Decision

RIIO-3 Final Determinations - Cadent

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The next set of price controls for the Electricity Transmission (ET), Gas Distribution (GD) and Gas Transmission (GT) sectors will cover the five-year period from 1 April 2026 to 31 March 2031 (RIIO-3). In December 2024, the network companies in these sectors submitted their RIIO-3 Business Plans for this period to Ofgem. We assessed these plans and published our Draft Determinations for consultation on 1 July 2025. Following consideration of consultation responses, this document and others published alongside it set out our Final Determinations for the RIIO-3 price controls.

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Contents

1. Introduction

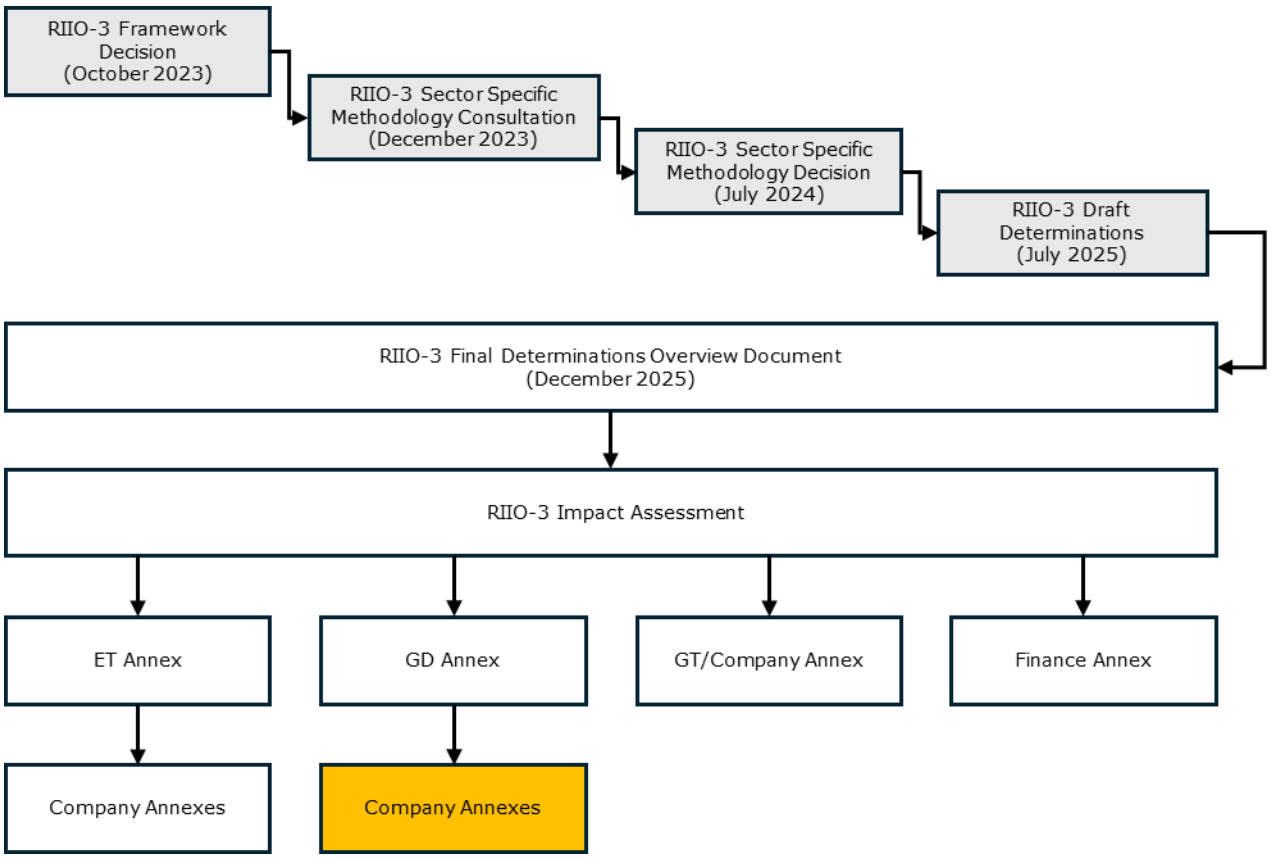
Purpose of this document

1.1 This document sets out our Final Determination positions for the price control areas that are specific to Cadent covering the five-year period from 1 April 2026 to 31 March 2031 (RIIO-GD3). All figures in this document are in 2023/24 prices and post our ongoing efficiency adjustment, except where otherwise stated.

Navigating the RIIO-3 Final Determinations documents

1.2 The RIIO-3 Final Determinations are comprised of an Overview Document, a Finance Annex and sector annexes for ET, GD and GT. The sector annexes are underpinned by a RIIO-3 Impact Assessment, company annexes and, where relevant, technical annexes. This document is the Cadent Annex. Figure 1 below maps all documents relevant to our suite of RIIO-3 Final Determinations, including the framework and methodology documents that have preceded it.

Figure 1: RIIO-3 Final Determinations map



1.3 Our Final Determinations have considered all previous feedback from network companies and other stakeholders, including the reports from the Independent Stakeholder Groups (ISGs) that were established to challenge each of the

network companies on their stakeholder engagement and business plans, and the feedback received in response to our RIIO-3 Draft Determinations. Further details on our approach to embedding the consumer voice is set out in the RIIO-3 Overview Document.

An overview of Cadent's RIIO-GD3 price control

1.4 This section summarises the key aspects of Cadent's RIIO-GD3 Final Determinations, setting out its cost allowances, outputs,[1] uncertainty mechanisms (UMs),[2] Business Plan Incentive (BPI) outcome and financing parameters.

Table 1: Allowed baseline totex (£m, 2023/24 prices)

Cost area	**Totex, £m**
Core baseline totex	7,136.2
Network Innovation Allowance (NIA)	18.4
Pass-throughs, UIOLI and other ex ante allowance	2,849.0
Ex ante allowances	**10,003.6**

Table 2: Outputs Package

Output name	**Output type**	**Sector(s)**	**Further detail**
Network Asset Risk Metric (NARM)	PCD, ODI-F and ODI-R	ET, GD, GT	Overview Document
Cyber Resilience	PCD, UIOLI and re-opener	ET, GD, GT	Overview Document
Environmental Action Plan (EAP) and Annual Environmental Report (AER)	ODI-R	ET, GD, GT	Overview Document
Strategic Innovation Fund (SIF)	Competitive Innovation Fund	ET, GD, GT	Overview Document
Network Innovation Allowance (NIA)	UIOLI	ET, GD, GT	Overview Document

[1] Outputs include Licence Obligations (LOs), Price Control Deliverables (PCDs), Use-It-Or-Lose-It (UIOLI) allowances and Output Delivery Incentives (ODIs). ODIs can be either financial (ODI-F) or reputational (ODI-R).
[2] UMs include volume drivers, re-openers, UIOLIs, pass-through, and indexation mechanisms.

Output name	Output type	Sector(s)	Further detail
Operational Transport Emissions Reduction	PCD	ET, GD, GT	Overview Document
Totex Incentive Mechanism (TIM)	ODI-F	ET, GD, GT	GD Annex
7- and 28-Day Repair Standards	ODI-F	GD	GD Annex
Tier 1 Mains Decommissioned	PCD	GD	GD Annex
Tier 1 Services	PCD	GD	GD Annex
Tier 1 Iron Stubs	PCD	GD	GD Annex
Emergency Response Time	LO and ODI-R	GD	GD Annex
Vulnerability and Carbon Monoxide Allowance (VCMA)	UIOLI	GD	GD Annex
Customer Satisfaction	ODI-F	GD	GD Annex
Disconnections Customer Satisfaction	ODI-R	GD	GD Annex
PSR Customer Satisfaction	ODI-R	GD	GD Annex
Complaints Metric	ODI-F	GD	GD Annex
PSR Customer Complaints	ODI-R	GD	GD Annex
Unplanned Interruptions	ODI-F	GD	GD Annex
Collaborative Streetworks	ODI-F	GD	GD Annex
Flow Weighted Average Calorific Value (FWACV) Compliance	PCD	Cadent	This document
London Medium Pressure	PCD	Cadent	This document
Grays Medium Pressure	PCD	Cadent	This document
Tinsley Viaduct Diversion	PCD	Cadent	This document

Output name	Output type	Sector(s)	Further detail
Mandated Category 3 Security	PCD	Cadent	This document
Implementation of the DPLA	LO	Cadent	GD Annex

Table 3: UMs package

UM name	UM type	Sector(s)	Further detail
Business Rates (prescribed rates)	Pass-through	ET, GD, GT	Overview Document
Cost of debt indexation	Indexation	ET, GD, GT	Finance Annex
Cost of equity indexation	Indexation	ET, GD, GT	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	ET, GD, GT	Finance Annex
Ofgem licence fee costs	Pass-through	ET, GD, GT	Overview Document
Pension Scheme Established Deficit	Pass-through	ET, GD, GT	Finance Annex
Tax Review	Re-opener	ET, GD, GT	Finance Annex
Real Price Effects (RPEs)	Indexation	ET, GD, GT	Overview Document
Digitalisation	Re-opener	ET, GD, GT	Overview Document
Cyber Resilience	UIOLI and PCD	ET, GD, GT	Overview Document
NIS-R Cyber Resilience	Re-opener	ET, GD, GT	Overview Document
Co-ordinated Adjustment Mechanism (CAM)	Re-opener	ET, GD, GT	Overview Document
Decarbonisation and Environmental Policy (DEP)	Re-opener	ET, GD, GT	Overview Document
Small Decarbonisation Projects (SDP)	Re-opener	GD, GT	Overview Document
Decarbonisation Project Development (DPD)	UIOLI	GD, GT	Overview Document

UM name	UM type	Sector(s)	Further detail
Biomethane Connections	UIOLI	GD, GT	GD Annex and GT Annex
Heat Policy	Re-opener	GD	GD Annex
HSE Policy	Re-opener	GD	GD Annex
Complex Distribution Systems	Re-opener	GD	GD Annex
Tier 2A Mains and Services Replacement	Volume driver	GD	GD Annex
Diversions and Loss of Development Claims	Re-opener	GD	GD Annex
Safety Disconnections	Volume driver	GD	GD Annex
New Large Load Connections	Re-opener	GD	GD Annex
General Reinforcement	Re-opener	GD	GD Annex
Specified Streetworks Costs	Re-opener	GD	GD Annex
Pension deficit charge adjustment	Pass-through	GD	GD Annex
Third-party damage and water ingress	Pass-through	GD	GD Annex
Shrinkage	Pass-through	GD	GD Annex
NTS exit capacity	Pass-through	GD	GD Annex
Theft of gas (supplier responsible)	Pass-through	GD	GD Annex
Central Data Service Provider (CDSP) Costs	Pass-through	GD	GD Annex
Miscellaneous	Pass-through	GD	GD Annex
Supplier of Last Resort (SoLR)	Pass-through	GD	GD Annex
London Subways and Tunnels	Re-opener	Cadent	This document

Table 4: BPI outcome

BPI Stage	**Cadent outcome (bps RoRE)**	**Further detail**
Stage A	Pass	Overview Document and this document
Stage B	5.1	Overview Document, GD Annex and this document
Stage C	4.9	Overview Document and this document

Table 5: Financing parameters

Area	**Cadent outcome**	**Further detail**
Notional Gearing	60%	Finance Annex
Cost of equity	6.12%	Finance Annex
Cost of debt (semi-nominal)	4.66%	Finance Annex
Weighted average cost of capital (semi-nominal)	5.24%	Finance Annex
Illustrative RoRE ranges (post RAMs)	3.50%-8.18%	Finance Annex

2. Outputs and incentives

2.1 This chapter sets out our decisions on outputs and incentives that are specific to Cadent, including for bespoke proposals submitted through its business plan.

Flow Weighted Average Calorific Value (FWACV) Compliance PCD

Purpose: To hold Cadent to account for delivering upgrades to aging FWACV systems.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Same as FD.
Output to be delivered	Design and install 28 FWACV systems to replace current FWACV systems.	Same as FD.
Delivery date	31 March 2031.	Same as FD.
Allowance	£53.9m.[3]	N/A
Reporting	Independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the Regulatory Reporting Packs (RRPs).	Same as FD.
Applied to	Cadent only.	Same as FD.

Final Determination rationale and Draft Determination responses

PCD type

2.2 We have decided that this project will be funded through an evaluative PCD with an ex post evaluation to establish whether Cadent has met the required output by the end of RIIO-GD3. This approach was supported by Cadent in its response to our Draft Determinations. No other stakeholders commented on this. We consider the continued use of an evaluative PCD is appropriate for the FWACV Compliance project as it is a specific project with clearly defined deliverables.

[3] This allowance is pre ongoing efficiency adjustment, which is applied across all totex. The final allowance will be included in the licence condition for this PCD.

Output to be delivered, delivery date and allowance

2.3 The output set for this PCD is the design and installation of 28 FWACV metering systems to replace existing FWACV systems. We expect Cadent to deliver the specified output by the end of the price control period. In response to our Draft Determinations there were no specific comments from stakeholders on the output or delivery date. We consider it is appropriate to set the output in line with the full workload proposed by Cadent in its business plan.

2.4 The allowance set for this PCD is £53.9m before the ongoing efficiency adjustment. In our Draft Determinations, we noted that two different costs were submitted for this proposal as part of Cadent's Business Plan. In its response to our Draft Determinations, Cadent confirmed its request was for £55.9m of funding as submitted in its Business Plan Data Template (BPDT), rather than the £53.91m in its Engineering Justification Paper (EJP).

