

# Consultation

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

In May 2019, we set out the framework for the price controls in our Sector Specific Methodology Decisions. 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 have now assessed these plans. This document, and others published alongside it, set out our Draft Determinations for company allowances under the RIIO-2 price controls, for consultation. We are seeking responses to the questions posed in these documents by 4 September 2020.

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

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## 1. Introduction and overall package

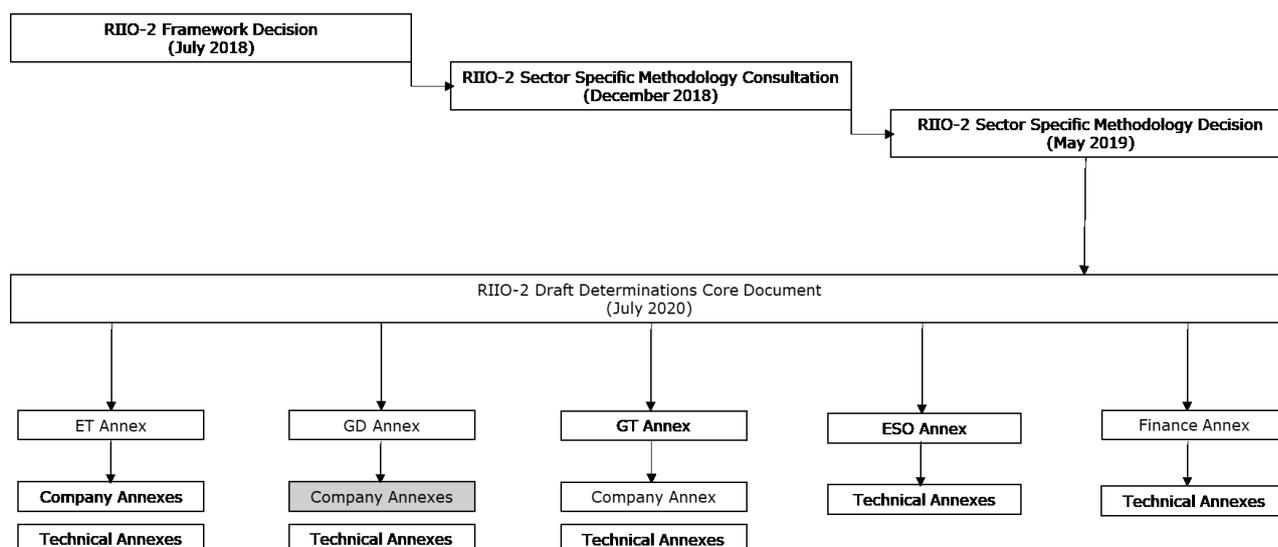
### Purpose of this document

- 1.1 This document sets out our Draft Determinations and consultation positions for the gas distribution (GD) price control (RIIO-GD2) for the areas that are specific to SGN. This price control will cover the five-year period from 1 April 2021 to 31 March 2026. All figures are in 2018/19 prices except where otherwise stated.
- 1.2 Setting Allowed Revenue is underpinned by a large set of proposals across output design, cost assessment, and finance. The purpose of this document is to focus on SGN and:
- support stakeholders in navigating the individual proposals across the suite of RIIO-2 Draft Determinations Documents that make up its overall allowed revenue
  - set out any proposals that are specific to SGN, including:
    - baseline cost allowances
    - parameters for common outputs
    - bespoke Output Delivery Incentives (ODIs)<sup>1</sup>
    - bespoke Price Control Deliverables (PCDs)
    - Consumer Value Propositions (CVPs)
    - Uncertainty Mechanisms (UMs)
    - the level of Network Innovation Allowance (NIA).
- 1.3 This document is intended to be read alongside the RIIO-2 Draft Determinations Core Document (Core Document) and RIIO-2 Draft Determinations - Gas Distribution Sector Annex (GD Annex). Figure 1 sets out where you can find information about other areas of our RIIO-2 Draft Determinations.

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<sup>1</sup> ODIs can be reputational (ODI-R) or financial (ODI-F).

**Figure 1: RIIO-2 Draft Determinations documents map**



## What makes up SGN’s Draft Determinations (the RIIO-2 building blocks)?

1.4 We have structured our price control consultation positions around a series of building blocks. The building blocks reflect how we propose to set companies’ Allowed Revenue. Table 1 provides stakeholders with a map to where to find the proposals that make up the Draft Determinations.

**Table 1: RIIO-2 Building Blocks**

Building Block		Where to find the Draft Determinations	
		Approach/Methodology	Company specific parameters
Base Revenue (BR)	Legacy items from previous controls including RIIO-1 RAV and close-out adjustments	Finance Annex: Chapter 11	GD Annex: Chapter 2
	Common ODIs, PCDs and LOs	Core Document: Chapter 4	GD Annex: Chapter 2
	Bespoke ODIs, PCDs and LOs	Core Document: Chapter 4	Chapter 2
	Baseline Totex Allowance	Core Document: Chapter 5	GD Annex: Chapter 3
	Capitalisation Rate (Fast/Slow Money)	Finance Annex: Chapter 11	Finance Annex: Chapter 11 Table 40
	WACC Allowance	Core Document: Chapter 6 Finance Annex: Chapter 4	Finance Annex: Chapter 4 Table 31
	Depreciation Allowance	Depreciation Annex	Finance Annex: Chapter 10 Table 39
	Tax Allowance	Finance Annex: Chapter 7	Finance Annex: Chapter 7
	Innovation	Core Document: Chapter 8	Chapter 5
	Cyber and Physical security	Core Document: Chapter 7	Cyber resilience – Confidential annexes Physical security – GD Annex: Chapter 22
Adjustments to BR for company performance	Totex Incentive Mechanism (TIM)	Core Document: Chapter 10	Chapter 1
	Network Asset Risk Metric (NARM)	NARM Annex: Appendix 3	NARM Annex Chapter 2
	BPI Reward/Penalty	Core Document: Chapter 10	Chapter 1
	Return Adjustment Mechanism (RAM)	Finance Annex: Chapter 8	Finance Annex: Chapter 8
Rules to adjust BR for other factors	Uncertainty Mechanisms (including Pass-through)	Core Document: Chapter 7	Chapter 3
	Policy Indexation (Real Price Effects, ongoing efficiency)	Core Document: Chapter 5	Core Document: Chapter 5
	Other Indexation (Regulatory asset value, Cost of equity, Cost of debt)	Finance Annex: Chapter 9	Finance Annex: Chapter 9
	Whole System Mechanisms	Core Document: Chapter 8	Core Document: Chapter 8
	Pensions	Finance Annex: Chapter 11	Finance Annex: Chapter 11
	Directly Remunerated Services (DRS)	Finance Annex: Chapter 11	Finance Annex: Chapter 11

