
RIIO-2 Final Determinations – SGN Annex

Publication date	08 December 2020	Contact:	RIIO Team
		Team:	Network Price Controls
		Tel:	020 7901 7000
		Email:	RIIO2@ofgem.gov.uk

Our aim for the RIIO-2 price controls is to ensure energy consumers across GB get better value for money, better quality of service and environmentally sustainable outcomes from their networks.

In 2019, we set out the framework for the price controls in our Sector Specific Methodology Decision. In December 2019, Transmission and Gas Distribution network companies and the Electricity System Operator (ESO) submitted their business plans to Ofgem setting out proposed expenditure for RIIO-2. We assessed these plans and published our consultation on Draft Determinations in July 2020.

This document and others published alongside it, set out our Final Determinations for companies under the RIIO-2 price control, which will commence on 1 April 2021.

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psi@nationalarchives.gsi.gov.uk

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1. Introduction and overall package

Purpose of this document

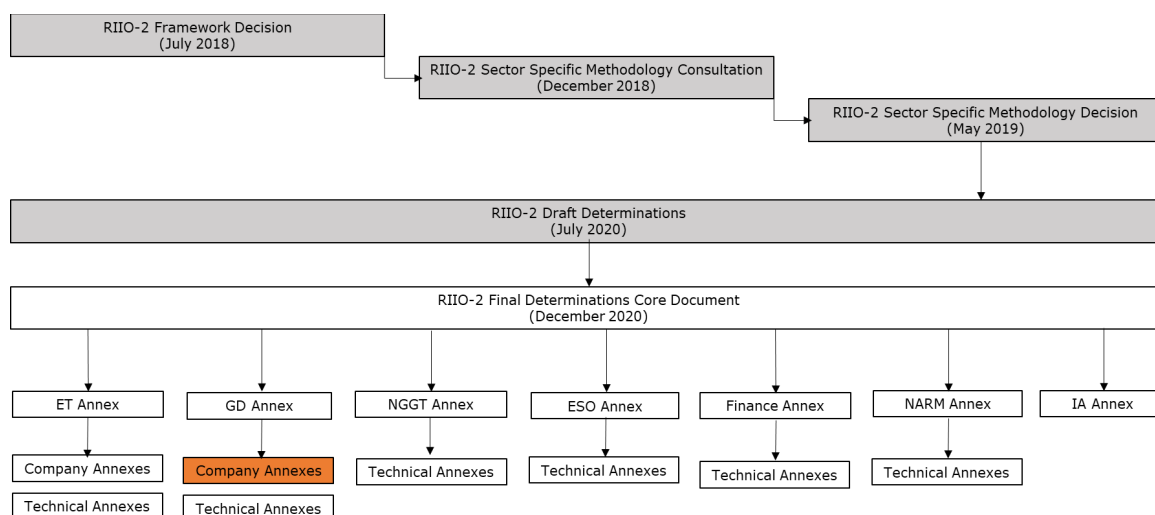
1.1 This document sets out our Final Determinations for the Gas Distribution (GD) price control (RIIO-GD2) for the areas that are specific to SGN focusing on its:

- baseline cost allowances
- output package, including Licence Obligations (LOs), Output Delivery Incentives (ODIs)¹ and Price Control Deliverables (PCDs)
- Consumer Value Propositions (CVPs)
- Uncertainty Mechanisms (UMs)
- the level of Network Innovation Allowance (NIA).

1.2 All figures are in 2018/19 prices except where otherwise stated.

1.3 This document is to be read alongside RIIO-2 Final Determinations Core Document (Core Document) and the RIIO-2 Final Determinations – Gas Distribution Sector Annex (GD Annex). Figure 1 sets out where you can find information about other areas of our RIIO-2 Final Determinations.

Figure 1: RIIO-2 Final Determinations documents map



¹ ODIs can be reputational (ODI-R) or financial (ODI-F).

An overview of SGN's RIIO-2 price control

- 1.4 This section focuses on bringing together the key aspects of SGN's RIIO-2 Final Determinations.
- 1.5 We present a summary of SGN's baseline totex² in Table 1. This reflects our view of efficient costs including ongoing efficiency over RIIO-GD2. For further details of any values, please refer to Chapter 3.³

Table 1: SGN's submitted versus allowed baseline totex⁴ (RIIO-GD2 total, £m, 2018/19 prices)

Network company	Submitted totex (Dec 19)	Resubmitted totex (Sep 20)	DD position	FD decision	FD vs. Sept 20 baseline request (£m, %)	
Sc	998	981	840	901	-80	-8.1%
So	2,060	2,026	1,687	1,738	-288	-14.2%
SGN	3,058	3,007	2,527	2,639	-368	-12.2%

- 1.6 Table 2 sets out the package of outputs that will apply to SGN during RIIO-GD2 – further details are contained within Chapter 2. For further details of our decisions on the bespoke proposals in SGN's Business Plan see Appendix 1.

Table 2: RIIO-2 outputs package for SGN

Output name	Output type	Companies applied to	Final Determination section
Common outputs			
Meeting the needs of consumers and network users			
Consumer vulnerability minimum standards	LO	All	Chapter 2 ⁵ , GD Annex
Consumer vulnerability reputational incentive	ODI-R	All	GD Annex
Vulnerability and carbon monoxide allowance	UIOLI output ⁶	All	
Fuel Poor Network Extension Scheme	ODI-R and capped volume driver	All	
Customer satisfaction survey	ODI-F	All	

² Baseline totex refers to total controllable costs (this excludes BPI, RPEs, pass-through costs and includes ongoing efficiency).

³ Where the source document is not stated, we are referring to this document (Final Determinations – SGN Annex, abbreviated to SGN Annex).

⁴ Baseline totex refers to total controllable costs (this excludes BPI, RPEs, pass-through costs and includes ongoing efficiency).

⁵ Where the source document is not stated, we are referring to this document (SGN Annex).

⁶ The Vulnerability and Carbon Monoxide Allowance is a UIOLI but has output status.

Output name	Output type	Companies applied to	Final Determination section
Complaints metric	ODI-F	All	
Guaranteed Standards of Performance (GSOPs)	LO ⁷	All	
Emergency response time	LO	All	
Unplanned interruptions	ODI-F	All (except Cadent North London)	
Digitalisation Strategy and Action Plan	LO	All	Core Document
Data Best Practice	LO	All	
Maintain a safe and resilient network			
Repex - tier 1 mains replacement	PCD	All	GD Annex
Repex - tier 1 services	PCD	All	
Gas holder demolitions	PCD	All	
Network Asset Risk Metric	PCD and ODI-F	All	Core Document, GD Annex
Capital projects	PCD	All	GD Annex
Cyber resilience Operational Technology (OT)	UIOLI and PCD	All	Core Document Confidential annexes
Cyber resilience IT	PCD	All	
Deliver an environmentally sustainable network			
Shrinkage and environmental emissions	ODI-F and ODI-R	All	GD Annex
Commercial Fleet EV PCD	PCD	All	
Environmental action plan and annual environmental report	LO and ODI-R	All	Core Document, GD Annex
Business Carbon Footprint (BCF) reporting	ODI-R	All	Core Document
Outputs bespoke to SGN			
Meeting the needs of consumers and network users			
Collaborative streetworks	ODI-F	Cadent (EoE, Lon) and SGN (So)	GD Annex
Deliver an environmentally sustainable network			
Gas escape reduction	PCD	SGN	Chapter 2
Biomethane improved access rollout	PCD	SGN	
Intermediate pressure reconfigurations	PCD	SGN	
Remote pressure management	PCD	SGN	

1.7 We set out the UMs that will apply to SGN during RIIO-2 price control period in Table 3 (further detail is in Chapter 4, and Chapter 4 of the GD Annex).

⁷ GSOPs are set out in statutory instruments due to the requirement for network companies to make direct payments to their customers. Some GSOPs also have accompanying target pass rates (percentage of times the standard has been met). These are set out in the licence to provide additional protection to customers.

Table 3: RIIO-2 Uncertainty Mechanism package for SGN

Uncertainty Mechanism	UM type	Network company	Final Determination section
Cross-sector			
Bad Debt	Pass-through	All	Finance Annex
Business Rates	Pass-through	All	Not covered (no change from decision made at SSMD)
Ofgem Licence Fee	Pass-through	All	
Pensions (pension scheme established deficits)	Re-opener	All	Core Document
Coordinated Adjustment Mechanism	Re-opener	All	
Cyber resilience OT	UIOLI and re-opener	All	
Cyber resilience IT	Re-opener	All	
Non-operational IT and Telecoms Capex	Re-opener	All	
Physical Security (PSUP)	Re-opener	All	
Tax Review	Re-opener	All	Finance Annex
Net Zero	Re-opener	GT, GD, ET	Core Document
Net Zero Pre-construction and Small Projects	Re-opener	GD, GT	
Net Zero and re-opener development	UIOLI	GT, GD, ET	
Cost of debt indexation	Indexation	All	
Real Price Effects	Indexation	All	
Cost of equity indexation	Indexation	All	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	All	
GD specific			
Pension deficit charge adjustment	Pass-through	All GDNs	GD Annex
Third-party damage and water ingress	Pass-through	All GDNs	
Miscellaneous pass-through	Pass-through	All GDNs	
Gas Transporters share of Xoserve costs	Pass-through	All GDNs	
Theft of gas (supplier responsible)	Pass-through	All GDNs	
Shrinkage	Pass-through	All GDNs	
NTS exit capacity	Pass-through	All GDNs	
Repex – Tier 2A iron mains	Volume driver	All GDNs	
Repex – HSE policy changes	Re-opener	All GDNs	
Repex - Tier 1 iron stubs	Re-opener	All GDNs	
Repex - Pipeline Diversions (non Rechargeable) and Loss of Development Claims	Re-opener	All GDNs	

Uncertainty Mechanism	UM type	Network company	Final Determination section
Multi occupancy buildings (MOBs) safety	Re-opener	All GDNs	
Heat policy	Re-opener	All GDNs	
Domestic connections	Volume driver	All GDNs	
New large load connection(s)	Re-opener	All GDNs	
Smart meter rollout costs	Re-opener	All GDNs	
Specified streetworks	Re-opener	All GDNs	
Fuel Poor Network Extension Scheme (FPNES)	Re-opener	All GDNs	
UMs bespoke to SGN			
Stranraer LDZ	Pass-through	SGN only	Chapter 4, GD Annex Chapter 3

1.8 On innovation funding, we have decided to set SGN’s RIIO-2 NIA funding at £35.6m (further details can be found in Chapter 5 of this document, and Chapter 8 of the Core Document, which details our decision to retain the option to direct additional NIA funding for hydrogen innovation during RIIO-2).

1.9 Table 4 summarises the outcome of SGN’s RIIO-2 BPI performance for each of the four stages and sets out where to find additional information.

Table 4: RIIO-2 BPI performance for SGN

BPI Stage	Final Determination	Final Determination Section
1	Pass	Chapter 6 and Core Document (Chapter 10)
2	£0m	
3	-£0.8m	
4	£0m	
Overall	Penalty of £0.8m	

1.10 We have decided to set SGN’s RIIO-2 Totex Incentive Mechanism (TIM) sharing factor at 49% for Scotland and 50% for Southern. Further details about TIM can be found in Chapter 10 of the Core Document.

1.11 Table 5 summarises the financing arrangements that we have decided to apply to SGN. Please refer to the Finance Annex for more detail on these areas.

Table 5: RIIO-2 financing arrangements for SGN⁸

Finance parameter	SGN Scotland rate	SGN Southern rate	Source
Notional gearing	60%	60%	Finance Annex
Cost of Equity	4.55%	4.55%	
Expected outperformance	0.25%	0.25%	
Allowed return on equity	4.30%	4.30%	
Allowed return on debt	1.88%	1.82%	
Allowed return on capital	2.85%	2.81%	

⁸ We present here a forecast average of RIIO-2 allowed returns. Final allowances for debt and equity from 2022/2023 onwards will reflect changes in market observations. Please see Finance Annex for further detail.

2. Setting outputs

Introduction

2.1 This chapter sets out our decisions for output areas that specifically apply to SGN. We set out more detail on the common outputs in the GD Annex, including our broader decisions and rationale for those decisions. This chapter is structured under the headings of the RIIO-2 outcomes:

- meet the needs of consumers and network users
- maintain a safe and resilient network
- deliver an environmentally sustainable network.

Meeting the needs of consumers and network users

2.2 We set out our decisions for the SGN-specific parameters in the following tables.

GD Sector outputs

Vulnerability package

Vulnerability and Carbon Monoxide Allowance (VCMA)

Table 6: Final Determinations decision - VCMA by network (£m, 2018/19 prices)⁹

Network¹⁰	2021/22	2022/23	2023/24	2024/25	2025/26	Total
Sc	0.75	0.75	0.75	0.75	0.75	3.77
So	1.68	1.68	1.68	1.68	1.68	8.42
Collaborative projects – SGN share ¹¹	0.81	0.81	0.81	0.81	0.81	4.06
Total¹²	3.25	3.25	3.25	3.25	3.25	16.25

⁹ Allowances per year do not have to be spent within each year and can be rolled over.

¹⁰ SGN's Scotland network is abbreviated to Sc and its Southern network to So throughout.

¹¹ 25% of the UIOLI must be spent on collaborative projects between GDNs. We will apportion the collaborative pot so each GDN will receive a share on top of its UIOLI based on their forecast percentage of GB domestic gas customers served in the first year of RIIO-GD2. We will set requirements for how this can be spent in the VCMA Governance Document.

¹² Subtotals may not add up to sum of line items due to rounding.

Fuel Poor Network Extension Scheme

Table 7: Final Determinations Decision - FPNES ODI-R targets and volume driver cap and unit costs for SGN (No. of connections, £ per service connection)

Network	ODI-R Target	Volume driver cap	Volume driver unit costs
	<i>Number of connections – RIIO-GD2 total</i>	<i>Number of connections – RIIO-GD2 maximum</i>	<i>£ per service connection</i>
Sc	13,000	13,000	1,440
So	5,000	6,479	1,507
Total	18,000	19,479	

Unplanned Interruptions

Table 8: Final Determinations Decision - ODI-F Minimum performance and Excessive Deterioration levels for SGN (hours)

Network	Minimum performance level	Excessive Deterioration level
	<i>Annual average duration (hours)</i>	<i>Annual average duration (hours)</i>
Sc	16	23.5
So	26	33.5

Maintaining a safe and resilient network

GD Sector outputs

2.3 We set out our decisions for the SGN-specific parameters in the following tables.

Repex*Tier 1 mains replacement***Table 9: Final Determinations Decision - Tier 1 mains Baseline Target Workloads for SGN Scotland (kilometres mains decommissioned)**

Sc	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workload
<i>Workload Activities</i>						
All materials						
a. <=3"	12.3	12.3	12.3	12.3	12.3	61.4
b. 4"-5"	102.5	102.5	102.5	102.5	102.5	512.4
c. 6"-7"	68.7	68.7	68.7	68.7	68.7	343.5
d. 8"	20.7	20.7	20.7	20.7	20.7	103.4
Total	204.1	204.1	204.1	204.1	204.1	1,020.6
Note: Subtotals may not add up to sum of line items due to rounding						

Table 10: Final Determinations Decision - Tier 1 mains Baseline Target Workloads for SGN Southern (kilometres mains decommissioned)

So	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workload
<i>Workload Activities</i>						
All materials						
a. <=3"	15.1	15.1	15.1	15.1	15.1	75.3
b. 4"-5"	364.3	364.3	364.3	364.3	364.3	1,821.5
c. 6"-7"	158.8	158.8	158.8	158.8	158.8	794.0
d. 8"	62.1	62.1	62.1	62.1	62.1	310.4
Total	600.3	600.3	600.3	600.3	600.3	3,001.3
Note: Subtotals may not add up to sum of line items due to rounding						

Table 11: Final Determinations Decision - Tier 1 mains Baseline Allowance (£m, 2018/19 prices)

SGN	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2
<i>Baseline Cost Allowance</i>						
Tier 1 mains baseline allowance						
Sc	32.3	32.3	31.8	31.6	31.8	159.8
So	83.5	86.6	85.5	84.9	84.7	425.2
SGN	115.8	118.9	117.3	116.4	116.5	584.9
Note: Subtotals may not add up to sum of line items due to rounding						

Table 12: Final Determinations Decision - Tier 1 mains ex ante unit costs for SGN Scotland (RIIO-GD2, £/km mains decommissioned, 2018/19 prices)

Sc	RIIO-GD2 ex ante unit costs
Tier 1 iron mains decommissioned	
a. <=3"	108,958
b. 4"-5"	120,614
c. 6"-7"	175,635
d. 8"	263,011
Note: Unit costs for Tier 1 mains PCD. Unit costs exclude RPEs.	

Table 13: Final Determinations Decision - Tier 1 mains ex ante unit costs for SGN Southern (RIIO-GD2, £/km mains decommissioned, 2018/19 prices)

So	RIIO-GD2 ex ante unit costs
Tier 1 iron mains decommissioned	
a. <=3"	101,803
b. 4"-5"	112,693
c. 6"-7"	164,102
d. 8"	245,740
Note: Unit costs for Tier 1 mains PCD. Unit costs exclude RPEs.	

*Tier 1 services PCD***Table 14: Final Determinations Decision - Tier 1 service interventions Baseline Target Workloads for SGN Scotland (No. of services)**

Sc	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>						
Tier 1 service interventions						
Relay	6,226	6,226	6,226	6,226	6,226	31,130
Test and transfer	9,860	9,860	9,860	9,860	9,860	49,300
Totals	16,086	16,086	16,086	16,086	16,086	80,430
Note: Subtotals may not add up to sum of line items due to rounding						

Table 15: Final Determinations Decision - Tier 1 service interventions Baseline Target Workloads for SGN Southern (No. of services)

So	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>						
Tier 1 service interventions						
Relay	35,967	35,967	35,967	35,967	35,967	179,836
Test and transfer	18,019	18,019	18,019	18,019	18,019	90,093
Totals	53,986	53,986	53,986	53,986	53,986	269,929
Note: Subtotals may not add up to sum of line items due to rounding						

Table 16: Final Determinations Decision - Tier 1 services Baseline Allowances for SGN (£m, 2018/19 prices)

SGN	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Allowance
Tier 1 services Baseline Allowances						
Sc	11.0	11.1	10.9	10.8	10.9	54.7
So	35.3	36.4	35.9	35.5	35.5	178.6
SGN	46.3	47.5	46.8	46.3	46.3	233.3
Note: Subtotals may not add up to sum of line items due to rounding						

Table 17: Final Determinations Decision - Tier 1 service interventions ex ante unit costs for SGN Scotland (RIIO-GD2, £/service, 2018/19 prices)

Sc	RIIO-GD2 ex ante unit costs
Tier 1 service interventions	
Relay	893
Test and transfer	563
Note: Unit costs for Tier 1 mains PCD. Unit costs exclude RPEs.	

Table 18: Final Determinations Decision - Tier 1 service interventions ex ante unit costs for SGN Southern (RIIO-GD2, £/service, 2018/19 prices)

So	RIIO-GD2 ex ante unit costs
Tier 1 service interventions	
Relay	760
Test and transfer	479
Note: Unit costs for Tier 1 mains PCD. Unit costs exclude RPEs.	

NARM PCD and ODI-F

2.4 This table summarises SGN's NARM targets. Please refer to the NARM Annex for our decisions and rationale for those decisions.

