

# RIIO-2 Final Determinations

Investor call

*Gas and Electricity Transmission,  
Gas Distribution, Electricity System Operator*

*11:30 – 13:00*

**Tuesday 8<sup>th</sup> December 2020**



## Presentation Overview

- Welcome and introduction
- RIIO-2 design
- Finance deep-dive
- Q&A



**Jonathan Brearley**  
CEO



## Welcome and introduction

- Today we published *'Network Price Controls (RIIO-2) Final Determinations for Gas and Electricity Transmission, Gas Distribution, and Electricity System Operator'*
- Five-year spending plan to 2026 to power forward a strong green energy infrastructure for GB, at lowest cost to consumers while still delivering the services consumers need.
- **T & GD:** 5-year RIIO-2 price control (1 Apr 2021 to 31 Mar 2026)
- **ESO:** 5-year RIIO-2 price control, Business Plan set for 2 years (1 Apr 2021 to 30 Mar 2023)

*The ESO will then submit a further Business Plan for the next period. This is designed to reflect the rapidly adaptable behaviour we expect from the ESO as it responds to the changing electricity system.*

**Akshay Kaul**  
Director of Networks

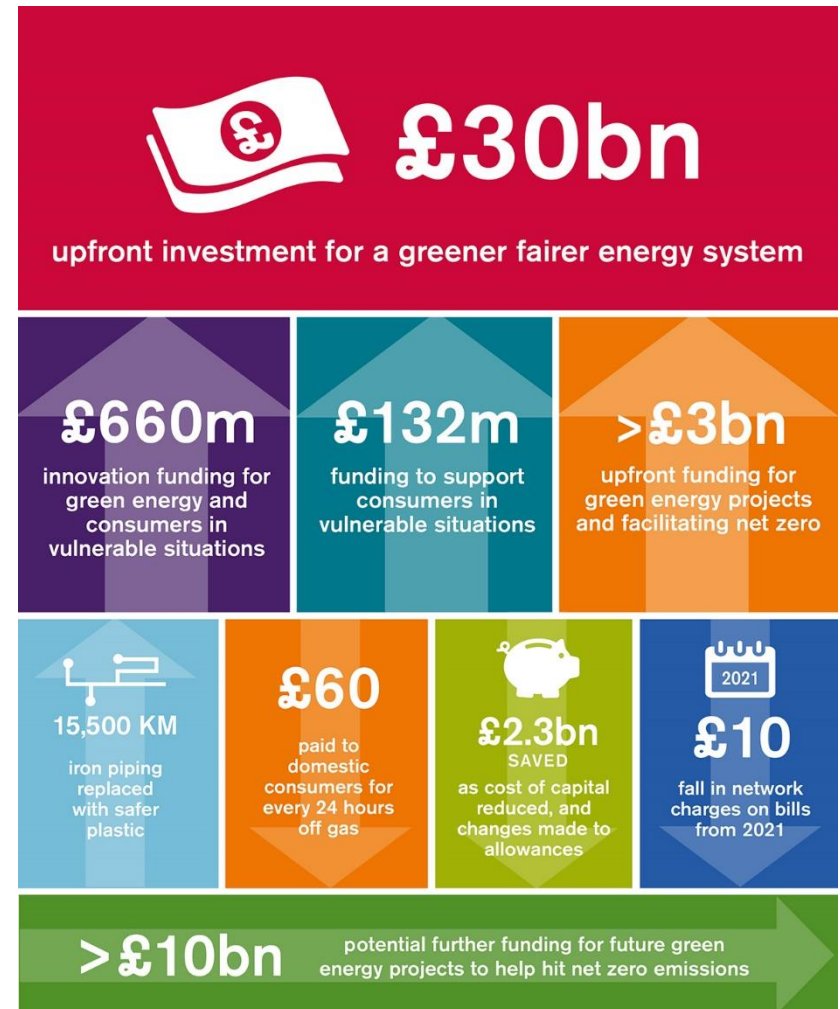


## **RIIO-2 design**

- **Two key components to our approach to Net Zero**
- **Baseline totex allowances**
- **RIIO-2 risk and return balance**

