ofgem has increased the WACC to 3.90-3.93% (CPIH, Real), up from 3.26-3.29% at DD and 3.01% at the SSMD:** This reflects an increase of both the cost of equity (increasing from 4.75% at DD to 5.23% at FD) and an increase in cost of debt (increasing from 2.26% - 2.32% at DD to 3.01-3.07% at FD). Ofgem made the decision not to adjust its approach for inflation but will consider the issue in more detail on a cross-sectoral basis during 2023 (meaning that WACC is currently set on forecast CPIH).
- **Increase in RoRE ranges (less negative, more positive):** The final RoRE ranges published by Ofgem are larger than those published at DD. Although the ranges remains tighter and lower than at RIIO-1.

The rest of this document sets out further details of the FDs in relation to: costs; uncertainty mechanisms; outputs and incentives; and financing.

TOTEX: OFGEM'S CHALLENGE ON COMPANY SUBMITTED TOTEX HAS REDUCED CONSIDERABLY FROM ITS DRAFT DETERMINATION PROPOSALS, HOWEVER IT REMAINS ABOVE 10% ON AVERAGE

Table: Submitted and allowed totex for RIIO-ED2, 2021/22 prices

	Sub- mitted totex (£m)	Ofgem FD totex (£m)	Gap (£m)	Gap (%)	Reduction in gap from DD (pp)
ENWL	£1,890	£1,720	-170	-9.0%	9.6pp
NPg	£3,232	£2,791	-441	-13.6%	4.3pp
SPEN	£3,397	£2,950	-447	-13.2%	0.6pp
SSEN	£4,241	£3,589	-652	-15.4%	7.0pp
UKPN	£5,523	£5,179	-344	-6.2%	4.9pp
NGED	£6,893	£5,977	-916	-13.3%	5.9pp
Total	£25,176	£22,206	-2,970	-11.8%	5.3pp

Ofgem has applied an average downward adjustment of 12% of submitted costs. This is a 5pp decrease in comparison to the 17% downward adjustment proposed at DD.

In slide, 6 we provide a breakdown of the adjustments made to submitted costs.

The challenge is slightly higher on capex, compared to opex, as shown in the following slides (4 & 5).

OPEX: THE CHALLENGE ON OPEX HAS REDUCED SUBSTANTIALLY FROM 16.7% AT DD TO 9.3% AT FD

Table: Submitted and allowed opex for RIIO-ED2, 2021/22 prices

	Submitted opex (£m)	Ofgem FD opex (£m)	Gap (£m)	Gap (%)	Reduction in gap from DD (pp)
ENWL	£963	£895	-68	-7.1%	11.9pp
NPg	£1,511	£1,433	-78	-5.2%	12.2pp
SPEN	£1,626	£1,434	-192	-11.8%	1.8pp
SSEN	£2,195	£1,892	-303	-13.8%	7.9pp
UKPN	£3,133	£2,972	-161	-5.1%	6.1pp
NGED	£3,362	£2,969	-393	-11.7%	7.4pp
Total	£12,790	£11,595	-1,195	-9.3%	7.4pp

The average downward adjustment for opex is 9.3%.

Whilst the challenge has been reduced since DD, SPEN, SSEN and NGED still face a challenge on their submitted opex of over 10%.

NPg and UKPN face a relatively smaller challenge on their costs, of just over 5%.

CAPEX: THE CHALLENGE ON CAPEX HAS BEEN REDUCED BY A RELATIVELY SMALLER MAGNITUDE FROM 17.4% AT DD TO 14.3% AT FD

Table: Submitted and allowed capex for RII0-ED2, 2021/22 prices

	Sub- mitted capex (£m)	Ofgem FD capex (£m)	Gap (£m)	Gap (%)	Reducti on in gap from DD (pp)
ENWL	£927	£825	-102	-11.0%	7.2pp
NPg	£1,721	£1,357	-364	-21.2%	-2.7pp
SPEN	£1,771	£1,516	-255	-14.4%	-0.4pp
SSEN	£2,047	£1,697	-350	-17.1%	6.0pp
UKPN	£2,389	£2,207	-182	-7.6%	3.5pp
NGED	£3,530	£3,008	-522	-14.8%	4.5pp
Total	£12,385	£10,610	-1,775	-14.3%	3.1pp

The average downward adjustment for capex is 14.3%.