Table 19: Summary of Final Determinations Decision - NARM Baseline Network Risk Outputs

Network	Baseline Network Risk Output (R£m)¹³	Baseline Allowance (£m)¹⁴	Unit Cost of Risk Benefit (£/R£)
Sc	9.6	155.4	16.2
So	23.9	335.8	14.1

Note: Baseline allowance included within totex. All values in table subject to change due to final reconciliation process ahead of RIIO-GD2 implementation. Any changes to Baseline Allowance will only affect the share of totex attributable to NARM but will not result in any changes to totex.

2.5 The data presented in Table 19 for Baseline Network Risk Output, Baseline Allowances and Unit Cost of Risk Benefit remain subject to update between the publication of Final Determinations and the implementation of RIIO-GD2. This is to ensure that the final targets we set for Gas Distribution Networks (GDNs) accurately reflect the decisions we have made at Final Determinations, including ensuring a consistent approach is taken across GDNs, where appropriate, as to which assets are included within the NARM. For example, the changes we've made to the Capital Projects PCD at Final Determinations may result in more assets being included in the NARM. Any changes we make to Baseline Allowances for NARM will only be updates to the share of totex attributable to asset intervention included within NARM and will not result in any changes to Final Determinations totex allowances.

2.6 We will work with the GDNs to ensure these values are updated to accurately reflect our Final Determinations positions, including requesting the GDNs to re-run their NARM models to determine final Baseline Network Risk Output targets. Please see the NARM Annex for further details on the process we intend to follow for finalising NARM outputs for the GDNs.

Capital projects

2.7 Table 20 summarises the projects included in the Capital projects PCD for SGN. See Appendix 2 for a list of projects that we included in our Draft Determinations and have decided to remove from the PCD at Final Determinations due to increasing the threshold for technically assessed projects. We have moved the costs to baseline totex for the projects we removed from the PCD and expect GDNs to deliver these within the baseline allowance.

¹³ The unit used to denote Monetised Risk values. R£ is used to differentiate from financial monetary values.

¹⁴ Baseline Allowance includes RPEs.

Table 20: Final Determinations Decision - SGN projects included in Capital projects PCD

Network	Cost category	Project name	RIIO-2 cost (£m)
Sc	LTS, Storage & Entry	E&I Upgrade Programme (5 sites)	1.45
Sc	LTS, Storage & Entry	E&I Upgrade Programme (4 sites)	0.76
So	LTS, Storage & Entry	E&I Upgrade Programme (2 sites)	0.66
So	LTS, Storage & Entry	E&I Upgrade Programme (23 sites)	4.63
Sc	LTS, Storage & Entry	T8: Pitcairngreen to Huntingtower - R04 and R05	6.71
So	LTS, Storage & Entry	Mappowder	5.17
Sc	LTS, Storage & Entry	Newton Mearns and Waterfoot PRS	8.54
Sc	LTS, Storage & Entry	Provan PRS	13.88
Sc	LTS, Storage & Entry	RO2 Dunkeld	23.52
So	LTS, Storage & Entry	Winkfield Offtake - System 1 (South East)	7.88
So	LTS, Storage & Entry	Winkfield Offtake - System 2 (South)	7.44
So	Repex	[REDACTED]	4.91
Total			85.55
Note: Subtotals may not add up to sum of line items due to rounding			

PCDs removed in our Final Determinations

2.8 This section includes PCDs that we proposed to accept in our Draft Determinations consultation position but which we have now decided to remove after reviewing stakeholder responses and relevant evidence.

[REDACTED] PCD

2.9 We have decided to include [REDACTED] within the common Capital Projects PCD. We think that consistent treatment of capital projects within a sector wide PCD is preferable to a bespoke PCD for this defined project. SGN's Customer Engagement Group (CEG) agreed that the project should be within the common PCD. SGN wanted clarity about the common PCD before it could express a view on whether [REDACTED] should be included within it. It was concerned in particular about lack of flexibility on delivery timescales.

2.10 For the common PCD we will adopt a more flexible approach to assessing project deliverables to accommodate different outcomes (including late, partial and equivalent delivery) where we consider them well justified and in customers'

interests. We think this will mitigate SGN's concerns about lack of flexibility. See Chapter 2 of the GD Annex and this chapter for the Capital Projects PCD.

2.11 At Draft Determinations we proposed to allow the full costs of the [REDACTED] project within a bespoke PCD as we thought there was a robust needs case. We asked whether [REDACTED] should be included in the Capital Projects PCD rather than as a separate PCD.¹⁵

Delivering an environmentally sustainable network

GD Sector outputs

2.12 We set out our decisions for the SGN-specific parameters in the following tables.

Commercial Fleet EV PCD

Table 21: Final Determinations Decision – EV Target Volume for SGN (RIIO-GD2 total, No. of vehicles and charging points)

Network	Output Category	Specification	Total Units over RIIO-GD2
Scotland	4x4	Payload: min. 1,000kg	7
	Small Van	Payload: max. 2,300kg	19
	Medium Van	Payload: max. 3,300kg	78
	Large Van	Payload: max. 3,500kg	135
	Support Van	Payload: max. 3,500kg	47
	Supporting Infrastructure	EV Charging Point	135
Southern	4x4	Payload: min. 1,000kg	11
	Small Van	Payload: max. 2,300kg	31
	Medium Van	Payload: max. 3,300kg	128
	Large Van	Payload: max. 3,500kg	221
	Support Van	Payload: max. 3,500kg	76
	Supporting Infrastructure	EV Charging Point	220

SGN specific PCDs

2.13 This section sets out details of SGN specific outputs we have included in our Final Determinations.

¹⁵ Draft Determinations SGN Annex paragraphs 2.21-2.24 and 3.45-3.46. SGN proposed a PCD for two projects ([REDACTED] and Cams Hall) in its Business Plan. We concluded that the engineering case for Cams Hall was not justified because there was still insufficient evidence to support the needs case and therefore only allowed costs for [REDACTED].

Gas Escape Reduction PCD

Purpose: To facilitate rollout of specified innovations SGN has developed to reduce the volume of gas lost during escapes.

Benefits: These innovations are expected to reduce leakage by 1.2ktCO₂e per year through RIIO-GD2 and beyond, with an NPV of £2.7m through to 2035 based on environmental and safety benefits.

*Final Determinations decision***Table 22: Final Determinations Decision - gas escape reduction PCD**

Output parameter	Final Determination	Draft Determinations ¹⁶
Type	Evaluative	Change: bespoke PCD not included at DDs
Output	Deployment of stent bags and the High Volume Gas Escape Toolbox	
Delivery date	31 March 2026	
Totex baseline allowances	£2m	
Re-opener	No	
Reporting method	PCD report	
Adjustment mechanism	Ex post review to determine delivery status	
Companies applied to	SGN only	N/A
Licence condition	Special Condition 3.31 Gas escape reduction Price Control Deliverable	

Final Determinations rationale and Draft Determinations responses

2.14 We have decided to accept this PCD and provide SGN with £2m of funding to rollout these innovations. We think this equipment will help to reduce levels of leakage, and we are satisfied that the resulting benefits are sufficient to justify the costs. SGN and SGN's CEG were disappointed that we had rejected this, given the importance of reducing leakage. In its Draft Determinations response, SGN submitted a full CBA as additional evidence.

2.15 At Draft Determinations, we rejected this proposal because SGN had not shown how the benefits would exceed the costs. We have assessed the new CBA and agree that it demonstrates value for money and therefore accept the PCD based on the evidence.

¹⁶ Draft Determinations SGN Annex Table 21, p24.

- 2.16 We have decided that this bespoke PCD must follow similar knowledge transfer requirements to projects funded under our NIA. However, we do not believe we should copy the NIA knowledge sharing for intellectual property rights (IPR). As this is not an NIA project, it is not possible to specify specific IPR rules that this bespoke PCD must follow.
- 2.17 However, we continue to believe that others will benefit from disseminated knowledge from the rollout. We will require SGN to publicly publish details of activities planned to deliver this output, publish progress reports on the use of this equipment each year and act in accordance with Data Best Practice Guidance. SGN will also be able to apply suitable protections to commercially sensitive information.

Biomethane Improved Access Rollout PCD

Purpose: Hold SGN to account for the delivery of its biomethane rollout project.

Benefits: Support the rollout of biomethane technologies on the gas network, delivering benefits to consumers from past innovation activities in this area.

Final Determinations decision

Table 23: Final Determinations Decisions - Biomethane improved access rollout PCD

Output parameter	Final Determination	Draft Determinations¹⁷
Type	Evaluative	Same as FD
Output	Installation of three technologies to increase biomethane volumes on the network	
Delivery date	31 March 2026	
Totex baseline allowances	£10m	
Re-opener	No	
Reporting method	PCD report and annual Regulatory Reporting Pack (RRP) reporting	
Adjustment mechanism	Ex post review to determine delivery status	
Companies applied to	SGN only	N/A
Licence condition	Special Condition 3.30 Biomethane improved access rollout Price Control Deliverable (BMI _t)	

¹⁷ Draft Determinations SGN Annex paragraphs 2.12-2.15.

Output parameter	Final Determination	Draft Determinations¹⁷
Knowledge dissemination	Similar knowledge transfer requirements to projects funded under our NIA	Change - we clarify that the NIA intellectual property requirements will not apply to this PCD

Final Determinations rationale and Draft Determinations responses

- 2.18 We have decided to accept this bespoke PCD and provide £10m funding to SGN to deliver it. This is because it will support the rollout of biomethane technologies on the gas network. The majority of stakeholders that commented on the proposal supported this decision.
- 2.19 We set out a challenge to SGN in our Draft Determinations to consider the feasibility of local billing zones as we had concerns that the activities SGN proposed might not be possible without regulatory change. SGN provided this evidence alongside further recent stakeholder engagement, that have reassured us it is taking forward work to establish local billing zones and therefore should be able to implement its proposed activities. We note SGN has stated it must comply with the Gas (Calculation of Thermal Energy) Regulations 1996 to deliver work on local billing zones.
- 2.20 The RIIIO2-CG saw merit in our proposal, but preferred sector wide funding to share benefits and create opportunities for all GDNs to take forward similar activities. We acknowledge that other GDNs may benefit from the learning of this work, which is why we have made knowledge transfer a key part of this PCD. This learning could inform future rollout for other GDNs by helping to confirm the benefits of these new technologies.
- 2.21 We have decided that this bespoke PCD must follow similar knowledge transfer requirements to projects funded under our NIA as we think that others will benefit from disseminated knowledge from the rollout. All stakeholders that responded on this output noted the merits of knowledge sharing for this project and that it should be pursued. We will require SGN to publicly publish details of activities planned to deliver this output, to publish progress reports on these activities each year and to act in accordance with Data Best Practice Guidance. SGN will also be able to apply suitable protections to commercially sensitive information (eg from biomethane operators).

2.22 However, after our own further consideration we do not believe we should copy the NIA knowledge sharing for intellectual property rights (IPR). As this is not a NIA project, it is not possible to specify specific IPR rules that this bespoke PCD must follow.

Intermediate pressure reconfigurations PCD

Purpose: To fund SGN to install 85 small PRIs and 355 service governors, to allow reconfiguration and replacement of 515 services and 9.32km of steel mains connected to intermediate pressure gas mains in its Scotland network.

Benefits: Protects customers from failure to deliver asset replacement works during RIIO-GD2. The project will reduce network risk by ensuring 515 properties have services configured to current safety standards.

Final Determinations decision

Table 24: Final Determinations Decision - Intermediate pressure reconfigurations PCD

Output parameter	Final Determination	Draft Determinations¹⁸
Type	Mechanistic	Same as FD
Output	85 small pressure reducing installations (PRIs) and 355 services governors; replace 515 services and 9.32km of steel mains	85 small PRIs and 355 service governors
Delivery date	31 March 2026	Same as FD
Totex baseline allowances	£3.7m	£2.3m
Re-opener	No	Same as FD
Reporting method	Annual reporting through the RRP	Same as FD
Adjustment mechanism	Formula defined in the licence	
Companies applied to	SGN only	
Licence condition	Special Condition 3.28 Intermediate pressure reconfigurations Price Control Deliverable (IPR _t)	N/A

Final Determinations rationale and Draft Determinations responses

2.23 We have decided to accept this bespoke PCD. The PCD will help support resilience in a specific region of Scotland. We have decided to include the full scope of work and costs that SGN proposed in its Business Plan which was also supported by SGN's CEG. This is because SGN provided satisfactory further evidence in support

¹⁸ Draft Determinations – SGN Annex paragraphs 2.21-2.24.

of the costs and the scope of work that we excluded at Draft Determinations. It demonstrated that the scope of work we excluded was not funded elsewhere in the price control and that funding this through the PCD was the best solution.¹⁹ We accept SGN’s position.

Remote Pressure Management PCD

Purpose: To provide for installation of pressure management equipment at 702 district governors across the Southern network.

Benefits: This is expected to reduce leakage by 1.5ktCO₂e per year through RIIIO-GD2 and beyond, delivering a Net Present Value (NPV) of £1.0m to 2030 in environmental benefits.

Final Determinations decision

Table 25: Final Determinations Decisions - Remote Pressure Management PCD

PCD parameter	Final Determination	Draft Determinations ²⁰
Type	Evaluative	Same as FD
Output	Install remote pressure management actuators and pressure loggers at 702 district governors	
Delivery date	March 2026	
Totex baseline allowances	£3.39m	
Re-opener	No	
Reporting method	PCD report	
PC Adjustment mechanism	Formula defined in the licence	
Companies applied to	SGN only	
Licence condition	Special Condition 3.29 Remote pressure management Price Control Deliverable (RPM _t)	N/A

Final Determinations rationale and Draft Determinations responses

2.24 We have decided to maintain our position to allow this PCD because it will make a material contribution to reducing harmful greenhouse gas emissions from gas leakage. SGN’s response focused on our Draft Determinations request for

¹⁹ SGN noted that the mains and services requiring replacement are steel and not iron therefore our suggestion in Draft Determinations that this was already funded under the Tier 1 mains and services PCDs was incorrect. It also set out that it could not fund this under the Iron pipes >30mm and steel pipes, including associated services EJP, as suggested in our QEM outcome as the proposed workload wasn’t granted at the time of our Draft Determinations.

²⁰ Draft Determinations SGN Annex paragraphs 2.25-2.30.

additional information as to why it couldn't fund this through rewards from the Shrinkage and environmental emissions incentive. SGN said its CBA showed a payback period extending beyond RIIO-GD2, hence the incentive would not provide sufficient funding. SGN's CEG agreed with our Draft Determinations position. We accept this evidence and will allow the proposed investment.

- 2.25 We have decided that this bespoke PCD must follow similar knowledge transfer requirements to projects funded under our NIA. However, we do not believe we should copy the NIA knowledge sharing for intellectual property rights (IPR). As this is not a NIA project, it is not possible to specify specific IPR rules that this bespoke PCD must follow.
- 2.26 However, we continue to believe that others will benefit from disseminated knowledge from the rollout. We will require SGN to publicly publish details of activities planned to deliver this output, publish progress reports on the use of this equipment each year and act in accordance with Data Best Practice Guidance. SGN will also be able to apply suitable protections to commercially sensitive information.

3. Setting baseline allowances

Introduction

- 3.1 This chapter sets out our decision on baseline allowances for the different cost areas within SGN's Business Plan submission.
- 3.2 We intend this chapter to be read alongside other parts of our Final Determinations that set out our industry-wide approach.

Baseline allowances

- 3.3 Baseline totex referenced in this chapter comprises forecast controllable costs.²¹ This includes direct and indirect opex, capex and repex and is inclusive of our proposed ongoing efficiency challenge. Non-controllable costs, while included in overall allowed revenue recoverable by GDNs, are not included in baseline totex and are treated separately. Moreover, the figures presented in this chapter do not include real price effects (RPEs) to allow comparison with GDNs' submissions.²²
- 3.4 Table 22 compares SGN's submitted baseline totex for each of its networks with our view.

²¹ Baseline totex, totex and forecast controllable costs will be used interchangeably.

²² Any costs not included in baseline totex, but included in allowed revenue, are captured in the licence model.

Table 22: SGN baseline allowance (RIIO-GD2 total, £m, 2018/19 prices)

Cost area	Submitted totex Dec 19 (£m)	Resubmitted totex Sep 20 (£m)	Ofgem DDs allowed totex (£m)	Ofgem FD allowed totex (£m)	DDs vs submitted (%)	FD vs submitted (%)
Sc						
Direct opex	255	255	229	231	-10%	-9%
Indirect opex	107	107	98	97	-8%	-9%
Capex	306	306	239	277	-22%	-9%
Repex	329	312	274	296	-17%	-5%
Totex	998	981	840	901	-16%	-8%
So						
Direct opex	466	466	410	393	-12%	-16%
Indirect opex	199	199	176	167	-12%	-16%
Capex	407	407	289	344	-29%	-15%
Repex	988	954	812	834	-18%	-13%
Totex	2,060	2,026	1,687	1,738	-18%	-14%
SGN						
Direct opex	721	721	639	624	-11%	-13%
Indirect opex	306	306	274	264	-10%	-14%
Capex	713	713	528	621	-26%	-13%
Repex	1,317	1,266	1,086	1,130	-18%	-11%
Totex	3,058	3,007	2,527	2,639	-17%	-12%

3.5 We have allowed £2.6bn of SGN's £3.0bn baseline request. Of this baseline allowance, we have tied £1.45bn to PCDs to ensure SGN is held accountable for delivery of its specified outputs. We have also set a number of uncertainty mechanisms to assess potential expenditure during RIIO-GD2.

Summary of our assessment

3.6 Prior to modelling SGN's forecast totex, we separated out costs associated with activities considered more suited to technical assessment. For the remaining modelled totex, we also distinguished between costs suitable for regression analysis and non-regression analysis. Table 23 details our breakdown of submitted totex for each SGN's network.

Table 23: SGN totex assessment approach (RIIO-GD2 total, £m, 2018/19 prices)

Network	Submitted totex Dec 19	Resubmitted totex Sep 20	Modelled Costs		Technically assessed costs
			Regression	Non-regression	
Sc	998	981	808	66	107
So	2,060	2,026	1,719	206	102
SGN	3,058	3,007	2,527	272	209
% of submitted costs	100%	100%	84%	9%	7%

3.7 Adjustments to submitted costs under each of our assessment approaches are summarised in Table 24. Modelled costs are subject to pre-modelling and benchmarking efficiency adjustments. Technically assessed costs are subject to technical assessment adjustments only. All costs are subject to ongoing efficiency adjustments.

Table 24: Step by step breakdown of adjustments (RIIO-GD2 total, £m, 2018/19 prices)

Network	Modelled cost			Technically assessed adjustments	Ongoing efficiency adjustments	Total adjustments
	Embedded OE adjustment	Pre modelling adjustments	Benchmark efficiency adjustments			
Sc	14	-19	-11	-34	-44	-94
So	30	-34	-175	-55	-84	-318
SGN	44	-53	-186	-89	-128	-412

3.8 Table 25 summarises the pre-modelling adjustments across each SGN network.

Table 25: Pre-modelling adjustments, SGN (RIIO-GD2 total, £m, 2018/19 prices)

Network	Volume-related adjustments	UM related adjustments	Total pre-model adjustments
Sc	-19	-	-19
So	-34	-	-34
SGN	-53	-	-53

3.9 For SGN, we have decided to remove £53m (net) of volume-related adjustments. We made no adjustments related to uncertainty mechanisms.

3.10 In our benchmarking, Scotland and Southern ranked third and seventh, respectively. This resulted in adjustments to modelled costs through benchmark efficiency of £11m and £175m, respectively.