<sup>2</sup> Cadent and SGN only

## An overview of SGN's RIIO-2 price control

1.5 We present a summary of our proposed baseline totex for Cadent in Table 2. This reflects our view of efficient costs including ongoing efficiency over RIIO-GD2. For further details of any values, please refer to Chapter 3.<sup>3</sup>

**Table 2: SGN’s submitted versus proposed baseline totex<sup>4</sup> (£m, 2018/19)**

Network	Cost area	SGN Submitted totex (£m)	Ofgem Proposed totex (£m)	Difference (%)
Scotland (Sc)	Direct opex	255	229	-10%
	Indirect opex	107	98	-9%
	Capex	306	239	-22%
	Repex	329	274	-17%
	<b>Totex</b>	<b>998</b>	<b>840</b>	<b>-16%</b>
Southern (So)	Direct opex	466	410	-12%
	Indirect opex	199	176	-12%
	Capex	407	289	-29%
	Repex	988	812	-18%
	<b>Totex</b>	<b>2,060</b>	<b>1,687</b>	<b>-18%</b>

1.6 The common outputs that we are proposing for all companies in RIIO-GD2 are set out in Table 3 with further details in the GD Annex. Table 3 also sets out the bespoke outputs that we have proposed to include in our Draft Determinations (further details are contained within Chapter 2).

<sup>3</sup> Where the source document is not stated, we are referring to this document (Draft Determinations – SGN Annex, abbreviated to SGN Annex).

<sup>4</sup> Baseline totex refers to total controllable costs (excludes BPI, RPEs, pass-through costs includes ongoing efficiency).

**Table 3: Summary of proposed common and bespoke outputs applicable to SGN**

Output name	Output type	Further detail
<b>Common outputs across GD Sector</b>		
<b>Meeting the needs of consumers and network users</b>		
Consumer vulnerability minimum standards	LO	Not covered (no change since our SSMD) <sup>5</sup>
Consumer vulnerability reputational incentive	ODI-R	GD Annex
Consumer vulnerability and carbon monoxide safety use-it-or-lose-it allowance (UIOLI)	PCD	GD Annex
Fuel Poor Network Extension Scheme	PCD	GD Annex, this annex Chapter 2
Customer satisfaction survey	ODI-F	GD Annex
Complaints metric	ODI-F	GD Annex
Guaranteed Standards of Performance (GSOPs)	LO	GD Annex
Emergency response time	LO	GD Annex
Unplanned interruptions	ODI-F	GD Annex, this annex Chapter 2
Appointments for restoring supply to appliances	ODI-R	GD Annex
Digitalisation Strategy and Action Plan	LO	Core Document
Data Best Practice	LO	Core Document
<b>Deliver an environmentally sustainable network</b>		
Shrinkage and environmental emissions	ODI-F and ODI-R	GD Annex
Environmental action plan and annual environment report	LO and ODI-R	GD Annex
Business carbon footprint reporting	ODI-R	Core Document
<b>Maintain a safe and resilient network</b>		
Repex - tier 1 mains replacement	PCD	GD Annex, this annex Chapter 2
Repex - tier 1 services	PCD	GD Annex, this annex Chapter 2
Gas holder demolitions	PCD	GD Annex
Network Asset Risk Metric	PCD and ODI-F	GD Annex
Cyber resilience Operational Technology (OT)	PCD	Confidential Annex
Cyber resilience Information Technology (IT)	PCD	Confidential Annex
Capital projects	PCD	GD Annex, this annex Chapter 2
<b>Bespoke outputs to SGN</b>		
<b>Deliver an environmentally sustainable network</b>		
Remote Pressure Management	PCD	Chapter 2
<b>Maintain a safe and resilient network</b>		
[REDACTED]	PCD	Chapter 2
Intermediate pressure reconfigurations	PCD	Chapter 2

<sup>5</sup> All references to 'our SSMD' in this GD Annex refer to the RIIO-GD2 Sector Decision Annex to the RIIO-2 Sector Specific Methodology Decision, <https://www.ofgem.gov.uk/publications-and-updates/riio-2-sector-specific-methodology-decision>

1.7 We set out the UMs that we are proposing for SGN in Table 4 (further detail is in Chapter 4).

**Table 4: Summary of proposed common and bespoke uncertainty mechanisms applicable to SGN**

UM Name	UM type	Included in baseline totex <sup>6</sup>	Further detail
<b>Common UMs across GD Sector</b>			
Pension deficit charge adjustment	Pass-through	No	Not covered (no change since our SSMD)
Third party damage and water ingress	Pass-through	No	GD Annex
Miscellaneous pass-through	Pass-through	No	Not covered (no change since our SSMD)
Gas Transporters share of Xoserve costs	Pass-through	No	Not covered (no change since our SSMD)
Repex – Tier 2A iron mains	Volume driver	Yes (baseline forecast)	GD Annex
Repex – HSE policy changes	Re-opener	No	GD Annex
Repex - Tier 1 iron stubs	Re-opener	No	GD Annex
Diversions	Re-opener	Partial (separate from re-opener)	GD Annex
Multiple occupancy buildings (MOB) safety	Re-opener	No	GD Annex
Heat policy	Re-opener	No	GD Annex
Domestic connections	Volume driver	Yes (baseline forecast)	GD Annex
New large load	Re-opener	No	GD Annex
Smart meter rollout costs	Re-opener	Partial (separate from re-opener)	GD Annex
Specified streetworks	Re-opener	Partial (separate from re-opener)	GD Annex
Fuel Poor Network Extension Scheme (FPNES)	Re-opener	Yes (baseline forecast)	GD Annex
<b>Common UMs across all sectors</b>			
Bad Debt	Pass-through	No	Finance Annex <sup>7</sup>
Business Rates	Pass-through	No	Not covered (no change since our SSMD)
Ofgem Licence Fee	Pass-through	No	Not covered (no change since our SSMD)

<sup>6</sup> Any costs not included in baseline totex, but included in allowed revenue are captured in the licence model.