NPg is most proportionally impacted, with over a fifth of its submitted capex not allowed.

UKPN, on the other hand, is least proportionally impacted by the cost determinations but still faces a challenge on its submitted costs of 7.6%.

COSTS: THE REDUCTION IN THE CHALLENGE APPLIED TO TOTEX COMES MAINLY AS A RESULT OF METHODOLOGICAL CHANGES TO OFGEM'S COST MODELLING

Table: Breakdown of difference between submitted and allowed totex (industry)

	Impact on totex at FD (£bn)	Impact on totex at DD (£bn)	Change (£bn)
Modelled totex	-£0.9bn	-£2.0bn	Reduction in challenge of £1.1bn
Demand driven adjustment	-£0.5bn	-£0.7bn	Reduction in challenge of £0.2bn
Catch up efficiency	-£0.4bn	-£0.3bn	Increase in challenge of £0.1bn
Ongoing efficiency	-£1.1bn	-£1.3bn	Reduction in challenge of £0.2bn
Total	-£2.9bn	-£4.3bn	Reduction in challenge of £1.3bn

Sources: Table 14, Final Determination - Core Methodology document; and Table 22, and para 7.7 Draft Determination - Core Methodology document.

Notes: numbers shown do not add perfectly due to rounding.

COST MODELLING

- As shown in the table, the main driver of the reduction in challenge between DD and FD occurs as a result of changes in Ofgem's **cost modelling** (including its disaggregated, or activity level benchmarking). These are a mix of methodological changes to its totex modelling (e.g. changes to cost drivers in its models), and its activity level assessments which are informed by engineering input.
- Ofgem states these changes come as a result of consideration of additional information submitted by DNOs in their DD responses and wider stakeholder feedback. As such, it would seem the regulator has applied **considerable regulatory judgement** in reducing the overall stretch on totex.
- In another notable change, Ofgem only applies its **demand driven adjustment** to the modelled costs from its totex benchmarking models, unlike in its DD where the regulator applied the adjustment to all modelled costs.

COSTS: OFGEM HAS REDUCED ITS ONGOING EFFICIENCY CHALLENGE TO 1.0% (DOWN FROM 1.2% AT DD), IN RELATION TO CATCH-UP EFFICIENCY IT HAS RETAINED THE USE OF ITS GLIDEPATH TO THE 85TH PERCENTILE

CATCH-UP EFFICIENCY

- In its ED2 FDs, **Ofgem has maintained the use of the three-year glide path from the 75th to the 85th percentile (as applied in GD2).** However, Ofgem has changed the way it applies this challenge since its DD proposals.
- At DD, Ofgem combined its three totex models and then applied the efficiency challenge (based on an unweighted average of the three totex models). It then incorporated the results of its disaggregated modelling.
- At FD, Ofgem has calculated a weighted average efficiency benchmark which places a 16.67% weight on each totex model and a 50% weight on the disaggregated benchmarking.
- As shown in the table on the previous slide, the result of this change appears to be that the overall catch-up efficiency challenge has increased slightly between DD and FD.

ONGOING EFFICIENCY

- **Ofgem has reduced its ongoing efficiency challenge from 1.2% (at DD), to 1.0% (at FD).**
- The estimate is still based on analysis conducted by CEPA (which produced the potential reference points of 0.5%, 1.0% and 1.2% for the DDs). However, Ofgem states the change comes as a result of considering stakeholder viewpoints, and re-evaluating the evidence produced by CEPA. Notably, the uplift for innovation is no longer referenced.
- Whilst 1.0% remains a stretching target (especially in the current macroeconomic climate), it is more in line with the recent regulatory precedent (including the CMA's decision on GD2 which set a challenge of 0.95% for opex and 1.05% for capex with no uplift for innovation).