3.11 For technically assessed costs, we have made the adjustments listed in the table below. The bespoke outputs we have included are presented in Chapter 2. Further details on other items are provided later in this chapter.

Table 26: Technically assessed costs adjustments, SGN (RIIO-GD2 total, £m, 2018/19 prices)

Network	Bespoke outputs	Capex and repex projects*	Resilience**	Total adjustments
Sc	-25	-2	-7	-34
So	-42	-	-13	-55
SGN	-67	-2	-20	-89
* Includes allowance for electric vehicles				
** Includes cyber and PSUP				

Regression Analysis

Introduction

3.12 In this section, we describe our adjustments to the drivers that define the totex Composite Scale Variable (CSV) used in our regression model. Changes to drivers complement the pre-model adjustments made to submitted totex costs, noted above. We made these adjustments following engineering and cost assessment reviews of SGN’s Business Plan.

3.13 We provide details for each of our cost categories, opex, repex and capex, listing out any changes to drivers used in the regression model.

Opex

Description

3.14 The components of the totex CSV that relate to opex are Modern Equivalent Asset Value (MEAV), maintenance MEAV, emergency CSV and total external condition reports.

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Table 27: SGN's opex cost drivers

Driver	Driver Value		FD Decision	DD Position
	Submitted*	Modelled		
Network	Submitted*	Modelled		
MEAV (£m, 2018/19 prices)				
Sc	42,523	42,523	We have included revised risers numbers and embedded gas entry points	Risers and embedded gas entry points excluded
So	88,150	88,150		
SGN	130,673	130,673		
Maintenance MEAV (£m, 2018/19 prices)				
Sc	9,217	9,217	We have included embedded gas entry points	Embedded gas entry points excluded
So	17,076	17,076		
SGN	26,293	26,293		
Emergency CSV (No., 80% customers number, 20% total external condition reports)				
Sc	2,859,105	2,859,480	Adjustments to total external condition reports	No adjustments to total external condition reports
So	6,718,387	6,719,854		
SGN	9,577,492	9,579,334		
Total External Condition Reports (No.)				
Sc	24,898	24,915	Upward adjustments to account for disallowed repex workloads	No adjustments for disallowed repex workloads
So	72,217	72,296		
SGN	97,115	97,211		

* Submitted values refer to post Draft Determinations resubmission

Table 28: Adjustments to cost repairs and condition reports (RIIO-GD2 total, £m, 2018/19 prices, No. of reports)

Network	Cost repairs (£m)	Mains condition reports (No.)	Service condition reports (No.)
Sc	0.6	4	12
So	0.2	4	75
SGN	0.8	8	87

Note: Positive number indicates upward adjustment

Final Determinations rationale and Draft Determinations responses

- 3.15 As detailed in the GD Annex and SBSG Annex, we have decided to include risers and embedded gas entry points into the MEAV driver in order to obtain a better measure for the scale of the networks. We have accepted SGN's proposal to adjust downwards the submitted number of risers to reduce the risk of overestimation.
- 3.16 We have made upwards adjustments to repairs costs and the repairs cost driver where we have disallowed repex distribution mains workloads for both Scotland and Southern. SGN resubmitted workloads and CBAs for some repex workloads that we proposed to disallow at Draft Determinations. At Final Determinations we

have made adjustments to account for the difference between these resubmitted workloads and SGN’s December 2019 Business Plan Data Table (BPDT) submission, as these were not otherwise captured in SGN’s resubmitted BPDTs. This was supported by SGN in its response to Draft Determinations. We made upwards adjustments according to the values presented in Table 28. Our methodology for calculating opex workload adjustments is explained in the GD Annex.

3.17 The adjustments made to total external condition reports also resulted in adjustments to the emergency CSV driver.

Repex

Final Determinations decision

Table 29: Tier 1 mains and steel <=2" mains commissioned workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20**	Modelled		
Tier 1 (km)					
Sc	1,055.2	1,009.2	983.8	We have disallowed all workloads associated with dynamic growth for Tier 1 (see the GD Annex)	Dynamic growth methodology as per FD Accelerated growth was included in initial submission and removed at DD
So	3,119.0	3,033.1	2,976.8		
SGN	4,174.2	4,042.3	3,960.6		
Steel <=2" (km)					
Sc	107.7	107.7	107.7	We allowed in full SGN’s submitted steel mains <=2" workloads	As per FD
So	101.4	101.4	101.4		
SGN	209.1	209.1	209.1		
* All values include capitalised replacement					
** SGN excluded accelerated growth assumptions from Sep 20 resubmission					

Table 30: Tier 2A mains commissioned workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
Tier 2A (km)²³					
Sc	2.5	2.5	1.3	We have reduced Tier 2A workloads following an update to MRPS	Allowed in full
So	13.5	13.5	6.7		
SGN	16.0	16.0	8.0		
* All values include capitalised replacement					

Table 31: Tier 2B and Tier 3 mains commissioned workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
Tier 2B (km)					
Sc	23.2	17.2	17.2	We allowed in full SGN's resubmitted Tier 2B workloads	Disallowed in full
So	37.7	30.2	30.2		
SGN	60.8	47.5	47.5		
Tier 3 (km)					
Sc	8.6	5.0	5.0	We allowed in full SGN's resubmitted Tier 3 workloads	Allowed in full for Southern Disallowed in full for Scotland
So	22.2	22.2	22.2		
SGN	30.8	27.2	27.2		
* All values include capitalised replacement					

Table 32: Steel >2" mains commissioned workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
Steel >2" (km)					
Sc	44.7	44.7	44.7	We allowed in full SGN's submitted steel mains >2" workloads	Disallowed in full for both Southern and Scotland
So	107.6	107.6	107.6		
SGN	152.3	152.3	152.3		
* All values include capitalised replacement					

²³ See GD Annex for further discussion of the Tier 2A volume driver.

Table 33: Iron >30m from a building and Other Policy & Condition mains²⁴ commissioned workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
Iron mains >30m from a building (km)					
Sc	6.3	6.3	6.3	We allowed in full SGN's submitted iron >30m workloads	As per FD
So	3.3	3.3	3.3		
SGN	9.6	9.6	9.6		
Other Policy & Condition (km)					
Sc	9.2	5.8	5.8	We allowed in full SGN's submitted Other Policy & Condition workloads	Allowed in full for Scotland Disallowed in full for Southern
So	18.7	11.6	11.6		
SGN	28.0	17.4	17.4		
* All values include capitalised replacement					

Table 34: Services associated with mains replacement commissioned workloads (RIIO-GD2 total, no. of service interventions)

Network	Driver Value*			FD decision	DD position		
	Submitted Dec 19	Submitted Sep 20	Modelled				
Tier 1 (No.)							
Sc	87,010	82,470	80,430	Where we have disallowed mains replacement workloads (see tables above and discussed below), we have made corresponding downward adjustments to service interventions. All adjustments were made on a pro rata basis	Methodology as per FD		
So	284,131	274,966	269,929				
SGN	371,141	357,436	350,359				
Steel <=2" (No.)							
Sc	9,954	9,954	9,954				
So	4,723	4,723	4,723				
SGN	14,677	14,677	14,677				
Tier 2A (No.)							
Sc	55	53	27				
So	414	414	207				
SGN	469	467	234				
Tier 2B (No.)							
Sc	1,473	446	446				
So	4,819	1,097	1,097				
SGN	6,291	1,543	1,543				
Tier 3 (No.)							
Sc	62	36	36				
So	25	25	25				

²⁴ Other Policy & Condition mains: The replacement of distribution mains and services not captured under the HSE policy workload. This includes non standard materials and mains selected to be replaced on a condition basis in accordance with policy.

Network	Driver Value*			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
SGN	87	61	61		
Iron main >30m (No.)					
Sc	5	5	5		
So	9	9	9		
SGN	14	14	14		
Steel mains >2" (No.)					
Sc	828	1,679	1,679		
So	1,997	4,021	4,021		
SGN	2,825	5,700	5,700		
Other Policy & Condition** (No.)					
Sc	325	325	325		
So	881	881	881		
SGN	1,206	1,206	1,206		

* All values include capitalised replacement
** Includes relays, and test and transfer for both domestic and non-domestic properties

Table 35: Services not associated with mains replacement commissioned workloads* (RIIO-GD2 total, no. of service interventions)

Network	Driver Value**			FD decision	DD position
	Submitted Dec 19	Submitted Sep 20	Modelled		
Non-Domestic: Relay (No.)					
Sc	103	103	103	We have allowed in full the proposed workloads for non-domestic relays	As per FD
So	512	512	512		
SGN	615	615	615		
Domestic: Relay after escape (No.)					
Sc	3,823	3,823	3,823	We have allowed in full the proposed workloads for domestic relays after escape	As per FD
So	20,436	20,436	20,436		
SGN	24,259	24,259	24,259		
Domestic: Relay other** (No.)					
Sc	4,376	4,376	4,376	We have allowed in full the proposed workloads for other domestic relays	As per FD
So	22,541	22,541	22,541		
SGN	26,917	26,917	26,917		

* Includes Domestic Relay: Bulk Services, Relay: Service Alts, Meter Relocations, Relay: Smart Metering, Relay: Smart Metering (Workload at Cost of Shipper), Relay: Other (Metallic), Relay: Other (Non-Metallic)
** All values include capitalised replacement

Final Determinations rationale and Draft Determinations responses

- 3.18 We have decided to mostly allow SGN's resubmitted repex workloads (see sections below for further details). We found that its revised submission provided adequate justification and clarity as well as paying back prior to 2037 CBA cut-off we proposed. We have assessed SGN's Draft Determinations response and further evidence submitted through a detailed engineering and cost assessment process. All Final Determinations decisions are detailed below per repex asset category. In its response SGN has resubmitted revised workloads and costs for all repex asset categories in the form of BPDTs as well as revised CBAs for the asset management repex categories that we proposed to disallow at Draft Determinations. Any decisions or adjustments mentioned in this section refer to the resubmitted BPDT.
- 3.19 SGN in its response stated that it strongly disagreed with the adjustments proposed to repex workloads at Draft Determinations. It argued that we had failed to take account of safety, stakeholder and leakage reduction arguments presented in the Engineering Justification Papers (EJPs). SGN also made a number of detailed arguments relating to specific asset categories, which are covered in more detail below.
- 3.20 SGN's CEG noted a concern that stakeholder feedback didn't appear to have been taken into account in our assessment of SGN's workloads at Draft Determinations. It hoped that Ofgem would support SGN's resubmitted and more focused proposals with shorter payback periods. SGN responded to our Draft Determinations position with revised workloads. We are confident that our final decision has factored in relevant considerations and the workload allowances strike the right balance between protecting future consumers and responding to current stakeholders' needs for ongoing safety investment in the gas network. Additionally, in assessing the CBAs for these investments, the allowances determined at Final Determinations have explicitly accounted for the cost of avoided emissions related to each investment.
- 3.21 The Scottish Government in its response highlighted the importance of safe, reliable and resilient networks. It was concerned that the proposed cuts place a risk to the strategic programmes of replacement and upgrading of aging infrastructure, which needs to look beyond RIIO-GD2. Another stakeholder has raised concerns about disallowances of repex workloads in London and urged Ofgem to ensure that resilience and safety benefits have adequately been accounted for. We think that our final decision on workloads, and adjustments to

opex costs, ensure SGN is funded to meet its statutory safety obligations and to maintain a reliable and resilient network. Furthermore, the NARM mechanism (see NARM Annex) allows for access to additional funding should it be justified within period (ie safety-driven reasons). Please see GD Annex Chapter 3 for further details on our overall GDNs' workloads decisions justification and the sections below for SGN specific justifications.

Tier 1 mains and steel mains <=2"

- 3.22 We have decided to implement our Draft Determination position to allow Tier 1 workloads but have excluded dynamic growth (see GD annex chapter 3 for further details) and have allowed steel mains <=2" in full.
- 3.23 We have decided not to allow SGN's proposed accelerated delivery of the Tier 1 repex programme. SGN and the SGN CEG in their responses stated that they disagreed with the proposed disallowance of accelerated growth programme as it was included based on stakeholder engagement views, environmental benefits, safety benefits and opex reduction benefits. SGN CEG stated it is supportive of accelerated growth as it sees it as the most efficient way of meeting the 2032 mandatory works replacement target due to reduced capital cost during COVID-19 and a potential cliff edge risk towards the end of the IMRRP scheme. Another stakeholder expressed its concern about the lack of priority attached to leakage with the disallowance of accelerated Tier 1 repex. We think that given the current uncertainty around the future of the gas network it is not appropriate to accelerate funding for the Tier 1 mains replacement programme. SGN removed accelerated growth from its resubmitted BPDTs for Tier 1 for both the Southern and Scotland.

Tier 2A mains

- 3.24 We have decided to halve the submitted Tier 2A workloads and removed 45% of costs for both of SGN's networks from resubmitted BPDTs to account for updated forecasts. Following an update to the MRPS²⁵ model, resulting in lower forecasts for Tier 2A mains, SGN requested a 50% reduction of submitted Tier 2A workloads and a 45% reduction of costs (in order to preserve the overhead costs). We agree

²⁵ Mains Risk Prioritisation System - the GDNs have recently completed an update to the coefficients within the risk model which is used to determine the risk scores used to classify Tier 2 mains. This update resulted in lower forecast workloads for Tier 2A for both SGN networks, but this was only agreed after SGN had resubmitted its BPDT, resulting in downward adjustments to submitted workloads.

with SGN's request. See GD Annex for further explanation of the Tier 2A volume driver mechanism and chapter for allowed costs and unit costs.

Tier 2B and Tier 3 mains

- 3.25 We have decided to allow in full SGN's resubmitted workloads for Tier 2B and Tier 3 for both networks as the needs cases have been justified. SGN strongly disagreed with the Draft Determinations approach for Tier 2B and Tier 3 stating many Tier 2B and Tier 3 assets within the overall proposed programme paid back before 2037 and some are associated with Tier 1 projects for efficiency. It argued that using average failure rates from the NARM model and running the CBA at the whole population level has distorted the output from the CBA model. In its response SGN has submitted updated CBAs with a revised workload that reflects the higher failure rates and exceptional costs associated with these particular assets. Following engineering and cost assessment reviews of the resubmitted material, we think that SGN has justified the needs case for these workloads, including meeting the 2037 CBA payback criteria, and we have therefore allowed them in full.

Steel mains >2"

- 3.26 We have decided to allow in full SGN's resubmitted workloads for steel mains >2" for both networks as the needs cases have been justified, however, we have made some adjustments to costs due to inconsistencies in the submitted data. We have made a downward cost adjustment of £4.7m for Southern and £0.7m for Scotland. The adjustment is based on the difference in submitted costs between the CBA submitted as part of SGN's Draft Determinations response in September 2020 and a revised CBA submitted in October 2020 alongside revised BPDT. We found that the increase in costs from the CBA submitted in September 2020 to the CBA submitted in October 2020 for the same volume of workloads was not justified.
- 3.27 SGN disagreed with the disallowance of steel >2" workloads in its response, stating that it is highly concerned with safety, reliability and customer issues. It also stated it could compromise its compliance with statutory requirements. SGN noted an increasing failure rate in this category, following joint research with the other GDNs in relation to observed steel pipe failures. In its response SGN has submitted updated CBAs with a revised workload that reflects the higher failure rates and exceptional costs associated with these pipes. We have allowed in full

SGN's revised workloads, as we consider these to be justified following extensive engineering and cost assessment review, including meeting the 2037 CBA payback criteria.

Iron mains >30m from a building and Other Policy and Condition mains²⁶

- 3.28 We have allowed in full SGN's proposed workloads for Southern and Scotland for iron mains >30m from a building in line with our Draft Determinations proposals. We did not receive any feedback to suggest that we should change our position at Final Determinations.
- 3.29 We have allowed in full SGN's proposed Other Policy and Condition workloads for both Southern and Scotland as the needs cases have been justified. This is a change from our Draft Determination position, where we had disallowed these workloads for Southern. SGN resubmitted other policy and condition workloads and costs for both of its networks and provided further technical evidence justifying the needs case. SGN noted that for some categories of other policy and condition mains (ie replacement of PE mains) it is not possible to justify replacement on a CBA basis alone, but intervention is still required. Following a further cost and engineering review of the additional evidence we have found the additional evidence supported the needs case justification for the resubmitted workloads.

Services associated with mains replacement

- 3.30 We have decided to implement our approach of making corresponding pro rata adjustments to services associated with mains where we have not allowed funding for submitted workloads (ie Tier 1 dynamic growth), as proposed at Draft Determinations. These adjustments are based on submitted services: mains ratios for each network and submitted proportions between intervention types²⁷ and domestic/non-domestic.

Services not associated with mains replacement

²⁶ Other Policy & Condition mains: The replacement of distribution mains and services not captured under the HSE policy workload. This includes non standard materials and mains selected to be replaced on a condition basis in accordance with policy.

²⁷ Services relays; services test and transfer.

3.31 At Final Determinations we have allowed in full SGN's submitted workloads for services not associated with mains replacement in both of its networks, in line with our Draft Determinations position.

Capex

Description

3.32 Reinforcement and connections workloads are the two capex components of the totex CSV used in our regression modelling for RIIO-GD2.

Final Determinations decision

Table 36: Reinforcement workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value		Final Determinations decision	Draft Determinations position
	Submitted	Modelled		
General (km)				
Sc	73.4	73.4	Workload allowed in full	Three Southern projects disallowed (CPM7607 Marden MP, CPM6843 Brackley and CPM6944 Wivelsfield)
So	68.9	68.9		
SGN	142.3	142.3		
Specific (km)				
Sc	-	-	No adjustments to workload	As Final Determinations
So	-	-		
SGN	-	-		

Note: Includes mains only. We have assessed growth governors separately, similar to RIIO-GD1.

Table 37: Connections - mains workloads (RIIO-GD2 total, kilometres mains commissioned)

Network	Driver Value		Final Determinations decision	Draft Determinations position
	Submitted	Modelled		
Domestic: all types (km)				
Sc	104.9	104.9	Workload allowed in full	As Final Determinations
So	205.7	205.7		
SGN	310.6	310.6		
Non-domestic: all types (km)				
Sc	20.9	20.9	Workload allowed in full	As Final Determinations
So	22.4	22.4		
SGN	43.3	43.3		
FPNES (km)				
Sc	30.6	30.6		As Final Determinations

Network	Driver Value		Final Determinations decision	Draft Determinations position
	Submitted	Modelled		
So	10.0	10.0	Workload allowed in full	
SGN	40.6	40.6		

Table 38: Connections - services workloads (RIIO-GD2 total, no. of service connections)

Network	Driver Value		Final Determinations decision	Draft Determinations position
	Submitted	Modelled		
Domestic: all types (no.)				
Sc	25,990	25,990	Workload allowed in full	As Final Determinations
So	59,139	59,139		
SGN	85,129	85,129		
Non-domestic: all types (no.)				
Sc	1,995	1,995	Workload allowed in full	As Final Determinations
So	3,500	3,500		
SGN	5,495	5,495		
FPNES (no.)				
Sc	12,950	12,950	Workload allowed in full	As Final Determinations
So	5,010	5,010		
SGN	17,960	17,960		

Final Determinations rationale and Draft Determinations responses

- 3.33 As shown in Table 36, we have decided to accept SGN's reinforcement workload in full. Having repeated our engineering review for these projects based on the additional information provided by SGN at Draft Determinations, we are now satisfied that the needs case is justified. Our engineering consultants, QEM/ARV, highlighted timing and volume uncertainty due to the nature of when the new developments underpinning these projects will be built, and recommended we introduce some form of uncertainty mechanism to guard against non-delivery. We recognise this point; however we expect SGN to manage this risk as other GDNs are doing for reinforcement projects of a similar size.
- 3.34 As shown in Table 37 and Table 38, we have decided to accept SGN's connections workload in full. As discussed in the GD Annex and Chapter 4 of this document, we have decided to include common domestic and FPNES connections volume drivers to handle any material variations in outturn workload volumes.