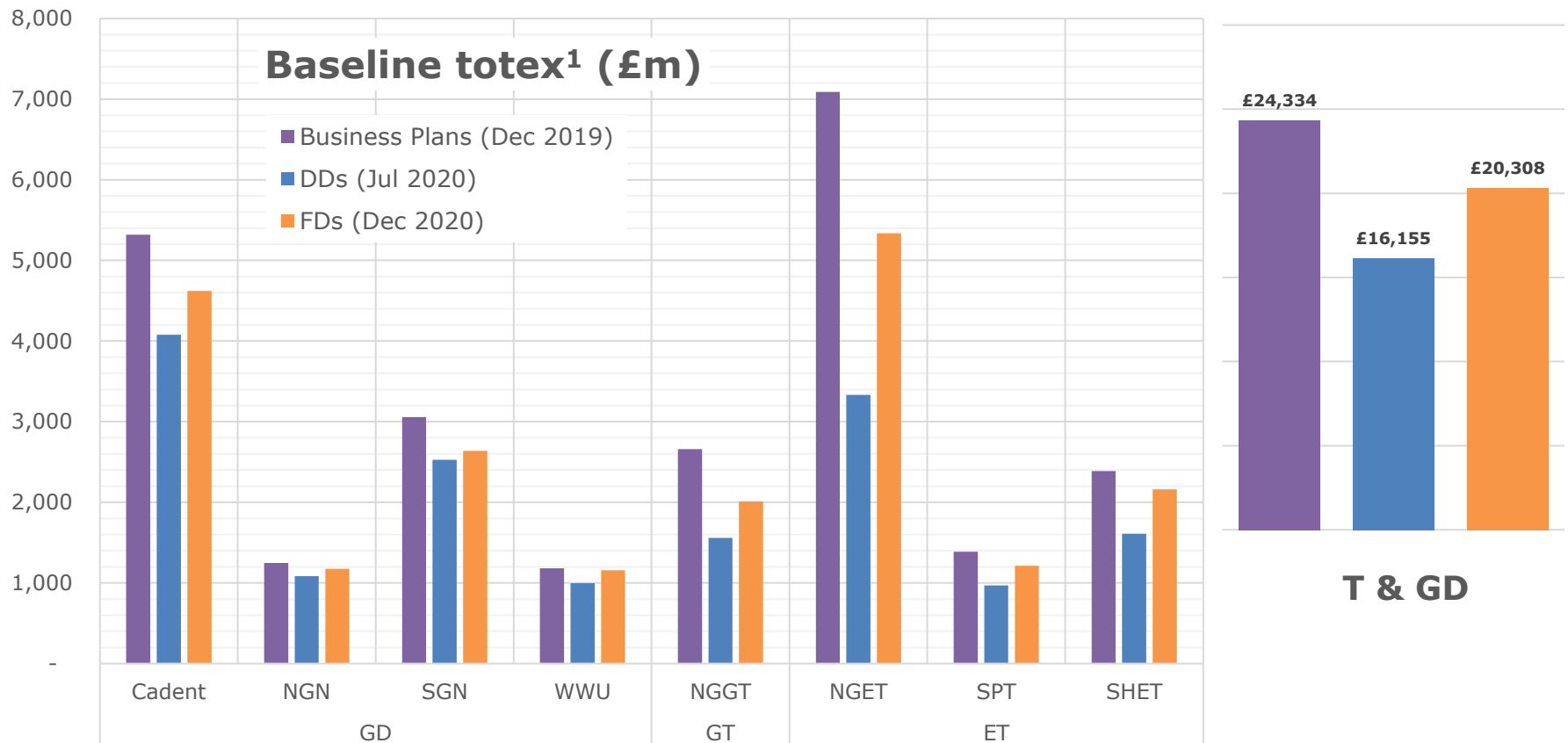
## Final Determinations overview

- A key objective of RIIO-2 is to **prepare the regulated network companies and ESO to deliver Net Zero at lowest cost to consumers.**
- We have added flexibility to the price control to **fund what is justified now and reopen what is needed later.**
- Challenging the companies to **be as efficient as possible in how they run and finance themselves.**
- A **reasonable allowed return** reflecting current market rates.
- **Expect the average company to outperform,** but modestly compared to the high levels of RIIO-1.



**Roughly half the gap between business plans and DDs has been closed at FDs.**

- Substantial evidence submission after DDs has increased allowed volumes of work.
- Tough efficiency challenge compared to RIIO-1 remains – giving more distinct impact across different companies.



<sup>1</sup> Baseline totex here excludes some items (eg RPEs) included in 'modelled totex' to allow for a better comparison with business plans. 'Modelled totex' is used to make comparisons with RIIO-1 actuals in Appendix 1, 2 and 3.

### **Improvement in the agility of the Uncertainty Mechanisms since Draft Determinations.**

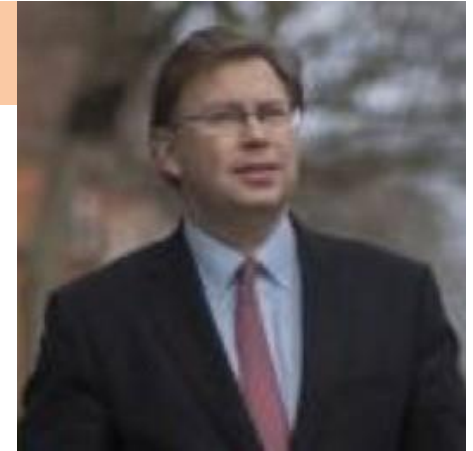
- More net zero spend in baseline allowances  
(eg large scheme pre-construction funding, project development allowances).
- More automatic mechanisms where possible  
(eg volume drivers for connections, medium sized upgrades).
- Streamlined approval process for administrative mechanisms  
(eg pipeline, tiered approval, gates where necessary).
- Speeding up cashflow from reopener approval to revenue reaching companies.