REAL PRICE EFFECTS (RPEs)

- As in GD2, Ofgem has maintained its DD position of applying RPE adjustments to the cost categories of labour (general and specialist) and materials for all DNOs.

TOTEX INCENTIVE MECHANISM: OFGEM HAS MAINTAINED ITS INTENTION FOR CONSUMERS TO RECEIVE A GREATER SHARE OF COMPANY COST SAVINGS OVER RIIO-2 – DAMPENING COMPANY INCENTIVES TO MAKE THESE

Table: Totex incentive mechanism (TIM) company incentive rates by price control period and sector

Price control	RIIO-GD&T1	RIIO-GD&T2	RIIO-ED1	RIIO-ED2
Range across companies	44% to 64%	33% to 50%	53% to 57%	49% to 50%

Company	TIM
NGED	50.0%
UKPN	50.0%
NPg	49.9%
SPEN	49.9%
ENWL	49.4%
SSEN	49.3%

- Across the board, Ofgem has given companies less opportunity to financially outperform on totex in RIIO-2 compared to RIIO-1. It has reduced the TIM rate from 53-57% at ED1 to 49-50% at ED2.
- Although this impact varies across companies, the share of outperformance kept by companies will decrease for all. This has implications for companies, who will now be able to reap less of the rewards of efficient cost saving – dampening their incentive to make these.

Source: Chapter 3 of company specific annexes.

UNCERTAINTY MECHANISMS: OFGEM HAS SET 37 COMMON UMS IN RIIO-ED2, UP FROM 19 PROPOSED AT SSMD, AND 34 at DD – AGAIN LIMITING THE POTENTIAL FOR COST UNDER- OR OUTPERFORMANCE

Table: Number of common and bespoke UMs applicable to companies

Company	Common UMs	Bespoke UMs
ENWL	37	1
NGED	37	0
NPg	37	0
SPEN	37	1
SSEN	37	5
UKPN	37	0

Sources: Table 4 of company specific annexes.

Note: please see our DD review for details of the 34 UMs proposed at DD.

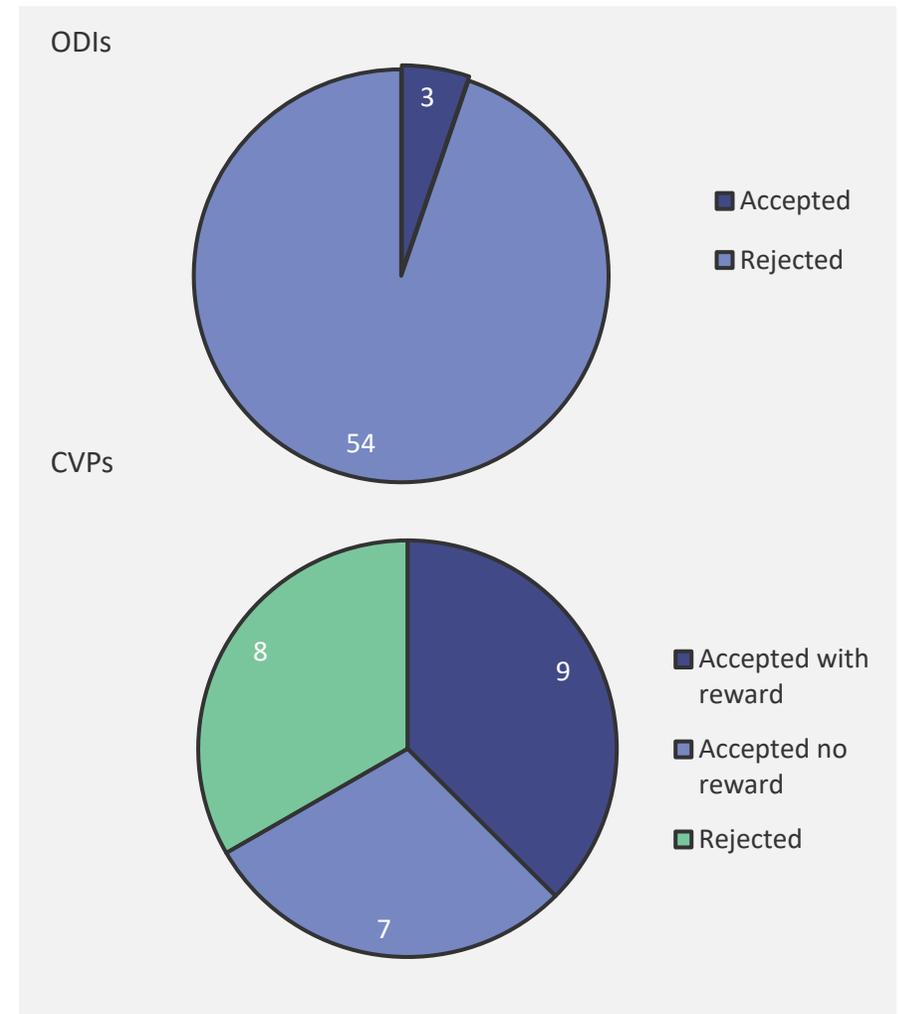
At FD, Ofgem has introduced four additional UMs relative to the 34 proposed at DD. We provide details of these below.