<sup>7</sup> RIIO-2 Draft Determinations – Regulatory Finance Annex (abbreviated to Finance Annex)

UM Name	UM type	Included in baseline totex <sup>6</sup>	Further detail
Coordinated Adjustment Mechanism	Re-opener	No	Core Document
Cyber Resilience OT*	UIOLI allowance and re-opener	Partial (separate from re-opener)	Core Document
Cyber Resilience IT*	Re-opener	Partial (separate from re-opener)	Core Document
Non-operational IT and Telecoms Capex	Re-opener	Partial (separate from re-opener)	Core Document
Pensions (pension scheme established deficits)	Re-opener	No	Not covered (no change since our SSMD)
Physical Security (PSUP)	Re-opener	Partial (separate from re-opener)	Core Document
Tax Review	Re-opener	No	Finance Annex
Net Zero	Re-opener	No	Core Document
Cost of debt indexation	Indexation	No	Finance Annex
Cost of equity indexation	Indexation	No	Finance Annex
Inflation Indexation of RAV and Allowed Return	Indexation	No	Finance Annex
Real Price Effects	Indexation	No	Core Document
<b>UMs addressed in this document (bespoke to SGN)</b>			
None	Not applicable	Not applicable	Not applicable

1.8 Table 5 sets out our NIA proposals for SGN (further details can be found in Chapter 5). Our general approach to the NIA is set out in the Core Document.

**Table 5: Summary of proposed Network Innovation Allowance applicable to SGN**

Consultation position
£30m, conditional on an improved industry-led reporting framework.

1.9 Table 6 summarises our assessment of SGN across the four stages of the Business Plan Incentive (BPI), and sets out where you can find additional information.

**Table 6: Summary of proposed SGN BPI performance**

BPI Stage	Outcome	Further detail
1	Pass	Core Document for approach to assessment and rationale.
2	No reward	Core Document for approach to assessment. Chapter 2 of this document for views on specific proposals.
3	Penalty of £1.2m	Core Document for approach to assessment. Chapter 3 of this document for specific views on SGN’s performance.
4	No reward	Core Document for approach to assessment. Chapter 3 of this document for specific views on SGN’s performance.
Overall	Penalty of £1.2m	Core Document

1.10 Table 7 summarises our proposed Totex Incentive Mechanism (TIM) rate for SGN. Further details can be found in the Core Document.

**Table 7: Summary of proposed TIM rate for SGN**

Network	TIM rate (%)
Scotland	49.0%
Southern	49.6%

1.11 Table 8 summarises the financing arrangements that we are proposing to apply to SGN and the GD sector as a whole. Please refer to the Finance Annex for more detail on these areas.

**Table 8: Summary of financing arrangements applicable to SGN**

Finance parameter	SGN rate	Source
Notional gearing	60%	See Table 31 in Finance Annex
Cost of Equity	4.20%	
Expected outperformance	0.25%	
Allowed return on equity	3.95%	
Allowed return on debt	1.74%	
Allowed return on capital	2.63%	

## 2. Setting outputs

### Introduction

2.1 In this chapter we provide our views on two main areas:

- Firstly, we set out the proposed SGN-specific parameters for common GD sector outputs.
- Secondly, we set out our views on the bespoke outputs that SGN proposed in its Business Plan.

### Common Outputs

2.2 We set out our consultation position for the SGN-specific parameters in the following tables for the common outputs for RIIO-GD2, excluding where we specify parameters in Chapter 2 of the GD Annex.

2.3 We set out more detail on the common outputs in the GD Annex, including the broader consultation positions and our rationale. For the cost assessment related to outputs, please see Chapter 3.

**Table 9: Summary - SGN parameters for common outputs**

Output name	Output type	Parameters
Fuel Poor Network Extension Scheme (FPNES)	ODI-R and Volume driver	Target number and cap for number of connections.
Unplanned interruptions	ODI-F	Minimum performance level, excessive deterioration level and highest modelled number of major incidents.
Repex - Tier 1 mains replacement	PCD	Baseline Target Workloads – number of kilometres of Tier 1 mains to be decommissioned. Baseline Cost Allowances for Tier 1 mains replacement.
Repex - Tier 1 services	PCD	Baseline Target Workloads – number of service interventions associated with Tier 1 mains replacement. Baseline Cost Allowances for Tier 1 services.
Capital Projects	PCD	List of projects included and the network where they apply.

## Fuel Poor Network Extension Scheme

**Table 10: Consultation position – FPNES ODI-R targets and volume driver cap**

Network	ODI-R Target	Volume driver cap
	<i>Number of connections – RIIO-GD2 total</i>	<i>Number of connections – RIIO-GD2 maximum</i>
Scotland	13,000	13,000
Southern	5,000	6,479
<b>Total</b>	<b>18,000</b>	<b>19,479</b>

## Unplanned Interruptions

**Table 11: Consultation position - ODI-F Minimum performance and Excessive Deterioration levels and highest modelled major incidents**

Network	Minimum performance level	Excessive Deterioration level	Highest Modelled Major Incidents
	<i>Hours per year</i>	<i>Hours per year</i>	<i>Number per year</i>
Scotland	21	28	4
Southern	28	36	1

2.4 The Monte Carlo model used to determine the values is included in the Unplanned Interruptions Model Annex.

**Tier 1 mains replacement PCD**

**Table 12: Consultation position - Tier 1 mains decommissioned Baseline Target Workloads for SGN Scotland (RIIO-GD2 total, km)**

Scotland	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workload
<i>Workload Activities</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>
<b>Cast Iron and Spun Iron: Low-Pressure and Medium Pressure</b>						
a. <=3"	13.2	13.2	13.2	13.2	13.2	<b>65.8</b>
b. 4"-5"	103.0	103.0	103.0	103.0	103.0	<b>514.8</b>
c. 6"-7"	70.2	70.2	70.2	70.2	70.2	<b>351.0</b>
d. 8"	20.7	20.7	20.7	20.7	20.7	<b>103.5</b>
<b>Ductile Iron: Low-Pressure</b>						
a. <=3"	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
b. 4"-5"	6.9	6.9	6.9	6.9	6.9	<b>34.4</b>
c. 6"-7"	3.5	3.5	3.5	3.5	3.5	<b>17.2</b>
d. 8"	1.5	1.5	1.5	1.5	1.5	<b>7.3</b>
<b>Total</b>						
<b>Total - all diameters and materials</b>	<b>218.8</b>	<b>218.8</b>	<b>218.8</b>	<b>218.8</b>	<b>218.8</b>	<b>1,094.1</b>