- Allowed return on capital set to levels consistent with current evidence and market conditions.
  - Cost of equity has been assessed at 4.55% (with notional gearing of 60%).
  - The CMA’s Provisional Findings for PR19 used allowed return on equity of 5.08% (including a retail margin).
  - Allowed equity returns at 4.30% (adjusted for expected outperformance), with **company-specific** ex-post adjustment if expected outperformance does not materialise.
  - Most networks allowed return on capital is 2.81%.
- We expect network companies to share a greater proportion of costs saved with consumers while still maintaining a strong incentive for companies to operate efficiently.
- Stretching ongoing efficiency targets (**1.15%** for capex and repex, **1.25%** for opex).
- Lower sharing factors vs RIIO-1, post-tax.
- Indexing RPEs to manage input price risks (forecast upfront, then true-up on outturn).
- Caps and collars on ODIs.
- Return adjustment mechanisms offer extra protections ( $\pm 300$  bps &  **$\pm 400$  bps RoRE thresholds**).

Licensee	Company sharing factor	
	DDs	FDs
ET - NGET	39%	33%
ET - SPT	39%	49%
ET - SHET	31%	33%
GT - NGGT	37%	39%
GD - Cadent	50%	50%
GD - NGN	50%	49%
GD - SGN	49%	50%
GD - WWU	50%	50%



**Simon Wilde**  
Senior Financial Advisor



## Finance deep-dive

- **Cost of equity**
- **Cost of debt, depreciation, capitalisation, notional gearing**
- **RoREs and RAMs**
- **Approach to financeability**

- Baseline **allowed equity returns of 4.30% CPIH real** at 60% notional gearing.
- **Step one** – CAPM estimation
  - Risk-free rate -1.58% CPIH real (average RIIO-2); equity indexation mitigates risk.
  - TMR range of 6.25% to 6.75% CPIH real (as at DDs).
  - Network company asset beta range of 0.323 to 0.373, notional equity betas of 0.694 to 0.819.
    - Greater weight on NG’s observed beta for FDs vs DDs.  
*(asset and equity beta for ESO of 0.55 and 1.13; ESO cost of equity 7.55% CPIH real – up from 5.28% at DDs)*
  - Implies cost of equity range of 3.85%-5.24%
- **Step two** – Cost of equity cross-checks
  - CMA NATS approach, MARs implied returns and OFTO bid returns.
  - Cross-check range suggests 0.15% reduction – **decided not to adjust step 1 mid-point in step 2.**
  - **Cost of equity: 4.55% CPIH real** for 60% notional gearing.
- **Step three** – distinguish between Allowed and Expected Return
  - **0.25% outperformance assumption:** based on long-run information asymmetry, calibrated to proposed RIIO-2 incentive package.
  - **Licensee specific ex-post adjustment at close-out** to correct for potential over-estimation of outperformance (this was on average basis at DDs).
- At 55% notional gearing, **weighted average return on capital is kept constant**, implying 4.25% cost of equity and 4.02% allowed equity return.

	DDs	FDs
Notional gearing	60%	<b>60%</b>
Total market return	6.50%	<b>6.50%</b>
Risk-free rate	-1.48%	<b>-1.58%</b>
Asset beta	0.365	<b>0.349</b>
Debt beta	0.125	<b>0.075</b>
Unlevered beta	0.3025	<b>0.311</b>
Notional equity beta	0.725	<b>0.759</b>
CAPM-implied CoE	4.30%	<b>4.55%</b>
Cross-checks	-0.10%	-
Expected outperformance	-0.25%	<b>-0.25%</b>
Allowed return on equity	3.95%	<b>4.30%</b>
Allowed return on debt	1.74%	<b>1.82%</b>
WACC allowance	2.63%	<b>2.81%</b>

### Cost of debt

- Full indexation as per SSMD & DDs.
- Change from combined A/BBB 10yr+ iBoxx indices to Utilities 10yr+ iBoxx index.
- Allowed return based on efficient average costs across network sectors (GD, GT and ET).
- RAV weighted allowance for SHET.
- Halo effect estimation removed by switch to Utilities iBoxx index.
- Additional costs of borrowing allowance of **0.25%** applied to embedded and new debt (0.17% at DDs).
- Debt indexation decisions:
  - 10-14 year trailing average plus 0.25% for most networks: implies 1.82% CPIH average debt allowance.
  - Bespoke RAV-weighted mechanism continued for SHET: implies 1.49-1.59% CPIH debt allowance depending on totex/RAV levels.
  - **Bespoke additional 0.06% allowance for smaller RAV/less frequent borrower** (SGN Scotland, NGN, WWU).
  - Bespoke short-term debt allowance for ESO to reflect bank funding.
- Most networks allowed return on capital allowance: 2.81% CPIH real.

### Depreciation

- Unchanged for ET (45 year straight line) and GD (45 year sum of year digits).
- GT aligned to GD, for period from 2002, in line with approach taken in RIIO-1 for change in GD depreciation.
- ESO use 7-year straight line.
- Takes into account estimated economic asset life and balance between current and future consumers.