Non-regression Analysis

3.35 This section provides an overview of the non-regression analysis we undertook for our SGN assessment, including adjustments that we made to costs and workloads. The analysis covered the following categories: Multi Occupancy Buildings (MOBs), diversions, growth governors, streetworks, smart metering and land remediation.

3.36 For some non-regression models, the costs assessed fall into more than one of the opex/capex/repex cost categories (ie MOBs, streetworks). We present each non-regression model in turn, rather than seeking to categorise costs into opex/capex/repex. The modelled costs in the tables below are costs before benchmarking and ongoing efficiency adjustments have been applied.

Multi Occupancy Buildings (MOBs)

Final Determinations decision

Table 39: MOBs interventions - gross costs and workloads (RIIO-GD2 total, £m 2018/19 prices, no. of risers)

Network	Final Determinations decision				Draft Determinations position	
	Costs (gross)		Workloads			
	<i>Submitted</i>	<i>Modelled</i>	<i>Submitted</i>	<i>Modelled</i>		
	<i>£m</i>	<i>£m</i>	<i>No.</i>	<i>No.</i>		
MOBs repex						We made a minor adjustment to SGNs submitted MOBs repex workloads in order to round annual workloads to the closest whole number to ensure that total MOBs repex workloads represent
Sc	13.8	13.7	628	626		
So	73.2	73.2	3,445	3,441		
SGN	87.0	86.9	4,072	4,067		
MOBs maintenance						
Sc	0.0	3.2	n/a	n/a		
So	0.0	3.0	n/a	n/a		
SGN	0.0	6.2	n/a	n/a		
MOBs connections						
Sc	0.0	0.0	0.0	0.0		
So	0.0	0.0	0.0	0.0		
SGN	0.0	0.0	0.0	0.0		

Network	Final Determinations decision				Draft Determinations position
	Costs (gross)		Workloads		
	Submitted	Modelled	Submitted	Modelled	
	£m	£m	No.	No.	
					a feasible forecast.

Final Determinations rationale and Draft Determinations responses

3.37 We have maintained the Draft Determination MOB's repex reductions of <£0.1m each for SGN Scotland and Southern. SGN's submitted data included some workloads, defined in number of MOB's, that did not add up to a whole number over RIIO-GD2. We rounded annual workloads to the closest whole number to ensure that total MOB's repex workloads represent a feasible forecast.

3.38 SGN CEG agreed with including MOB riser funding in baseline but thought a PCD would hold companies to account for delivery. MOB risers are covered by the NARM mechanism, which ensures companies are held to account for delivery.

3.39 We have decided to make upwards adjustments to SGN's MOB's maintenance allowance to account costs associated with MOB riser surveys for buildings <6 storeys. SGN proposed a bespoke PCD for MOB riser surveys in its Business Plan submission. We rejected this (see Appendix 1 for further details) but agree that these costs should be included in baseline as they are an important safety measure that GDNs must undertake. We allowed £3.2m for Scotland and £3.0m for Southern, based on our view of average survey costs across the industry.

Diversions

Final Determinations decision

Table 40: Diversions mains and associated services proposed costs and workloads (RIIO-GD2 total, £m, 2018/19 prices, kilometres mains commissioned and no. of services)

Network	Final Determinations decision				Draft Determinations position
	Costs		Workloads*		
	Submitted*	Modelled	Submitted	Modelled	
Diversions					We made downward adjustments to rechargeable diversions costs, totalling £2.1m for SGN Southern and £0.3m for SGN Scotland.
	£m	£m	km	km	
Sc	17.2	16.5	49.1	49.1	
So	28.1	25.6	45.2	45.2	
SGN	45.4	42.1	94.3	94.3	

Network	Final Determinations decision				Draft Determinations position
	Costs		Workloads*		
	Submitted*	Modelled	Submitted	Modelled	
Diversions – services					
	£m	£m	No.	No.	
Sc	0.2	0.2	234	234	
So	0.2	0.2	399	399	
SGN	0.4	0.4	633	633	
* Submitted workloads refer to post Draft Determinations resubmission					

Final Determinations rationale and Draft Determinations responses

3.40 We have decided to maintain the Draft Determinations adjustment methodology adjusting SGN's unit costs for two of the submitted rechargeable diversions activities for both of SGN's networks. SGN disagreed with the downward cost adjustment application based on the average annual historical unit cost, the inconsistent application of the unit cost adjustment across categories and for other networks. The unit costs submitted by SGN for these categories were significantly higher than those reported historically, and we still think the increase is not justified and have not seen evidence that would convince us to change our Draft Determination position. We have made downward adjustments to rechargeable diversions other policy and condition and steel <2" diversions for Scotland and Southern. The adjustments were made by applying the average annual historical unit cost for each network across RIIO-GD2. The downward adjustments total £2.6m for SGN Southern and £0.8m for SGN Scotland in gross terms²⁸.

Growth governors

Final Determinations decision

Table 41: Growth governors costs and workloads (RIIO-GD2 total, £m, 2018/19 prices, no. of governors)

Network	Final Determinations decision				Draft Determinations position
	Costs		Workload		
	Submitted	Modelled	Submitted	Modelled	
	£m	£m	No	No	
Sc	3.2	2.0	23	23	Unit cost benchmark based on RIIO-GD1 historic years, which resulted in a -£1.6m modelled reduction for Scotland and a -
So	9.4	3.3	37	37	

²⁸ Adjustments equal to £0.5m and £0.2m in net terms for Southern and Scotland respectively. Note, while the methodology for calculating the adjustments remained the same as at Draft Determinations, SGN resubmitted higher costs in its consultation response, resulting in slightly higher adjustments in £m terms than at Draft Determinations.

Network	Final Determinations decision				Draft Determinations position
	Costs		Workload		
	Submitted	Modelled	Submitted	Modelled	
	£m	£m	No	No	
SGN	12.6	5.3	60	60	£6.8m modelled reduction for Southern.

Final Determinations rationale and Draft Determinations responses

- 3.41 As discussed in our GD Annex, we decided to assess growth governor costs using a unit cost benchmark based on all RIIO-GD1 and RIIO-GD2 data. We have separated the assessment into Intermediate Pressure (IP) inlet and Medium Pressure (MP) inlet asset types because the unit costs are materially different when this extended time-period is used. This change addresses SGN's concern around the combined assessment of IP and MP governors used at Draft Determinations.
- 3.42 In response to Draft Determinations, SGN reduced its RIIO-GD2 governor forecast by £6.2m compared to its original submission of £12.6m, with forecast volumes increasing by one governor installation. SGN disagreed with our treatment of five non-routine governor installations, arguing that their complexity made them unsuitable for unit cost benchmarking and requested specific unit costs for each. We have not separately assessed SGN's five non-routine installations, as we think our updated approach of using an extended time-period and distinguishing between inlet pressures adequately accounts for all projects.

Streetworks

Final Determinations decision

Table 42: Streetworks costs (RIIO-GD2 total, £m, 2018/19 prices)

Network	Final Determinations decision		Draft Determinations position
	Costs		
	Submitted	Modelled	
	£m	£m	
Sc	15.4	16.5	Costs adjusted in line with SGN's average costs in years 2016/17 to 2019/20, and costs for fines and penalties were disallowed. This resulted in a modelled downward adjustment of £2.4m for Scotland and £8.7m for Southern.
So	60.4	56.0	
SGN	75.8	72.4	
Workload/volume data not used for cost assessment.			

Final Determinations rationale and Draft Determinations responses

- 3.43 As discussed in our GD Annex, we have decided to base our streetworks assessment on an extended time-period through to 2026, compared to 2020 at Draft Determinations. This change ensures costs associated with statutory schemes introduced in 2021 are accounted for in our assessment, and addresses SGN’s feedback that our Draft Determinations approach failed to account fully for RIIO-GD1 forecasts and therefore risked underfunding GDNs for any statutory costs introduced in the last year of RIIO-GD1.
- 3.44 SGN disagreed with our Draft Determinations proposal to disallow costs for fines and penalties. We have not changed our assessment in response to this feedback and have outlined our rationale for this in the GD Annex.

Smart metering

Final Determinations decision

Table 43: Smart metering costs and workloads (RIIO-GD2 total, £m, 2018/19 prices, no. of interventions)

Network	Final Determinations decision				Draft Determinations position
	Costs*		Workloads		
	Submitted	Modelled	Submitted	Modelled	
	£m	£m	No.	No.	
Sc	8.9	6.6	48,000	25,417	Costs reduced by £11.4m, reflecting the reduction to the forecast number of smart metering interventions in the RIIO-GD2 period.
So	20.0	15.0	96,000	50,883	
SGN	28.9	21.6	144,000	76,300	

* Includes embedded OE adjustment.

Final Determinations rationale and Draft Determinations responses

- 3.45 We have decided to implement the Draft Determinations position and assume an intervention rate of 2.5% for smart metering activities. SGN argued that our understanding of their original intervention rates had been incorrect, resulting in the final allowance being under-awarded. We have amended the assumed intervention rates, resulting in a reduction of submitted costs by £7.3m.

Land remediation*Final Determinations decision***Table 44: Land remediation costs and workloads (RIIO-GD2 total, £m, 2018/19 prices, no. of sites)**

Network	Final Determinations decision				Draft Determinations position
	<i>Costs*</i>		<i>Workloads</i>		
	<i>Submitted</i>	<i>Modelled</i>	<i>Submitted</i>	<i>Modelled</i>	
	<i>£m</i>	<i>£m</i>	<i>No.</i>	<i>No.</i>	
Sc	8.6	8.6	112	112	As per Final Determinations
So	15.9	15.9	96	96	
SGN	24.5	24.5	208	208	

*Includes embedded OE adjustment.

Final Determinations rationale and Draft Determinations responses

3.46 We have decided to implement the Draft Determinations position and make no adjustments to SGN's forecast land remediation expenditure.

SIU Opex*Final Determinations decision***Table 45: SIU opex and workloads (RIIO-GD2 total, £m, 2018/19 prices)**

Network	Final Determinations decision				Draft Determinations position
	<i>Costs*</i>		<i>Workloads**</i>		
	<i>Submitted</i>	<i>Modelled</i>	<i>Submitted</i>	<i>Modelled</i>	
	<i>£m</i>	<i>£m</i>	<i>No.</i>	<i>No.</i>	
Sc	34.4	34.4	-	-	As per Final Determinations

* Includes embedded OE adjustment.
** Workload data not used for cost assessment.

Final Determinations rationale and Draft Determinations responses

3.47 We have decided to implement the Draft Determinations positions and make no adjustments to SGN's SIU opex.

Technically assessed costs

3.48 This section contains an overview of the technical analysis undertaken for SGN, including our adjustments to submitted costs. For each category, we present a summary of submitted and allowed costs (excluding ongoing efficiency). Our GD Annex sets out the qualitative and quantitative techniques we used to assess costs.

Bespoke outputs

Description

3.49 Table 46 summarises our decision on SGN’s bespoke outputs. Further detail and full list of our decisions for all bespoke outputs is provided in Chapter 2 and Appendix 1. Of the submitted bespoke outputs, we have accepted £22.5m of expenditure.

Final Determinations decision

Table 46: Assessment of SGN’s submitted bespoke outputs (RIIO-GD2 total, £m, 2018/19 prices)

Network	Submitted	Allowed (excludes OE)	Adjustments	Adjustment (%)
Sc	34.3	9.4	-24.9	-73%
So	55.3	13.2	-42.2	-76%
SGN	89.6	22.5	-67.1	-75%

Repex

Final Determinations decision

Table 47: Technical assessment of repex projects

Network	Investment name	Costs			FD position	DD position
		Submitted £m	Allowed* £m	Confidence		
Sc	Intermediate Pressure Service reconfigurations	3.68	3.68	Lower	Accept in full with bespoke PCD	Allowed bespoke PCD excluding costs for mains and services replacement

Network	Investment name	Costs			FD position	DD position
		Submitted	Allowed*	Confidence		
		£m	£m			
So	[REDACTED]	4.91	4.91	Lower	Accept in full and include in Capital Projects PCD	Allowed in full as standalone bespoke PCD
So	Cams Hall	1.44	0.00	Lower	Rejected in full following engineering review	Rejected in full following engineering review
Sc	Tier 1 stubs	2.72	1.16	Lower	Partially allowed, included in baseline. Re-opener implemented	Rejected in full, re-opener proposed
So	Tier 1 stubs	5.98	2.53	Lower	Partially allowed, included in baseline. Re-opener implemented	Rejected in full, re-opener proposed

* Allowed costs do not include ongoing efficiency

Final Determinations rationale and Draft Determinations responses

- 3.50 Intermediate Pressure (IP) Service reconfigurations: We have decided to allow in full the costs associated with this project, based on the additional information provided by SGN. The company provided further evidence justifying why the works are substantially different in unit costs to their respective mains category and therefore why they should be funded within the PCD itself. Following engineering and cost assessment review of this evidence, we agree with SGN, revising our Draft Determinations position. We have allowed the full cost of £3.68m for IP service reconfigurations in RIIO-GD2 and will set a bespoke PCD to ensure the company is held accountable for delivery of the project. Please see bespoke outputs section in Chapter 2 for further information.
- 3.51 [REDACTED]: We have decided to maintain our decision to allow costs in full for [REDACTED] but will now include it within the common Capital Projects PCD. Please see bespoke outputs section in Chapter 2 and the GD Annex for further information.
- 3.52 Cams Hall: We have decided not to provide funding for the Cams Hall project, as the needs case has not been met. SGN responded that it was disappointed that Cams Hall was rejected and raised concerns over its inability to carry out effective

condition assessment due to lack of accessibility, lack of knowledge on status of pipe and legacy design issues. Following further detailed review of the project, we maintain our position that the needs case has not been justified from an engineering perspective, based on the information provided. This project was submitted as part of a combined PCD, alongside [REDACTED].

3.53 Tier 1 stubs: We have decided to provide some baseline funding for Tier 1 stubs at Final Determinations. At Draft Determinations, we proposed to remove baseline funding for stubs in full, with all funding covered by a re-opener due to uncertainty on overall workloads. SGN removed Tier 1 stubs from its baseline in its revised BPDT submissions, in response to our proposal to fund Tier 1 stubs through a re-opener at Draft Determination. As Tier 1 stubs remain mandatory, we think it is reasonable to provide costs equivalent to the first two years of the proposed stubs decommissioning programme, ensuring funding is available until the first re-opener window (please see GD Annex Chapter 4 for further details on the Tier 1 stubs reopener). We have therefore allowed £1.16m for Scotland and £2.53m for Southern.

Capex

Description

3.54 We technically assessed several of SGN’s large and discrete capex projects through a combination of needs case and deep dive assessments. Our decisions outlined below have taken account of all additional information submitted by SGN following Draft Determinations.

LTS, storage & entry

Final Determinations decision

Table 48: Technical assessment of LTS, storage and entry projects (RIIO-GD2 total, £m, 2018/19 prices)

Network	Investment name	Final Determinations decision			Draft Determinations position	
		Submitted* £m	Allowed** £m	Confidence £m	Proposed £m	Confidence £m
Sc	RO2 Dunkeld	24.97	23.52	High	23.10	High
Sc	T8: Pitcairngreen to Huntingtower - R04 and R05	6.71	6.71	High	5.67	High

Network	Investment name	Final Determinations decision			Draft Determinations position	
		Submitted*	Allowed**	Confidence	Proposed	Confidence
		£m	£m	£m	£m	£m
Sc	E&I Upgrade Programme (5 sites)	1.56	1.45	High	1.05	High
Sc	E&I Upgrade Programme (4 sites)	0.81	0.76	High	0.55	High
Sc	Newton Means and Waterfoot PRS	8.54	8.54	High	7.54	Lower
Sc	Provan PRS	14.41	13.88	High	11.96	High
So	E&I Upgrade Programme (2 sites)	0.72	0.66	High	0.48	High
So	Mappowder	5.27	5.17	High	3.86	High
So	Winkfield Offtake - System 1 (South East)	8.23	7.88	High	4.84	High
So	Winkfield Offtake - System 2 (South)	7.79	7.44	High	3.81	High
So	E&I Upgrade Programme (23 sites)	4.89	4.63	High	3.41	High
Total		83.89	80.64		66.27	

* Submitted costs include the revised proposals submitted in SGN's response to our Draft Determinations consultation.
** Project overheads were assessed via our totex regression rather than through technical assessment, however they are included in the above figures to enable comparison with submitted costs.
Note: Subtotals may not add up to sum of line items due to rounding

Table 49: Decisions on previously disallowed LTS, storage & entry investments

Network	Investment name	Submitted (£m)	Final Determinations decision
So	Battle PRS - System 2	2.59	Needs case met at FD based on additional evidence provided as part of Draft Determinations response.
So	E&I Minor Works	1.46	
So	St. Mary Cray 1 – Boiler	1.97	
So	St. Mary Cray 1 - CHP Unit	2.47	
So	Westerham PRS System 2 (HP-MP PRS)- Full System Rebuild	2.63	
So	Battle PRS - System 2	2.59	Project costs assessed through our totex regression.
Sc	E&I Minor Works (~15 sites)	0.5	
Sc	Georgetown PRS	0.94	Disallowed at FD due to insufficient needs case.
Sc	Replace atmospheric vaporisers	0.96	

*Final Determinations rationale and Draft Determinations responses***Table 50 Rationale for cost reductions in the technical assessment of LTS, storage & entry projects**

Network	Investment name	Draft Determinations responses	Rationale for Final Determinations decision
Sc	Provan PRS	Disagreed with our proposed reductions to materials costs and contingency and provided further justification for the proposal.	We now accept the justification for the materials costs. We have increased the contingency costs compared to our Draft Determinations position based on the additional justification, but do not accept the full amount requested which is higher than other projects of a similar nature.
Sc	R02 Dunkeld	Reduced design costs and contingency but disagreed with additional reductions. New evidence provided on cost breakdown.	We accept the reduced design costs. We have reduced the project management and contingency costs to a level comparable with works of a similar nature due to a lack of justification.
Sc	Replace atmospheric vaporisers	Disagreed with our proposal to disallow based on insufficient needs case. Provided new evidence on the need for investment.	Disallowed due to insufficient needs case. Refer to QEM Annex for further detail.
Both	E&I Upgrade Programme	Reduced request due to crossover with Battle PRS but disagreed with our proposed reductions for efficiency savings which they explain are already included.	Costs reduced to account for savings that can be achieved by bundling these works together with other works at the same sites.
So	Winkfield Offtake Systems 1 & 2	Disagreed with our proposed reductions. Provided further explanation of materials and civil/mechanical costs and argued that there was no duplication in costs between systems 1 and 2.	We now accept the majority of the direct project costs but have disallowed the additional SGN staff costs because no justification has been provided. We accept that design costs are not double counted but have halved costs for the let-down units that are included in both projects, because the drawings provided show one let-down unit serving both systems.