2.5 Cadent's requested funding amount of £55.9m included £2m that was spent during RIIO-GD2 to support mobilisation of the RIIO-GD3 work programme. We do not consider retrospectively funding Cadent for costs incurred in RIIO-GD2 appropriate, particularly as Cadent already received FWACV Compliance funding in RIIO-2 via the Capital Projects PCD. We have therefore decided to reject the additional £2m of funding requested for this. We consider the remaining £53.9m is justified for Cadent to deliver its FWACV Compliance upgrades as required for the RIIO-GD3 period.

Reporting

2.6 We have decided to require an independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.

2.7 In its response to our Draft Determinations, Cadent proposed including a dedicated FWACV Compliance PCD table within its RRP reporting, which is subject to both internal assurance and a separate independent engineering assurance activity. It stated that the project is a rolling programme of work so independent assurance should be aligned with the annual RRP process, rather than at the completion of each section of the project.

2.8 While we agree that there should be a dedicated table for the FWACV Compliance PCD as part of annual RRP reporting, we have decided that we also need to see an independently audited engineering report confirming the completion of each section of the project. This is because the information captured in the RRPs is not

detailed enough to be able to confirm that the specific outputs agreed as part of the FWACV Compliance PCD have been delivered (eg specific named sections of pipe). This is consistent with our approach to reporting for other bespoke PCDs.

London Medium Pressure PCD

Purpose: To fund replacement of specific sections of Cadent's London Medium Pressure (LMP) project during RIIO-GD3.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Decided in our SSMD.
Output to be delivered	Replacement of 15.9km of high-risk Tier 3 iron mains, abandonment of 3.3km of mains, and rebuild of five governors in Cadent's LMP project.	Same as FD.
Delivery date	31 March 2031.	Same as FD.
Allowance	£88.5m.[4]	Same as FD.
Reporting	Independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.	Same as FD.
Applied to	Cadent North London.	Decided in our SSMD.

Final Determination rationale and Draft Determination responses

PCD type

2.9 We have decided that this project will be funded through an evaluative PCD with an ex post evaluation to establish whether Cadent has met the required output by the end of RIIO-GD3. This approach was supported by Cadent in its response to our Draft Determinations. No other stakeholders commented on this. We consider the continued use of an evaluative PCD is appropriate for the LMP project as it is a specific project with clearly defined deliverables.

[4] This allowance is pre ongoing efficiency adjustment, which is applied across all totex. The final allowance will be included in the LMP PCD licence condition.

Output to be delivered, delivery date and allowance

2.10 The output set for this PCD is replacement of 15.9km mains, abandonment of 3.3km of mains and rebuild of five governors. We expect Cadent to deliver the specified output by the end of the price control period. In response to our Draft Determinations, there were no specific comments from stakeholders on the output or delivery date. We consider it is appropriate to set the output in line with the full workload proposed by Cadent in its business plan.

2.11 The allowance set for this PCD is £88.5m before the ongoing efficiency adjustment. In its response to Draft Determinations, Cadent supported the proposed allowance of £88.5m. We therefore confirm our Draft Determinations position to fund this PCD in full.

Reporting

2.12 We have decided to require an independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.

2.13 In its response to our Draft Determinations, Cadent proposed that it produces a dedicated LMP PCD table as part of RRP reporting, which is subject to both internal assurance and a separate independent engineering assurance activity. It stated that the project is a rolling programme of work so independent assurance should be aligned with the annual RRP process, rather than at the completion of each section of the project.

2.14 While we agree that there should be a dedicated table for the LMP PCD as part of annual RRP reporting, we have decided that we also need to see an independently audited engineering report confirming the completion of each section of the project. This is because the information captured in the RRPs is not detailed enough to be able to confirm that the specific outputs agreed as part of the LMP PCD have been delivered (eg specific named sections of pipe). This is consistent with our approach to reporting for other bespoke PCDs.

Grays Medium Pressure PCD

Purpose: To hold Cadent to account for delivering replacement of specific sections of the Grays Medium Pressure project during RIIO-GD3.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Same as FD.
Output to be delivered	Replacement of 42.5km of medium pressure network in Cadent's Grays Medium Pressure project.	Same as FD.
Delivery date	31 March 2031.	Same as FD.
Allowance	£25.5m.[5]	Same as FD.
Reporting	Independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.	Same as FD.
Applied to	Cadent EoE.	Same as FD.

Final Determination rationale and Draft Determination responses

PCD type

2.15 We have decided that this project will be funded through an evaluative PCD with an ex post evaluation to establish whether Cadent has met the required output by the end of RIIO-GD3. No stakeholders commented on the use of a PCD for this project in response to our Draft Determinations. We consider an evaluative PCD is appropriate for the Grays Medium Pressure project as it is a specific project with clearly defined deliverables.

Output to be delivered, delivery date and allowance

2.16 We have decided to provide £25.5m, before the ongoing efficiency adjustment, for the replacement of 42.5km of the Grays Medium Pressure pipeline during RIIO-GD3. We expect Cadent to deliver the specified output by the end of the price control period.

2.17 Our engineering review concluded that Cadent chose the best suited option with clear justification of the needs case, optioneering and scope, with challenges and risks clearly outlined. We therefore confirm our Draft Determination position and accept the funding and outputs Cadent proposed for this project in full.

[5] This allowance is pre ongoing efficiency adjustment, which is applied across all totex. The final allowance will be included in the GMP PCD licence condition.

Reporting

2.18 We have decided to require an independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.

2.19 In its response to our Draft Determinations, Cadent proposed including a dedicated Grays Medium Pressure PCD table as part of RRP reporting, which is subject to both internal assurance and a separate independent engineering assurance activity. It stated that the project is a rolling programme of work so independent assurance should be aligned with the annual RRP process, rather than at the completion of each section of the project.

2.20 While we agree that there should be a dedicated table for the Grays Medium Pressure PCD as part of annual RRP reporting, we have decided that we also need to see an independently audited engineering report confirming the completion of each section of the project. This is because the information captured in the RRPs is not detailed enough to be able to confirm that outputs have been delivered. This is consistent with our approach to reporting for other bespoke PCDs.

Tinsley Viaduct Diversion PCD

Purpose: To hold Cadent to account for delivering replacement of pipelines which are in poor state of repair at the Tinsley Viaduct site.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Same as FD.
Output to be delivered	Diversion of two intermediate pressure pipelines located on the underside of the M1 Tinsley Viaduct.	Same as FD.
Delivery date	31 March 2031.	Same as FD.
Allowance	£28.8m[6].	Same as FD.

[6] This allowance is pre ongoing efficiency adjustment, which is applied across all totex. The final allowance will be included in the TVD PCD licence condition.

Design	Final Determination	Draft Determination
Reporting	Independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.	Same as FD.
Applied to	Cadent EoE.	Same as FD.

Final Determination rationale and Draft Determination responses

PCD type

2.21 We have decided that this project will be funded through an evaluative PCD with an ex post evaluation to establish whether Cadent has met the required output by the end of RIIO-GD3. No stakeholders commented on the use of a PCD for this project in response to our Draft Determinations. We consider an evaluative PCD is appropriate for the Tinsley Viaduct Diversion project as it is a specific project with clearly defined deliverables.

Output to be delivered, delivery date and allowance

2.22 We have decided to provide £28.8m, before the ongoing efficiency adjustment, for the diversion of two intermediate pressure pipelines which are located on the underside of the M1 Tinsley Viaduct. We expect this to be delivered by the end of RIIO-GD3. No stakeholders commented on this in response to our Draft Determinations.

2.23 Our engineering review concluded that Cadent's proposed delivery option is the most suitable. We therefore confirm our Draft Determinations position to provide the funding and outputs Cadent proposed for this project in full.

Reporting

2.24 We have decided to require an independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.

2.25 In its response to our Draft Determinations, Cadent proposed including a dedicated Tinsley Viaduct Diversion PCD table as part of RRP reporting, which is subject to both internal assurance and a separate independent engineering assurance activity. It stated that the project is a rolling programme of work so independent assurance should be aligned with the annual RRP process, rather than at the completion of each section of the project.

2.26 While we agree that there should be a dedicated table for the Tinsley Viaduct Diversion PCD as part of annual RRP reporting, we have decided that we also

need to see an independently audited engineering report confirming the completion of each section of the project. This is because the information captured in the RRPs is not detailed enough to be able to confirm that outputs have been delivered. This is consistent with our approach to reporting for other bespoke PCDs.

Mandated Category 3 Security PCD

Purpose: To hold Cadent to account for delivering upgrade and refresh works on three specified Category 3 Security sites.

Benefits: To protect consumers if any discrete capital investment is not delivered.

Final Determinations summary

Design	Final Determination	Draft Determination
PCD type	Evaluative.	Change – no mechanism proposed at DD.
Output to be delivered	Critical National Infrastructure (CNI) Category 3 upgrades to Site B and Site F, and asset refresh on existing CNI Site 5. Cadent may apply via re-opener to update the PCD to include Sites C, D, E and 6 once fully scoped.	Change – no mechanism proposed at DD.
Allowance	[REDACTED][7]	Change – no mechanism proposed at DD.
Delivery date	31 March 2031.	Change – no mechanism proposed at DD.
Ability to change during RIIO-3	Yes - re-opener to adjust the PCD outputs to include Sites C, D, E and 6 once fully scoped.	Change – no mechanism proposed at DD.
Reporting	Independently audited engineering report confirming the completion of each section of the project, as well as annual reporting through the RRPs.	Change – no mechanism proposed at DD.
Applied to	Cadent.	Change – no mechanism proposed at DD.

[7] This allowance is pre ongoing efficiency adjustment, which is applied across all totex. The final allowance will be included in the Mandated Category 3 Security PCD licence condition.

Final Determination rationale and Draft Determination responses

PCD type and ability to change during RIIO-3

2.27 We have decided to fund upgrade and refresh works on three specified CNI Category 3 security sites - Sites B, F and 5 - through an evaluative PCD. These are well scoped specific projects with clearly defined deliverables. We will use an ex-post evaluation to establish whether Cadent has met the required output by the end of RIIO-GD3.

2.28 This is a change from our Draft Determinations proposal to reject this EJP. In our Draft Determinations, we agreed with the overall needs case but determined that the quality of the information on scope and cost confidence of the projects was poor. A full cost breakdown and project scope had not been provided.

2.29 In its response to our Draft Determinations, Cadent provided additional design, scope and costing information. Based on this, we now consider Site B, F and 5 to be sufficiently justified.

2.30 However, we have decided that Cadent should reapply for funding for Sites C, D, E and 6, when more robust site-specific scope, design and costing is complete. As a result, we have decided to include a re-opener in this PCD. Cadent may apply to the re-opener condition of this mechanism to include Sites C, D, E and 6 as outlined in its Mandated Category 3 EJP.

Output to be delivered, delivery date and allowance

2.31 We have decided to provide [REDACTED], before the ongoing efficiency adjustment, for Cadent to deliver:

- [REDACTED]
- [REDACTED]

2.32 We expect Cadent to deliver these outputs by the end of the price control.

2.33 This is a change from our Draft Determinations position to reject this EJP. The reasons for deciding to approve part of this workload in our Final Determinations are outlined in the section above.

2.34 In its resubmission after our Draft Determinations, Cadent requested [REDACTED] for Sites B, C, D, E and F, and [REDACTED] for Sites 5 and 6, a total of [REDACTED] (Table 6). We have decided to approve [REDACTED] for the delivery of Sites B, F, and 5. This total reflects a full allowance for Sites B and 5, and a contingency reduction on the allowance for Site F.

Table 6: Mandated Category 3 PCD, submitted vs. allowed costs (£m, 2023/24 prices)

Site	Submitted cost[8], £m	FD allowed cost, £m
B	[REDACTED]	[REDACTED]
C	[REDACTED]	[REDACTED]
D	[REDACTED]	[REDACTED]
E	[REDACTED]	[REDACTED]
F	[REDACTED]	[REDACTED]
5	[REDACTED]	[REDACTED]
6	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

2.35 We have reduced the contingency for Site F as we are applying a flat contingency of 10% consistently across projects. For more information, please see the section on Physical Security Upgrade Programme (PSUP) capex in the Technically assessed costs section of Chapter 5 of the GD Annex. Therefore, the overall allowance for this PCD is [REDACTED] pre ongoing efficiency adjustment.

Reporting

2.36 Cadent will provide annual reports through the RRPs, which will enable us to monitor the project's status, including timelines and costs. An independent audited engineering report will also need to be provided confirming the completion of each section of the project. This is consistent with our approach to reporting for other bespoke PCDs.

Non-Mandatory Repex

Purpose: To fund the efficient delivery of Cadent's non-mandatory repex programme.

Benefits: To allow Cadent to maintain the safety of the network, whilst also protecting consumers from inefficient spending.

[8] Cost proposed by Cadent in its August 2025 resubmission of the Mandated Category 3 Security EJP.

Final Determination rationale and Draft Determination responses

Design	Final Determination	Draft Determination
Output to be delivered	390km of cost beneficial mains replacement.	Change - 230.5km in DD.
Allowance	£209.6m.[9]	Change - £118.4m in DD.
Applied to	Cadent.	Same as FD.