### Capitalisation / Fast- and Slow-money

- Rates set based on natural capitalisation of baseline opex and capex.
- Different treatment of totex under UMs.

### Notional gearing

- 60% for lower RAV growth gas networks and 55% for ET networks.
- FDs no more than 5% variation from RIIO-1 notional gearing levels.

## Return on Regulatory Equity ranges

Figure 3: RIIO-2 average RoRE ranges and company proposals

Chapter 3, Finance Annex.

Figure 3 reflects our decisions for ODIs, including cap and collar levels and a wider range of downside outcomes than upside ones for ET. It reflects the range of possible outcomes, without reference to the distribution of outcomes within the range. The expected outcome is not necessarily the simple average of the highest and lowest points. Our expectation based on actual performance to-date is that SHET, SPT and NGET should perform well on these ODIs and the more extreme downside outcomes are highly unlikely to materialise.



## Return Adjustment Mechanisms (RAMs)

- Apply to all network sectors (but not ESO).
- Two symmetrical sharing thresholds on RoRE: 50% RAM at  $\pm 300$  bps, **90% at  $\pm 400$  bps (new at FDs)**.
- The cap and floor are sufficiently wide to not be easily triggered.
- Downside RAMs offers some credit support.

- Duty to have regard to the need to secure that network companies are able to finance activities subject of obligations imposed by or under the relevant legislation, assessed with reference to the notional company.
- We consider **all networks to be financeable on basis of notional capital structure** taking account of the allowed costs, cost recovery and allowed returns in these Final Determinations.
- Included results of **stress tests at FDs, showing notional company is resilient.**
- Ofgem does not target any particular rating or credit ratio. We complete an in-the-round assessment.

**Tables 14, 15, 16: Summary financial ratios for notional company structures**

(FYE 2022-2026 average), **FD allowances, Net Zero 1 scenario, Net Zero 2 scenario** (Chapter 5, Finance Annex)

Licensee	RIIO-2 Starting Notional Gearing	AICR			FFO/net debt		
		FD	NZ1	NZ2	FD	NZ1	NZ2
SHET	55%	1.64	1.64	1.62	10.5%	9.9%	9.6%
SPTL	55%	1.63	1.59	1.58	12.7%	12.3%	12.1%
NGET	55%	1.60	1.57	1.56	11.9%	11.5%	11.4%
NGGT	60%	1.57	1.52	-	11.6%	11.5%	-
Cadent	60%	1.49	1.47	-	10.1%	10.0%	-
NGN	60%	1.46	1.43	-	9.7%	9.6%	-
SGN Scotland	60%	1.46	1.44	-	9.8%	9.8%	-
SGN South	60%	1.49	1.47	-	10.1%	10.0%	-
WWU	60%	1.47	1.44	-	10.1%	10.1%	-

*Note that actual company credit ratios may be quite different to notional ratios, depending on actual capital structure. "NZ1" and "NZ2" are illustrative scenarios, they are not forecasts.*

## Summary of key financial changes from RIIO-1 for investors

- Ensuring only clearly evidenced totex is agreed to up-front, with greater expectation for reopeners.
- Setting the return to equity investors in line with current market conditions and the risks that networks face.
- Indexing rather than forecasting key variables, such as interest rates (both equity and debt allowances now proposed to be annually indexed for changes in market rates).
- Stronger cost efficiency and output performance challenge than RIIO-1.
- Reined in underspend upside, but also better protected on overspend downside.
- Bespoke suite of arrangements for the ESO.
- Moving from RPI to CPIH at start of RIIO-2.
- Front-loaded depreciation for GT (aligned with GD).

# Closing remarks

# Questions

To ask a question:

- if in the Teams meeting: use *raise hand* function.
- if dialling in on the phone:
  - email [investor.relations@ofgem.gov.uk](mailto:investor.relations@ofgem.gov.uk),
  - wait for your name to be called out,
  - unmute (press \*6) and ask your question.



Further information:

[www.ofgem.gov.uk/regulating-energy-networks/](http://www.ofgem.gov.uk/regulating-energy-networks/)

IR contact: [Investor.Relations@ofgem.gov.uk](mailto:Investor.Relations@ofgem.gov.uk)