3.55 Where SGN responded to our Draft Determinations proposals with additional evidence, we repeated our engineering needs case review and bottom-up deep dive assessments for individual projects. Table 48 presents the results of our final bottom-up deep dive assessments, supported by the rationale presented in Table

50. We have allowed an additional £14.37m of efficient costs compared to Draft Determinations.
- 3.56 By increasing the materiality threshold for technically assessed capex projects, 34 smaller SGN projects were moved into our totex regression at Final Determinations. In response to SGN’s feedback, we have excluded all indirect project costs from our bottom-up deep dive assessments, instead including £17.21m of submitted indirect project costs in the totex regression.
- 3.57 We have decided to revise upwards our BPI confidence classification for SGN’s Newton Means and Waterfoot PRS project. SGN disagreed with our lower confidence classification at Draft Determinations, arguing that the level of project detail they submitted satisfied the criteria we set out in our Business Plan Guidance (BPG). We have reviewed our position and are satisfied with the basis of SGN’s cost estimate.
- 3.58 Table 49 shows the results of our repeat engineering need case review of the SGN projects we disallowed at Draft Determinations.

PSUP (Physical Security Upgrade Programme)

Final Determinations decision

Table 51: Technical assessment of PSUP capex (RIIO-GD2 total, £m, 2018/19 prices)

Network	Costs*		Final Determinations decision	Draft Determinations position
	Submitted	FD Decision		
	£m	£m		
Sc	2.1	2.1	Costs accepted in full	Same as FD
So	0.0	0.0		
SGN	2.1	2.1		

* Excludes ongoing efficiency

Final Determinations rationale and Draft Determinations responses

- 3.59 We have decided to implement our Draft Determinations position to allow SGN’s submitted PSUP capex costs in full.

Company-specific factors

- 3.60 In light of the responses to our Draft Determinations and the additional evidence submitted, we have revisited our assessment of SGN’s company specific factors.

3.61 Where we have accepted the need for an adjustment, we have assessed whether the magnitude of the adjustments proposed by companies are reasonable, proportionate and consistent with the other pre-modelling adjustments we have applied.

Isle of Wight

Description

3.62 SGN claimed that costs in its Southern network should be adjusted by to compensate for the additional costs of operating on the Isle of Wight. SGN submitted that these factors are not covered by the sparsity adjustment, as they are instead a consequence of the island being geographically disconnected from the mainland.

3.63 At our Draft Determinations, we have rejected this claim as we considered it was not material in nature.

Final Determinations Decision

Table 52: Final Determinations Decisions - Isle of Wight

Company specific factor	Final Determinations Decision	Draft Determinations Position
Isle of Wight	No adjustment	Same as FD

Final Determinations rationale and Draft Determinations responses

3.64 We have decided to implement our Draft Determinations position and have not applied any adjustment for Isle of Wight.

3.65 SGN asked that we reconsider the position. As we note in our Draft Determinations, we accept that operating in the Isle of Wight may involve additional costs that are not captured by the cost drivers in the econometric models and/or other regional adjustments. However, we consider this claim not to be material at a totex level. In addition, SGN have not indicated what activities the adjustment should be applied to.

Repex reinstatement and plant hire

Description

3.66 Cadent claimed that the cost of reinstatement and plant hire is significantly higher in its London network than elsewhere and regional adjustments are required. Since similar issues are likely to affect Southern GDN’s London operations, we have considered applying an adjustment proportional to the one proposed by Cadent for London network.

Final Determinations Decision

Table 53: Final Determinations Decision - Repex reinstatement and plant hire

Company specific factor	Final Determinations Decision	Draft Determinations Position
Plant hire	Apply adjustment	No adjustment
Repex reinstatement	Apply adjustment	No adjustment

Final Determinations rationale and Draft Determinations responses

3.67 Following the acceptance of a related Cadent’s London network cost claim, we have decided to make an adjustment to plant hire and reinstatement costs for SGN’s Southern network, which is exposed to an analogous operating environment. In doing this, we have taken into account the fact that work in London represents a smaller share of SGN Southern’s operations compared to Cadent’s London network.

3.68 More details on rationale and calculation of these adjustments can be found in the Cadent’s annex.

Non totex cost items

Non-controllable opex

Description

3.69 SGN's non-controllable opex allowances are shown in the tables below. We set out our decisions in relation to each pass-through mechanism in Chapter 4 of our GD Annex.

*Final Determinations decision***Table 54: RIIO-GD2 non-controllable costs, Sc (RIIO-GD2 total, £m, 2018/19 prices)**

Sc	Total RIIO-GD2 (£m, 2018/19 prices)
Shrinkage	12.0
Ofgem Licence	6.8
Network Rates	181.0
Established Pension Deficit Recovery Plan Payment	2.4
Pension Deficit Charge Adjustment (NTS Pension Recharge)*	0.0
Third Party Damage and Water Ingress	0.0
Gas Theft	0.0
Bad Debt	0.8
NTS Exit Costs	129.9
Xoserve	9.5
Misc	0.0
Supplier of Last Resort Claims	0.0
Other - Stranraer LDZ	2.9
Total non-controllable costs	345.4

* As per National Grid's 'Notice of Indicative Gas Transmission Transportation Charges' published on the 30th of October 2020, Pension Deficit Charge Adjustment costs have been set to zero.

Table 55: RIIO-GD2 non-controllable costs, So (RIIO-GD2 total, £m, 2018/19 prices)

So	Total RIIO-GD2 (£m, 2018/19 prices)
Shrinkage	31.7
Ofgem Licence	15.2
Network Rates	393.0
Established Pension Deficit Recovery Plan Payment	1.8
Pension Deficit Charge Adjustment (NTS Pension Recharge)*	0.0
Third Party Damage and Water Ingress	0.0
Gas Theft	0.0
Bad Debt	1.0
NTS Exit Costs	294.9
Xoserve	21.4
Misc	0.0
Supplier of Last Resort Claims	0.0
Total non-controllable costs	759.1

* As per National Grid's 'Notice of Indicative Gas Transmission Transportation Charges' published on the 30th of October 2020, Pension Deficit Charge Adjustment costs have been set to zero.

4. Adjusting baseline allowances for uncertainty

Introduction

4.1 This chapter sets out our decisions for the SGN-specific parameters as well as our decisions and rationale where we have accepted bespoke UMs. We set out more detail on the common UMs in the GD Annex including our broader decisions and rationale.

GD Sector uncertainty mechanisms

4.2 We set out our decisions for the SGN-specific parameters in the following tables.

Repex - Tier 2A iron mains volume driver

Table 56: Final Determinations decision - Tier 2A iron mains Baseline Target Workloads (kilometres mains decommissioned)

Sc	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>						
Tier 2A mains decommissioned						
9" in diameter	0.1	0.1	0.1	0.1	0.1	0.4
10"-12" in diameter	0.1	0.1	0.1	0.1	0.1	0.6
>12"-17" in diameter	0.1	0.1	0.1	0.1	0.1	0.3
Totals	0.3	0.3	0.3	0.3	0.3	1.3
Note: Subtotals may not add up to sum of line items due to rounding						

Table 57: Final Determinations decision - Tier 2A iron mains Baseline Target Workloads (kilometres mains decommissioned)

So	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>						
Tier 2A mains decommissioned						
9" in diameter	0.0	0.0	0.0	0.0	0.0	0.0
10"-12" in diameter	0.8	0.8	0.8	0.8	0.8	3.9
>12"-17" in diameter	0.6	0.6	0.6	0.6	0.6	2.9
Totals	1.4	1.4	1.4	1.4	1.4	6.8
Note: Subtotals may not add up to sum of line items due to rounding						

**Table 58: Final Determinations decision - Tier 2A iron mains and services
Baseline Cost Allowance (£m, 2018/19 prices)**

SGN	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Cost Allowance
Tier 2A mains and services Baseline Cost Allowance						
Sc	0.1	0.1	0.1	0.1	0.1	0.3
So	0.5	0.5	0.5	0.5	0.5	2.6
SGN	0.6	0.6	0.6	0.6	0.6	3.0

Note: Subtotals may not add up to sum of line items due to rounding

Table 59: Final Determinations decision - Tier 2A iron mains and services ex ante unit costs for Scotland (RIIO-GD2, £/km mains decommissioned, 2018/19 prices)

Sc	RIIO-GD2 ex ante unit costs
Tier 2A iron mains decommissioned	
e. 9"	134,180
f. 10" - 12"	278,834
g. >12" - 17"	477,087

Note: Unit costs for Tier 2A volume driver. Unit costs are inclusive of associated service workloads. Unit costs exclude RPEs.

Table 60: Final Determinations decision - Tier 2A iron mains and services ex ante unit costs for Southern (RIIO-GD2, £/km mains decommissioned, 2018/19 prices)

So	RIIO-GD2 ex ante unit costs
Tier 2A iron mains decommissioned	
e. 9"	143,451
f. 10" - 12"	298,101
g. >12" - 17"	510,053

Note: Unit costs for Tier 2A volume driver. Unit costs are inclusive of associated service workloads. Unit costs exclude RPEs.

Domestic connections volume driver**Table 61: Final Determinations decision – domestic connections mains baseline target workloads (kilometres mains commissioned)**

Network	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 baseline target workloads
	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>
Domestic connections mains¹						
Sc	20.0	20.7	21.4	21.4	21.4	105.0
So	46.2	46.4	41.7	37.6	33.8	205.7
SGN	66.2	67.1	63.1	59.0	55.2	310.6

1 Combines mains diameters above and below 180mm for both new and domestic housing.

Table 62: Final Determinations decision – domestic connections services baseline target workloads (No. of service connections commissioned)

Network	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 baseline target workloads
	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Domestic connections services¹						
Sc	5,780	5,880	5,290	4,759	4,281	25,990
So	13,400	13,300	11,970	10,773	9,696	59,139
SGN	19,180	19,180	17,260	15,532	13,977	85,129

1 Combines services for both new and domestic housing.

Table 63: Final Determinations decision – domestic connections mains ex ante unit costs (RIIO-GD2, £/km mains commissioned, 2018/19 prices)

Network	RIIO-GD2
	<i>£/km</i>
Domestic connections mains¹	
Sc	112,207
So	84,301

1 Combines mains diameters above and below 180mm for both new and domestic housing. Figures include ongoing efficiency and exclude RPEs.

Table 64: Final Determinations decision – domestic connections services ex ante unit costs (RIIO-GD2, £/service connection, 2018/19 prices)

Network	RIIO-GD2
	<i>£/service</i>
Domestic connections services¹	
Sc	166
So	470

1 Combines services for both new and domestic housing. Figures include ongoing efficiency and exclude RPEs.

SGN specific uncertainty mechanisms

Stranraer LDZ pass-through

Purpose: To recover non-controllable costs for the Stranraer Local Distribution Zone (LDZ).

Benefits: Protects companies from cost increases, or decreases, that are outside of their control.

Final Determinations Decision

Table 65: Final Determinations Decisions - Stranraer LDZ pass-through

UM parameter	Final Determination	Draft Determinations
UM type	Pass-through	Titled as "Other" non-controllable opex
Pass-through arrangements	Capacity booking costs (opex) for supplying the Stranraer LDZ	
Applied to	SGN only	
Licence condition	Special Condition 6.1	N/A

Final Determinations rationale and Draft Determinations responses

- 4.3 SGN's Stranraer network was previously classed as an SIU but is now indirectly connected to the main SGN Scotland network via a private transmission pipeline.
- 4.4 We've decided to implement our Draft Determinations proposal²⁹ to treat the capacity booking costs for this pipeline as non-controllable opex. This therefore requires a bespoke pass-through to be created. The pass-through enables the costs to be monitored through the RRP and ensures that they can be recovered in full. These costs are non-controllable in the same way as those covered by the National Transmission System (NTS) exit capacity pass-through (see Chapter 4 of the GD Annex). Therefore, for the same reasons, it is in consumers' interests to treat this as a pass-through. We did not receive any responses to our Draft Determinations position on this.

²⁹ Draft Determinations SGN Annex p59 Table 52, 'other'.

5. Innovation

Introduction

- 5.1 This chapter sets out our Final Determination on SGN's Network Innovation Allowance (NIA) for the RIIO-GD2 price control period. Chapter 8 of the Core Document also details our Final Determination on the RIIO-2 NIA framework and the Strategic Innovation Fund.
- 5.2 SGN also included bespoke outputs to trial various innovation technologies and rollout proven innovation. We have assessed these bespoke outputs in Chapter 2.

Network Innovation Allowance

Purpose: To fund innovation relating to support for consumers in vulnerable situations and/or to the energy system transition.

Benefits: The NIA will enable companies to take forward innovation projects that have the potential to address consumer vulnerability and deliver longer-term financial and environmental benefits for consumers, which they would not otherwise undertake within the price control.

Final Determination

Table 66: Network Innovation Allowance summary

Network Innovation Allowance	SGN proposed NIA (£m)	Ofgem Draft Determinations position (£m)	Ofgem Final Determinations decision (£m)
Level of NIA funding	£65.9m	£30m, conditional on an improved industry-led reporting framework.	£35.6m. We retain the option to direct additional NIA funding for hydrogen innovation during RIIO-2.

Final Determinations rationale and Draft Determinations responses

- 5.3 We have decided that all network companies, and the ESO, will be able to access NIA funding during RIIO-2, as they have satisfactorily evidenced that an improved industry-led reporting framework will be in place for the start of RIIO-2 (see Chapter 8 of the Core Document).
- 5.4 We have decided to award SGN £35.6m of NIA funding after considering the three responses which directly addressed SGN's NIA. This is £5.6m higher than our

Draft Determinations proposal. We think this is an appropriate level, having reviewed new evidence from SGN which demonstrates that it is embracing greater levels of innovation as part of Business as Usual (BAU) activities. While we previously noted SGN's CEG's comment on the low levels of BAU innovation spend within SGN's Business Plan, we note that the CEG's response reiterated the view that SGN had a good track record of innovation. The CEG is confident SGN is committed to taking forward innovations which produce payback within RIIO-2. As a result of this evidence and feedback, we think that SGN has demonstrated it is satisfactorily undertaking other innovation within BAU activities - one of the criteria we used to assess NIA requests.

- 5.5 However, we have decided to award SGN less NIA than it requested. SGN's request is considerably more than it received in RIIO-1, and other GDNs. A substantial amount of NIA requested related to hydrogen innovation funding which is very uncertain at this time and could duplicate activities by other GDNs. A consumer representative body suggested SGN should provide stronger evidence of the need for this investment. SGN, and its CEG, suggested that additional funding could be added by Ofgem during RIIO-2, if it utilised its existing allocation.
- 5.6 We recognise that a need for additional hydrogen innovation projects could arise during RIIO-2. We will therefore consider allowing NGGT and GDNs additional NIA funding for hydrogen innovation, should the NIA funding prove insufficient (see Chapter 8 of Core Document).

6. Business Plan Incentive (BPI)

6.1 This chapter sets out our Final Determination for SGN in the Business Plan Incentive (BPI). Further details of our decisions for BPI at a cross-sectoral level can be found in Chapter 10 of the Core Document.

Table 67 Summary of decisions for SGN’s BPI

BPI stage	Final Determination
Stage 1 - Minimum requirements	Pass
Stage 2 – CVP reward	£0m
Stage 3	-£0.8m
Stage 4	£0m
Total	Penalty of £0.8m

6.2 Our cost confidence assessment results in a Totex Incentive Mechanism (TIM) sharing factor of 49% for Scotland and 50% for Southern. See Chapter 10 in the Core Document for further details on the TIM.

Stage 1 – Minimum requirements

6.3 We have decided that SGN has met all the Business Plan minimum requirements set out in our Sector Specific Methodology Document (SSMD) and has, therefore, passed Stage 1 of the BPI. This was supported by consultation respondents.

6.4 Further detail on our assessment of Stage 1 can be found in our Draft Determinations Core Document.

Stage 2 – Consumer Value Propositions

6.5 We have decided not to allow any of the CVPs proposed by SGN, which means it will receive no rewards under Stage 2 of the BPI.

6.6 For details of our decisions on CVPs see Appendix 1.

Stage 3

6.7 We have decided that SGN will incur a £0.8m penalty following our BPI Stage 3 assessment.

6.8 Table 68 sets out our decisions on lower cost confidence cost categories and the associated Stage 3 penalties.

Table 68 Final Determination on Stage 3

Cost category	Lower cost confidence disallowance (£m)	BPI stage 3 penalty (£m)
Scotland		
SIU capex (Replace atmospheric vaporisers)	0.96	0.3
Repex tier 1 stubs	1.2	
Southern		
Repex [REDACTED] and Cams Hall	4.6	0.5
Repex tier 1 stubs	2.8	

Final Determination rationale and Draft Determination responses

Table 69 Final Determination rationale for Stage 3

Cost category	Final Determination rationale and Draft Determination responses
SIU capex (Replace atmospheric vaporisers)	We have decided to classify this project as lower confidence and disallow submitted costs due to an insufficient needs case, as set out in Table 50. SGN disagreed with our Draft Determinations proposal to disallow this project, but we have not received substantive evidence to justify changing our approach.
Repex tier 1 stubs	We have decided to classify this project as lower confidence due to a lack of cost detail provided by SGN. At Draft Determinations, we rejected these costs in full and proposed a re-opener. SGN broadly supported our proposed UM. For Final Determinations, we have decided to partially allow these costs (see Chapter 3), but do not think that NGN provided sufficient detail on costs for us to consider them as high confidence.
Repex [REDACTED] and Cams Hall	We have decided to implement our Draft Determinations position of allowing costs for [REDACTED] in full while disallowing costs for Cams Hall in full. SGN submitted these as a combined bespoke PCD in its Business Plan, but we assessed the projects separately, as we considered them to be clearly distinct from one another. SGN supported our position on [REDACTED], but disagreed with our assessment of Cams Hall, arguing the project should be funded, as it was unable to access the pipe to undertake inspections. Our engineering review found that the needs case for the project had not been justified.

Stage 4

6.9 We have decided that SGN will earn no reward following our BPI stage 4 assessment.

6.10 Table 70 sets out our decisions on high cost confidence categories, allowances and the associated Stage 4 rewards.

Table 70 Final Determination on Stage 4

Cost category	Company view (£m)	Ofgem view (£m)	BPI stage 4 reward (£m)
Scotland			
Modelled costs	885	869	0.0
Technically assessed capex projects	54.9	44.4	
Electric vehicles	4.1	4.1	
Southern			
Modelled costs	1,951	1,772	0.0
LTS separately assessed projects	25.8	21.0	
Electric vehicles	6.7	6.7	

Final Determination rationale and Draft Determination responses

Table 71 Final Determination rationale for Stage 4

Cost category	Final Determination rationale and Draft Determination responses
Modelled costs	We have applied our SSMD methodology and classified modelled costs (regression and non-regression) as high confidence.
Technically assessed capex projects	As set out in Table 48, we have decided to classify 11 technically assessed capex projects as high confidence. The information submitted by SGN met the criteria we set out in our BPG. With the exception of SGN's Newton Means and Waterfoot project, we have decided at Final Determinations to implement our Draft Determinations position.
Electric vehicles	These costs were not part of the Business Plan submissions. Information received from all GDNs following Draft Determinations allowed us to develop high confidence unit costs that were used to set out the allowance for electric vehicles. This activity has not earned a reward because we have accepted company submitted costs and workloads.

Appendices

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Appendix 1 – Rationale for Ofgem’s decision on SGN’s proposed bespoke outputs, CVPs and UMs

Summary of decisions- bespoke outputs

A1.1 This section sets out our decisions on the bespoke ODIs and PCDs that SGN proposed in its Business Plan. This includes our consideration of the responses we received to our Draft Determinations along with our decisions, rationale and references to further information.