**Table 13: Consultation position - Tier 1 mains decommissioned Baseline Target Workloads for SGN Southern (RIIO-GD2 total, km)**

Southern	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workload
<i>Workload Activities</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>
<b>Cast Iron and Spun Iron: Low-Pressure and Medium Pressure</b>						
a. <=3"	15.7	15.7	15.7	15.7	15.7	<b>78.5</b>
b. 4"-5"	365.0	365.0	365.0	365.0	365.0	<b>1,824.9</b>
c. 6"-7"	159.4	159.4	159.4	159.4	159.4	<b>796.8</b>
d. 8"	59.9	59.9	59.9	59.9	59.9	<b>299.4</b>
<b>Ductile Iron: Low-Pressure</b>						
a. <=3"	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
b. 4"-5"	14.3	14.3	14.3	14.3	14.3	<b>71.6</b>
c. 6"-7"	6.0	6.0	6.0	6.0	6.0	<b>29.9</b>
d. 8"	4.8	4.8	4.8	4.8	4.8	<b>23.8</b>
<b>Total</b>						
<b>Total - all diameters and materials</b>	<b>625.0</b>	<b>625.0</b>	<b>625.0</b>	<b>625.0</b>	<b>625.0</b>	<b>3,124.8</b>

**Table 14: Consultation position - Tier 1 mains Baseline Allowances (RIIO-GD2 total £m, 2018/19)**

	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Allowance
<i>Baseline allowance</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>
<b>Tier 1 mains Baseline Allowances</b>						
Scotland	24.8	24.9	24.4	24.3	24.4	<b>122.8</b>
Southern	63.8	64.0	63.1	62.6	62.4	<b>315.7</b>
SGN	88.5	88.9	87.5	86.8	86.8	<b>438.5</b>

## NARM PCD and ODI-F

2.5 This table summarises SGN’s NARM targets. Please refer to the NARM Annex for our consultation position and rationale.

**Table 15: Summary - NARM Baseline Network Risk Outputs**

<b>Network</b>	<b>Baseline Network Risk Outputs</b>
<i>Unit</i>	<i>Risk pound (R£m)<sup>8</sup></i>
Scotland	3.6
Southern	20.2

**Tier 1 services PCD**

**Table 16: Consultation position - Tier 1 service interventions Baseline Target Workloads for SGN Scotland (RIIO-GD2 total, number of services)**

Scotland	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>
<b>Tier 1 service interventions</b>						
Relay - domestic	6,512	6,512	6,512	6,512	6,512	<b>32,560</b>
Test and transfer - domestic	10,362	10,362	10,362	10,362	10,362	<b>51,809</b>
Relay - non-domestic	55	55	55	55	55	<b>276</b>
Test and transfer - non-domestic	64	64	64	64	64	<b>320</b>
Totals	16,993	16,993	16,993	16,993	16,993	<b>84,965</b>

**Table 17: Consultation position - Tier 1 service interventions Baseline Target Workloads for SGN Southern (RIIO-GD2 total, number of services)**

Southern	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>	<i>No.</i>
<b>Tier 1 service interventions</b>						
Relay - domestic	37,095	37,095	37,095	37,095	37,095	<b>185,476</b>
Test and transfer - domestic	18,355	18,355	18,355	18,355	18,355	<b>91,777</b>
Relay - non-domestic	157	157	157	157	157	<b>783</b>
Test and transfer - non-domestic	211	211	211	211	211	<b>1,055</b>
Totals	55,818	55,818	55,818	55,818	55,818	<b>279,091</b>

<sup>8</sup> The unit used to denote Monetised Risk values. R£ is used to differentiate from financial monetary values.

**Table 18: Consultation position - Tier 1 service interventions Baseline Allowances (RIIO-GD2 total £m, 2018/19)**

	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Allowance
<i>Baseline allowance</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>
<b>Tier 1 services Baseline Allowances</b>						
Scotland	11.2	11.3	11.1	11.0	11.0	<b>55.6</b>
Southern	37.5	37.6	37.1	36.8	36.7	<b>185.7</b>
SGN	48.7	48.9	48.2	47.8	47.7	<b>241.3</b>

### Capital Projects PCD

**Table 19: Consultation position – SGN project list for the Capital projects PCD**

Network	Project	Deliverable/output	Proposed costs (£m)
Scotland	RO2 Dunkeld	As per Engineering Justification Paper (EJP)	23.10
Scotland	T8: Pitcairngreen to Huntingtower - R04 and R05	As per EJP	5.67
Scotland	E&I Upgrade Programme (5 sites)	As per EJP	1.05
Scotland	ICMDL	As per EJP	1.99
Scotland	Telemetry Upgrades (8 Offtakes)	As per EJP	0.46
Scotland	Dreghorn PRS	As per EJP	2.04
Scotland	E&I Upgrade Programme (4 sites)	As per EJP	0.55
Scotland	New PRS (Edinburgh South East Wedge)	As per EJP	2.34
Scotland	Newton Means and Waterfoot PRS	As per EJP	7.54
Scotland	Provan PRS	As per EJP	11.96
Scotland	Telemetry Upgrade (73 PRS')	As per EJP	3.33
Scotland	Tranent PRS	As per EJP	2.39
Scotland	Lockerbie Offtake	As per EJP	1.74
Scotland	Metering Uncertainty Programme (6 sites)	As per EJP	3.32
Scotland	Aberdeen (Craibstone) PRS	As per EJP	0.59
Scotland	Airth	As per EJP	1.07
Scotland	Carleith PRS	As per EJP	0.83
Scotland	Fairmilehead	As per EJP	1.79
Scotland	Granton	As per EJP	0.68