**Jamie Tunncliffe**

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**Aidan Stringfellow**

Senior Manager, Investor Relations

# Appendix

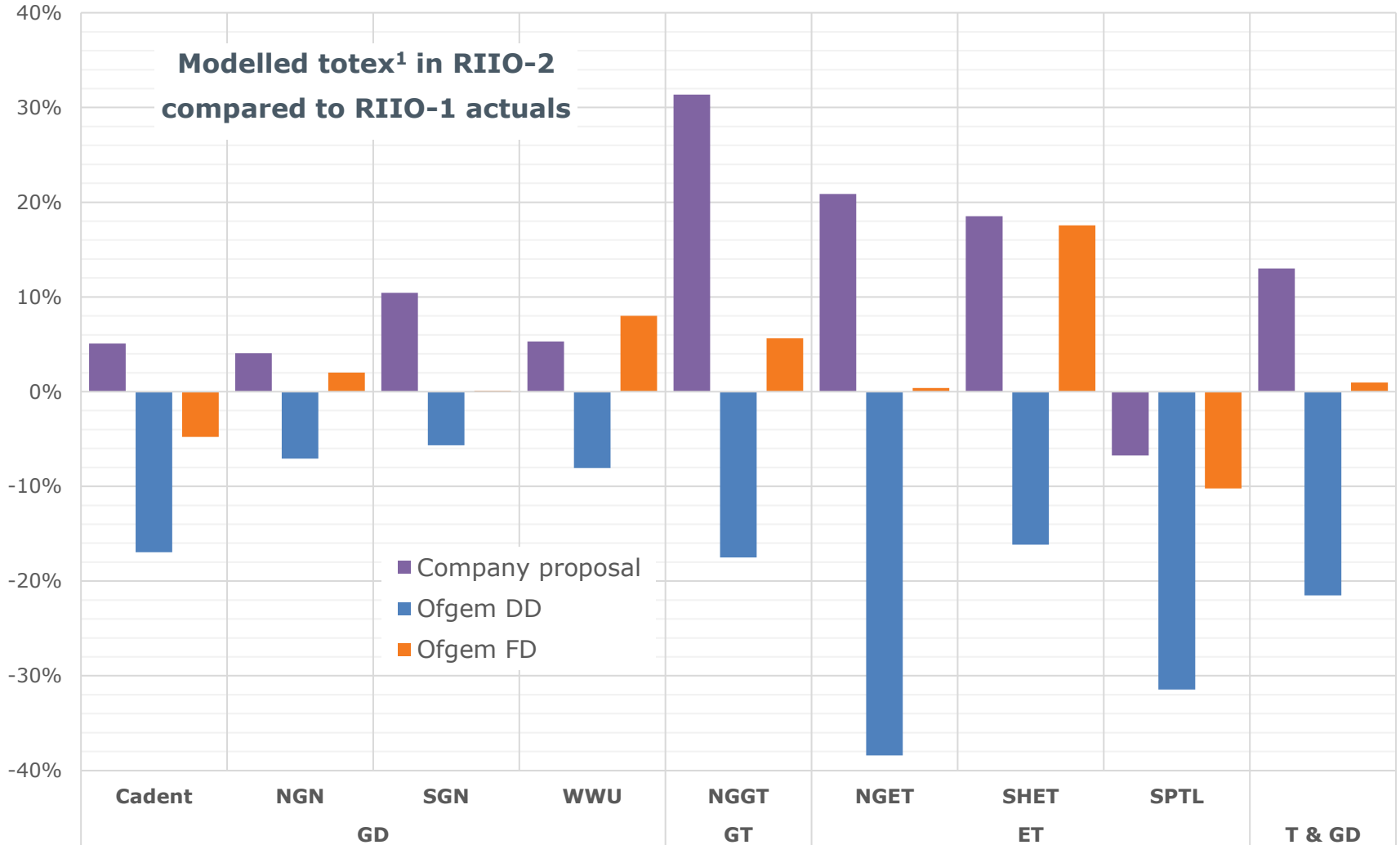
## Appendix 1 – modelled Totex comparison<sup>1</sup>

£m 18/19 prices	RIIO-1 actuals (6-year average*5)	Business plans	Draft Determination	Final Determination	FD Net Zero 1 <sup>3</sup>	FD Net Zero 2 <sup>3</sup>
Cadent	5,081.5	5,339.9	4,219.9	4,839.2	5,426.1	5,426.1
NGN	1,206.5	1,255.3	1,121.1	1,230.7	1,405.9	1,405.9
SGN	2,772.7	3,061.8	2,616.1	2,771.5	3,182.9	3,182.9
WWU	1,122.5	1,182.1	1,032.1	1,212.2	1,422.4	1,422.4
<b>GD sector</b>	<b>10,183.1</b>	<b>10,839.1</b>	<b>8,989.1</b>	<b>10,053.5</b>	<b>11,437.3</b>	<b>11,437.3</b>
<b>NGGT</b>	<b>1,980.7</b>	<b>2,602.0</b>	<b>1,633.4</b>	<b>2,092.0</b>	<b>3,206.4</b>	<b>3,206.4</b>
NGET	6,163.4	7,449.5	3,795.5	6,186.7	7,274.8	10,820.0
SHET	2,021.0	2,395.4	1,694.3	2,375.8	3,490.2	4,353.7
SPTL	1,475.3	1,375.0	1,010.7	1,323.8	2,294.4	2,811.4
<b>ET sector</b>	<b>9,658.7</b>	<b>11,219.9</b>	<b>6,500.5</b>	<b>9,886.4</b>	<b>13,059.4</b>	<b>17,985.1</b>
<b>ESO<sup>2</sup></b>	<b>859.0</b>	<b>1,291.9</b>	<b>1,144.4</b>	<b>1,286.3</b>	<b>1,286.3</b>	<b>1,286.3</b>
<b>Industry total</b>	<b>22,681.5</b>	<b>25,952.8</b>	<b>18,267.5</b>	<b>23,318.2</b>	<b>28,989.4</b>	<b>33,915.1</b>