Output to be delivered and allowance

2.37 We have decided to provide £209.6m for Cadent to deliver 390km of non-mandatory repex programme through the Network Asset Risk Metric (NARM). This is a change from our Draft Determinations proposal to provide £118.4m for Cadent to deliver 231km of non-mandatory repex.

2.38 Cadent proposed the Advanced Leakage Intervention Programme (ALIP) in its business plan, which would adopt a proactive approach to non-mandatory repex, targeting the leakiest pipes. Unlike other GDNs' non-mandatory programmes, Cadent largely justified its programme through emissions reduction rather than safety, and it requested a significant increase in the volume of interventions - from 231km in RIIO-GD2 to 750km in RIIO-GD3.

2.39 In our Draft Determinations, we proposed to reject Cadent's ALIP proposal on engineering grounds and only fund 231km of non-mandatory repex, in line with RIIO-GD2 workloads.

2.40 Cadent resubmitted its Cost Beneficial Mains Replacement EJP in response to our Draft Determinations, including new options for the volume of non-mandatory repex delivered using ALIP. Cadent argued that our Draft Determinations proposal would lead to decreasing levels of safety on its networks. We consider that the resubmitted EJP has more robust optioneering, with some additional volumes justified to prevent Gas in Buildings (GIB), gas escapes and supply interruptions.

2.41 We have therefore decided to fund Option 3 in Cadent's resubmitted non-mandatory repex proposal, which maintains the current levels of safety on Cadent's networks.

Network Asset Risk Metric (NARM)

2.42 As in our Draft Determinations, our decisions on network companies' Baseline Network Risk Outputs (BNROs) are based on their business plan proposals and

[9] This allowance is before the application of the ongoing efficiency adjustment, which is applied across all totex, and catch-up efficiency challenge.

reflect any adjustments to asset intervention volumes to align with baseline allowances.

2.43 As we set out in our Draft Determinations, to ensure that BNROs, baseline allowances and Outturn Network Risk Output (ONRO) and Outturn Allowances are comparable, we require network companies to recalculate their BNROs to reflect their Final Determinations volumes. More detail on this process can be found in the Chapter 4in the Overview Document.

2.44 We continue to use the NARM funding categories set out in the NARM Handbook, which provides the scope of the NARM Funding Adjustment and Penalty Mechanism and its interaction with other mechanisms.

2.45 Tables 7-10 below summarise our Final Determinations on the BNROs, associated baseline allowances and the Unit Cost of Risk per network. The BNROs relate only to the A1 Funding Category.

Table 7: EoE Baseline Network Risk Output, Baseline Allowance and Unit Cost of Risk per NARM Risk Sub-Category

Risk Sub-Category	**Risk Sub-Category**	**Baseline Network Risk Output, R£m**	**Baseline Allowance, £m**	**Unit Cost of Risk Benefit, UCR, £/R£**
Network Level	NET	378.7	198.4	0.5

Table 8: Lon Baseline Network Risk Output, Baseline Allowance and Unit Cost of Risk per NARM Risk Sub-Category

Risk Sub-Category	**Risk Sub-Category**	**Baseline Network Risk Output, R£m**	**Baseline Allowance, £m**	**Unit Cost of Risk Benefit, UCR, £/R£**
Network Level	NET	422.2	245.9	0.6

Table 9: NW Baseline Network Risk Output, Baseline Allowance and Unit Cost of Risk per NARM Risk Sub-Category

Risk Sub-Category	**Risk Sub-Category**	**Baseline Network Risk Output, R£m**	**Baseline Allowance, £m**	**Unit Cost of Risk Benefit, UCR £/R£**
Network Level	NET	488.2	179.9	0.4

Table 10: WM Baseline Network Risk Output, Baseline Allowance and Unit Cost of Risk per NARM Risk Sub-Category

Risk Sub-Category	Risk Sub-Category	Baseline Network Risk Output R£m	Baseline Allowance, £m	Unit Cost of Risk Benefit, UCR, £/R£
Network Level	NET	219.2	118.1	0.5

2.46 Tables 11-14 below summarise the results of our assessment of the BNROs per NARM asset category at Draft Determinations and Final Determinations. Further detail about the NARM methodology can be found in Chapter 4 of the Overview Document.

Table 11: EoE Baseline Network Risk Output (R£m) per NARM asset category

Asset Category	Draft Determination	Change from DD to FD	Final Determination
LTS Pipelines	-	-	-
Mains	160.4	74.0	234.5
Services	71.4	34.1	105.5
Risers	2.4	19.3	21.6
Offtake & PRS Filters	-	3.0	3.0
Offtake & PRS Slamshut/Regulators	-	6.9	6.9
Offtake & PRS Pre-heating	0.4	3.9	4.3
Offtake & PRS Odorisation & Metering	0.0	-	0.0
Governors	-	2.9	2.9
Total	234.6	144.1	378.7

Table 12: Lon Baseline Network Risk Output (R£m) per NARM asset category

Asset Category	**Draft Determination**	**Change from DD to FD**	**Final Determination**
LTS Pipelines	-	-	-
Mains	77.7	57.6	135.3
Services	112.7	54.1	166.8
Risers	13.0	56.6	69.6
Offtake & PRS Filters	-	3.1	3.1
Offtake & PRS Slamshut/Regulators	-	5.5	5.5
Offtake & PRS Pre-heating	0.5	3.1	3.6
Offtake & PRS Odorisation & Metering	0.0	-	0.0
Governors	-	38.2	38.2
Total	204.0	218.2	422.2

Table 13: NW Baseline Network Risk Output (R£m) per NARM asset category

Asset Category	**Draft Determination**	**Change from DD to FD**	**Final Determination**
LTS Pipelines	-	-	-
Mains	153.6	27.1	180.6
Services	161.8	26.4	188.2
Risers	2.5	9.5	11.9
Offtake & PRS Filters	-	1.2	1.2
Offtake & PRS Slamshut/Regulators	-	17.6	17.6
Offtake & PRS Pre-heating	1.0	11.1	12.0

Asset Category	Draft Determination	Change from DD to FD	Final Determination
Offtake & PRS Odorisation & Metering	0.0	-	0.0
Governors	-	76.6	76.6
Total	318.8	169.4	488.2

Table 14: WM Baseline Network Risk Output (R£m) per NARM asset category

Asset Category	Draft Determination	Change from DD to FD	Final Determination
LTS Pipelines	-	-	-
Mains	77.1	41.8	119.0
Services	44.9	15.7	60.6
Risers	1.4	14.3	15.7
Offtake & PRS Filters	-	2.3	2.3
Offtake & PRS Slamshut/Regulators	-	2.6	2.6
Offtake & PRS Pre-heating	-	1.7	1.7
Offtake & PRS Odorisation & Metering	0.0	-	0.0
Governors	-	17.3	17.3
Total	123.5	95.7	219.2

2.47 The changes in BNRO between Draft Determinations and Final Determinations are reflective of our final review of Cadent's Engineering Justification Papers (EJPs). Our reasoning is set out in further detail in the Engineering assessment of Cadent's Business Plan in Chapter 5 this document.

2.48 All capex NARM asset proposed replacement and refurbishment workload for Cadent is allocated to Category A1 and is covered by the NARM Funding Adjustment and Penalty Mechanism.

2.49 As for repex, Tier 1 and associated services are funded and incentivised through the Tier 1 Mains Decommissioned and the Tier 1 Services PCDs. Tier 2A mains and associated services are funded by the Tier 2A Mains and Services Replacement Volume Driver. These are included in Category A2 (Funding Under a Separate Mechanism). Diversions are subject to the Diversions and Loss of Development Claims Re-opener and reported under A3 (Ring-fenced Project/Activity). These workloads are not funded under NARM.

2.50 In addition, we have decided that the following repex projects will be assigned to A3 (Ring-fenced Project/Activity) and their associated outputs will therefore not contribute towards the delivery of BNROs:

- London Medium Pressure; and
- Greys Medium Pressure.

2.51 Finally, all repex replacement and refurbishment not tied to a PCD or a volume driver is allocated to Category A1 and covered by the NARM Funding Adjustment and Penalty Mechanism.

Repex Output Tables

2.52 Tables 15-24 below provide additional detail on the company-specific allowances and workload volumes for repex outputs. For more information on the policy decisions for these outputs please see Chapter 3 of the GD Annex.

Tier 1 Mains Decommissioned PCD

Table 15: Baseline Target Workloads of Tier 1 Mains Decommissioned

GDN	**Volume, km**
EoE	2,723
Lon	1,684
NW	1,874
WM	1,491

Table 16: Baseline activity volumes of Tier 1 Mains Decommissioned and Allowed Unit Costs of Tier 1 Mains Decommissioned

GDN	**Diameter band of decommissioned pipe**	**Baseline Activity Volumes of Tier 1 Mains Decommissioned, km**	**Allowed Unit Cost, £/km**
EoE	≤3"	33	[REDACTED]
EoE	4" - 5"	1,362	[REDACTED]

EoE	6" - 7"	866	[REDACTED]
EoE	8"	461	[REDACTED]
Lon	≤3"	5	[REDACTED]
Lon	4" - 5"	751	[REDACTED]
Lon	6" - 7"	556	[REDACTED]
Lon	8"	372	[REDACTED]
NW	≤3"	115	[REDACTED]
NW	4" - 5"	861	[REDACTED]
NW	6" - 7"	620	[REDACTED]
NW	8"	278	[REDACTED]
WM	≤3"	31	[REDACTED]
WM	4" - 5"	680	[REDACTED]
WM	6" - 7"	427	[REDACTED]
WM	8"	354	[REDACTED]

Table 17: Tier 1 Mains Baseline values by regulatory year (£m)

GDN	26/27	27/28	28/29	29/30	30/31	Total
EoE	93.0	93.7	97.3	100.5	104.6	489.1
Lon	75.0	82.6	88.9	97.1	104.4	448.1
NW	66.8	67.4	69.9	73.2	75.1	352.5
WM	54.1	56.7	57.5	59.6	64.3	292.1

Tier 1 Services PCD

Table 18: Baseline target workloads of Tier 1 Services repex

GDN	Volume, no. interventions[10]
EoE	227,686
Lon	166,687
NW	143,874
WM	127,433

[10] The total no. of interventions for each GDN may not sum to the total of the disaggregated components in the table below due to rounding

Table 19: Baseline activity volumes of Tier 1 Services and allowed unit costs

GDN	Type of service intervention	Baseline activity volume of Tier 1 Services, no. interventions	Allowed Unit Cost, £/intervention
EoE	Relay	138,372	[REDACTED]
EoE	Test & Transfer	89,314	[REDACTED]
Lon	Relay	124,265	[REDACTED]
Lon	Test & Transfer	42,422	[REDACTED]
NW	Relay	96,569	[REDACTED]
NW	Test & Transfer	47,306	[REDACTED]
WM	Relay	84,424	[REDACTED]
WM	Test & Transfer	43,009	[REDACTED]

Table 20: Tier 1 Services Baseline values by regulatory year (£m)

GDN	26/27	27/28	28/29	29/30	30/31	Total
EoE	55.5	58.5	52.1	48.0	40.9	255.0
Lon	45.0	46.0	45.3	45.6	45.8	227.7
NW	31.0	29.0	25.7	23.1	18.8	127.6
WM	28.9	28.3	26.9	23.3	19.2	126.7

Tier 1 Iron Stubs PCD

Table 21: Target workload of Tier 1 Iron Stubs Decommissioned by regulatory year (number of Tier 1 Iron Stubs)

GDN	26/27	27/28	28/29	29/30	30/31	Total
EoE	137	137	137	137	137	686
Lon	162	162	162	162	162	808
NW	188	188	188	188	188	941
WM	228	228	228	228	228	1,138

Table 22: Allowed unit cost of Tier 1 Iron Stubs Decommissioned

GDN	Allowed unit cost, £/Tier 1 Iron Stub
EoE	[REDACTED]
Lon	[REDACTED]
NW	[REDACTED]

GDN	Allowed unit cost, £/Tier 1 Iron Stub
WM	[REDACTED]

Table 23: Forecast number of Tier 1 Iron Stubs Investigated but not Decommissioned by regulatory year (number of Tier 1 Iron Stubs)

GDN	26/27	27/28	28/29	29/30	30/31	Total
EoE	201	201	201	201	201	1,003
Lon	212	212	212	212	212	1,062
NW	287	287	287	287	287	1,434
WM	357	357	357	357	357	1,783

Table 24: Allowed unit cost of Tier 1 Iron Stubs Investigated but not Decommissioned

GDN	Allowed unit cost, £/Tier 1 Iron Stub
EoE	[REDACTED]
Lon	[REDACTED]
NW	[REDACTED]
WM	[REDACTED]

Outputs we have partially or fully rejected

Environmental Action Plan (EAP): Net Zero Transition Planning

Final Determinations rationale and Draft Determination responses

2.53 We have decided to approve £9.6m (before the application of the catch-up and ongoing efficiency challenges) of the £24.7m funding Cadent requested through its EAP for planning and engagement with the National Energy System Operator (NESO) in its role developing Regional Energy Strategic Plans (RESPs). This funding will be provided through baseline allowances, and its delivery will be monitored through the Annual Environmental Report.

2.54 This is a change from our Draft Determinations, where we proposed to reject Cadent's Net Zero Transition Planning proposal in its entirety. In response to our Draft Determinations, Cadent resubmitted this proposal with a £6.6m reduction, which it said was uncertain and could instead be funded through the Decarbonisation Project Delivery (DPD) UIOLI.[11] The updated proposal totalled £18.1m.