Network	Project	Deliverable/ output	Proposed costs (£m)
Scotland	Lauder	As per EJP	0.98
Scotland	St Andrews PRS	As per EJP	2.11
Southern	E&I Upgrade Programme (2 sites)	As per EJP	0.48
Southern	ICMDL	As per EJP	2.89
Southern	Mappowder	As per EJP	3.86
Southern	Telemetry Upgrades (2 Offtakes)	As per EJP	0.12
Southern	Winkfield Offtake - System 1 (South East)	As per EJP	4.84
Southern	Winkfield Offtake - System 2 (South)	As per EJP	3.81
Southern	E&I Upgrade Programme (23 sites)	As per EJP	3.41
Southern	East Morden	As per EJP	3.80
Southern	Telemetry Upgrade (82 PRS')	As per EJP	3.78
Southern	Wavendon	As per EJP	3.65
Southern	Metering Uncertainty Programme (1 site)	As per EJP	0.20
Southern	Aylesham PRS	As per EJP	1.27
Southern	Battle PRS - System 1	As per EJP	0.49
Southern	Boxhill PRS	As per EJP	1.55
Southern	Braishfield C	As per EJP	1.23
Southern	Godstone PRS	As per EJP	1.69
Southern	Hillside	As per EJP	1.87
Southern	Hurst Green PRS	As per EJP	1.69
Southern	Reading A	As per EJP	3.09
Southern	Shalford	As per EJP	4.24
Southern	Shatterling PRS	As per EJP	1.43
Southern	Smarden PRS	As per EJP	1.53
Southern	Westerham PRS - System 1	As per EJP	2.90
Southern	Woking	As per EJP	2.09
<b>Total</b>			<b>131.46</b>

## **Bespoke Output Proposals**

- 2.6 For RIIO-2, we invited companies to propose additional bespoke outputs as part of their Business Plans reflecting the needs of and feedback from their stakeholders and consumers.
- 2.7 We requested that companies' support bespoke outputs with robust justification to ensure that the potential consumer benefits were reasonable, given the additional cost and/or regulatory complexity introduced into the price controls. In making our draft decisions for RIIO-2 outputs, we have sought to strike a balance between these trade-offs for each bespoke output. You can find the background and our assessment approach in our Core Document.
- 2.8 In this section, we provide our views on all of the bespoke outputs that SGN proposed in its Business Plan, and any that we propose to apply to SGN.
- 2.9 For full details on the bespoke outputs, refer to SGN's Business Plan.

### **Bespoke output delivery incentives**

- 2.10 The table below summarises the bespoke ODI proposals that SGN submitted as part of its Business Plan and outlines our consultation position.

**Table 20: SGN’s bespoke ODI proposals**

Output name	Consultation position
<b>Bespoke outputs we propose to reject</b>	
<b>Bespoke social value incentive:</b> SGN proposed to 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.	<b>Reject:</b> We commend SGN for this proposal. We propose to work with Cadent and SGN to develop a consistent incentive for their similar proposals. Refer to the section 'Collaborative streetworks' in Chapter 2 of our GD Annex for our approach for Cadent and SGN's similar proposals.
<b>Other Activities (theft, Own use):</b> SGN proposed a reputational ODI to reduce shrinkage from theft and own usage by 0.5ktCO <sub>2</sub> e per year.	<b>Reject:</b> We propose that SGN includes its target within our new common reputational ODI for business carbon footprint. Refer to Chapter 2 of our GD Annex for the section covering 'Environmental Action Plan commitments and targets'.
<b>Biomethane capacity ambition:</b> SGN proposed to increase the capacity of annual biomethane supplies by the end of RIIO-GD2 to the equivalent of 450,000 households.	<b>Reject:</b> Our view, expressed in our SSMC <sup>9,10</sup> remains 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 propose not to include this ODI. As set out in our SSMD, <sup>11</sup> 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.
<b>12 hour standard:</b> HSE requirement for repair within 12 hours.	<b>Reject:</b> Our SSMD <sup>12</sup> 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.

**Bespoke ODI consultation questions**

SGNQ1. Do you agree with our proposals on the bespoke ODIs? If not, please outline why.

<sup>9</sup> 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](https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-gd2_sector_annex_0.pdf)

<sup>10</sup> Paragraph 4.52.

<sup>11</sup> Paragraph 3.75.

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

## Bespoke PCDs

2.11 The table below summarises the bespoke PCD proposals that SGN submitted as part of its Business Plan and outlines our consultation position.

**Table 21: SGN's bespoke PCD proposals**

Output name	Consultation position
<b>Bespoke outputs we propose to accept</b>	
<b>Biomethane improved access rollout:</b> if trials prove successful, 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.	<b>Accept:</b> We propose to accept this bespoke PCD. Our rationale follows this table. We note it is vital that SGN considers the feasibility of local billing zones before committing funding under the PCD to this project. We would welcome further information as part of SGN's response to the Draft Determinations.
<b>Intermediate pressure reconfigurations:</b> programme to reconfigure 515 IP service installations in Scotland at a cost of £3.7m.	<b>Accept:</b> We propose to accept this bespoke PCD but exclude costs for mains and services replacement. Our rationale follows this table.
<b>Remote Pressure Management:</b> initiative for SGN's Southern network to reduce leakage through smarter network control and remote management.	<b>Accept:</b> We propose to accept this bespoke PCD subject to SGN providing additional information. Our rationale follows this table.
<b>Bespoke outputs we propose to reject</b>	
<b>Increased fleet replacement rate:</b> SGN proposed to bring forward the average rate of vehicle replacement from eight to six years.	<b>Reject:</b> We found poor justification of cost assumptions (high unit costs, back-up vehicle purchases and replacing vehicles before their asset life expires). We have proposed that GDNs submit further information for commercial fleet conversion and charging infrastructure, with a view to setting a common PCD if appropriate, as discussed in Chapter 2 of the GD Annex.
<b>Low emission vehicles:</b> SGN proposed to replace around half of their fleet with ultra-low emission vehicles (ULEVs) by the end of RIIO-GD2 and introduce the necessary refuelling infrastructure.	<b>Reject:</b> For our rationale, refer to Increased fleet replacement rate above.
<b>SIU Biomethane:</b> 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.	<b>Reject:</b> There is low materiality associated with this PCD. We do not consider SGN has provided evidence of need for the feasibility studies, nor a CBA demonstrating the benefits. Additionally, we think the provision of NIA funding provides SGN with flexibility to take forward innovation projects on biomethane if it wishes.