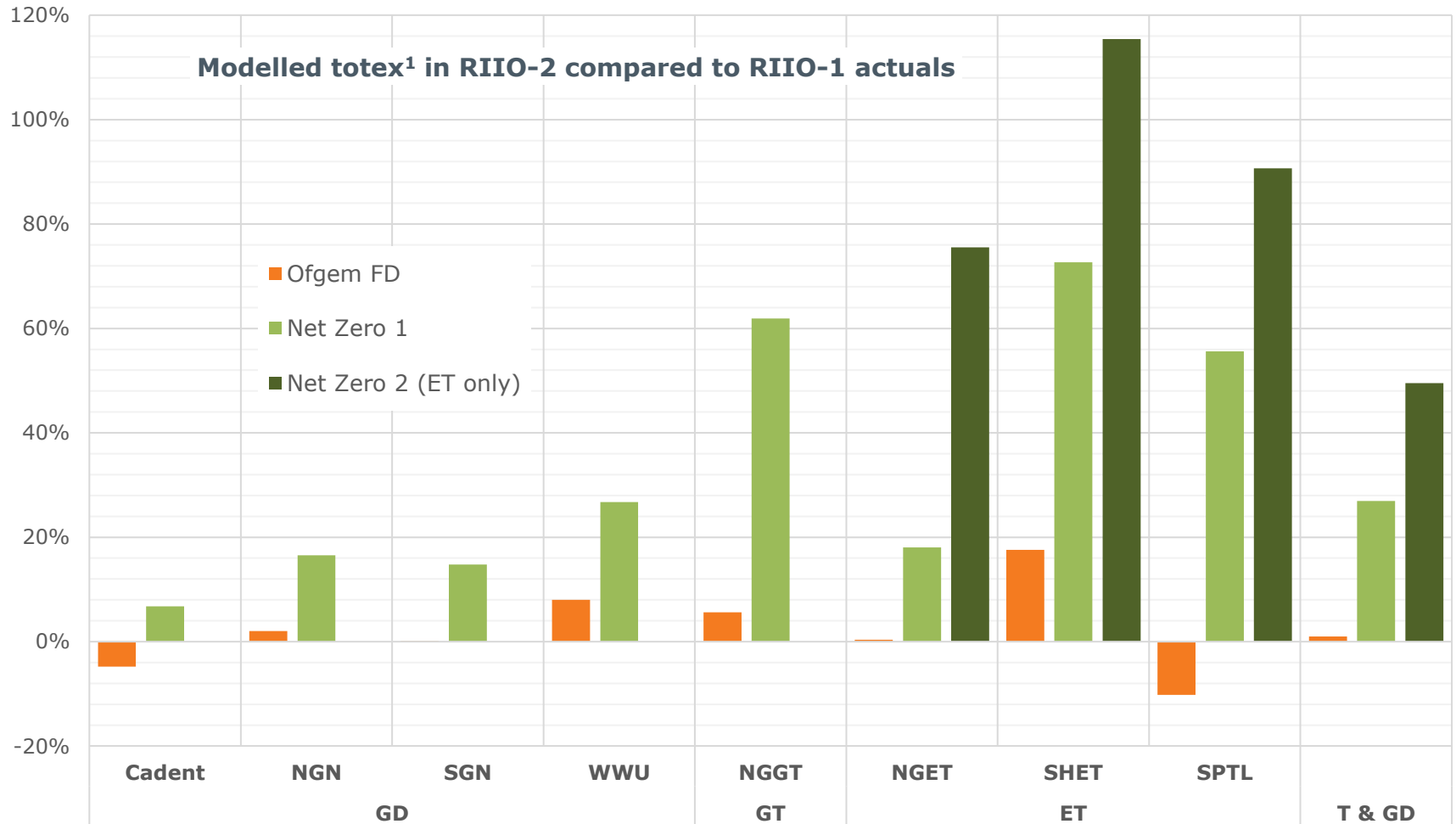
<sup>1</sup> The RIIO-2 modelled totex comparators used here include some variables (eg RPEs) that were excluded in the equivalent table in Appendix 1 of the investor presentation at Draft Determinations. They are used here to allow for a better comparison between RIIO-1 actuals and the RIIO-2 figures. These figures exclude passthrough, other allowances and other funding (eg NIA, NZCF, etc.) approved for RIIO-2 which when included represents the 'total upfront funding' package (ie £29,608.7m approved industry total for RIIO-2 FD baseline). This measure does not allow for a good comparison between business plans and the other measures.

<sup>2</sup> The figures for the ESO include company proposals for years 3-5. The 5-year figures shown are not a forecast or an expectation.