[11] Previously named the Net Zero and Re-opener Development UIOLI.

2.55 The only other response was from Cadent's ISG, which did not agree with our proposed rejection. It acknowledged NESO's responsibility for the RESPs and the intention not to duplicate existing work, but noted that the process will place new demands on local authorities without additional resources. To support these stakeholders, it said GDNs should leverage and expand their existing relationships, with funding allocated to enable this increased commitment.

2.56 We have decided to partially accept Cadent's resubmitted proposal to fund two of four portions of the proposal - 'Network Modelling' (£5.3m) and 'Net Zero Transition Customer and Stakeholder Management' (£4.3m), totalling £9.6m. The Network Modelling component will deliver detailed models to support RESP and NESO engagement, including future supply and demand scenarios, potential hydrogen and biomethane integration, and decommissioning plans, as well as technical engagement with all 195 Local Authorities. The Net Zero Transition Customer and Stakeholder Management element will provide dedicated resources to build and maintain long-term relationships with customers and regional stakeholders, ensuring they receive tailored support and information to plan and implement decarbonisation options effectively. We consider this work to be justified because the RESPs will require input and work from the GDNs, including more granular modelling for their networks and bottom-up input from their stakeholders.

2.57 However, we have decided to reject the 'Engineering Policy Development and Assurance' (£6.3m) and 'Market Framework Development' (£2.3m) elements of Cadent's proposal. The Engineering Policy Development and Assurance component aimed to create and maintain technical standards, safety frameworks, and assurance processes to ensure that hydrogen and biomethane integration, decommissioning, and other transition activities comply with regulatory and engineering best practice. The Market Framework Development element sought to establish commercial and operational models for future low-carbon gas markets, including rules for capacity, balancing, and customer participation in hydrogen and biomethane networks. We do not consider these work packages are appropriate for baseline allowance funding as the need for some of this work is uncertain - eg for hydrogen blending pending the HSE's safety case review and further government decisions - and the 100% hydrogen-focused work is not suitable for funding through the natural gas price control.

2.58 When there is clarity on the need for this work, Cadent can use its increased DPD UIOLI allowance or the Small Decarbonisation Projects (SDP) Re-opener to implement such changes, where it is appropriate to fund through the natural gas

price control. For hydrogen blending specifically, this certainty will be provided once the safety case is complete and government's policy direction is made clear.

2.59 Further details on our RIIO-3 EAP policy design and a high-level cross-sector review can be found in Chapter 4 of the Overview Document, while the GD-specific review can be found in Chapter 3 of the GD Annex.

Capacity Upgrades PCD

Final Determination rationale and Draft Determination responses

2.60 We have decided to reject Cadent's proposal for a Capacity Upgrades PCD. Instead, we have allowed baseline allowances for upgrades on its above 7 bar offtake and pressure reduction system sites required to meet its 1-in-20 peak demand obligations. This is a change from our Draft Determinations, where we proposed to fund this work through NARM to ensure a consistent approach across all the GDNs.

2.61 Cadent's response to our Draft Determinations supported our proposal to include Capacity Upgrades within the NARM framework, provided that this funding was additional to its existing asset health allowances and not reallocated. While it considered that the mechanical components of the upgrades fall under NARM, it said that other capex elements should be treated separately, with clear guidance on allocation and implications before implementation.

2.62 While our Draft Determinations proposed funding through NARM for consistency, we now consider these works fall outside the scope of NARM because they do not primarily mitigate asset health risk but address capacity requirements. We have therefore decided to allow baseline allowances for Capacity Upgrades instead.

West Winch Pipeline PCD

Final Determination rationale and Draft Determination responses

2.63 We have decided to reject Cadent's business plan proposal for a PCD to deliver £11.3m of feasibility and design studies for managing the West Winch high-pressure pipeline system. Instead, we have decided to provide baseline allowances for this project.

2.64 The West Winch Pipeline is a section of non-piggable high-pressure major accident hazard pipeline on the Local Transmission System, which is seeing an emerging trend of pipeline failures associated with pipeline fittings. In our Draft Determinations, we proposed to reject this project on engineering grounds. In its Draft Determinations response, Cadent submitted an updated EJP that justified the needs case and optioneering for the feasibility study and ongoing

maintenance. We have subsequently decided to approve funding through baseline allowances, instead of allowing funding through a PCD, because the project is below the £15m PCD materiality threshold that we set in our SSMD.

2.65 Further information on the engineering assessment for this proposal can be found in Appendix 1 of this document.

3. Business Plan Incentive (BPI)

3.1 This chapter sets out Cadent's Final Determinations BPI results, including some of the key points raised by stakeholders, and our responses to these points. Where the results have changed from that published in the Draft Determinations, we have set out our reasoning for this change. For information on the overall results for the BPI for all companies, see the Overview Document.

Table 25: Final Determinations BPI results

BPI Stage	Draft Determinations result	Final Determinations result	Further detail
A	Pass	Pass	This chapter for specific views on the Final Determinations result.
B	-4.2 bps	5.1 bps	Chapter 5 of the GD Annex for the GDNs' results compared within the sector and an explanation of the methodology. This chapter for specific views on the Final Determinations result.
C	4.9 bps	No change	This chapter for specific views on the Final Determinations result.
Total bps	0.7 bps	10 bps	
Total 5-year monetary equivalent, £m	1.6	24.5	

Stage A

3.2 Through the consultation we received no information to alter our position and therefore we have decided to implement our Draft Determinations position that Cadent met all the minimum requirements, as set out in the Business Plan Guidance (BPG), and has passed Stage A of the BPI.

Stage B

3.3 The overall Final Determinations result for Cadent is 5.1 bps, which corresponds to the weighted average of the outcomes from comparative (3.9 bps) and bespoke (1.2 bps) assessment, rounded to one decimal point. The following

provides details on our Final Determinations result for each cost category including the rationale for change from our Draft Determinations results.

Comparatively assessed costs

3.4 Table 26 below sets out the comparatively assessed costs and their weightings within the overall Stage B BPI assessment score.

Table 26: Final Determination BPI scoring for comparatively assessed costs by network

Comparatively assessed cost category	Weighting	Efficiency benchmark	Efficiency Score	BPI reward/penalty, bps
EoE - Econometric Modelling	86%	0.98	0.98	1.29
EoE - Ratio Benchmarking	7%	1.01	1.03	-0.16
Lon - Econometric Modelling	79%	0.98	1.01	-2.92
Lon - Ratio Benchmarking	13%	1.01	1.06	-0.55
NW - Econometric Modelling	89%	0.98	1.07	-8.62
NW - Ratio Benchmarking	6%	1.01	1.04	-0.17
WM - Econometric Modelling	89%	0.98	0.95	35.44
WM - Ratio Benchmarking	6%	1.01	1.00	0.87
Cadent Total Comparative				3.89

3.5 The changes to the comparatively assessed costs outcome in our Final Determinations come from the cost modelling updates and adjustments following our Draft Determinations. For all Cadent networks, the share of costs assessed through the regression has fallen at Final Determinations relative to Draft Determinations, reflecting updates to our approach to exclusions. In response to Draft Determinations, Cadent highlighted that there was an error in the calculation of the regressed costs, specifically the calculation used RIIO-GD2 input data rather than RIIO-GD3 and used smoothed costs and driver data instead of unsmoothed. We acknowledge there was an error within the BPI calculations in our Draft Determinations which resulted in the value of BPI outcomes being incorrectly stated. We have corrected this for Final

Determinations. Cadent also noted concerns in relation to the implementation of the ratio benchmarking used to inform the comparative assessment of the non-regressed costs. For example, it noted that for MOBs both NGN and WWU are shown to have higher allowances than their original business plan submissions which it said makes the respective networks look more efficient than they are. We have updated the model in relation to this issue. Further details can be found on these issues in Chapter 5 of the GD Annex.

3.6 The efficiency rankings of GDNs have changed in our Final Determinations. West Midlands has replaced NGN to be the frontier network in the econometric modelling and receives the maximum Stage B reward. East of England moved to second place (from third in our Draft Determinations), with North London remaining at fifth and North West moving from sixth to seventh in the ranking. Cadent proposed that we use the glide path instead of the 85th percentile efficiency benchmark. Whilst we reject this specific proposal, we have decided to change the efficiency benchmark from the 85th percentile to the 81st percentile, as set out in the BPI section within Chapter 5 of the GD Annex.

Bespoke costs

3.7 The changes to the bespoke costs BPI outcome in our Final Determinations are the result of the adjustments to the treatment of cost items as bespoke costs. Compared to our Draft Determinations, we have moved more Cadent-specific costs and costs that are common across the GDNs into technical assessment. Cadent agreed with the assessment of the bespoke costs in their consultation document. It noted that it has reviewed the calculations and detail we provided and have verified that they are consistent with the outcomes of our Draft Determination assessment of bespoke outputs. For more information on our technical assessment and bespoke assessment in our Final Determinations, see Chapter 5 of the GD Annex and Chapter 5 of this document.

3.8 Tables 27-30 below set out bespoke costs assessed for each Cadent network.

Table 27: Final Determinations BPI scoring for bespoke cost activities for EoE

Bespoke Cost	**Weighting**	**BPI reward/penalty, bps**
Advanced Leakage Detection (ALD)	0.23%	0.05
Electric Vehicles (EVs)	0.16%	0.03

Bespoke Cost	**Weighting**	**BPI reward/penalty, bps**
Gas Safety (Installation and Use) Regulations 1998 (GSIUR) disconnections	0.43%	0.09
Cyber opex	[REDACTED]	[REDACTED]
Digital Platform for Leakage Analytics (DPLA)	0.06%	0.01
Cyber UIOLI	[REDACTED]	[REDACTED]
West Winch	0.42%	0.08
Tinsley Viaduct	1.08%	0.22
Flow Weighted Average Calorific Value Metering Compliance (FWACV)	0.87%	0.17
Cyber capex	[REDACTED]	[REDACTED]
ALD capex	0.28%	0.06
PSUP capex	[REDACTED]	[REDACTED]
EVs capex	0.03%	0.01
Tier 1 Iron Stubs	0.31%	0.06
Robotic Intervention	0.29%	0.06

Table 28: Final Determinations BPI scoring for bespoke cost activities for Lon

Bespoke Cost	**Weighting**	**BPI reward/penalty, bps**
ALD	0.10%	0.02
EVs	0.14%	0.03
GSIUR disconnections	0.22%	0.04

Bespoke Cost	**Weighting**	**BPI reward/penalty, bps**
Cyber opex	[REDACTED]	[REDACTED]
DPLA	0.03%	0.01
Cyber UIOLI	[REDACTED]	[REDACTED]
FWACV	0.37%	0.07
Cyber capex	[REDACTED]	[REDACTED]
PSUP capex	[REDACTED]	[REDACTED]
ALD capex	0.01%	0.00
EVs capex	0.03%	0.01
Robotic Intervention	0.62%	0.12
Tier 1 Iron Stubs	0.56%	0.11
London Medium Pressure capex	0.93%	0.19
Grays Medium Pressure capex	0.07%	0.01
London Medium Pressure repex	2.77%	0.55
Grays Medium Pressure repex	1.01%	0.20

Table 29: Final Determinations BPI scoring for bespoke cost activities for NW

Bespoke Cost	**Weighting**	**BPI reward/penalty, bps**
ALD	0.21%	0.04
EVs	0.19%	0.04
GSIUR disconnections	0.44%	0.09

Bespoke Cost	Weighting	BPI reward/penalty, bps
Cyber opex	[REDACTED]	[REDACTED]
DPLA	0.08%	0.02
Cyber UIOLI	[REDACTED]	[REDACTED]
FWACV	0.70%	0.14
Cyber capex	[REDACTED]	[REDACTED]
ALD	0.17%	0.03
PSUP capex	[REDACTED]	[REDACTED]
EVs	0.04%	0.01
Robotic Intervention	0.09%	0.02
Tier 1 Iron Stubs	0.69%	0.14

Table 30: Final Determinations BPI scoring for bespoke cost activities for WM

Bespoke Cost	Weighting	BPI reward/penalty, bps
ALD	0.22%	0.04
EVs	0.14%	0.03
GSIUR disconnections	0.31%	0.06
Cyber opex	[REDACTED]	[REDACTED]
DPLA	0.11%	0.02
Cyber UIOLI	[REDACTED]	[REDACTED]
FWACV	0.66%	0.13

Bespoke Cost	Weighting	BPI reward/penalty, bps
Cyber capex	[REDACTED]	[REDACTED]
EVs	0.03%	0.01
ALD	0.09%	0.02
PSUP capex	[REDACTED]	[REDACTED]
Robotic Intervention	0.28%	0.06
Tier 1 Iron Stubs	1.10%	0.22

Company results

3.9 The company level result for Stage B for Cadent has been calculated as the weighted average of its four networks. Total BPI and comparative BPI are reported as the bps of Cadent's RoRE over all RIIO-GD3 years, and not a simple summation of BPI components over all the four networks. BPI for each network's bespoke cost are the total of individual projects. This is the same as our approach to calculating the Stage B outcomes at Draft Determinations.

Stage C

3.10 The below section sets out the Final Determinations result and rationale for the Clarity and Business Plan Commitments assessments for Stage C of the BPI. NGN responded to this question with some feedback on our Stage C proposals for Cadent and some general feedback on the assessment process. Our response to NGN's general feedback is within Chapter 5 of the Overview Document.