Table 72: SGN's bespoke ODI proposals

Output name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
Bespoke social value incentive: reduce disruption from streetworks by implementing collaboration projects with other utility companies having to dig up the same road. SGN proposed a financial incentive linked to the 'social value' of a completed collaborative project.	Reject: We commended SGN for this proposal. We proposed to work with Cadent and SGN to develop a consistent incentive for their similar proposals. ³⁰	Respondents (GDNs, CEGs, environmental and consumer groups, suppliers and a DNO) were broadly supportive of the introduction of a new output and preferred a financial ODI over funding through baseline totex.	Reject: We have decided to implement our Draft Determinations position to implement a consistent incentive for both Cadent and SGN. Stakeholders broadly supported a financial ODI and we have worked with Cadent and SGN to develop this. We have decided to set a financial ODI for Cadent and SGN (see GD Annex Chapter 2, collaborative streetworks).

³⁰ Draft Determinations GD Annex paragraphs 2.103-2.107.

Output name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Other Activities (theft, Own use): SGN proposed a reputational ODI to reduce shrinkage from theft and own usage by 0.5ktCO₂e per year.</p>	<p>Reject: We proposed that SGN should include its target within our new common reputational ODI for business carbon footprint (BCF).³¹</p>	<p>Few respondents provided specific feedback for this output. SGN broadly agreed with our position. SGN’s CEG was disappointed this output was rejected but recognised it could be addressed in BCF reporting with consistent definitions.</p>	<p>Reject: We have decided to exclude reporting on all shrinkage elements (including theft and own use gas) from the ODI-R for BCF but this will be reported on under the Shrinkage ODI-R in the Annual Environmental Report (AER). Stakeholders broadly accepted that this output could be accommodated consistently elsewhere within the price control framework. We will explore this with stakeholders as part of developing the AER (see Chapter 2 of the GD Annex).</p>
<p>Biomethane capacity ambition: SGN proposed to increase the capacity of annual biomethane supplies by the end of RIIO-GD2 to the equivalent of 450,000 households.</p>	<p>Reject: Our view, expressed in our SSMC^{32, 33} remained that it is inappropriate to include biomethane targets within RIIO-GD2 as much of what determines the number and capacity of biomethane connections lies beyond GDNs' control. We therefore proposed not to include this ODI. As set out in our SSMD,³⁴ GDNs will continue to report on biomethane connections data in the Annual Environment Report (AER). SGN may also want to retain the proposed monitoring as a separate key performance indicator (KPI) for its stakeholders.</p>	<p>Few respondents provided specific feedback. SGN broadly agreed with our position and will monitor the output as it remains important to its stakeholders. SGN’s CEG was disappointed this output was rejected. It thought we should give biomethane capacity greater focus (as well as number of connections). It recognised that reporting in the AER could help if the basis was consistent (to reveal whether the driver is policy or individual network actions). A consumer representative body agreed with our position.</p>	<p>Reject: We have decided to implement our Draft Determinations position to use the AER for this data as we have no additional substantive evidence to justify a change. We note the CEG's view that consistent reporting across GDNs is important in understanding the GDNs' role. We will explore this with stakeholders as part of developing the AER (see Chapter 2 of the GD Annex).</p>

³¹ Draft Determinations GD Annex paragraphs 2.121-2.161.

Output name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>12 hour standard: HSE requirement for repair within 12 hours.</p>	<p>Reject: Our SSMD³⁵ stated that we would remove this RIIO-GD1 output because this level of service is now BAU. We also found insufficient evidence of a stretching target beyond BAU. SGN may want to retain the proposed monitoring as a separate KPI for its stakeholders.</p>	<p>Few respondents provided specific feedback for this output. SGN and a consumer representative body broadly agreed with our position. SGN did not think this area was eligible for CVP (as it is BAU) and requested a consistent approach, given its frontier performance. SGN’s CEG thought we should reinstate a common ODI-R or have all GDNs track the proposed measures for NGN’s CVP so relative performance can be assessed.</p>	<p>Reject: We have decided to implement our Draft Determinations position because this level of service is now BAU. SGN did not provide any additional evidence of why this target is stretching beyond BAU. We have decided to reject NGN's CVP for Final Determinations taking account of additional evidence from stakeholders (see NGN Annex Chapter 6). As part of this decision we will look to collect more granular and consistent data across GDNs on the measures proposed by NGN. We have not considered SGN's output as a CVP. It wasn't proposed as such in its Business Plan and the BPI is intended to incentivise good Business Plan submissions.</p>

³² RIIO-GD2 GD Sector Annex to the RIIO-2 Sector Specific Methodology Consultation, https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gd2_sector_annex_0.pdf

³³ Paragraph 4.52.

³⁴ Paragraph 3.75.

³⁵ Paragraph 4.86. The 12 hour standard is a secondary deliverable in relation to the repairs safety output in RIIO-GD1.

Table 73: SGN's bespoke PCD proposals

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem's Final Determination
PCDs we have decided to accept			
Biomethane improved access rollout: if trials prove successful, an output to fund rollout technologies to maximise injection flow rates, for reverse compression to expand the accessible mains network and for creating local billing zones in areas of high biomethane concentration.	Accept: We proposed to accept this bespoke PCD. ³⁶ We noted it is vital that SGN considers the feasibility of local billing zones before committing funding to this project under the PCD and sought further information on this.	See Chapter 2 for a summary of consultation responses.	Accept: We have decided to accept this bespoke PCD. Our rationale is set out in Chapter 2.
Intermediate pressure reconfigurations: programme to reconfigure 515 IP service installations in Scotland at a cost of £3.7m.	Accept: We proposed to accept this bespoke PCD but excluded costs for mains and services replacement. ³⁷	SGN submitted further evidence in relation to costs we excluded at Draft Determinations. See Chapter 2 for a summary of consultation responses.	Accept: We have decided to accept this bespoke PCD and have allowed the proposed costs in full (£3.7m) as we accept the additional evidence SGN put forward. Our full rationale is set out in Chapter 2.
Remote Pressure Management: initiative for SGN's Southern network to reduce leakage through smarter network control and remote management.	Accept: We proposed to accept this bespoke PCD subject to SGN providing additional information on how the rewards available through the Shrinkage and environmental emissions incentive would not be sufficient to fund the proposed investment. ³⁸	SGN submitted further evidence how the rewards available through the Shrinkage and environmental emissions incentive would be insufficient to fund the investment. See Chapter 2 for a summary of consultation responses.	Accept: We have decided to accept this bespoke PCD based on the information SGN provided. Our full rationale is set out in Chapter 2.

³⁶ Draft Determinations SGN Annex paragraphs 2.12-2.15.

³⁷ Draft Determinations SGN Annex paragraphs 2.21-2.24.

³⁸ Draft Determinations SGN Annex paragraphs 2.25-2.30.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Innovation rollout - stent bags/HVGET: SGN proposed to rollout innovations developed in RIIO-GD1 to reduce leakage: the stent bag, the high volume gas escapes toolkit and the GECO pump.</p>	<p>Reject: The justification provided did not demonstrate that benefits would exceed the costs. SGN may wish to consider using RIIO2 innovation funding instead, if it considers that it meets the criteria.</p>	<p>Only SGN provided specific feedback for this PCD and submitted a CBA to demonstrate that benefits would exceed costs. See Chapter 2 for a summary of consultation responses.</p>	<p>Accept: We have decided to accept this bespoke PCD because new evidence from SGN's CBA provided the justification that was previously missing. Our full rationale is set out in Chapter 2.</p>
<p>PCDs we have decided to reject</p>			
<p>Increased fleet replacement rate: SGN proposed to bring forward the average rate of vehicle replacement from eight to six years.</p>	<p>Reject: We found poor justification of cost assumptions (high unit costs, back-up vehicle purchases and replacing vehicles before their asset life expires). We proposed that GDNs submit further information for commercial fleet conversion and charging infrastructure, with a view to setting a common PCD if appropriate.³⁹</p>	<p>All GDNs provided additional information for their fleet proposals, as requested in our Draft Determinations. SGN said their proposal should be reinstated and provided updated costs and scenarios based on an eight year cycle. One consumer representative group said they supported a common PCD reflecting any economies of scale and expected decreases in costs of vehicles. We summarise responses on our industrywide approach in Chapter 2 of our GD Annex, Commercial Fleet EV PCD.</p>	<p>Reject: We have decided to reject this bespoke PCD and create a new common PCD. We’ve removed the costs for EVs and associated charging infrastructure and set an allowance for these through a common PCD. See Chapter 2 of our GD Annex, Commercial Fleet EV PCD.</p>

³⁹ Draft Determinations GD Annex paragraphs 2.133-2.142.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Low emission vehicles: SGN proposed to replace around half of its fleet with ultra-low emission vehicles (ULEVs) by the end of RIIO-GD2 and introduce the necessary refuelling infrastructure.</p>	<p>Reject: For our rationale, refer to 'Increased fleet replacement rate' above.</p>	<p>For a summary of consultation responses see 'Increased fleet replacement rate' above.</p>	<p>Reject: We have decided to reject this bespoke PCD and create a new common PCD. For our rationale, refer to 'Increased fleet replacement rate' above Also see Chapter 2 of our GD Annex, Commercial Fleet EV PCD.</p>
<p>Statutory Independent Undertakings: SGN proposed £9.6m per year for its operational and investment costs for its five SIUs during RIIO-GD2.</p>	<p>Reject: Proposal was well justified but we decided to include SIU costs within the proposed totex baseline allowance.⁴⁰</p>	<p>SGN accepted our proposed approach to SIU funding. SGN's CEG was disappointed that we had not considered more creative alternatives to the current approach of transporting liquid fuel to the networks by road or sea.</p>	<p>Reject: We have decided to implement our Draft Determinations position. Although we note the CEG's concerns, the option analysis set out in SGN's Business Plan provided clear evidence that the current supply arrangements will remain the most cost-effective approach in RIIO-GD2. We think the development of alternative SIU approaches could be supported by other RIIO-2 mechanisms (see SIU Biomethane below).</p>
<p>SIU Biomethane: three feasibility studies to promote biomethane injection (or potentially hydrogen) at the Statutory Independent Undertakings (SIU) locations, Oban, Wick, and Thurso, at an estimated £100,000 per study.</p>	<p>Reject: There was low materiality associated with this PCD. We did not consider SGN provided evidence of need for the feasibility studies. There was also no CBA demonstrating the benefits. Additionally, we thought the provision of NIA funding provided SGN with flexibility to take forward innovation projects on biomethane if it wishes.</p>	<p>SGN did not support the decision but said it would explore other options for funding. SGN's CEG also expressed disappointment, noting that they had pressed SGN to find more creative solutions for these sites.</p>	<p>Reject: We have decided to implement our Draft Determinations position. There is insufficient materiality to make it a PCD. However, we would encourage SGN to consider using the new Net Zero and Re-opener Development UIOLI allowance (which supports feasibility studies) or the NIA to support this work.</p>

⁴⁰ Draft Determinations GD Annex paragraphs 3.136-3.138.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Biomethane improved access trials - Capex: SGN proposed a PCD to fund the delivery of three trial projects that will increase the amount of biomethane able to enter the network from existing sites and reduce the costs of new biomethane sites.</p>	<p>Reject: We considered that the RIIO-2 innovation stimulus, including the NIA, provides SGN with the ability to take forward these trials if it considers that the project meets the required criteria.⁴¹</p>	<p>Few respondents provided specific feedback for this PCD. SGN was disappointed that this proposal was rejected but accepted that this would come under NIA funding. SGN’s CEG noted that we had accepted rollout proposals while rejecting the trials and hoped rollout funding would be sufficient to cover the combined costs.</p>	<p>Reject: We have decided to implement our Draft Determinations position. SGN broadly accepted our position that RIIO-2 innovation stimulus, including the NIA, provides them with the ability to take forward these trials. If the trials are successful, the separate decision to accept Biomethane improved access rollout PCD will then provide SGN sufficient funding to rollout the technology.</p>
<p>Biomethane improved access trials - Opex: SGN proposed a PCD to fund the delivery of three trial projects that will increase the amount of biomethane able to enter the network from existing sites and reduce the costs of new biomethane sites.</p>	<p>Reject: For our rationale, refer to 'Biomethane improved access trials – Capex' above.</p>	<p>For a summary of consultation responses, refer to 'Biomethane improved access trials – Capex' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'Biomethane improved access trials – Capex' above.</p>

⁴¹ Draft Determinations SGN Annex Chapter 5 and Draft Determinations Core Document Chapter 8.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Biodiversity improvements - Opex: SGN proposed to undertake biodiversity surveys on 153 selected sites, at a cost of £2m, to develop a biodiversity improvement strategy.</p>	<p>Reject: We proposed SGN reports on its biodiversity improvements under the Annual Environmental Report (AER). While the proposal is well justified, we did not think it warrants a PCD given that delivery is reasonably certain, and the reputational incentive of the AER offers sufficient safeguard against the risk of non-delivery. We proposed to allow costs in SGN's baseline allowance to carry out the work.</p>	<p>SGN challenged the cost treatment of its Environmental Action Plan (EAP) measures and said these shouldn't be included in the regression model. A consumer representative group said benchmarking should be standardised as much as possible.</p>	<p>Reject: We have decided to implement our Draft Determinations position. We have decided to continue including the costs in the regression analysis rather than as bespoke costs, consistent with cost treatment of the biodiversity proposals from the other GDNs. See Chapter 2 and 3 of the GD Annex for our approach.</p>
<p>Biodiversity improvements - Capex: SGN proposed to implement the identified improvement and enhancement measures based on the surveys SGN proposed to undertake under 'Biodiversity improvements - Opex' above, at an estimated £2.5m.</p>	<p>Reject: For our rationale, refer to 'Biodiversity improvements – Opex' above.</p>	<p>For a summary of consultation responses, refer to 'Biodiversity improvements - Opex' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'Biodiversity improvements – Opex above'.</p>
<p>Climate Change Adaptation - Opex: SGN proposed climate change adaptation and flood surveys for all occupied sites (ie including above ground assets but not including the mains) at an estimated £500k.</p>	<p>Reject: Proposal is justified but did not warrant a PCD given that delivery is reasonably certain and designing a PCD is disproportionate to the materiality at risk in the case of non-delivery. We proposed to allow costs in SGN's baseline allowance to carry out the work. Progress should be reported on in the RRP.</p>	<p>SGN challenged the cost treatment of its EAP measures and said these shouldn't be included in the regression analysis. One consumer group said benchmarking should be standardised as much as possible.</p>	<p>Reject: We have decided to implement our Draft Determinations position. We have decided to continue including the costs in the regression analysis rather than as bespoke costs, consistent with cost treatment for climate change adaptation proposals of other GDNs. See Chapter 2 and 3 of the GD Annex for our approach.</p>

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Climate Change Adaptation - Capex: SGN proposed to implement the identified actions from surveys for climate change adaptation measures at an estimated £2m per year (with an uncertainty mechanism attached to the EAP).</p>	<p>Reject: If SGN identified actions from the surveys described above,⁴² we thought these should be undertaken through SGN’s baseline totex allowance - it was not clear that this work goes beyond BAU. We also found a lack of robust supporting evidence to understand how to implement this PCD. In particular, the cost assumptions were not well justified and no particular activities were defined.</p>	<p>SGN thought this should be reconsidered as major work will not be done until RIIO3. SGN's CEG agreed this activity does not naturally fit in EAP and is more appropriate as resilience but disagreed that this is BAU and requires additional focus.</p>	<p>Reject: We have decided to implement our Draft Determinations position. There is no new evidence to support SGN's proposal - costs remain unclear as does implementation as a PCD. Other companies are managing climate change adaptation in their totex. However, we acknowledge this may need additional focus going forward and acknowledge this in Chapter 4 of the Core Document.</p>
<p>Installation of PV - Occupied Sites: SGN proposed to install solar PV across 45 office sites at an estimated total cost of £1.7m.</p>	<p>Reject: We proposed that SGN reports on this through the AER. The proposal was well justified, but we did not think it warrants a PCD given the low materiality. Delivery is reasonably certain and the reputational incentive of the AER offers sufficient safeguard against the risk of non-delivery. We proposed to allow costs in SGN's baseline allowance to carry out the work.</p>	<p>SGN challenged the cost treatment of its EAP measures and said these should not be included in the regression analysis. One consumer group said benchmarking should be standardised as much as possible.</p>	<p>Reject: We have decided to implement our Draft Determinations position. We have decided to continue including the costs in the regression analysis rather than as bespoke costs, consistent with cost treatment of the PV proposals from other GDNs. See Chapter 2 and 3 of the GD Annex for our approach.</p>

⁴² See 'Climate Change Adaptation – Opex'.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Installation of PV - Governor sites: SGN proposed to deploy solar PV on selected profiling governor sites to power monitoring and control equipment, at a cost of £3.4m over RIIO-GD2.</p>	<p>Reject: For our rationale, refer to Installation of PV – Occupied Sites.</p>	<p>For a summary of consultation responses, refer to 'Installation of PV - Occupied Sites' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'Installation of PV - Occupied Sites' above.</p>
<p>DCC membership PCD - Capex: SGN proposed that if Government expects GDNs to use smart meter data, Data Communications Company (DCC) membership would require an initial £5m capital investment to set up systems and associated interfaces.</p>	<p>Reject: We did not find clear evidence that GDNs would be mandated to be DCC Users during RIIO-GD2 and considered that SGN needs to weigh costs and benefits for any membership decisions. We considered there was insufficient justification of the needs case for a bespoke PCD.</p>	<p>One respondent provided specific feedback for this PCD. SGN’s CEG agreed that SGN has not made the case on DCC membership.</p>	<p>Reject: We have decided to implement our Draft Determinations position as no substantive evidence was provided to justify that a PCD in this area is required in RIIO-GD2.</p>
<p>DCC membership PCD - Opex: SGN proposed that DCC membership would require ongoing cost of £100k per year.</p>	<p>Reject: For our rationale, refer to for DCC membership PCD – Capex.</p>	<p>For a summary of consultation responses, refer to DCC membership PCD – Capex above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to for DCC membership PCD – Capex above.</p>
<p>Cyber resilience - Capex: Investment to provide an appropriate level of protection from cyber threats, both information and operational technology (IT and OT).</p>	<p>Reject: We retained a common approach and due to issues of national security, we detail our proposed cyber resilience OT and IT allowances and PCDs in a confidential annex.</p>	<p>One respondent provided specific feedback for this PCD. SGN agreed that this should be covered by a common mechanism.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. SGN agreed with our proposed approach. We detail our proposed cyber resilience OT and IT outputs and assessment in company specific confidential annexes to the Core Document.</p>

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Cyber resilience - Opex: Investment to provide an appropriate level of protection from cyber threats, both information and operational technology (IT and OT).</p>	<p>Reject: For our rationale, refer to Cyber resilience – Capex.</p>	<p>For a summary of consultation responses, refer to Cyber resilience – Capex above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to Cyber resilience – Capex above.</p>
<p>IT Technology Readiness - Capex: Proposed investment to keep pace with technological change, specifically in IIOT, Analytics and AI.</p>	<p>Reject: We adopted a common IT&T cost approach and proposed new licence conditions for Digitalisation Strategies and for meeting Data Best Practice. Therefore, we did not consider it necessary to set an additional bespoke PCD.⁴³</p>	<p>Only SGN provided specific feedback and accepted our proposed approach.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. We have included all IT&T costs (opex and capex) in our regression analysis (see GD Annex Chapter 3). Therefore, we did not consider it necessary to set an additional bespoke PCD.</p>
<p>IT Technology Readiness - Opex: Proposed investment to keep pace with technological change, specifically in IIOT, Analytics and AI.</p>	<p>Reject: For our rationale, refer to IT Technology Readiness – Capex.⁴⁴</p>	<p>For a summary of consultation responses, refer to 'IT Technology Readiness – Capex' above. In addition, SGN noted that it has proposed an operating cost scalar for the common mechanism to address its concerns that our current approach is focused mainly on capex.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'IT Technology Readiness – Capex' above.</p>

⁴³ Draft Determinations GD Annex paragraphs 3.153-3.154 for the technical assessment of 'IT&T capex', Draft Determinations Core Document Chapter 4 for proposed reporting requirements for 'Modernising Energy Data'.