<sup>3</sup> The 'Net Zero 1' and 'Net Zero 2' scenarios outlined are illustrative cases that could be considered with additional totex received through uncertainty mechanisms above that proposed in the baseline proposal. These illustrative cases do not represent a forecast or an indication of re-opener allowances.



<sup>1</sup> Appendix 1 – shows and describes the data for this modelled totex comparison.



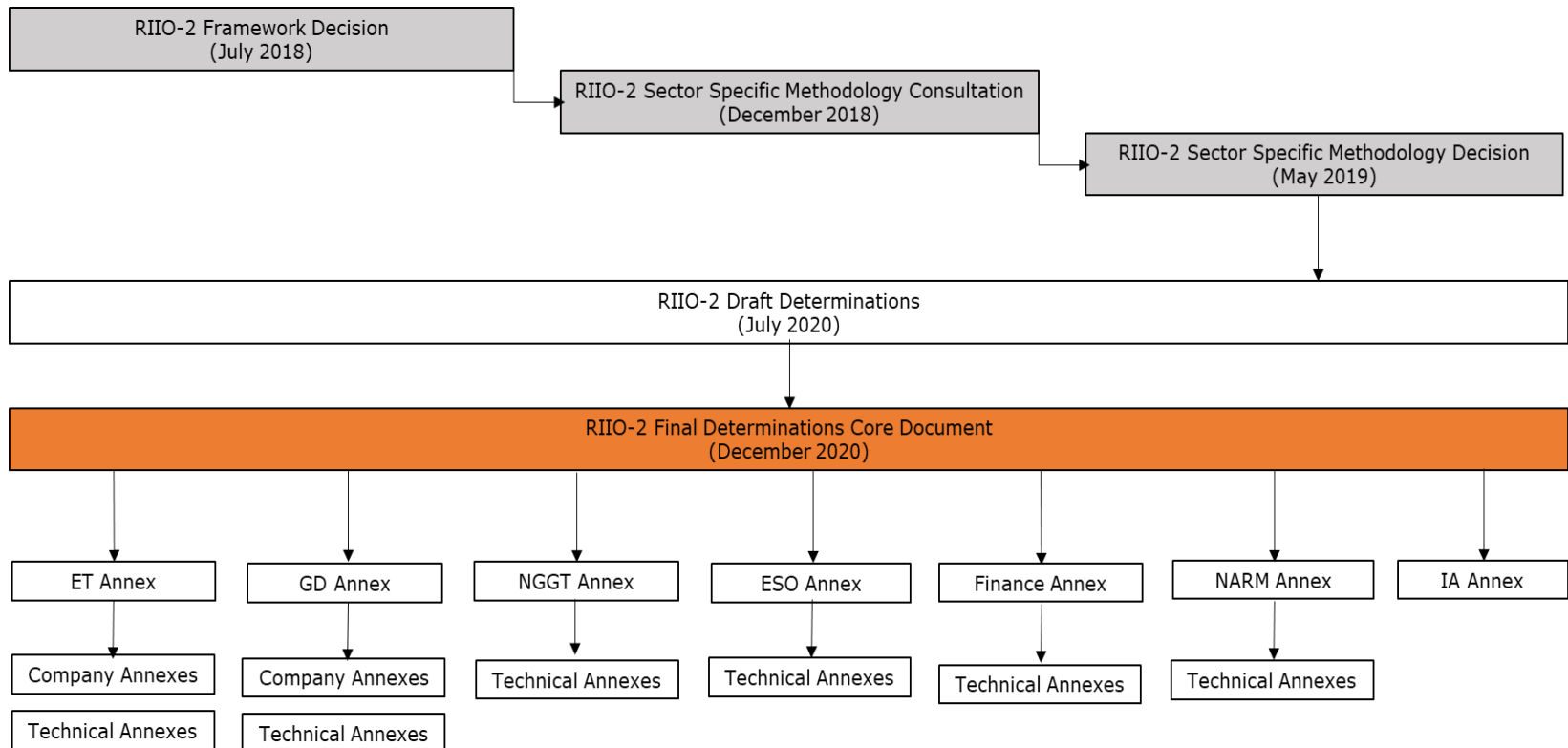
<sup>1</sup> Appendix 1 – shows and describes the data for this modelled totex comparison.

## **Impact of COVID-19 on the price controls**

- COVID-19 has **presented some new challenges** - we have addressed these as part of the Final Determinations (as we did at DDs), and will continue to address as part of our ongoing work.
- We have engaged **with the companies to understand the impacts on RIIO-1 and consequential impacts on RIIO-2. We will continue to do so.**
  - We will consider any impacts of COVID-19 on RIIO-1 outputs at close-out for RIIO-1.
  - Not making any COVID-19 related adjustments to RIIO-2 baseline allowances.
  - We are not implementing DD position to create UMs to make adjustments to RIIO-2 – we will address any impacts on RIIO-2 outputs at close-out for RIIO-2.