Output name	Consultation position
<p><b>Biomethane improved access trials - Capex:</b> 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><b>Reject:</b> We consider 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. (We provide further details in Chapter 5 of this document, as well as Chapter 8 of the Core Document.)</p>
<p><b>Biomethane improved access trials - Opex:</b> 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><b>Reject:</b> For our rationale, refer to for Biomethane improved access trials – Capex.</p>
<p><b>Biodiversity improvements - Opex:</b> SGN proposed to undertake biodiversity surveys on 153 selected sites at £2m, based on which it proposes to develop a biodiversity improvement strategy.</p>	<p><b>Reject:</b> We propose SGN reports on its biodiversity improvements under the Annual Environmental Report (AER). While the proposal is well justified, we do 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 propose to allow costs in SGN's baseline allowance to carry out the work.</p>
<p><b>Biodiversity improvements - Capex:</b> Based on the surveys, SGN proposed to then implement the identified improvement and enhancement measures at £2.5m.</p>	<p><b>Reject:</b> For our rationale, refer to for Biodiversity improvements – Opex.</p>
<p><b>Climate Change Adaptation - Opex:</b> 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><b>Reject:</b> Proposal is justified but does 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 propose to allow costs in SGN's baseline allowance to carry out the work. Progress should be reported on in the RRP.</p>
<p><b>Climate Change Adaptation - Capex:</b> SGN proposed to implement the identified actions from surveys for climate change adaption measures at an estimated £2m per year (with an uncertainty mechanism attached to the EAP).</p>	<p><b>Reject:</b> If SGN identifies actions from the surveys described above,<sup>13</sup> we think these should be undertaken through SGN's baseline totex allowance - it is 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 are not well justified and no particular activities are defined.</p>

<sup>13</sup> See 'Climate Change Adaptation – Opex'.

Output name	Consultation position
<p><b>Installation of PV - Occupied Sites:</b> SGN proposed to install solar PV across 45 office sites at an estimated total cost of £1.7m.</p>	<p><b>Reject:</b> We propose SGN reports on this through the AER. The proposal is well justified, but we do 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 propose to allow costs in SGN's baseline allowance to carry out the work.</p>
<p><b>Installation of PV - Governor sites:</b> 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><b>Reject:</b> For our rationale, refer to Installation of PV – Occupied Sites proposal.</p>
<p><b>DCC membership PCD - Capex:</b> 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><b>Reject:</b> We did not find clear evidence that GDNs would be mandated to be DCC Users during RIIO-GD2 and consider that SGN needs to weigh costs and benefits for any membership decisions. We consider there is insufficient justification of the needs case for a bespoke PCD.</p>
<p><b>DCC membership PCD - Opex:</b> SGN proposed that DCC membership would require ongoing cost of £100k per year.</p>	<p><b>Reject:</b> For our rationale, refer to for DCC membership PCD – Capex.</p>
<p><b>Cyber resilience - Capex:</b> Investment to provide an appropriate level of protection from cyber threats, both information and operational technology (IT and OT).</p>	<p><b>Reject:</b> As set out in our SSMD, we will provide expenditure on a 'use-it-or-lose-it' (UIOLI) basis and set a PCD.<sup>14</sup> We have 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><b>Cyber resilience - Opex:</b> Investment to provide an appropriate level of protection from cyber threats, both information and operational technology (IT and OT).</p>	<p><b>Reject:</b> For our rationale, refer to for Cyber resilience – Capex.</p>
<p><b>IT Technology Readiness - Capex:</b> Proposed investment to keep pace with technological change, specifically in IIOT, Analytics and AI.</p>	<p><b>Reject:</b> We have adopted a common IT&amp;T cost approach and proposed new licence conditions for Digitalisation Strategies and for meeting Data Best Practice. Therefore, we do not consider it is necessary to set an additional bespoke PCD. Refer to Chapter 3 of the GD Annex for the technical assessment of 'IT&amp;T capex' and Chapter 4 of the Core Document for proposed reporting requirements for 'Modernising Energy Data'.</p>
<p><b>IT Technology Readiness - Opex:</b> Proposed investment to keep pace with technological change, specifically in IIOT, Analytics and AI.</p>	<p><b>Reject:</b> For our rationale, refer to IT Technology Readiness – Capex. However, refer to Chapter 3 of the GD Annex for the modelled totex approach for opex.</p>

<sup>14</sup> SSMD Core Document, Paragraph 6.108 and SSMD GD Annex, Table 9.

Output name	Consultation position
<b>Open Data sharing - Capex:</b> 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.	<b>Reject:</b> For our rationale, refer to IT Technology Readiness - Capex.
<b>Open Data sharing - Opex:</b> 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.	<b>Reject:</b> For our rationale, refer to IT Technology Readiness - Opex.
<b>Innovation rollout - stent bags/HVGET:</b> 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.	<b>Reject:</b> The justification provided does not demonstrate that benefits will exceed the costs. SGN may wish to consider using RIIO2 innovation funding instead, if it considers that it meets the criteria.
<b>Land Remediation:</b> SGN proposed land remediation and regeneration activities covering 0.25km <sup>2</sup> annually for £23.4m.	<b>Reject:</b> Given the low risk of non-delivery, we do not consider it necessary to establish a bespoke PCD. We provide an allowance through our totex baseline. Refer to Chapter 3 of our GD Annex for our treatment of land remediation costs.
<b>Statutory Independent Undertakings:</b> SGN proposed an investment of £9.6m per year for ongoing operational costs for its five SIUs.	<b>Reject:</b> Proposal is well justified but we have decided to include SIU costs within the proposed totex baseline allowance. See our SIU opex section in Chapter 3 of our GD Annex.
<b>Accelerated tier 1 mains replacement:</b> 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. <sup>15</sup>	<b>Reject:</b> Given the uncertainty around future use of the gas network, and the potential additional constraint this would place on the labour market, we do not think it is appropriate to accelerate the rate of Tier 1 mains replacement activity in RIIO-GD2.
<b>Pro-active steel mains replacement:</b> A PCD to fund the replacement of steel mains >2" in diameter in RIIO-GD2.	<b>Reject:</b> We do 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 have not included 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 (see Chapter 3 for further details).

<sup>15</sup> 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.