- **Bad debts.** To enable DNOs to recover amounts associated with supplier-related bad debts by adjusting recovered revenue for valid bad debt claims. This is a pass-through mechanism.
- **Indirect scaler.** In response to the DDs, many DNOs proposed the introduction of a UM to automatically scale up allowances for indirects, as and when capex allowances flex upwards through other UMs. Ofgem was persuaded by these, in particular analysis submitted by UKPN, and has introduced such a mechanism.
- **Supplier of Last Resort Recovery (SoLR).** This is a pass-through mechanism to align payments to SoLRs with changes to allowed revenue. The purpose of this is to align the electricity sector to the gas sector, and reduce complexity.
- **Wayleaves and Diversions.** This is a re-opener to recover additional costs associated with wayleaves and diversions costs.

OUTPUTS AND INCENTIVES: SINCE DD OFGEM HAS ONLY MADE MINOR ADJUSTMENTS – REJECTING MOST ODIs AND MAKING CVPs NON-FINANCIAL

- Since DDs, Ofgem has introduced four new common uncertainty mechanisms and amended its decision to accept a small number of PCDs and CVPs that it had previously rejected .
- Ofgem did not amend its decision on bespoke ODIs since DD. Out of a total 54 bespoke PCs proposed by companies only 3 were accepted.
- Since DDs, Ofgem has accepted a small number of additional CVPs. Almost half the CVPs that it has accepted do not have rewards, Ofgem’s rationale is that CVPs are not going beyond the baseline.
- At DDs Ofgem rejected most bespoke PCDs. Since DD, Ofgem accepted one PCD that it had previously rejected due to further evidence provided. It also reallocated some PCDs as uncertainty mechanisms.
- As set out on the following slide, Ofgem has retained its pragmatic approach to setting caps and collars on ODIs, based on percentages of RoRE.