Clarity

Final Determination assessment result: 4.2 bps

3.11 We have decided to implement our Draft Determinations position that Cadent scored 4.2 bps for the BPI Stage C Clarity assessment. This reflects that it scored 'outstanding' against 'layout and structure', 'accessibility and conciseness' and 'coherence and justification', and 'acceptable' against 'relevance of information' and 'clarity of information that supports the demonstration of value to consumers.' The rationale for this result is set out in our Draft Determinations Cadent Annex.

3.12 We received three responses to our Draft Determinations question on Cadent's Stage C score. Two of the responses, from Cadent and Cadent's ISG, were supportive of the Clarity score proposed in our Draft Determinations.

3.13 However, NGN responded disagreeing with our assessment, citing what it perceived as inconsistencies and subjectivity in specific areas compared to the BPI assessment of its business plan. We disagree with NGN's view and consider the BPI assessment undertaken by all reviewers to have been rigorous, balanced, and supported by consistency and calibration checks integrated into the process.

3.14 We consider it appropriate to rate Cadent as 'outstanding' for its business plan's clarity because it was easy to navigate, with a clear layout and signposting; it made effective use of text, tables, charts, subheadings, and case studies; and it placed clear emphasis on consumer value and stakeholder engagement, among other positives. Overall, despite minor discrepancies and weaknesses, it was 'outstanding' as measured against the scorecard.

Business Plan Commitments

Final Determinations overall assessment result: 0.7 bps

Outcome: Infrastructure fit for a low-cost energy transition

Final Determinations assessment result: 0 bps

3.15 We have decided to implement our Draft Determinations position that Cadent scored 0 bps for the outcome 'infrastructure fit for a low-cost energy transition' in our BPI Stage C Commitments assessment. This reflects that each of the assessment criteria for this outcome were rated as 'acceptable'. The rationale for this result is set out in our Draft Determinations Cadent Annex.

3.16 Cadent disagreed with our proposed 'acceptable' rating for its business plan under this outcome, asserting that its shrinkage targets are highly ambitious. It highlighted its Advanced Leakage Management Approach (ALMA) proposal, which is a three-part strategy - to detect, analyse, and intervene - using ALD, the DPLA, and its proposed ALIP to cut methane leakage. Cadent estimated that this approach could deliver up to twice the leakage reduction compared to standard model estimates, though it stated this was not fully reflected in the data provided in its business plan due to our prescribed methodology for the provision of shrinkage estimates. Cadent argued that, given its view that it has the most ambitious leakage reduction targets of all GDNs, an 'acceptable' rating was unjustified and that its plan merited an 'outstanding' score.

3.17 We do not agree with Cadent. Its ALIP proposal has not been fully approved; therefore, even if this approach had been reflected in its shrinkage target, we consider it is unlikely Cadent would achieve that target, as it depends on workloads that have not been approved. Furthermore, the methodology set out in our BPG for cost-benefit analysis remains appropriate, not least because it is consistent with HM Treasury's Green Book. Lastly, we can only assess the information provided to us within the business plans of the network companies. Therefore, we disagree with Cadent's assessment that its 'acceptable' rating should be 'outstanding', as it was not reflected within the information provided to us for assessment.

Outcome: Secure and resilient supplies

Final Determinations assessment result: -1.3 bps

3.18 We have confirmed our Draft Determinations position that Cadent scored -1.3 bps for the outcome 'secure and resilient supplies' in our BPI Stage C Commitments assessment. While the overall score remains unchanged, the basis for the calculation has been revised since our Draft Determinations. Previously, Cadent was assessed as 'poor' under the 'new company proposals' criterion because we proposed to reject one of its flagship initiatives, the ALIP, on engineering grounds. It was otherwise scored as 'acceptable' under the 'deliverability', 'consumer value and additionality' and 'stretching performance' criteria. We have now determined that Cadent should be scored as 'acceptable' under 'new company proposals', but 'poor' under 'deliverability'.

3.19 Cadent disagreed with our Draft Determinations proposal of a 'poor' rating under 'new company proposals', arguing that this contradicts our BPG and previous praise for its advanced leakage management. Cadent contended that the ALIP programme is well-evidenced and aligns with the criteria for new company proposals, making the penalty unjustified.

3.20 We have reconsidered the score for this criterion because we have decided to partially accept some of the workload Cadent proposed through ALIP, as set out in paragraphs 2.37 to 2.41 and Appendix 1. This reflects the additional justification and options Cadent provided for the ALIP-driven workloads. As a result, we have increased the associated non-mandatory repex costs and volumes. Since we are not rejecting the ALIP-driven workloads in full, we do not consider it appropriate to penalise Cadent for its proposal. We note that Cadent has led the development of the DPLA, but this has been funded through the RIIO-2 Strategic Innovation Fund (SIF) and has not yet been rolled out consistently

across the GDNs. We therefore do not consider this should be rewarded through the BPI and have scored Cadent as 'acceptable'. We maintain that ALD and the DPLA should be used to prioritise workload, rather than justifying large increases in workload.

3.21 Separately, we have decided to score Cadent as 'poor' under 'deliverability' for this outcome. This reflects concerns raised in our Draft Determinations regarding the reliability of Cadent's Tier 1 repex workload forecasts. In their responses to our Draft Determinations, WWU and SGN expressed concerns that Cadent and NGN's forecasted Tier 1 replacement volumes in the diameter band mix showed a substantial change compared to historical delivery.

3.22 Following further engagement and analysis after our Draft Determinations, we consider these forecasts posed a risk of overfunding, particularly for Cadent and NGN, and risked distorting the efficiency scores in the benchmark modelling. To address this, we have normalised the GDNs' workload forecasts using our own forecasts to correct for these concerns. We therefore consider it appropriate to reflect this adjustment in our Stage C assessment. Further detail on these concerns and how costs were treated based on these findings can be found in the repex synthetic cost driver section of Chapter 5 of the GD Annex.

Outcome: High quality of service from regulated firms

Final Determinations assessment result: 2.0 bps

3.23 We have confirmed our Draft Determinations position that Cadent scored 2.0 bps for the 'high quality of service from regulated firms' outcome in our BPI Stage C Commitments assessment. This score reflects that the 'deliverability', 'consumer value and additionality' and 'stretching performance' criteria have been rated as 'outstanding'. However, 'new company proposals' have been rated as 'poor' as we consider some of its business plan proposals lacked sufficient evidence of consumer benefit (eg trialling a Services Beyond the Meter blueprint and customer satisfaction surveys for 'worst-served customers') or clear deliverability plans (eg expanding the Collaborative Streetworks ODI-F). The rationale for this result is set out in our Draft Determinations Cadent Annex.

3.24 Cadent argued that our Draft Determinations proposal to rate its 'new company proposals' on this outcome as 'poor' was inconsistent with our Business Plan Guidance. It said the initiatives we assessed as poor were supported by both customers and its ISG. Cadent contended that it is unreasonable to expect full evidence of consumer benefit before trials are conducted, as the trials are intended to generate such evidence. It also argued that our rating of its proposal

to expand the Collaborative Streetworks ODI-F as 'poor' was inconsistent with our proposal to expand the incentive (see Chapter 3 of the GD Annex).

3.25 Cadent's ISG also disagreed with our proposed rating for its Services Beyond the Meter initiative, arguing that our score failed to recognise the role GDNs can play in supporting vulnerable customers during the energy transition. It asserted that penalising proactive, self-funded initiatives risks discouraging innovation and deterring network companies from proposing future solutions that could benefit customers.

3.26 We disagree and continue to consider that Cadent's 'new company proposals' should be rated as 'poor'. Our assessment is based on the information provided to us within the business plans of the network companies, and Cadent's plan did not contain sufficient justification for these proposals, including for its Services Beyond the Meter proposal. As stated in our Draft Determinations, we welcome efforts to improve knowledge, reduce emergency callouts and address consumer vulnerability. However, we are concerned that this research may seek to expand the GDNs' role in consumer vulnerability beyond their existing areas of competence, activity and consumer interaction, which we do not support. We also continue to disagree with Cadent's proposal to survey 'worst served consumers', as this conflicts with our SSMD decision that these consumers are already sufficiently accounted for through the existing Customer Satisfaction and Complaints Metric ODI-Fs.

3.27 Cadent also failed to justify its proposal to expand the Collaborative Streetworks ODI-F nationwide or provide sufficient detail on implementation. The relevant section of its business plan was only four sentences long, which did not provide sufficient detail to satisfy the criteria in paragraph 3.28 of the Business Plan Guidance. As stated in our Draft Determinations, Cadent did not provide evidence of interest from specific local authorities, identify regions for expansion, or outline how the incentive could work in RIIO-GD3. For example, it lacked detailed criteria for determining expansion areas or on adapting key ODI-F design elements, such as incentive exposure and rates. Our proposal and subsequent decision to expand the ODI-F has been based on separate engagement we have had with local authorities, not on Cadent's business plan justification which we considered to be poor. The implementation of this expansion has required us to undertake significant policy development given the absence of critical information from Cadent's proposal.

4. Managing uncertainty

4.1 This chapter sets out our views on UMs that are specific to Cadent, including bespoke UM proposals submitted through its business plan.

London Subways and Tunnels Re-opener

Purpose: To provide Cadent with additional efficient costs for its Tier 1 Mains replacement work, if required, to enable it to comply with specific safety-related legislation requiring the use of utility subways in London for gas assets.

Benefits: Enables Cadent's Tier 1 mains replacement programme to be flexible to comply with legislation relating to the proximity to subways in London.

Final Determinations summary

Design	Final Determination	Draft Determination
UM type	Re-opener.	Same as FD.
Scope	This re-opener can adjust Cadent's totex allowance to provide funding for additional engineering costs relating to requirements from specified safety legislation for tunnels and subways.	Change - from adjusting the Tier 1 Mains Decommissioned PCD allowance.
Authority triggered	No.	Same as FD.
Network company re-opener window	1 October 2027 – 7 October 2027.	Change - 24 April 2028 – 30 April 2028.
Materiality threshold	Default materiality threshold (see Chapter 6 of the Overview Document).	Same as FD.
Applied to	Cadent North London.	Same as FD.

Final Determination rationale and Draft Determination responses

UM type

4.2 We have decided to introduce the London Subways and Tunnels Re-opener to adjust Cadent's totex allowance for additional engineering costs arising from work that needs to be carried out in compliance with legislation relating to London Subways and Tunnels.

4.3 In its Draft Determinations response, Cadent supported the introduction of the re-opener. It stated that it is currently carrying out a feasibility study which will provide greater clarity on the costs and timings to inform the allowances it requires for RIIO-GD3.

4.4 However, Cadent opposed our proposed re-opener design. It said that the ability for the re-opener to adjust its Tier 1 Mains Decommissioned PCD could create complexity. Instead, Cadent suggested drafting the re-opener licence condition with the option to add PCDs.

4.5 We agree with Cadent that adjusting the Tier 1 Mains Decommissioned PCD could be complex. The London Subways Tunnels Re-opener will therefore allow the adjustment of Cadent's totex allowance, instead of its Tier 1 Mains Decommissioned PCD allowance. We will consider applying PCDs, if appropriate, when assessing the re-opener application during the price control.

Scope

4.6 The re-opener will allow Cadent to cover additional costs for replacing Tier 1 mains in London subways and tunnels in its North London network to comply with legislative requirements relating to subways and tunnels from:

- Section 3 of the Health and Safety at Work Act 1974;
- the London County Council (Subways) Act 1893; and
- the City of London (Various Powers) Act 1900.

4.7 This is a change from our Draft Determinations proposal where we included Regulation 13 of the Pipeline Safety Regulations in the scope. Regulation 13 requires the GDNs to maintain pipelines in an efficient state, working order and in good repair. We removed reference to this regulation because it applies universally to all GDNs and does not impose specific requirements for works in London Subways and Tunnels. This re-opener focuses on extra costs incurred by Cadent specifically for its Tier 1 repex programme within London Subways and Tunnels, therefore we have amended the scope to ensure that the correct legislation governing these works is referred to.

4.8 Costs submitted through this re-opener must not already be included in any existing PCDs or baseline allowances and there should be a clear distinction between different engineering challenges compared to normal Tier 1 iron mains replacement projects.

4.9 We did not receive any comments on the scope of the re-opener from stakeholders in response to our Draft Determinations.

Re-opener triggers

4.10 We have decided to set a single window for Cadent to trigger the re-opener between 1 October 2028 and 7 October 2028. This re-opener will not be authority triggered. No feedback on the trigger window was received from stakeholders.

4.11 We have changed the trigger window from our Draft Determination proposal following a holistic consideration of the number and timing of re-opener windows across the full suite of re-opener mechanisms in all three sectors. More information about the default re-opener design parameters can be found in Chapter 6 of the Overview Document. We consider this trigger window will provide Cadent sufficient time to complete its feasibility study for the project.

Materiality threshold

4.12 We have decided to keep the materiality threshold proposed in our Draft Determinations at 0.5% of ex ante base revenue - in line with the default set out in Chapter 6 of the Overview Document. No stakeholders commented on this approach, so we consider it remains appropriate to apply the default materiality threshold.

Repex Uncertainty Mechanism Tables

4.13 Tables 31 - 34 below provide additional detail on the company-specific cost allowances and workload volumes for the Tier 2A Mains and Services Replacement Volume Driver. For more information on the policy decisions regarding this UM, please see Chapter 4 of the GD Annex.