Output name	Consultation position
[REDACTED] and Cams Hall: A PCD to fund two projects in its Southern network: [REDACTED] and Cams Hall.	<b>Reject:</b> We propose not to include the combined PCD, but propose to accept the [REDACTED] project as a standalone PCD. We assessed the two projects separately as part of our engineering review. We do not consider that SGN has provided sufficient evidence to support the needs case for Cams Hall. Hence, we rejected the bespoke PCD and disallowed the associated costs. See our rationale following this table on the [REDACTED] PCD.
<b>Tier 1 iron stubs:</b> 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.	<b>Reject:</b> We think there is significant uncertainty around the decommissioning of Tier 1 stubs in RIIO-GD2 and have proposed a common re-opener (see Chapter 4 of the GD Annex for further details).
<b>Responsible demolition:</b> remove vulnerable redundant assets that no longer carry a live supply at a cost of £5.1m.	<b>Reject:</b> We do not consider this warrants a bespoke output. GDNs should manage their redundant assets responsibly as part of their BAU activities.
<b>Riser isolation valves survey &gt; 6 storey buildings:</b> repair 675 valves as part of the riser inspection survey programme for multiple occupancy buildings (MOBs) in response to the Hackitt review. <sup>16</sup>	<b>Reject:</b> We provide SGN with a cost allowance through our common approach for modelled MOBs totex. We do not consider there is sufficient evidence to justify a bespoke PCD. Our allowance for SGN is set out in Chapter 3 of this annex.
<b>Riser inspection surveys &lt; 6 storey buildings:</b> extend the ongoing GD1 riser inspection survey programme to include four and then three storey buildings.	<b>Reject:</b> For our rationale, refer to Riser isolation valves survey > 6 storey buildings.
<b>Record keeping other records:</b> extend the scope of the annual asset management external audit and assurance process for NARMs modelling and reporting.	<b>Reject:</b> 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 (see Chapter 2 of the GD Annex for further details).

### Bespoke PCD consultation questions

SGNQ2. Do you agree with our proposals on the bespoke PCDs? If not, please outline why.

<sup>16</sup> Building Regulations and Fire Safety review undertaken by Dame Judith Hackitt.

## Our consultation position on bespoke PCDs included in our Draft Determinations

### Biomethane improved access rollout

Biomethane technology rollout PCD	
Purpose	Hold SGN to account for the delivery of their biomethane rollout project.
Benefits	Support the rollout of biomethane technology on the gas network.

#### *Background*

2.12 In its Business Plan, SGN proposed a biomethane technology rollout PCD. This would rollout innovations to tackle barriers such as high connection costs and minimum calorific value required for gas injection into the network. This work includes the installation of three technologies developed across their network to help grow and encourage an increase in the volume of biomethane on the network. SGN proposed a cost of £10m for this activity.

#### *Consultation position*

Output parameter	Consultation position
Description and purpose of the deliverable	Installation of three technologies to increase biomethane volumes on the network as per EJP.
Expected timing of delivery	End of RIIO-GD2
Totex baseline allowances	£10m
Proposed approach to allowance clawback	Ex post assessment of delivery at Closeout.
Knowledge dissemination	Similar knowledge transfer requirements and intellectual property rights to projects funded under our NIA.

#### *Rationale for consultation position*

2.13 In our SSMD, we encouraged network companies to rollout past innovation and provided the opportunity for companies to receive additional funding where they could not take innovations forward as part of BAU activities.

2.14 We propose to include this PCD as it builds upon SGN’s ongoing innovation work. Although there is further work needed prior to the proposed rollout in 2022, we consider SGN has evidenced environmental benefits and demonstrated that the activity would not enable it to realise commercial benefits during the course of the RIIO-GD2 price control. We think this activity is beyond the scope of the RIIO-GD2 NIA as it involves rolling out innovation and so additional funding through the PCD is appropriate.

2.15 As the PCD involves embedding innovation and customer funding, we consider it is appropriate that SGN reports and disseminates knowledge from the project in the same way they would if it were a NIA project. We propose to require SGN to share learnings on this project, which could take a similar form to the knowledge transfer requirements and intellectual property rights for projects funded under our NIA.

*Consultation questions*

SGNQ3. Do you agree with our proposal for SGN’s bespoke biomethane technology rollout PCD?

[REDACTED]

[REDACTED] project PCD	
Purpose	To fund SGN to complete the [REDACTED] repex project during RIIO-GD2. This involves replacing and re-routing an intermediate pressure main that crosses the River Swale.
Benefits	Completing the project allows SGN to appropriately manage the risk to customers from a single intermediate pressure feed and meet the terms of its easement agreement with Network Rail.

*Background*

2.16 SGN propose to replace a single intermediate pressure main located within the [REDACTED] in their Southern network. This includes a new tunnel under the river to safeguard the single feed main, which supplies 14,950 customers. SGN requested £4.9m for [REDACTED] in the first year of RIIO-GD2.

2.17 SGN submitted the [REDACTED] project as part of a bespoke PCD that also included its proposed Cams Hall project. We do not think the needs case for Cams Hall has been sufficiently justified (as we set out earlier in this section). Hence, we are considering the [REDACTED] project as a standalone PCD.

*Consultation position*

Output parameter	Consultation position
Description and purpose of the deliverable	PCD for completing the [REDACTED] project.
Delivery	Fully delivered only
Expected timing of delivery	End of RIIO-GD2
Totex baseline allowances	£4.9m
Accountability mechanism	Independently audited engineering report confirming the completion of the project as specified in the Business Plan.
Proposed approach to allowance clawback	Automatic adjustment using ex ante project costs to clawback 100% of funding for full or partial non-delivery.

*Rationale for consultation position*

2.18 We propose to allow SGN's proposed costs for [REDACTED] in full. Following engineering and cost assessment reviews of the supporting EJP and CBA documents, we think there is a robust needs case for this proposal and that SGN presented a clear and justified breakdown of the costs associated with the project. We think this project is in consumers' interests, given the risks associated with the existing single feed. There are also benefits with improved safety and access.

2.19 *Description and delivery:* The PCD will fund SGN to deliver the [REDACTED] project in full during RIIO-GD2. This involves drilling a new tunnel for a replacement intermediate pressure pipe to feed the Isle of Sheppey, allowing SGN to decommission the existing intermediate pressure feed that runs through the [REDACTED], specifically:

- drilling a 370m tunnel to lay the new IP main
- open cutting a further 300m to connect the new main
- abandoning 434m of IP steel main located within the bridge.

2.20 *Accountability and clawback:* If SGN does not deliver this project<sup>17</sup> we will seek to recover the £4.9m allowance. SGN should demonstrate that the project is complete by submitting to Ofgem a report evidencing project completion to the specification set out in the EJP submitted as part of SGN's RIIO-GD2 Business Plan.

<sup>17</sup> As outlined in the relevant EJP document provided in support of its RIIO-GD2 Business Plan.

*Consultation questions*

SGNQ4. Should we include [REDACTED] within the Capital Projects PCD, rather than setting a separate PCD?