Figure: Bespoke ODIs and CVPs accepted/rejected



OUTPUTS AND INCENTIVES: OUTPUTS AND INCENTIVES REMAIN LARGELY UNCHANGED SINCE SSMD WITH STRETCHING TARGETS AND LIMITED INCENTIVE FOR OUTPERFORMANCE

ODI	SSMD – target	SSMD – incentive (RoRE equivalent)	FD – target	FD – incentive (RoRE)
Customer Satisfaction Survey (CSS)	Static common targets based on average performance in last 4 years of RIIO-ED1	+0.40% / -0.40%	Static common target of survey score based on average performance data from the last 4 years of RIIO-ED1. Target updated to 9.01 reflecting latest DNO data	+0.40% / -0.40%
Complaints Metric (CM)	Static common targets based on average performance in last 4 years of RIIO-ED1	0% / -0.20%	Static common target of survey score based on average performance data from the last 7 years of RIIO-ED1	0% / -0.20%
Time to Connect (TTC)	Static common targets based on average performance in last 4 years of RIIO-ED1	+0.15% / -0.15%	Static common targets based on average performance in most recent 4 years	+0.15% / -0.15%
Major Connections	Baseline expectations with ex-post review	+0.35% / -0.35%	Introduce Major Connections Customer Satisfaction Survey (MCCSS), target in year 1 is 7.41/10 with year 2 onwards being informed by year 1 performance	0% / -0.35%
Vulnerability	Baseline expectations with ex-post review	+0.20% / -0.20%	Ex post assessment of performance against targets set against five metrics, underpinned by an independent assurance check process	+0.20% / -0.20%
DSO	To drive DNOs to more efficiently develop and use their network, considering flexible and smart alternatives to network reinforcement	N/A	Based on ex post review of DNO's delivery of their DSO activities through three evaluation criteria: (i) stakeholder survey (mechanistic); (ii) performance panel assessment (evaluative); and (iii) outturn performance metrics (mechanistic)	+0.20% / -0.20%
Interruptions Incentive Scheme (IIS)	Retain RIIO-ED1 approach: rolling three-year average, with a two-year lag	N/A	Different elements of ISS: value of lost load; unplanned interruptions; and planned interruptions have different targets	+1.50% / -2.50%
Network Asset Risk Metric (NARM)	On-target delivery of NARM output delivery	Deadband around NARM output delivery	Deadband around the NARM output at +/-5%	Penalty, up to 2.5% of avoided costs associated with unjustified under-delivery

FINANCING: OFGEM HAS INCREASED THE WACC TO 3.90-3.93% (CPIH, REAL), UP FROM 3.26-3.29% AT DD AND 3.01% AT THE SSMD

Table: Summary of key WACC parameters and changes

Parameter	RIIO-GD&T2 FD (Dec 2020)	RIIO-GD&T2 CMA (Oct 2021)	RIIO-ED2 SSMD (Mar 2021)	RIIO-ED2 DD (June 2022)	RIIO-ED2 FD (Nov 2022)
Debt beta	0.075	0.075	0.075	0.075	0.075
Asset beta	0.35	0.35	0.35	0.35	0.35
Notional equity beta	0.76	0.76	0.76	0.76	0.76
Total market return	6.5%	6.5%	6.5%	6.5%	6.5%
Risk-free rate	-1.58%	-1.58%	-1.16%	-0.74%	1.23%
Cost of equity	4.25% - 4.55%	4.25% - 4.55%	4.65%	4.75%	5.23%
Expected outperformance	0.22% - 0.25%	0%	0.25%	0%	0%
Allowed return on equity	4.02% - 4.3%	4.02% - 4.3%	4.40%	4.75%	5.23%
Cost of debt	1.59% - 1.88%	1.59% - 1.88%	2.09%	2.26% - 2.32%	3.01-3.07%
Notional gearing	55% - 60%	55% - 60%	60%	60%	60%
WACC	2.69% - 2.85%	2.79% - 2.95%	3.01%	3.26% - 3.29%	3.90-3.93%

Note: Changes from previous position highlighted in blue.