Tier 2A Mains and Services Replacement Volume Driver

Table 31: Tier 2A unit costs by diameter band - East of England (£ per km mains decommissioned including associated service interventions)

Diameter band (inches)	26/27	27/28	28/29	29/30	30/31
>8 to <10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
≥10 to ≤12	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
>12 to <18	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 32: Tier 2A unit costs by diameter band - London (£ per km mains decommissioned including associated service interventions)

Diameter band (inches)	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**
>8 to <10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
≥10 to ≤12	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
>12 to <18	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 33: Tier 2A unit costs by diameter band - North West (£ per km mains decommissioned including associated service interventions)

Diameter band (inches)	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**
>8 to <10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
≥10 to ≤12	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
>12 to <18	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Table 34: Tier 2A unit costs by diameter band - West Midlands (£ per km mains decommissioned including associated service interventions)

Diameter band (inches)	**26/27**	**27/28**	**28/29**	**29/30**	**30/31**
>8 to <10	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
≥10 to ≤12	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
>12 to <18	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

5. Cost of service

Introduction

5.1 This chapter sets out our decision on efficient totex allowances for Cadent in RIIO-GD3. This chapter should be read alongside other parts of our Final Determinations that set out our overall approach to RIIO-GD3. In particular, Chapter 5 of the GD Annex, which provides more detail on our proposed cost assessment approach, and modelling methodology and process.

Efficient totex allowances

5.2 We have decided to set Cadent efficient totex of £7.1bn in RIIO-GD3 at Final Determination. This is an increase of £853.7m compared to our Draft Determination position, driven by the changes to our assessment of investment need and modelling approach (see GD Annex Chapter 5 for further details).

5.3 Our efficient totex allowances comprise forecast controllable costs on a net basis[12] and are inclusive of our ongoing efficiency (OE) challenge, unless otherwise stated. Figures presented in this chapter do not include real price effects (RPEs), to allow direct comparison with other GDNs.

5.4 Table 35 below sets out Cadent's submitted and efficient totex allowances for RIIO-GD3. Submitted totex includes resubmissions (see the Resubmissions section of Chapter 5 of the GD Annex for further information).

[12] Net costs are gross costs minus any 'contributions' the GDNs receive from third parties towards the work undertaken. Some activities may have chargeable elements, resulting in full or partial payment by third parties, with the remainder chargeable to customers through the RIIO price control framework.

Table 35: Cadent RIIO-GD3 submitted totex and efficient totex by network (£m, 2023/24 prices)

GDN	Submitted totex, £m	FD efficient totex, £m	DD proposed totex, £m	Difference FD vs submitted, £m	Difference FD vs submitted, %
Cadent - EoE	2671.2	2370.0	2092.2	-301.2	-11%
Cadent - Lon	2264.2	1950.3	1676.6	-313.8	-14%
Cadent - NW	1917.3	1564.5	1397.5	-352.8	-18%
Cadent - WM	1392.3	1251.3	1116.2	-140.9	-10%
Cadent - all networks	8244.9	7136.2	6282.5	-1108.7	-13%

Summary of our assessment

5.5 We have decided to exclude various costs from the econometric benchmarking and assess them through non-regression or technical assessment routes, where we consider that cost activities are not well suited to regression assessment. Table 36 below shows the breakdown of submitted costs by each assessment route at Final Determinations.

Table 36: Company submitted totex by cost assessment approach (£m, 2023/24 prices)

GDN	Submitted totex, £m	Regression benchmarking, £m	Non-regression assessment, £m	Technically assessed, £m
Cadent - EoE	2,809.6	2,354.1	218.4	237.1
Cadent - Lon	2,385.6	1,792.5	332.4	260.7
Cadent - NW	2,000.9	1,730.6	133.8	136.5
Cadent - WM	1,453.9	1,256.1	91.0	106.8
Cadent - all networks	8,650.0	7,133.4	775.6	741.1

Pre-modelling, normalisations and adjustments

Background

5.6 To ensure that our cost benchmarking is carried out on a comparable basis between GDNs, submitted data is adjusted to correct for inconsistencies in reporting and the influence of regional and company specific factors.

5.7 Our approach and rationale for pre-modelling adjustments for all GDNs are set out in detail in Chapter 5 of the GD Annex.

Regression

Cost drivers

Background

5.8 Our decisions regarding adjustments to cost drivers are set out in Chapter 5 of the GD Annex. See Appendix 1 for further details of our engineering review.

5.9 Tables 37-40 summarise the adjustments we have made to each GDN cost driver in the Composite Scale Variable (CSV) for RIIO-GD3, following the outcomes of our assessment process and application of pre-modelling adjustments.

Table 37: Final adjustments to cost drivers for Cadent's East of England network in RIIO-GD3

CSV driver (units)	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Repex (£m)	990	840	947	-150	-15%

CSV driver (units)	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Reinforcements (£m)	54	39	11	-15	-28%
Connections (£m)	28	28	25	0	0%
Emergency CSV (No.)	6,548,571	6,548,571	6,548,571	0	0%
External condition reports (No.)	72,824	72,824	72,824	0	0%
Maintenance MEAV (No.)	25,246	25,246	20,271	0	0%
MEAV (£m)	101,555	101,555	81,598	0	0%
Cadent - EoE Total[13] (#)	11,475	10,711	10,206	-763	-7%

[13] This is the weighted average of the CSV components. See the CSV weights section within Chapter 5 of the GD annex for further details on weightings for each component.

Table 38: Final adjustments to cost drivers for Cadent's London network in RIIO-GD3

CSV driver	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Repex (£m)	709	582	678	-127	-18%
Reinforcements (£m)	9	6	2	-2	-28%
Connections (£m)	14	14	13	0	0%
Emergency CSV (No.)	3,962,991	3,962,991	3,962,991	0	0%
External condition reports (No.)	58,947	58,947	58,947	0	0%
Maintenance MEAV (No.)	8,988	8,988	7,217	0	0%
MEAV (£m)	54,851	54,851	44,364	0	0%
Cadent - Lon Total[14] (#)	6,790	6,225	6,069	-535	-8%

[14] This is the weighted average of the CSV components. See the CSV weights section within Chapter 5 of the GD annex for further details on weightings for each component.

Table 39: Final adjustments to cost drivers for Cadent's North West network in RIIO-GD3

CSV driver	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Repex (£m)	754	591	688	-163	-22%
Reinforcements (£m)	17	13	4	-5	-28%
Connections (£m)	11	11	10	0	0%
Emergency CSV (No.)	4,707,331	4,707,331	4,707,331	0	0%
External condition reports (No.)	71,285	71,285	71,285	0	0%
Maintenance MEAV (No.)	13,165	13,165	9,608	0	0%
MEAV (£m)	65,583	65,583	51,773	0	0%
Cadent - NW Total[15] (#)	7,786	7,044	6,723	-742	-10%

Table 40: Final adjustments to cost drivers for Cadent's West Midlands network in RIIO-GD3

CSV driver	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Repex (£m)	565	476	527	-89	-16%

[15] This is the weighted average of the CSV components. See the CSV weights section within Chapter 5 of the GD annex for further details on weightings for each component.

CSV driver	Submitted	FD modelled	DD modelled	FD Difference vs submitted	FD Difference vs submitted, %
Reinforcements (£m)	13	9	3	-4	-28%
Connections (£m)	11	11	10	0	0%
Emergency CSV (No.)	3,281,941	3,281,941	3,281,941	0	0%
External condition reports (No.)	40,820	40,820	40,820	0	0%
Maintenance MEAV (No.)	11,074	11,074	8,892	0	0%
MEAV (£m)	50,574	50,574	40,642	0	0%
Cadent - WM Total[16] (#)	5,910	5,500	5,215	-410	-7%

Non-regression

Background

5.10 Our approach to assessing costs for non-regression activities for RIIO-GD3 at Final Determinations is set out in the Non-Regression Benchmarking section of Chapter 5 in the GD Annex.

5.11 Tables 41-44 present a summary of submitted and allowed modelled costs for each non-regression category for Cadent networks in RIIO-GD3. The reductions set out below result from the removal of workloads or costs deemed unjustified following engineering review and as a result of our non-regression cost assessment approaches.

[16] This is the weighted average of the CSV components. See the CSV weights section within Chapter 5 of the GD annex for further details on weightings for each component.

5.12 The modelled costs presented in the tables below do not include our catch-up and ongoing efficiency challenges.

Table 41: Submitted and allowed modelled costs for non-regression cost activities for East of England in RIIO-GD3 (£m, 2023/24)

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Multiple Occupancy Buildings (MOBs)	42.5	41.9	15.9	-0.6	-1%
Diversions	76.9	55.6	0.0	-21.3	-28%
Streetworks	90.7	78.3	107.2	-12.4	-14%
Smart metering	2.3	2.4	2.3	0.1	6%
Land remediation	2.7	2.7	2.7	0.0	0%
SIU	0.0	0.0	0.0	0.0	0%
Growth governors	3.4	2.2	0.0	-1.2	-36%

Table 42: Submitted and allowed modelled costs for non-regression cost activities for London in RIIO-GD3 (£m, 2023/24)

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Multiple Occupancy Buildings (MOBs)	101.7	100.3	48.5	-1.5	-1%
Diversions	81.7	58.9	0.0	-22.8	-28%
Streetworks	146.5	123.6	145.6	-22.8	-16%
Smart metering	1.0	1.1	1.0	0.1	7%
Land remediation	0.4	0.4	0.4	0.0	0%
SIU	0.0	0.0	0.0	0.0	0%

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Growth governors	1.0	0.6	0.00	-0.4	-43%

Table 43: Submitted and allowed modelled costs for non-regression cost activities for North West in RIIO-GD3 (£m, 2023/24)

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Multiple Occupancy Buildings (MOBs)	25.2	24.8	7.9	-0.4	-2%
Diversions	52.0	37.3	0.0	-14.8	-28%
Streetworks	50.1	43.6	60.1	-6.6	-13%
Smart metering	1.5	1.6	1.6	0.1	8%
Land remediation	1.4	1.4	1.4	0.0	0%
SIU	0.0	0.0	0.0	0.0	0%
Growth governors	3.6	2.3	0.0	-1.3	-35%

Table 44: Submitted and allowed modelled costs for non-regression cost activities for West Midlands in RIIO-GD3 (£m, 2023/24)

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Multiple Occupancy Buildings (MOBs)	23.9	23.5	7.55	-0.3	-1%
Diversions	28.0	20.4	0.0	-7.6	-27%
Streetworks	35.9	33.2	48.7	-2.7	-7%
Smart metering	1.3	1.4	1.3	0.1	7%

Non-regression activity	Submitted, £m	FD allowed modelled costs, £m	DD allowed modelled costs, £m	FD allowed modelled vs submitted, £m	FD allowed modelled vs submitted, £m
Land remediation	1.0	1.0	1.0	0.0	0%
SIU	0.0	0.0	0.0	0.0	0%
Growth governors	0.9	0.6	0.0	-0.3	-35%

Technically assessed costs

Background

5.13 Our approach to assessing costs for technically assessed activities for RIIO-GD3 at Final Determinations is set out in the Technically assessed Costs section of Chapter 5 in the GD Annex. Tables 45-48 below set out the adjustments we have made through technical assessment for RIIO-GD3.

Technically assessed costs Final Determinations decisions and rationale

5.14 We have decided to technically assess the costs for Robotic intervention. In our Draft Determinations, we included costs and workload in the totex regression. However, following the review of the additional evidence put forward by Cadent in its consultation response, we consider that the costs associated with Robotic intervention meet the criteria for separate assessment. See Chapter 5 in the GD Annex for further information.

5.15 We have also decided to partially fund the West Winch Pipeline (East of England network). Whilst we recognised in the model files an exclusion for this project in our Draft Determinations, we rejected the proposal as we considered the needs case unjustified based on the available evidence, there was too much uncertainty, and more robust data was required to support the proposal. In response to our Draft Determinations, Cadent submitted further evidence that justified the needs case and optioneering for the feasibility study and ongoing maintenance. We have therefore decided to fund and assess this project. See Chapter 2 for further details of the associated PCD for the West Winch pipeline.

5.16 The modelled costs presented in the tables below include any adjustments resulting from the technical assessment process, but do not include our ongoing efficiency challenge.