**The Core Document should be read alongside:**

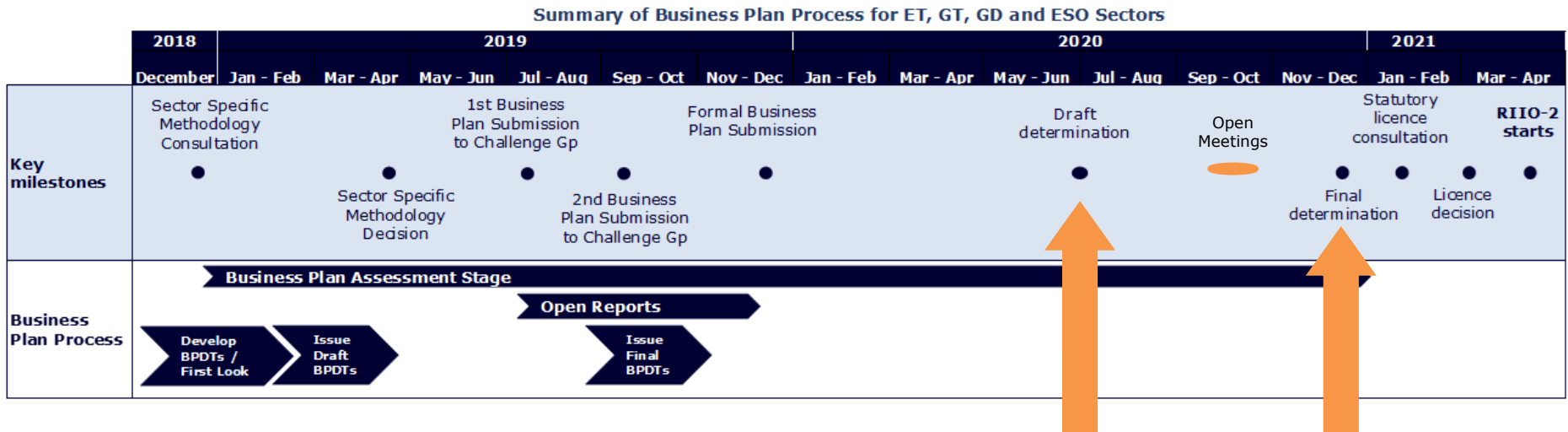
- company-specific annex documents which contain company-specific values for each area of their price control settlements and our proposed approach to any areas that are specific to that company; and
- any technical annexes or consultancy reports relevant to each sector annex (these will be cross-referenced where relevant).



**Table 13, Chapter 4, Finance Annex**

<b>FDs baseline allowed return on capital – average forecast - five years ending 31<sup>st</sup> March 2026</b>						
	<i><b>SHE-T</b></i>	<i><b>NGET SPT</b></i>	<i><b>NGGT</b></i>	<i><b>SGN South Cadent</b></i>	<i><b>SGN Scot NGN WWU</b></i>	<i><b>ESO</b></i>
Allowed return on debt	1.59%	1.82%	1.82%	1.82%	1.88%	-0.07%
Notional gearing	55%	55%	60%	60%	60%	55%
Cost of equity	4.25%	4.25%	4.55%	4.55%	4.55%	7.55%
Expected Outperformance	0.22%	0.22%	0.25%	0.25%	0.25%	0%
Allowed return on equity	4.02%	4.02%	4.30%	4.30%	4.30%	7.55%
Allowed return on capital	2.69%	2.81%	2.81%	2.81%	2.85%	3.36%





Source: Ofgem

**Draft Determination**  
**9<sup>th</sup> July 2020**

**Final Determination**  
**8<sup>th</sup> December 2020**

**December 2020** Statutory consultation on licence modifications.

**February 2021** RIIO-2 licences and Regulatory Instructions and Guidance.

**1<sup>st</sup> April 2021** RIIO-2 price controls for gas and electricity transmission, gas distribution and the electricity system operator will commence.

The ESO is critical for net zero – should be agile, proactive, forward-looking and ambitious.

Finance area	Final determinations	Applicable
Allowance for debt financing of RAV	Debt allowances to reflect shorter term debt measures which we forecast to be -0.07%	RIIO-2
Allowance for equity financing of RAV	7.55%, subject to equity indexation updates during RIIO-2	RIIO-2
Allowed return on capital	3.36%, subject to debt and equity indexation updates during RIIO-2	RIIO-2
Additional funding - other	£4.8m (nominal prices)	BP1
Additional funding - WCF	Working Capital Facility costs passed-through (estimated at £0.7m-£0.9m, nominal prices)	BP1
Financeability	We find that a notional ESO can finance its licenced activities, and confirm a 55% notional gearing level	RIIO-2
Depreciation	A 7-year period for depreciation.	RIIO-2
Capitalisation rates	Annual capitalisation rates that reflect expected split between capex and opex expenditure (37% for 2021/22 and 34% for 2022/23).	BP1
All other finance issues	Most other issues consistent with approach taken for networks.	RIIO-2