⁴⁴ Also see Draft Determinations GD Annex Chapter 3 for treatment of opex in regression modelling.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Open Data sharing - Capex: to implement guidance from Energy Data Taskforce (EDTF), SGN proposed to provide suitable IT platforms and changes at £3.8m capital investment. Aim is to enable data to be sourced, managed, shared and accessed.</p>	<p>Reject: For our rationale, refer to IT Technology Readiness - Capex.</p>	<p>For a summary of consultation responses, refer to 'IT Technology Readiness - Capex' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'IT Technology Readiness – Capex' above.</p>
<p>Open Data sharing - Opex: to implement guidance from Energy Data Taskforce (EDTF), SGN proposed to provide suitable IT platforms and changes at annual operating cost £1.1m. Aim is to enable data to be sourced, managed, shared and accessed.</p>	<p>Reject: For our rationale, refer to IT Technology Readiness - Opex.</p>	<p>For a summary of consultation responses, see 'IT Technology Readiness - Opex' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position. For our rationale, refer to 'IT Technology Readiness – Capex' above.</p>
<p>Land Remediation: SGN proposed land remediation and regeneration activities covering 0.25km² annually for £23.4m.</p>	<p>Reject: Given the low risk of non-delivery, we did not consider it necessary to establish a bespoke PCD. We provided an allowance through our totex baseline.⁴⁵</p>	<p>Only SGN provided specific feedback for this PCD and agreed with our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. SGN agreed with our proposed approach.</p>

⁴⁵ Draft Determinations GD Annex paragraph 3.132-3.135.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Accelerated tier 1 mains replacement: SGN proposed to accelerate its Tier 1 mains replacement programme in RIIO-GD2, above a flat workload profile to the end of the IMRRP in 2032.⁴⁶</p>	<p>Reject: Given the uncertainty around future use of the gas network, and the potential additional constraint this would place on the labour market, we did not think it was appropriate to accelerate the rate of Tier 1 mains replacement activity in RIIO-GD2.</p>	<p>The two specific responses we had disagreed with our proposal. SGN thought that given the level of customer support and the environmental impacts the bespoke PCD should be permitted. SGN's CEG stated that we should allow some flexibility between RIIO-GD2 and RIIO-GD3 for accelerated repex through a limited volume driver as we had introduced a mechanism to deal with variations in mix of pipe diameters. The CEG stressed the importance of accelerated repex as an important issue with very strong stakeholder support for action to address leakage and mitigate a clear safety risk.</p>	<p>Reject: We have decided to implement our Draft Determinations position not to allow for this bespoke PCD. We recognise that accelerated repex has environmental and safety benefits and is firmly supported by SGN and its CEG. Nonetheless, there is a high degree of uncertainty over the future pathway to Net Zero. Given this uncertainty, we do not think it is appropriate to fund additional mains replacement activity during RIIO-GD2. We also note that the Tier 1 programme allows GDNs flexibility in terms of project design, meaning GDNs can prioritise leakage reduction within the bounds of the Tier 1 PCD baseline workload allowances.</p>

⁴⁶ Under the Iron Mains Risk Reduction Programme, GDNs are required to decommission all Tier 1 iron mains by 2032. A flat workload profile means a GDN will decommission an equal share of the remaining Tier 1 iron mains population in each year between the start of RIIO-GD2 and 2032.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Pro-active steel mains replacement: A PCD to fund the replacement of steel mains >2" in diameter in RIIO-GD2.</p>	<p>Reject: We did not consider that SGN provided sufficient evidence to support the use of a PCD, given steel mains >2" are already included in the NARM, which monitors delivery of asset management repex workloads in RIIO-GD2. Furthermore, we did not include the proposed workload programmes due to concerns over poor value for money for customers and risks around the uncertainty around future use of the gas network.⁴⁷</p>	<p>Few respondents provided specific feedback for this PCD. SGN thought that given the level of customer support and the environmental impacts this bespoke PCD should be permitted. SGN's CEG stated that we should allow some flexibility between RIIO-GD2 and RIIO-GD3 for accelerated repex through a limited volume driver as we had introduced a mechanism to deal with variations in mix of pipe diameters. The CEG stressed the importance of repex as an issue with very strong customer and stakeholder support for action to address leakage and mitigate a clear safety risk.</p>	<p>Reject: We have decided to implement our Draft Determinations position not to allow for this bespoke PCD. This is because we have decided to include costs for this activity in our regression model, consistent with other GDNs' treatment of these costs. See Chapter 3 of the GD Annex for details of our approach to cost assessment. Steel mains >2" are included in the NARM, which monitors delivery of asset management repex workloads in RIIO-GD2. We think there is no need for an additional accountability mechanism as the NARM already provides this. We believe our decision on repex workloads at Final Determinations addresses stakeholder concerns while using an industrywide approach that is consistent across all GDNs.</p>

⁴⁷ See Draft Determinations SGN Annex Chapter 3.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>[REDACTED] and Cams Hall: A PCD to fund two projects in its Southern network: [REDACTED] and Cams Hall.</p>	<p>Reject: We proposed not to include the combined PCD, but to accept the [REDACTED] project as a standalone PCD. We assessed the two projects separately as part of our engineering review. We did not consider that SGN provided sufficient evidence to support the needs case for Cams Hall, so rejected its inclusion within the PCD and disallowed the associated costs.⁴⁸</p>	<p>For a summary of consultation responses about [REDACTED] see Chapter 2. SGN was disappointed that we proposed to reject Cams Hall and submitted further evidence in support of the project.</p>	<p>Reject: We have decided to include the [REDACTED] project within the common Capital Projects PCD. See Chapter 2 for our rationale. Our engineering assessment of the new evidence SGN provided for Cams Hall found that there was still insufficient evidence to support the needs case. Hence, we maintain our Draft Determinations position to reject its inclusion and have disallowed the associated costs (see Chapter 3).</p>
<p>Tier 1 iron stubs: SGN proposed a PCD with an associated use-it-or-lose-it allowance to decommission or replace 1,056 Tier 1 iron stubs at cost of £8.7m.</p>	<p>Reject: We thought there was significant uncertainty around the decommissioning of Tier 1 stubs in RIIO-GD2 and proposed a common re-opener. We provided no baseline costs for the activity.⁴⁹</p>	<p>Only SGN provided specific feedback for this PCD and agreed that iron stubs should be managed in a consistent manner across all networks and provided feedback on the common UM.</p>	<p>Reject: We have decided to implement our Draft Determinations position to have a re-opener for Tier 1 stubs but have provided some baseline funding for SGN and NGN. GDNs argued this was mandatory activity and should receive baseline funding. See Chapter 4 of the GD Annex for the Tier 1 stubs common re-opener.</p>

⁴⁸ Draft Determinations SGN Annex paragraphs 2.16-2.20.

⁴⁹ Draft Determinations GD Annex paragraphs 4.32-4.36.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Responsible demolition: remove vulnerable redundant assets that no longer carry a live supply at a cost of £5.1m.</p>	<p>Reject: We did not consider that this warranted a bespoke output. GDNs should manage their redundant assets responsibly as part of their BAU activities.</p>	<p>Only SGN provided specific feedback for this PCD. It provided new information to clarify the regulatory background to these redundant assets and explained that, in the absence of receiving funding for demolition, it would incur operating costs to maintain the assets in situ.</p>	<p>Reject: We have decided to implement our Draft Determinations position to reject the PCD, as we consider the output can be managed through baseline costs. However, we have changed our position on the costs. We reconsidered SGN’s EJP in conjunction with the new information and now accept the needs case and funding because it will improve public safety and is cost-effective relative to the opex costs which SGN would otherwise incur. On this basis we have included SGN’s £5.1m request in baseline funding. Since these costs are not unique, as all GDNs have some redundant assets of this kind, we have included the costs in the totex regression. GDNs may choose to manage their assets in different ways.</p>

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Riser isolation valves survey > 6 storey buildings: repair 675 valves as part of the riser inspection survey programme for Multi occupancy buildings (MOBs) in response to the Hackitt review.⁵⁰</p>	<p>Reject: We provided SGN with a cost allowance through our common approach for modelled MOBs totex. We did not consider there was sufficient evidence to justify a bespoke PCD.⁵¹</p>	<p>Only SGN provided specific feedback for this PCD and noted that we had not included a value for this activity in or calculation of baseline totex.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. We will however include a value for this activity in our calculation of baseline allowances (rolled into the allowance for 'riser inspection surveys <6 storey buildings', see Chapter 3) as we consider that to be a more appropriate means of funding than a PCD.</p>
<p>Riser inspection surveys < 6 storey buildings: extend the ongoing GD1 riser inspection survey programme to include four and then three storey buildings.</p>	<p>Reject: For our rationale, refer to Riser isolation valves survey > 6 storey buildings.</p>	<p>Only SGN provided specific feedback for this PCD and noted that we had not included a value for this activity in or calculation of baseline totex.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. We will however include a value for this activity in our calculation of baseline allowances (see Chapter 3) as we consider that to be a more appropriate means of funding than a PCD.</p>

⁵⁰ Building Regulations and Fire Safety review undertaken by Dame Judith Hackitt.

⁵¹ For details of our proposed allowance, see Draft Determinations SGN Annex Chapter 3.

PCD name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Record keeping other records: extend the scope of the annual asset management external audit and assurance process for NARMs modelling and reporting.</p>	<p>Reject: We found a lack of sufficient evidence to understand the need for the PCD. The proposals did not include a clear CBA or consumer support. During RIIO-GD2, we will look to develop a cross-sector approach to record keeping.⁵²</p>	<p>No respondents provided specific feedback for this PCD although we did receive feedback on our proposed common approach to GDN record keeping (see Chapter 2).</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change for this specific bespoke PCD proposal. For our sector wide decisions on record keeping, see GD Annex Chapter 2.</p>

Summary of decisions – BPI Stage 2 - CVPs

A1.2 This section sets out our decisions on the CVPs that SGN proposed in its Business Plan.

A1.3 Consultation responses from consumer representative groups and enhanced engagement groups about our overall CVP positions at Draft Determinations were mixed. Some stakeholders supported our rationale for rejecting proposals on one or more of the following grounds: not above BAU, CSR activity, lacking stakeholder support or evidence, and not having stretching targets. However, other stakeholders challenged our approach to assessing CVPs. We have addressed the responses on our approach to CVP assessment in Chapter 10 of the Core Document.

A1.4 Stakeholders particularly focused on the lack of vulnerability CVPs rewarded. They questioned whether our Draft Determinations assessment allowed vulnerability CVPs to be rewarded, given that many were rejected on the grounds that an associated PCD or ODI could be funded through the Vulnerability and Carbon Monoxide Allowance (VCMA). Cadent's CEG also questioned whether CVPs should be rejected on the grounds that the methodology or evidence base of the associated ODI or PCD was not robust enough. We retain our position that many of the GDNs' vulnerability CVP proposals are activities that we expected to be funded

⁵² Draft Determinations GD Annex paragraphs 2.251-2.254

through the VCMA, so were not providing sufficient additional value to consumers to receive a CVP reward. Our approach to CVP assessment allows CVP rewards for vulnerability CVP items that are justified through our assessment framework. For example, we have provided a CVP reward for Cadent's Personalising welfare facilities CVP item. Our BPG stated that we would assess each CVP on the merit of its proposal. We have done this and have rejected CVPs if the associated methodology or evidence base was not sufficiently robust. Further detail is set out below.

A1.5 The table below sets out our decisions and rationale for each of SGN's CVP items, along with our consideration of the specific new evidence or narrative we received in response to our Draft Determinations and references to further information.

Table 74: SGN's CVP proposals

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Productivity delivered over GD2: Target of 1% productivity in RIIO-GD2, over and above economy-wide productivity of 0.3%, delivering £59m benefit to current customers and £157m to future customers.</p>	<p>Reject: Efficiency is already rewarded through other mechanisms in the price control, including the BPI stage 4, and the TIM.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we received no additional substantive evidence to justify a change from our proposed position at Draft Determinations.</p>

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Absorbed weather risk: Moving from a longer-term baseline to a baseline that is more reflective of the weather observed in RIIO-GD1, delivering £7m benefit to current customers.</p>	<p>Reject: We didn't think that sufficient evidence of additional value to consumers had been provided to justify a CVP reward. While the frequency, and severity, of weather events may be an important factor for ensuring adequate emergency service capacity, we expect GDNs to actively manage this, along with other factors (eg asset condition), as part of BAU activities.</p>	<p>SGN was disappointed that this CVP had been rejected, as the financial risk associated with deterioration in weather during RIIO-GD2 is carried by SGN rather than the customer.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we received no additional substantive evidence to justify a change. We acknowledge the risk associated with deterioration in weather, however we view the management of this risk as BAU.</p>
<p>Aligning allowances with workload: Align workload and allowances more precisely through a series of price control deliverables (PCDs), volume drivers, use it or lose it mechanisms and re-openers, delivering £96m benefit to current customers.</p>	<p>Reject: We didn't think that sufficient evidence of additional value to consumers had been provided to justify a CVP reward. We didn't think that shifting costs from baseline to a PCD or UM was innovative, so should not receive a CVP reward.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we received no additional substantive evidence to justify a change.</p>

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Environmental action plan initiatives: Its environmental action plan includes a range of targets to reduce the impact of its network on the environment, delivering £18m benefit to current customers and £39m to future customers.</p>	<p>Reject: We did not propose to accept the associated UM (Environmental Action Plan)⁵³ so didn't think this should receive a CVP reward.</p>	<p>SGN felt its EAP delivered the expectations of the BPG and that the rejection of the UM and associated CVP is unusual given it was designed to return unspent allowances to consumers.</p>	<p>Reject: We have decided to implement our Draft Determinations position to reject the UM as explained in Table 70. We do not consider this eligible for a CVP reward. The majority of activities awarded funding are at low risk of non-delivery and unspent allowances, therefore have been included in baseline costs. These measures and their associated costs have been assessed individually in Table 69. For the EV proposal, we’ve created a common PCD which includes costs for EVs and associated charging infrastructure based on information provided following Draft Determinations. (See Chapter 2 of the GD Annex).</p>
<p>Bespoke safety and reliability outputs: Proposals for a number of bespoke outputs, which go above and beyond the baseline option as set out in the SSMD, delivering £37m benefit to current customers and £13m to future customers.</p>	<p>Reject: We did not propose to accept any of the associated bespoke outputs in the form they were submitted^{54, 55} so didn't think this should receive a CVP reward.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received additional substantive evidence to justify a change.</p>

⁵³ See Draft Determinations SGN Annex Table 56.

⁵⁴ This CVP was associated with the following bespoke outputs: Accelerated tier 1 mains replacement, Pro-active steel mains replacement, [REDACTED] and Cams Hall, Tier 1 iron stubs, Intermediate pressure reconfigurations, Responsible demolition, Riser isolation valves survey > 6 storey buildings, Riser isolation valves < 6 storey buildings and Record keeping other records.

⁵⁵ See Draft Determinations SGN Annex Table 20.

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Additional transparency through lowering the CBA threshold: Justified all points of major expenditure (every project over £0.5m), delivering £3m benefit to current customers.</p>	<p>Reject: We didn't think that there was sufficient evidence of additional value to consumers, or evidence that the proposal was innovative, was provided to receive a CVP reward.</p>	<p>SGN’s CEG welcomed SGN’s wide use of CBAs to justify individual projects.</p>	<p>Reject: We have decided to implement our Draft Determinations position. We acknowledge that SGN's CEG welcomed the wide use of CBAs, however no additional substantive evidence was received to justify a change to our Draft Determinations position.</p>
<p>Financial savings to vulnerable households: Working with stakeholders to drive better value from the funds used to address consumer vulnerability and go above and beyond the minimum required by Ofgem for SGN’s RIIO-GD2 Business Plan, delivering £40m benefit to vulnerable customers.</p>	<p>Reject: We expect GDNs to work with stakeholders to develop and implement their vulnerability strategies, and funding for this will be available through the VCMA, so it was not clear how this goes beyond BAU.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received any additional substantive evidence to justify a change. The proposal involves the type of activity we expect to be funded through the VCMA, as set out in our SSMD. It doesn’t provide sufficient additional value to receive a CVP reward. We expect the GDNs to use the VCMA effectively and demonstrate value for money and a net positive social return on investment as good practice. All GDNs have based their vulnerability strategies on stakeholder engagement, so we don't think SGN's proposals go significantly beyond other GDNs' proposals or beyond BAU.</p>

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Health and wellbeing benefits = social value: Health and wellbeing benefits of the proposed vulnerability initiatives, delivering £81m benefit to vulnerable customers.</p>	<p>Reject: SGN did not provide sufficient evidence that its proposals go sufficiently beyond the strategy required for the VCMA as part of the Business Plan minimum requirements.</p>	<p>SGN’s CEG responded that SGN’s approach to social evaluation is an area where it thinks SGN is going beyond BAU.</p>	<p>Reject: We have decided to implement our Draft Determinations position. We do not think the proposals go beyond what is required as part of the Business Plan minimum requirements, and no further substantive evidence has been submitted since Draft Determinations to justify a change in our Draft Determinations proposed position. It doesn’t provide sufficient additional value to receive a CVP reward. We expect the GDNs to use the VCMA effectively and demonstrate value for money and a net positive social return on investment as good practice. All GDNs have based their vulnerability strategies on stakeholder engagement, so we don't think SGN's proposals go significantly beyond other GDNs' proposals or beyond BAU.</p>
<p>Community action projects: Undertaking community action projects where our staff are encouraged to utilise their time in supporting local charities and community action projects, delivering £3m benefit to vulnerable customers.</p>	<p>Reject: We thought this CVP proposal constituted corporate social responsibility (CSR) activities that are not within SGN’s business footprint. We think CSR should be BAU for GDNs.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received any additional substantive evidence to justify a change.</p>

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Innovation funding: Proposal to invest in both BAU innovation and to support non-BAU innovation with a 10% contribution, delivering £20m benefit to current customers and £12m to future customers.</p>	<p>Reject: The CVP is based on the estimated benefits from using the RIIO innovation schemes (SIF and NIA). We expect consumers (and SGN) to derive value from the completion and potential rollout of projects using these schemes. We didn’t think this went beyond BAU. In terms of innovation within BAU activities, also considered under the CVP, we did not identify any evidence to suggest that SGN is doing this to a greater extent than other network companies.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received any additional substantive evidence to justify a change.</p>
<p>Open Data: Plans to make data more visible, more accurate, and more accessible, delivering £2m benefit to current customers and £1m to future customers.</p>	<p>Reject: We have adopted a common IT&T cost approach and proposed new licence conditions for Digitalisation Strategies and for meeting Data Best Practice. We didn’t think this CVP proposal added additional value to consumers beyond our common proposals.⁵⁶</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received any additional substantive evidence to justify a change.</p>

⁵⁶ See Draft Determinations GD Annex paragraphs 3.153-3.154 for the technical assessment of 'IT&T capex', and Draft Determinations Core Document Chapter 4 for proposed reporting requirements for 'Modernising Energy Data'.