FINANCING: THE CONTROVERSIAL DOWNWARDS ADJUSTMENT FOR EXPECTED OUTPERFORMANCE HAS BEEN ABANDONED – BUT ASIDE FROM THIS OFGEM'S APPROACH TO THE COST OF CAPITAL IS CONSISTENT WITH ITS RIIO-GD&T2 FD

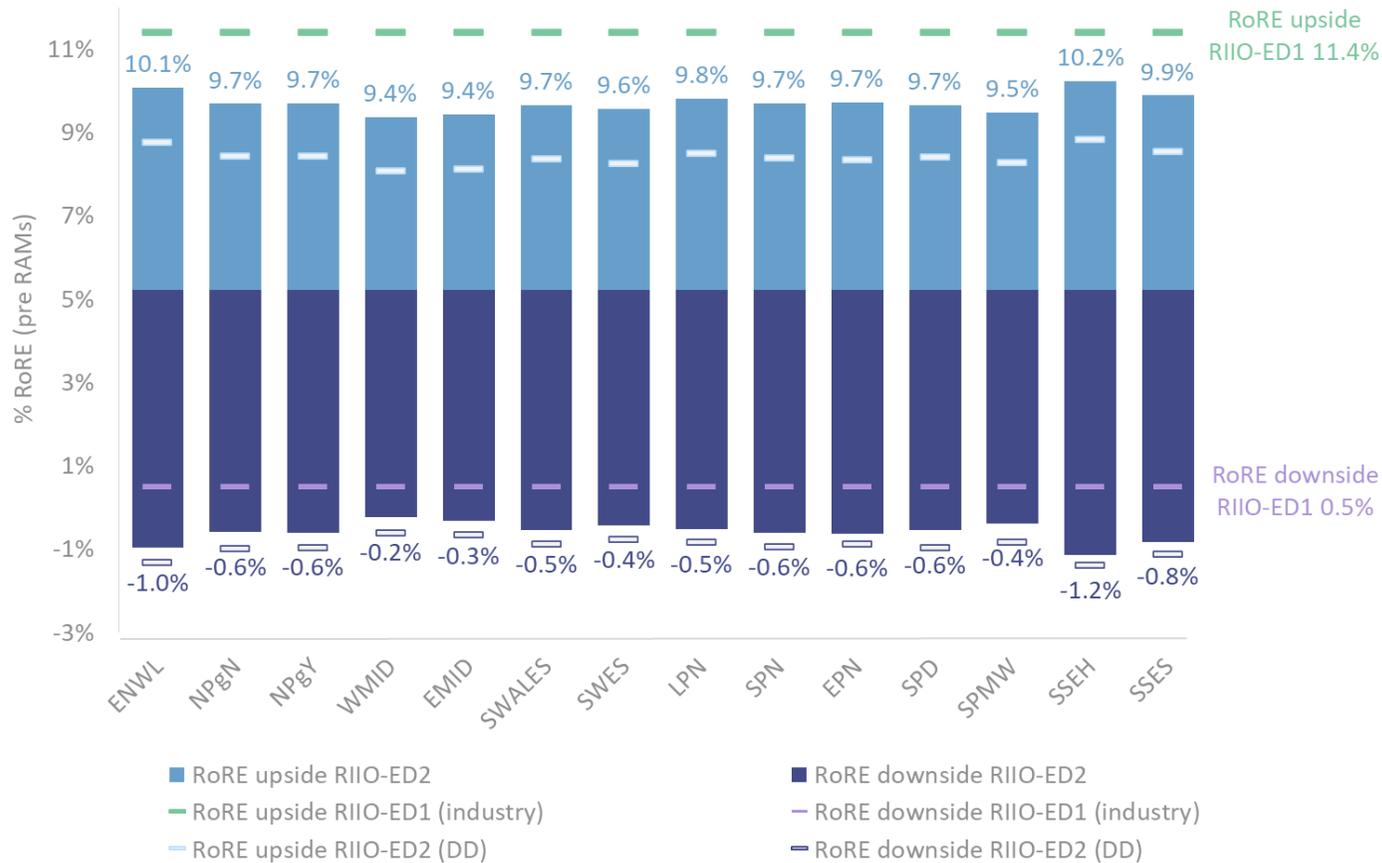
In light of the CMA's determination on RIIO-GD&T2 (which for the most part did not find error in Ofgem's approach to the cost of equity), the regulator has taken a very similar approach to ED2 with the exception of the 'outperformance wedge', as set out below.