Table 45: Submitted and allowed modelled costs for technically assessed cost activities for East of England in RIIO-GD3 (£m, 2023/24)

Technically assessed activity	**Submitted, £m**	**FD allowed costs, £m**	**DD allowed costs, £m**	**FD allowed vs submitted, £m**	**FD allowed vs submitted, %**
Cyber	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ALD	18.6	13.5	13.5	-5.1	-27%
DPLA	1.5	1.5	1.5	0.0	0%
Large rechargeable LTS diversions	0.0	0.0	0.0	0.0	0%
Tier 1 iron stubs	9.7	8.4	0.0	-1.3	-13%
PSUP capex	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Major projects	11.3	11.2	0.0	-0.1	0%
Electric vehicles	26.9	5.2	0.0	-21.7	-81%
Robotic intervention	7.6	7.6	0.0	0.0	0%
GSIUR disconnections	41.3	11.5	0.0	-29.7	-72%
Intermediate pressure and medium pressure steel services	0.0	0.0	0.0	0.0	0%

Table 46: Submitted and allowed modelled costs for technically assessed cost activities for London in RIIO-GD3 (£m, 2023/24)

Technically assessed activity	**Submitted, £m**	**FD allowed costs, £m**	**DD allowed costs, £m**	**FD allowed vs submitted, £m**	**FD allowed vs submitted, %**
Cyber	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ALD	7.7	2.6	2.6	-5.1	-66%
DPLA	0.7	0.7	0.7	0.0	0%

Technically assessed activity	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
Large rechargeable LTS diversions	0.0	0.0	0.0	0.0	0%
Tier 1 iron stubs	15.1	13.3	0.0	-1.8	-12%
PSUP capex	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Major projects	0.0	0.0	0.0	0.0	0%
Electric vehicles	20.7	4.0	0.0	-16.7	-81%
Robotic intervention	14.6	14.6	0.0	0.0	0%
GSIUR disconnections	24.0	5.3	0.0	-18.7	-78%
Intermediate pressure and medium pressure steel services	0.0	0.0	0.0	0.0	0%

Table 47: Submitted and allowed modelled costs for technically assessed cost activities for North West in RIIO-GD3 (£m, 2023/24)

Technically assessed activity	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
Cyber	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ALD	12.3	7.2	7.2	-5.1	-42%
DPLA	1.5	1.5	1.5	0.0	0%
Large rechargeable LTS diversions	0.0	0.0	0.0	0.0	0%
Tier 1 iron stubs	13.1	13.1	0.0	0.0	0%

Technically assessed activity	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
PSUP capex	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Major projects	0.0	0.0	0.0	0.0	0%
Electric vehicles	22.5	4.3	0.0	-18.2	-81%
Robotic intervention	1.7	1.7	0.0	0.0	0%
GSIUR disconnections	28.7	8.3	0.0	20.4	-71%
Intermediate pressure and medium pressure steel services	0.0	0.0	0.0	0.0	0%

Table 48: Submitted and allowed modelled costs for technically assessed cost activities for West Midlands in RIIO-GD3 (£m, 2023/24)

Technically assessed activity	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
Cyber	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
ALD	9.3	4.3	4.3	-5.0	-54%
DPLA	1.5	1.5	1.5	0.0	0%
Large rechargeable LTS diversions	0.0	0.0	0.0	0.0	0%
Tier 1 iron stubs	14.9	14.9	0.0	0.0	0%
PSUP capex	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Major projects	0.0	0.0	0.0	0.0	0%
Electric vehicles	12.5	2.4	0.0	-10.1	-81%

Technically assessed activity	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
Robotic intervention	3.8	3.8	0.0	0.0	0%
GSIUR disconnections	18.3	4.2	0.0	-14.1	-77%
Intermediate pressure and medium pressure steel services	0.0	0.0	0.0	0.0	0%

Bespoke outputs Final Determinations summary

Design	Final Determination	Draft Determination
Bespoke outputs	Partially fund four bespoke outputs totalling £196.7m across the Cadent networks.	Partially fund two bespoke repex projects, London medium pressure and Grays medium pressure (both London network), in line with the costs requested by Cadent.

Final Determination rationale and Draft Determination responses

5.17 We have decided to partially fund four bespoke outputs totalling £196.7m across the Cadent company networks. Allowances for these projects are presented in Tables 49-52.

5.18 We have allowed in full £120.1m for three bespoke repex projects, Tinsley Viaduct (East of England), London Medium Pressure (London) and Grays Medium Pressure (London). We consider that these costs are well justified based on the evidence provided. The decision to separately assess these costs maintains our position at Draft Determinations. We consider these investments to be material and atypical, and therefore to meet the criteria for exclusion from the regression.

5.19 We have partially allowed £53.9m of the £55.9m total submitted costs for the Flow Weighted Average Calorific Value Metering Systems for Final Determinations. We have disallowed £2m of these costs because they relate to costs incurred at RIIO-GD2 and we do not consider it appropriate to fund historically incurred costs in RIIO-GD3 baseline allowances. Further details on the decision to allow these costs and the related PCD can be found in Chapter 2 of this document.

5.20 The modelled costs presented in the tables below include any adjustments resulting from the technical assessment process, but do not include our ongoing efficiency challenge.

Table 49: Submitted and allowed modelled costs for bespoke output cost activities for East of England in RIIO-GD3 (£m, 2023/24)

Bespoke Outputs	**Submitted, £m**	**FD allowed costs, £m**	**DD allowed costs, £m**	**FD allowed vs submitted, £m**	**FD allowed vs submitted, %**
Flow Weighted Average Calorific Value Metering Systems	23.5	23.0	0.0	-0.5	-2%
Tinsley Viaduct	28.8	28.8	0.0	0.0	0%

Table 50: Submitted and allowed modelled costs for bespoke output cost activities for London in RIIO-GD3 (£m, 2023/24)

Bespoke Outputs	**Submitted, £m**	**FD allowed costs, £m**	**DD allowed costs, £m**	**FD allowed vs submitted, £m**	**FD allowed vs submitted, %**
Flow Weighted Average Calorific Value Metering Systems	9.2	8.7	0.0	-0.5	-5%
London Medium Pressure	88.5	88.5	87.8	0.0	0%
Grays Medium Pressure	25.5	25.5	25.5	0.0	0%

Table 51: Submitted and allowed modelled costs for bespoke output cost activities for North West in RIIO-GD3 (£m, 2023/24)

Bespoke Outputs	**Submitted, £m**	**FD allowed costs, £m**	**DD allowed costs, £m**	**FD allowed vs submitted, £m**	**FD allowed vs submitted, %**
Flow Weighted Average Calorific Value Metering Systems	13.7	13.2	0.0	-0.5	-4%

Table 52: Submitted and allowed modelled costs for bespoke output cost activities for West Midlands in RIIO-GD3 (£m, 2023/24)

Bespoke Outputs	Submitted, £m	FD allowed costs, £m	DD allowed costs, £m	FD allowed vs submitted, £m	FD allowed vs submitted, %
Flow Weighted Average Calorific Value Metering Systems	9.5	9.0	0.0	-0.5	-5%

Final cost exclusions from totex

Background

5.21 In this section we provide further details of the cost activities that Cadent proposed for technical assessment or as bespoke outputs (ie cost to be excluded from the totex regression) in its business plan and its Draft Determinations response, and the decision we have reached on each of these cost activities for Final Determinations.

5.22 In its business plan, Cadent made several proposals for cost exclusion. At Draft Determinations, we evaluated each of these claims for exclusion from comparative regression benchmarking and proposed not to exclude the following costs (ie continue to assess them within the regression) as they did not meet the criteria set out in our SSMD for separate assessment:

(1) Robotic Intervention – Repex;

(2) FWACV Compliance Metering Systems;

(3) Capacity upgrades > 7bar;

(4) Net Zero Activities within baseline totex;

(5) Vulnerability activities within baseline totex;

(6) Physical Security (PSUP) – Opex;

(7) LTS Diversions;

(8) Modernisation of Field Service Management;

(9) Energy Control Centre Applications Rationalisation – Opex and Capex; and

(10) Network Infrastructure for Supervisory Control and Data Acquisition (SCADA) Operational Technology – Opex and Capex.

5.23 In its consultation response, Cadent broadly agreed with the list of exclusions from the totex regression made by us at Draft Determinations. However, it re-emphasised that Robotic Intervention, FWACV, Net Zero and Vulnerability related costs and PSUP Opex should be excluded from the totex regression.

Final Determinations summary

Design	Final Determination	Draft Determination
Excluded	Robotic Intervention.	Not excluded.
Excluded	FWACV.	Not excluded.
Not excluded	All other proposed exclusions (numbers 3-10 above).	Same as FD.

Final Determination rationale and Draft Determination responses

5.24 We have decided to exclude the costs for Robotic Intervention from the regression for Final Determinations. For more details refer to the Technically assessed costs section in Chapter 5 of the GD Annex.

5.25 We have also decided to exclude the costs associated with the FWACV system project which is the continuation of work started in RIIO-GD2 to replace obsolete energy volume meters across the Cadent pipe networks. This was excluded at RIIO-GD2 on the basis that non-Cadent networks do not have costs in this area. We agree with this should be implemented for RIIO-GD3 too. We are satisfied, based on the further information provided by Cadent in its response, that this project is distinct for Cadent and warrants being technically assessed. More detail on this cost exclusion is provided within Chapter 2 of the GD annex.

5.26 We have concluded that the costs associated with PSUP opex and those related to the Net Zero and Vulnerability activities should remain within the totex regression analysis. We consider these activities to be sufficiently common between GDNs and therefore find that they do not meet the criteria for separate assessment.

Engineering assessment of Cadent's Business Plan

EJP Review overview

5.27 Following our final review of Cadent's EJPs, we present our assessment for Final Determinations.

5.28 For Cadent EJP Determinations please see Appendix 1. Table 53 lists all justified EJPs, while Table 54 includes EJPs that were partially justified or unjustified.

EJP quality and data provision

5.29 Overall, our technical analysis found that Cadent had well justified needs cases.

5.30 Cadent provided industry leading data in areas such as Filters on offtakes & Pressure Reduction Station (PRS), Pressure Reduction on offtakes and PRS, Preheat on offtakes and PRS, Governor interventions and MOB Risers. This supported the needs, optioneering and scope cases for its proposals.

Assessment

5.31 We reviewed 25 Cadent's EJPs, totalling approximately £4.4bn planned for the RIIO-3 period. Following our technical review, we found that 14 EJPs were fully justified and recommended for approval without any adjustment to volumes.

5.32 A further 11 EJPs were partially justified where either the needs case, optioneering and/or scope did not provide sufficient justification for the full request. We recommended volume reductions when the data provided or narrative did not support the need for the intervention type requested. This is fully detailed in Appendix 1.

5.33 Additional reporting will be required for MOB risers to ensure only assets with a risk rating exceeding 100,000 are replaced.

6. Innovation

Background

6.1 The SSMD, Business Plan Guidance (BPG), Draft Determinations and Overview Document identify the criteria and process that we have used to assess NIA funding requests. The Overview Document also details our decisions for future of gas related innovation, NIA oversight, the SIF, increasing third party involvement and innovation deployment.

6.2 We set out below our Final Determinations on Cadent's RIIO-3 NIA funding.

Summary of Final Determinations

Design	Final Determinations	Draft Determinations
NIA funding	£18.4m allowed	£18m allowed

Final Determination rationale and Draft Determination responses

6.3 We have decided to allow Cadent £18.4m of NIA funding. In its business plan, Cadent requested £21.5m of funding.

6.4 In our Draft Determinations, we proposed allowing Cadent £18m of NIA. We had deducted £0.8m from Cadent's request due to our decision to retain the SIF Discovery Phase. Additionally, we had proposed reducing Cadent's award by 13% to reflect shortcomings in its business plan submission against the criteria set out in the BPG.

6.5 In its Draft Determinations response, Cadent provided further evidence against the criteria set out in the BPG. Cadent argued it had provided an appropriate amount of information on its key areas of focus for NIA spending and provided additional information on its network collaboration to identify and deliver NIA projects, how it ensures projects are not duplicative and why its innovation cannot be funded through totex allowances. We disagree that it had provided sufficient information on key areas of focus of NIA spending and expected further detail on the problems to be solved, potential solutions and why these were chosen. From the additional information provided, we found the evidence provided regarding duplication compelling, which led us to decrease its NIA reduction from 13% to 11%.

7. Data and Digitalisation

Introduction

7.1 The SSMD, BPG and Overview Document identify the criteria and process that we have used to assess the funding of proposed Data and Digitalisation investments. The Overview Document also details our decisions for further digitalisation of the sector through the existing Digitalisation licence condition and a Digitalisation Re-opener.

7.2 We have set out below our Final Determinations position on Cadent's RIIO-3 Data and Digitalisation funding.

Summary of Final Determinations

Design	Final Determinations	Draft Determinations
Data & Digitalisation funding	£30.9m allowed	£18.4m allowed

Final Determinations rationale and Draft Determinations responses

7.3 We have decided to allow Cadent £30.9m in Data and Digitalisation funding. In its business plan, Cadent had requested £30.9m.

7.4 Cadent's well-targeted RIIO-3 digitalisation strategy focuses on maturing internal digital capability and improving the accessibility and governance of its data. Cadent sets out three digital priorities; 'Digital Foundations', 'Digital Culture', and 'Data as a Strategic Asset'. These priorities are underpinned by a portfolio of targeted investments including the development of a unified data architecture, modernisation of regulatory reporting, and deployment of a leakage analytics platform. Cadent's proposals also demonstrated alignment with Data Best Practice (DBP) Guidance, and we are encouraged by its improvement and future ability to embed these principles at scale.

7.5 In the BPG we noted that all network companies should signpost investments that would allow them to connect and utilise the Data Sharing Infrastructure (DSI) effectively. Cadent has noted its intention to design systems compatible with wider sector standards and national infrastructure. Its investment in metadata standards, data catalogues and a Common Information Model demonstrate a strong foundation for future sector-wide coordination.

7.6 In our Draft Determinations we proposed to reject one of Cadent's investments, INV-50 'Unified Asset Investment Portfolio Management'. This totalled £12.5m, or 40% of its proposed investments. Despite proposing to approve the majority of

INV-50, we had concerns that the 'data inputs' and 'Future Energy Specialist' use case elements of the proposal duplicated the work of the Regional Energy System Planners (RESPs). We needed further clarity on how Cadent currently manages these functions and what additional value the geospatial tool provides. Following Cadent's consultation response, which provided further clarity on what the Future Energy Specialist would do and a more detailed technical explanation of the data inputs and outputs, we are satisfied that these activities complement the RESP, rather than duplicate it. As such, we have allowed all Cadent's proposed investments.