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Supporting decision making: Supporting effective engagement with Local Authorities and Governments to provide high quality robust data from which decisions can be taken, delivering £5m benefit to future customers.</p>	<p>Reject: We didn't think that SGN had provided sufficient evidence of stakeholder support to justify why this proposal should receive a CVP reward.</p>	<p>No specific feedback was provided on our proposal.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have not received any additional substantive evidence to justify a change.</p>
<p>GSMR standards: Promoting a change in GSMR standards supported by the evidence generated during the 'opening the gas market' project, which is expected to substantially reduce ballasting costs, delivering £101m benefit to future customers.</p>	<p>Reject: We recognised and encouraged SGN's proactive work to promote changing the GSMR standards. We recognised that, in seeking to drive this work forward, SGN is likely to help facilitate promoting change. However, the outcome is not fully within its control and requires input from the rest of the industry. Therefore, we thought the CVP benefits provided couldn't be solely attributed to SGN's work. There was also no clear timeframe for a change in standard to take effect at a national level, until which time there is no value for consumers generated. We were unable to separate out the costs directly associated with SGN's proactive work but invited further evidence to consider whether to allow these costs within SGN's baseline.</p>	<p>SGN responded that it is disappointed by the rejection of the CVP, due to the outcome not being fully within SGN's control and that the benefits cannot be solely attributed to SGN's work. SGN's CEG also responded that the actions being taken by SGN on behalf of the industry could deliver cost savings to customers.</p>	<p>Reject: We have decided to implement our Draft Determinations position. SGN's work in this area, together with other GDNs and industry stakeholders is well established, therefore we consider it BAU. We agree with feedback that the actions taken by SGN on behalf of the industry could deliver cost savings to customers in future, however, based on the evidence we received we did not think the benefits were robustly quantified to establish a CVP. We did not receive any further evidence of costs in response to our consultation that has led us to change the Draft Determinations proposed position, therefore we assume SGN will continue to progress this work in RIIO-GD2.</p>

CVP name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Hydrogen standards: Focusing its innovation strategy on understanding the standards that would be needed for a hydrogen rollout, delivering £26m benefit to future customers.</p>	<p>Reject: We found insufficient evidence that this goes beyond what we expect from SGN's innovation strategy.</p>	<p>SGN’s CEG commented that SGN’s ambition on hydrogen was an area where it thinks SGN is going beyond BAU.</p>	<p>Reject: We have decided to implement our Draft Determinations position as no further substantive evidence has been submitted to demonstrate that this goes beyond what we expect from SGN's innovation strategy. Additionally, the provision of NIA funding to SGN enables it to take forward work on hydrogen which it may not otherwise do within BAU activities.</p>

Summary of decisions - bespoke uncertainty mechanisms

A1.6 This section sets out our decisions on the UMs that SGN proposed in its Business Plan, including our consideration of the Draft Determination responses, which we have summarised below, along with our decisions and rationale.

Table 75: SGN's bespoke UM proposals

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem's Final Determination
<p>Streetworks: Single re-opener for streetworks in general that covers three specific areas of uncertainty:</p> <ul style="list-style-type: none"> • permitting and lane rental • reinstatement costs • hazardous waste management. 	<p>Reject: We proposed to merge aspects of this proposal into a new common UM to address the uncertainty for future costs associated with new permit and lane rental schemes not yet in operation.⁵⁷</p>	<p>SGN, a consumer body and a CEG and the RIIO-2 CG agreed with our proposal to introduce a common UM instead of bespoke mechanisms. See Chapter 4 of our GD Annex (specified streetworks re-opener) for a summary of responses to our proposals for the common re-opener.</p>	<p>Reject: We have decided to implement our Draft Determinations position as stakeholders were supportive of the principle of a common re-opener. We have decided to expand the scope of the common re-opener to cover the uncertainty around hazardous waste management in SGN's bespoke proposal. See Chapter 4 of our GD Annex for details of the common Specified Streetworks re-opener.</p>
<p>Smart meter: Re-opener for uncertainty around pace and complexity of installations for the rollout.</p>	<p>Reject: We proposed to merge this proposal into a new common UM to address the uncertainty associated with the timing of the programme.⁵⁸</p>	<p>A consumer representative body, SGN and SGN's CEG and the RIIO-2 CG supported our proposal to introduce a common UM instead of bespoke mechanisms. See Chapter 4 of our GD Annex (smart meter rollout re-opener) for a summary of responses to our proposals for the common re-opener.</p>	<p>Reject: We have decided to implement our Draft Determinations position. The responses received supported our position proposed at Draft Determinations. See Chapter 4 of the GD Annex for details of the smart meter rollout re-opener.</p>

⁵⁷ See Draft Determinations GD Annex paragraphs 3.124-3.127 and 4.78-4.83.

⁵⁸ See Draft Determinations GD Annex paragraphs 3.128-3.131 and 4.73-4.77.

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Tier 1 iron stubs: SGN proposed a PCD with an associated use-it-or-lose-it (UIOLI) allowance to fund the decommissioning of Tier 1 iron stubs⁵⁹ during RIIO-GD2.</p>	<p>Reject: We thought there was significant uncertainty around the decommissioning of Tier 1 stubs in RIIO-GD2 and proposed a common re-opener.⁶⁰</p>	<p>SGN questioned whether the methodology proposed for the common re-opener was the most appropriate but agreed with the principle that the uncertainty mechanism should be common. The RIIO-2 CG and SGN's CEG supported our proposal to introduce a common UM instead of bespoke mechanisms.</p>	<p>Reject: We have decided to implement our Draft Determinations position as stakeholders were supportive of the principle of a common re-opener. See Chapter 4 of the GD Annex for details of the Repex - Tier 1 iron stubs re-opener.</p>
<p><=2" steel: A volume driver to adjust repex allowances for variations in outturn steel mains ≤2" workloads in RIIO-GD2.</p>	<p>Reject: We did not consider that SGN provided sufficient evidence to support the use of a volume driver, given steel mains ≤2" are already included within the NARM, which provides a mechanism for dealing with uncertainty during RIIO-GD2.</p>	<p>Only SGN responded. It accepted Ofgem’s proposal not to include this as an uncertainty mechanism.</p>	<p>Reject: We have decided to implement our Draft Determinations position for the same reasons as stated at Draft Determinations. SGN accepted our proposed approach.</p>

⁵⁹ Tier 1 iron stubs are short lengths of Tier 1 iron mains attached larger diameter parent mains.

⁶⁰ See Draft Determinations GD Annex paragraphs 4.32-4.36

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>New connections: With the move to net zero, there is the potential that connection volumes may change significantly towards the end of RIIO-GD2. Proposed a volume driver to align the totex allowances with delivery.</p>	<p>Reject: We considered that there was sufficient evidence the network company cannot manage the uncertainty within its baseline allowance. However, we considered the need for risk mitigation applies to all GDNs and we proposed a common volume driver.⁶¹</p>	<p>SGN accepted our decision to progress the volume driver for new connections. It considered this was in customers' interests given the uncertainty surrounding decarbonisation pathways. SGN's CEG was supportive of our proposals. See Chapter 4 of our GD Annex (Domestic Connections volume driver) for a summary of responses to our proposals for the common mechanism.</p>	<p>Reject: We have decided to implement our Draft Determinations position as stakeholders were supportive of the principle of a common re-opener. See Chapter 4 of the GD Annex for details of the Domestic Connections volume driver.</p>

⁶¹ See Draft Determinations GD Annex paragraphs 4.62-4.65.

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Below 2 bar reinforcement: Volume driver for possible reinforcement resulting from new connections above.</p>	<p>Reject: Insufficient needs case. We provided a baseline allowance through our modelled capex for all GDNs. We thought a volume driver would weaken the incentive for GDNs to adopt non-build capacity solutions.</p>	<p>SGN accepted our decision only to progress the volume driver for new reinforcement <2bar and not for reinforcement >2bar. It considered this was in customers' interests given the uncertainty surrounding the decarbonisation pathways but accepts our proposal to include it in baseline allowances. SGN's CEG questioned whether the same principle should apply to reinforcement as for connections as they were concerned that SGN's reinforcement volume forecasts were too high.</p>	<p>Reject: We have decided to implement our Draft Determinations position as SGN accepted our position and as we have no additional substantive evidence to justify a change. We do not think the approach we have implemented for connections is appropriate for reinforcement because the uncertainty surrounding connections workload is much higher, and because networks can sometimes avoid reinforcing the network through alternative measures. Refer to Chapter 3 of our GD Annex for our approach to assessing reinforcement costs.</p>
<p>Greater 2 bar reinforcement: there is uncertainty around new connections and below two bar reinforcement that make it impossible to determine the amount of reinforcement work needed on greater than two bar network.</p>	<p>Reject: Insufficient needs case. We provided a baseline allowance through our modelled capex for all GDNs. We thought a volume driver would weaken the incentive for GDNs to adopt non-build capacity solutions.</p>	<p>For a summary of consultation responses, please refer to 'Below 2 bar reinforcement' above.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change. Refer to Chapter 3 of our GD Annex for our approach to assessing LTS costs.</p>

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Process safety: £15m UIOLI allowance to resolve critical defects impacting asset reliability or condition.</p>	<p>Reject: We found insufficient justification for the needs case due to a lack of robust evidence of likely costs, lack of analysis of potential drawbacks and lack of consumer or stakeholder support. We considered the work to be BAU activities and SGN could manage the associated costs within its totex baseline.</p>	<p>SGN highlighted that its proposal relates to an important area of expenditure and that if the UIOLI is not accepted, then a baseline allowance should be provided instead. It said that we had not given sufficient weight to the evidence that it provided on the likely costs. It considered that there were inconsistencies in our approach due the cost treatment of named projects under the NARMs framework.</p>	<p>Reject: We have decided to implement our Draft Determinations position to reject this proposed UIOLI. We consider that SGN should manage these costs within its totex allowance. The costs are not unique to SGN, nor have they been explicitly requested by other GDNs. We reconsidered the examples provided in SGN's Business Plan but based on the evidence, think they can be funded elsewhere in the price control. Therefore, we think a UIOLI allowance risks overpaying for these workloads. SGN also failed to explain the link between the indicative costs in their examples and total amount requested. Our approach to managing these costs within totex baseline is consistent across GDNs - all received the same investment decision pack guidance and could choose which projects to name. We’ve increased the materiality threshold on the Capital Projects PCD meaning SGN has more scope to manage defects, as there is a larger share of baseline funding not tied to specific mechanisms. We’ve moved £30.4m to totex for Scotland and £52.5m for Southern.</p>

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Environmental Action Plan: a series of UIOLI allowances for a range of proposed EAP measures to address uncertainty relating to appropriate ambition, as well as cost and workload. Includes: Biodiversity Climate Change Adaptation Renewable energy deployment Biomethane rollout Deployment of innovation Low emission vehicles</p>	<p>Reject: We set out our assessment of the individual PCDs for each UIOLI allowance in the Draft Determinations SGN Annex.⁶² We did not consider an UM relating to a multitude of different outputs and uncertainties met our BPG criteria for a well-defined mechanism. Therefore, we proposed to reject this overarching UM.</p>	<p>SGN felt its EAP delivered the expectations of the BPG and that the UM rejection is unusual given it was designed to return unspent allowances to consumers.</p>	<p>Reject: We have decided to implement our Draft Determinations position to reject this UM, as it comprises UIOLI allowance for multiple activities and uncertainties that have not been clearly defined. We found insufficient evidence of stakeholder support for the mechanism or analysis of potential benefits. The activities awarded funding are generally low materiality and at low risk of non-delivery and unspent allowances. The measures and their associated costs have been assessed individually in Table 69. We’ve moved costs for EVs and associated charging infrastructure into a common PCD (See Chapter 2 of the GD Annex).</p>
<p>Environmental Action Plan (Carbon capture and storage): a re-opener for the legal and regulatory uncertainty around implementing CCS for biomethane produced from food waste.</p>	<p>Reject: We found insufficient justification of need for a re-opener in this area beyond our proposed net zero and innovation investment mechanisms.⁶³</p>	<p>SGN’s CEG and the RIIO-2 CG supported our proposal to use a common UM instead of bespoke mechanisms.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have no additional substantive evidence to justify a change.</p>

⁶² See Draft Determinations SGN Annex Chapter 2.

⁶³ See Draft Determinations Core Document Chapter 8.

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>External and environmental resilience: re-opener for environmental change or external direction that requires a substantial change in its assets.</p>	<p>Reject: We consider land development claims and flood risk to be part of the BAU activities associated with operating a distribution network. We did not have sufficient evidence to support the suggestion that the number, or materiality of the claims would rise in RIIO-GD2. In RIIO-GD1, the GDNs are treating these costs as totex overspend and therefore share the costs with customers and we think this should continue for RIIO-GD2.</p>	<p>SGN stated that its proposal would protect consumers from the inherent risk of ex-ante allowances for such an unpredictable cost. It also provided examples of where erosion had led to significant costs being incurred.</p>	<p>Reject: Our Final Determinations decision is to reject this proposal. However, we have expanded the scope of the common re-opener for Pipeline Diversions and Loss of Development Claims to help mitigate the risk to GDNs should these costs exceed baseline allowances by a material amount. See Chapter 4 of the GD Annex for the Pipeline Diversions and Loss of Development Claims re-opener.</p>
<p>Cyber Security – Cyber Assessment Framework: A re-opener mechanism to allow SGN to incorporate changes to the Cyber Resilience guidelines and scope definition into its RIIO-GD2 plans.</p>	<p>Reject: We considered the uncertainty to be addressed by our proposed common cyber resilience OT and IT re-openers.⁶⁴</p>	<p>No respondents provided specific feedback for this UM. SGN’s CEG and the RIIO-2 CG supported our proposal to use a common UM instead of bespoke mechanisms.</p>	<p>Reject: We have decided to implement our Draft Determinations position as stakeholders were supportive of the principle of a common re-opener. See Core Document Chapter 7 for the cyber resilience Operational Technology (OT) and cyber resilience Information Technology (IT) re-openers.</p>

⁶⁴ See Draft Determinations Core Document Chapter 7.

UM name and description	Draft Determinations summary	Consultation response summary	Ofgem’s Final Determination
<p>Energy System Transition Projects: Re-opener mechanism to allow the deployment of a number of hydrogen infrastructure construction and deployment projects. Includes three large industrial hydrogen projects and one domestic hydrogen project.</p>	<p>Reject: We proposed to respond to hydrogen projects using the net zero and innovation investment mechanisms.⁶⁵</p>	<p>No respondents provided specific feedback for this UM. SGN’s CEG and the RIIO-2 CG supported our proposal to use a common UM instead of bespoke mechanisms.</p>	<p>Reject: We have decided to implement our Draft Determinations position as stakeholders were supportive of the principle of a common re-opener. We think SGN's broad objectives are supported by our wider suite of Net Zero mechanisms for RIIO-2. Refer to Chapter 4 of our GD Annex and Chapter 8 of the Core Document.</p>
<p>Legislative Change: general re-opener to accommodate the cumulative impact of legislative or regulatory change from either government or HSE.</p>	<p>Reject: SGN did not identify any specific examples to support this re-opener. Some of the common re-openers we proposed deal with legislative changes in key areas.⁶⁶</p>	<p>SGN provided specific feedback for this UM, providing an extensive list of potential sources of legislative risk that would justify a common uncertainty mechanism. This included Brexit, the Health & Safety Executive, Environment Agency, Employment Law, hydrogen and Net Zero.</p>	<p>Reject: We have decided to implement our Draft Determinations position as we have decided to reject the concept of a common legislative uncertainty mechanism in general (See Core Document Chapter 7 for our rationale). Where we think specific uncertainties exist, they have been addressed in or various common re-opener mechanisms.</p>

⁶⁵ See Draft Determinations Core Document Chapter 8 and Draft Determinations GD Annex paragraphs 2.155-2.160 and 4.53-4.61.

⁶⁶ See Draft Determinations GD Annex Chapter 4.

Appendix 2 - Projects moved from the Capital projects PCD into baseline totex

A2.1 We have moved the costs to baseline totex for the projects we removed from the PCD and expect GDNs to deliver these within the baseline allowance.

Table 76: SGN projects removed from capital projects PCD between Draft Determinations and Final Determinations

Network	Cost category	Project name	RIIO-GD2 Submitted costs Sep 20 (£m)
Sc	LTS Pipelines, Storage & Entry	ICMDL	3.07
Sc	LTS Pipelines, Storage & Entry	Telemetry Upgrades (8 Offtakes)	0.50
Sc	LTS Pipelines, Storage & Entry	Telemetry Upgrade (73 PRS')	3.65
Sc	LTS Pipelines, Storage & Entry	Dreghorn PRS	2.42
Sc	LTS Pipelines, Storage & Entry	New PRS (Edinburgh South East Wedge)	2.77
Sc	LTS Pipelines, Storage & Entry	Tranent PRS	2.83
Sc	LTS Pipelines, Storage & Entry	Metering Uncertainty Programme (6 sites)	4.15
Sc	LTS Pipelines, Storage & Entry	Lauder	1.13
Sc	LTS Pipelines, Storage & Entry	Airth	1.23
Sc	LTS Pipelines, Storage & Entry	St Andrews PRS	2.56
Sc	LTS Pipelines, Storage & Entry	Lockerbie Offtake	1.74
Sc	LTS Pipelines, Storage & Entry	Aberdeen (Craibstone) PRS	0.59
Sc	LTS Pipelines, Storage & Entry	Carleith PRS	0.83
Sc	LTS Pipelines, Storage & Entry	Fairmilehead	1.79
Sc	LTS Pipelines, Storage & Entry	Granton	0.68
Sc	LTS Pipelines, Storage & Entry	E&I Minor Works (~15 sites)	0.50
So	LTS Pipelines, Storage & Entry	ICMDL	4.47
So	LTS Pipelines, Storage & Entry	Telemetry Upgrades (2 Offtakes)	0.13

Network	Cost category	Project name	RIIO-GD2 Submitted costs Sep 20 (£m)
So	LTS Pipelines, Storage & Entry	Telemetry Upgrade (82 PRS')	4.15
So	LTS Pipelines, Storage & Entry	East Morden	4.49
So	LTS Pipelines, Storage & Entry	Wavendon	4.31
So	LTS Pipelines, Storage & Entry	Metering Uncertainty Programme (1 site)	0.25
So	LTS Pipelines, Storage & Entry	Woking	2.32
So	LTS Pipelines, Storage & Entry	Westerham PRS - System 1	3.08
So	LTS Pipelines, Storage & Entry	Reading A	3.23
So	LTS Pipelines, Storage & Entry	Battle PRS - System 1	1.08
So	LTS Pipelines, Storage & Entry	Aylesham PRS	1.27
So	LTS Pipelines, Storage & Entry	Boxhill PRS	1.55
So	LTS Pipelines, Storage & Entry	Braishfield C	1.23
So	LTS Pipelines, Storage & Entry	Godstone PRS	1.69
So	LTS Pipelines, Storage & Entry	Hillside	1.87
So	LTS Pipelines, Storage & Entry	Hurst Green PRS	1.69
So	LTS Pipelines, Storage & Entry	Shalford	4.24
So	LTS Pipelines, Storage & Entry	Shatterling PRS	1.43
So	LTS Pipelines, Storage & Entry	Smarden PRS	1.53
So	LTS Pipelines, Storage & Entry	Battle PRS - System 2	2.59
So	LTS Pipelines, Storage & Entry	E&I Minor Works	1.46
So	LTS Pipelines, Storage & Entry	St. Mary Cray 1 - Boiler	1.97
So	LTS Pipelines, Storage & Entry	St. Mary Cray 1 - CHP Unit	2.47