- The regulator considers its approach to the asset beta has been confirmed by the CMA and has not made any changes (including since the DDs). **However, Ofgem's proposed asset beta is likely to continue to be an area of debate**, given the subjectivity surrounding the: (i) weighting of the listed companies; (ii) balance of estimation time periods and techniques; (iii) relative risk of energy versus water companies; and (iv) approaches to gearing / re-gearing.
- **Ofgem's position on TMR is unchanged from both the SSMD and DD and is consistent with the approach it took in RIIO-GD&T2**, with a range of 6.25% to 6.75% (CPIH, real). Ofgem referenced the CMA's position on RIIO-GD&T2 as confirming its approach. The regulator was not persuaded by the DNOs' responses to use the new CPIH back-cast data.
- Ofgem continues to believe that RPI index-linked gilts are a good proxy for the RfR and has used updated index-linked gilts to calculate the final RfR. In our view, this position remains flawed, as it **fails to recognise that neither real gilts, nor deflated nominal gilts, provide a 'perfect' measure of the RfR**. The regulator has also chosen to continue using the single-year approach to calculate the RPI-CPIH inflation wedge (as used for RIIO-GD&T2), rather than adopting a 20-year geometric wedge approach.
- Ofgem has **removed the 'outperformance wedge'** and has made no explicit downward adjustment to the allowed return on equity. This reflects the decision made by the CMA in relation to RIIO-GD&T2.

In relation to the cost of debt, key points include:

- Ofgem is proposing to use the iBoxx GB Utilities 10yr+ index, in line with its position at DDs. The regulator has not proposed an explicit adjustment for any **'halo effect'**, consistent with its DDs approach, as it considers this index better reflects energy networks' actual cost of debt.
- On additional borrowing costs, Ofgem is allowing an **uplift of 25bps** (unchanged from the SSMD and DD), which is intended to reflect transaction costs, liquidity costs, costs of carry, and a CPIH basis risk. We note that the networks have previously stated such an allowance is not sufficient, including in their DD responses. The regulator contends that no sufficiently convincing arguments were submitted by the companies to change its approach.

FINANCING: THE RoRE (%) RANGES REMAIN TIGHTER AND LOWER THAN THEY WERE FOR RIIO-ED1



The final RoRE ranges published by Ofgem are larger than those published at DD. Although the ranges remain tighter and lower than they were for RIIO-1.

Sources: Finance annex, Figure 8 and Table 24.

FINANCING: FINANCEABILITY IS A KEY AREA IN WHICH OFGEM'S APPROACH REMAINS MATERIALLY FLAWED AND OPEN TO CHALLENGE AT THE CMA

FINANCEABILITY

Ofgem's overall approach to financeability remains largely unchanged. Therefore, the main issues of controversy also remain as follows:

- the approach seems removed from that used by ratings agencies;
- potential tensions between target investment grades and the assumptions that underpin the cost of debt; and
- whether revenue advancement / capitalisation can meaningfully resolve financing constraints.

Most critically, it is **Ofgem's underlying working assumptions** (which pre-supposes that the rest of the price control is correctly set) that still **primarily drives its conclusion that the notional firm is financeable**. This remains questionable factually, but moreover in our view, is questionable even in terms of an approach.

In our view, financeability is therefore a key area in which **Ofgem's approach remains materially flawed**.

RETURN ADJUSTMENT MECHANISM

Ofgem has retained its **sharing mechanism** that adjusts DNOs' RoRE when they deviate from a pre-determined collar. Under this mechanism, the more an individual company outperforms / underperforms the threshold, the more their outperformance / underperformance will be shared with consumers.

This **mechanism dampens the incentives that companies have to outperform their totex allowances and ODIs**.



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