Appendix 1 - Summary of Engineering Review

Table 53: Cadent Justified EJPs

Ofgem Scheme Reference (OSR)	Title
EJP12	Pipeline Integrity
EJP01	Civil Interventions
EJP06	Housing Interventions
EJP16	Pressure Monitoring & Control on Governors
EJP02	EI&T on offtakes & PRS
EJP10	MOBs Risers
EJP13	Pipeline Isolation Valves
EJP08	Mains Tier 1 (IMRRP) and Associated Services
MJP05	Tinsley Viaduct Diversion
MJP06	West Winch EoE
MJP03	FWACV Compliance (MSU)
MJP07	Grays MP NL
MJP04	London MP
MJP01	Capacity Upgrades

Table 54: Cadent EJPs - Summary of Justification Outcomes

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
Pipeline Monitoring & Protection EJP14	Partially Justified. Cost reduction. Cadent have stated that the workstack for sleeves differs between RIIO-3 and RIIO-2, proposing to use significantly more nitrogen sleeves in RIIO-3. This is proposed without substantive supporting evidence or justification for the increase in submitted unit costs. We have recommended overall workload is funded assuming all work is construction sleeves, applying a construction sleeve unit cost for RIIO-3. Further evidence is required to support the need for nitrogen sleeves, specific volumes and justification for proposed unit costs.	Cadent provided an explanation detailing the need and volumes for nitrogen sleeves. A representative work balance, based on real data, was provided to account for the volume of nitrogen sleeves and construction sleeves.	Partially Justified. Volume Reduction. Volumes have been reduced to align with the data provided for high-risk sleeves. The total sleeve volume is proportioned according to the representative work balance provided, 24% nitrogen sleeves and 76% construction sleeves.
Filters on Offtakes & PRS EJP03	Unjustified.	Cadent provided the data requested at Draft Determination enabling a complete assessment to be undertaken.	Partially Justified. Volume Reduction. We have decided to increase volumes from Draft Determination position as data has been provided which enables an assessment to be undertaken. There is still an overall volume reduction from Cadent's submission.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
	Cadent did not provide the requested global repository asset health data, therefore we were unable to undertake a detailed engineering analysis of the investments proposed in the EJP, to determine if optioneering, scope and costs are justified. Multiple options were proposed, three of which would remove all 4-5 health scoring assets. The chosen option had the highest capex, but there was insufficient justification as to why this option is the optimal solution. To allow for a complete assessment of the investment to be undertaken, we would expect to see the following global asset data as a minimum: installation date, NARM score, health condition score beginning of price control, health condition score at the end of price control, intervention mode, date of inspection, size of filter, historical investment, NDT inspection to justify the investment case and accompanying narrative to support proposed optioneering.		Increases in volumes have been applied to support replacements due to forecasted failure rates incurred against PSSR[17] ES/94/15 Part 1 and Part 2 and the asset health data provided. The data did highlight that the model selected assets for replacement with a health score < 3.9 by the end of the RIIO-GD3 period which we would not consider to be justified.

[17] Pressure Systems Safety Regulations (PSSR).

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
Pressure Reduction on Offtakes and PRS EJP17	Unjustified. Cadent proposed to invest in the highest risk pressure reduction systems based on condition. Cadent did not provide additional data when requested. The data provided is for risk score only and confirmation of investment. Asset health data and intervention proposed was not provided. This meant we could not complete a detailed engineering analysis. 11 sites have data which did not reconcile with other cost details provided in the EJP, which created further uncertainty. The investment is considered unjustified, with further data required to support justification of the investment needs case.	Cadent provided the data requested at Draft Determinations, enabling a complete assessment to be undertaken.	Partially Justified. Volume Reductions. Based on our assessment of the additional data, we have decided to increase volumes from Draft Determinations. The data did highlight that the model selected assets for replacement with a health score < 3.9 by the end of the RIIO-GD3 period which we would not consider to be justified. Volumes for a full system replacement with an asset health score <3.9 by the end of RIIO-GD3 and no recorded PSSR faults are unjustified. Volumes for a full system replacement with an asset health score <3.9 but have a PSSR fault are justified for a minor refurbishment, to improve the assets health condition. Remaining volumes with an asset health score >3.9 and PSSR faults at the end of GD3 are justified.
Preheat on Offtakes & PRS EJP15	Partially justified. We have proposed alternative optioneering to minimise investment to maintain stable risk score.	Cadent provided the data requested at Draft Determinations, enabling a complete assessment to be undertaken.	Partially Justified. Volume reduction. Based on our assessment of the additional data, we have decided to increase volumes from Draft Determinations. Volumes for major boiler refurbishments are justified when the data indicates they have a PSSR score A1-B or the health index would be greater than 3.9 by the end of RIIO-GD3.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
	The additional data requested was not provided so unable, with any certainty, to corroborate intervention volumes or type. To allow for a complete assessment of the investment to be undertaken, we would expect to see asset data such as heater type, intervention mode, historical investment mode, asset health score at beginning of price control, asset health score at the end of price control, NARM score. This is required to demonstrate investment need and create scope confidence.		The data did highlight that the model selected assets for replacement with a health score < 3.9 by the end of the RIIO-GD3 period which we would not consider to be justified. Volumes for full system replacements are justified based on PSSR score and Medium Combustion Plant Directive (MCPD) requirements. Volumes are not justified when the age, capacity and asset health score does not justify investment.
Governor Interventions EJP04	Unjustified. The EJP narrative justifies the need for investment through NARM. Limited supporting information was provided on the specific assets to be intervened on or their health condition. No unit costs were provided for the proposed work. The paper did not allow easy comparison with RIIO-2 volumes. To allow for a complete assessment of the investment to be undertaken, we would expect to see more detailed data including governor type, location and associated health score.	Cadent provided the data requested at Draft Determinations, enabling a complete assessment to be undertaken.	Partially justified. Volume reduction. Based on our assessment of the additional data, we have decided to increase volumes from Draft Determinations. The data did highlight that the model selected assets for replacement with a health score < 3.8 by the end of the RIIO-GD3 period which we would not consider to be justified. District Governor Refurbishment and Replacement volumes were reduced as assets with a health score below 3.8 at the end of RIIO-GD3 are unjustified.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
PE Riser Interventions EJP11	Partially justified. Reduced volumes. We do not consider there to be anything in current building regulations that requires retrospective action to replace PE risers in use on buildings above 18 metres in height (ie high-rise buildings, HBRs). Therefore, we propose to remove 93 HRBs. We would expect the need for intervention to be justified on risk and asset health score. 63 medium-rise buildings (MRBs) have no supporting fault data, although risk scores are reported as being >10,000. This suggests potentially erroneous data inputs. Therefore, we have reduced MRBs volumes by 63. It would be helpful to see full PE riser repository data, rather than data just for proposed interventions, to provide context for the required workloads across this asset class in RIIO-GD3.	Cadent provided the data requested at Draft Determinations, enabling a complete assessment to be undertaken. Cadent agreed that 63 medium rise building (MRBs) risers should be removed from funding as this was a data error.	Partially Justified. Volume reduction. Based on our assessment of the additional data, we have decided to increase volumes from Draft Determinations. Volumes of HRB PE risers are justified when they exceed the risk action threshold. The needs case for the remaining HRBs has not been met, at this time, as the building regulations do not mandate retrospective action be taken against PE HRB risers.
Cost Beneficial Mains Replacement EJP09	Partially Justified. Reduced volumes.	More robust optioneering has been provided, which focuses on improving or stabilising gas in building (GIB) events, gas escapes and supply interruptions.	Partially Justified. Volume reduction.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
	Cadent intends to use DPLA to prioritise workload to target repex investments which is not included in the mandatory IMRRP programme due to leakage. We understand the intent of DPLA is not to increase intervention volumes but to strategically target "leakiest" pipelines. Volumes proposed in RIIO-3 have increased 44% from RIIO-2 and Cadent's SQ response does not fully justify why this is required and how the workforce will be obtained to deliver additional volumes. Cadent has not provided sufficient evidence to support successful delivery of additional volumes and more options could have been explored to justify need for intervention volumes. Continuing with the strategy utilised in RIIO-2, which limits the workload volume in each region, allows Cadent to continue cost beneficial repex work alongside utilising the benefits of DPLA.		We have decided to increase volumes from Draft determinations and implement "Option 3"[18]. Option 3 has the second lowest capital investment, whilst improving or stabilising GIBs, supply interruptions and gas escapes. This option enables Cadent to maintain safety, in alignment with other GDNs, whilst also enabling Cadent to utilise the benefits of their innovative technology.

[18] Option 1 - Increase volumes from RIIO-GD2, Option 2 - Continue with RIIO-GD2 volumes, Option 4 - 20km per year per region, Option 5 - Unconstrained workload.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
Services not associated with mains replacement EJP05	Partially Justified. Reduced volumes. Bulk Steel Service Relays - Cadent state volumes will be based on RIIO-2 run rates plus additional volumes due to steel tails. No analysis or data on deterioration or fault rates has been provided to justify the proposed increase in steel tail volumes. Therefore, we consider the additional volumes of bulk steel service relays proposed above RIIO-2 levels to be unjustified. We have accepted the needs case for workloads in line with RIIO-2 average volumes. Service Alterations - this is customer triggered reactive work based on historic volumes. No evidence has been provided to support increase in volumes relative to RIIO-2 or their delivery. Other services volumes are reactive interventions and the volumes pertaining to each category in the scope of this work is not known. There is a volume reduction from RIIO-2 but a significant cost increase, which has not been explained.	Cadent provided amended volumes for EJP05, reducing the workloads for bulk steel service relays, service relay after gas escape and other service relay. A volume increase for service alterations was still submitted.	Partially Justified. Volume reduction. We have decided to accept the reduced volumes for bulk steel service relays, service relay after gas escape and other service relay. We have decided to reduce the volumes for service alterations to align with RIIO-2 volumes as insufficient data or supporting information has been provided to justify the volume increase.
Mains Reinforcements below 7 bar EJP18	Partially justified. Reduced volumes.	Additional narrative was provided to support requested volumes.	Partially justified. Volume reductions. We have decided to increase volumes from Draft Determinations.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
	Costs and volumes are uncertain as the workload is reactive, often driven by third parties. The workload is split into three categories: general reinforcement, specific industrial & commercial (I&C) reinforcements and IMRRP insertion enabling reinforcements. We consider insertion enablement to be well justified, and we agree with the proposed volumes. The needs case and scope for general reinforcement is considered poorly justified, and we have concerns over scope confidence for specific I&C reinforcements. We consider both general reinforcements and specific I&C volumes to not be justified. We would expect more data to be provided to support the justification of the proposed volumes, dimensions and cost. Where sufficiently detailed data cannot be provided due to the uncertainty or need, a re-opener may be an option for funding additional volumes in-period.	The volumes are determined using the average volumes from the previous price control for both general and specific volumes and applying a 5% volume reduction per year which is conservative against the 1.5% reduction in the 2025 Future Home Standard. No general or I&C volumes are planned in for Year 1 GD3 (26/27). The customer quote acceptance, which is required before planning, has not been obtained and the average length of time to obtain this is 33 weeks.	We consider insertion enablement to be well justified, and we agree with the proposed volumes. We have decided to reduce general and specific I&C volumes, removing Year 1 volumes from the overall volume request and allowing Year 2-5 volumes with the 5% reduction per year, as this will conservatively account for delays.
Mains Diversions (chargeable & non-chargeable) EJP07	Unjustified. We propose alternative optioneering or re-opener funding may be more appropriate.	Cadent responded continuing with its request for its original option to be approved. They also provided a 15% reduction in workload option, but the specific volume breakdown per network was not provided.	Partially Justified. Volume reduction. We have decided to increase volumes from Draft Determinations and implement Cadent's "do minimum" option.

EJP Title	Ofgem Draft Determinations	Response to Draft Determinations	Ofgem Final Determinations
	There is significant uncertainty around volumes required to be delivered in RIIO-GD3. We do not consider the proposed optioneering to support the proposed workloads. We think there was a lack of alternative approaches considered. We would like to see more robust optioneering ahead of Final Determinations to support the justification for baseline funding. A UM may be more appropriate, given volume uncertainty.		We understand that diversion volumes are required but as the specific breakdown for the 15% volume reduction was not provided in the Draft Determinations response, we are unable to justify this option. The Diversions and Loss of Development Re-opener can be utilised if required.
Mandated Category 3 Security MJP02	Unjustified. We agree with the overall needs case. However, the quality of the information on scope and cost confidence for the projects is poor. A full cost breakdown and project scope has not been provided. Cadent was unable to provide the data requested through SQs. We require further information on scope, sites and costs before the proposed costs for this investment can be considered justified.	Confirmation of classification was provided for five additional sites and two refresh sites. Design, scope and costing information was provided, and final recommendations have been based on the certainty of these.	Partially Justified. Volume Reduction. We have decided to increase volumes from Draft Determinations. Site B, Site F and Site 5 are justified. Site C, Site D and Site E require detail design work to validate the scope of works to be completed. Site 6 requires more robust and site-specific scope, design and costing. These four sites are unjustified, and the Mandated Category 3 Security Re-opener should be utilised when scope and optioneering is determined.