Intermediate pressure reconfigurations

<b>IP services reconfigurations PCD</b>	
Purpose	To fund SGN to install 85 small PRIs and 355 service governors (to allow reconfiguration of 515 services 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.

*Background*

2.21 SGN is proposing a structured programme in Scotland to proactively manage risk for Intermediate Pressure (IP) services connected to 515 properties. SGN has requested £3.7m to install 85 small pressure reducing installations (PRIs) and 355 services governors; and to replace 515 services and 9.32 kilometres of iron mains. SGN's EJP notes that these are aging assets where there have been an increasing number of failures, and that the network company must respond to regulatory changes stating that new IP installation cannot be within three metres of a building.

*Consultation position*

<b>Output parameter</b>	<b>Consultation position</b>
Description and purpose of the deliverable	PCD to provide baseline funding for commissioning 85 small PRIs 355 service governors.
Expected timing of delivery	End of RIIO-GD2.
Totex baseline allowances	£2.3m
Accountability mechanism	We propose that SGN reports annually in the Regulatory Reporting Pack (RRP).
Proposed approach to allowance clawback	Automatic adjustment with ex ante unit costs for undelivered small PRIs or service governors.

*Rationale for consultation position*

2.22 We are proposing to allow the costs SGN submitted for commissioning the small PRIs and services governors. We have not allowed any costs for mains and

services replacement as we are already funding these under the Tier 1 mains PCD and Tier 1 services PCD respectively.

### Scope

- 2.23 The PCD will fund SGN to deliver 85 small PRIs and 355 service governor installations over RIIO-GD2. We will measure the target across the whole of the RIIO-GD2 period, rather than annually.
- 2.24 If SGN does not meet the delivery target for either category, we will automatically adjust allowances at close out based on ex ante unit cost. We have set the unit costs at £9,739 per installation for small PRIs and £4,242 per installation for service governors. This is consistent with the unit costs SGN submitted in its RIIO-GD2 Business Plan.

### Consultation questions

- SGNQ5. Do you agree with our proposal for SGN's IP services reconfigurations PCD?

### Remote Pressure Management

Remote Pressure Management	
Purpose	Installation of an actuator enables remote control of pressure, allowing more targeted and dynamic pressure control.
Benefits	Minimising pressures reduces the environmental and financial costs resulting from gas leakage.

### Background

- 2.25 Pressure in SGN's largest networks is largely controlled by automated profiling equipment, allowing it to be optimised according to current conditions. However, it has previously been uneconomic or impractical to install this on some of their low-pressure networks, which therefore operate on fixed or seasonal settings.
- 2.26 Following the successful trial of a cheaper solution, SGN has proposed a PCD to cover the installation of actuator and pressure logging equipment on 702 district governors across 89 low-pressure networks. This will allow it to measure and control pressure remotely, so that it can be optimised dependent upon demand. The PCD will deliver environmental and financial benefits through reduced leakage by avoiding unnecessarily high pressure levels.

*Consultation position*

Output parameter	Consultation position
Description and purpose of the deliverable	PCD to provide baseline funding for the installation of pressure management equipment at 702 district governors across the Southern region.
Expected timing of delivery	End of RIIO-GD2
Totex baseline allowances	£3.39m
Proposed approach to allowance clawback	Automatic adjustment with ex ante unit costs.
Accountability mechanism	We propose that SGN reports annually on its outturn workloads in the RRP.
Knowledge dissemination	Learnings to be shared and reported as per requirements within RIIO-2 NIA framework.

*Rationale for consultation position*

2.27 We are proposing to allow the costs submitted by SGN in full. However, we recognise there is an interaction between this PCD and the shrinkage and environmental emissions ODI-F. Our acceptance is therefore conditional on SGN providing further evidence as to why this investment would not go ahead on the basis of gains from the incentive, without the need for a PCD.

2.28 Since the PCD will provide customer funding for the rollout of a new technology, we propose to require SGN to share learnings on this project. This could take a similar form to the knowledge transfer requirements and intellectual property rights for projects funded under our NIA.

*Scope*

2.29 The PCD will fund the installation of an actuator and pressure logger at each of 385 district governors in the South/South East LDZs and 317 in the South London LDZ. The total will be measured over the whole of RIIO-GD2.

2.30 If SGN does not meet the delivery target, we will automatically adjust allowances at close out based on ex ante unit costs for the equipment. We have set these unit costs at £3,500 per actuator and associated equipment and £1,389 per pressure data logger. These are consistent with the unit costs SGN submitted in its RIIO-GD2 Business Plan.

*Consultation questions*

SGNQ6. Do you agree with our approach for SGN’s Remote Pressure Management PCD?

## Consumer Value Propositions

2.31 The table below summarises the CVP proposals that SGN submitted under stage 2 of the BPI and outlines our consultation position.

2.32 For full details on the proposed CVPs, see SGN’s Business Plan.

2.33 Where our CVP decisions reference associated bespoke ODIs, PCDs or UMs, please see tables 20, 21 and 56 respectively for more detail.

**Table 22: SGN's CVP proposals**

CVP name	Consultation position
<p><b>Productivity delivered over GD2:</b> 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><b>Reject:</b> Efficiency is already rewarded through other mechanisms in the price control, including the BPI stage 4, and the TIM.</p>
<p><b>Absorbed weather risk:</b> 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><b>Reject:</b> We don't think that sufficient evidence of additional value to consumers has 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><b>Aligning allowances with workload:</b> 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><b>Reject:</b> We don't think that sufficient evidence of additional value to consumers has been provided to justify a CVP reward. We don't think that shifting costs from baseline to a PCD or UM is innovative, so should not receive a CVP reward.</p>
<p><b>Environmental action plan initiatives:</b> 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><b>Reject:</b> We are not proposing to accept the associated UM (Environmental Action Plan) for the reasons stated in Table 56, so don't think this should receive a CVP reward.</p>

CVP name	Consultation position
<p><b>Bespoke safety and reliability outputs:</b> 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><b>Reject:</b> We are not proposing to accept any of the associated bespoke outputs in the form they were submitted<sup>18</sup> for the reasons stated in Table 20, so don't think this should receive a CVP reward.</p>
<p><b>Additional transparency through lowering the CBA threshold:</b> Justified all points of major expenditure (every project over £0.5m), delivering £3m benefit to current customers.</p>	<p><b>Reject:</b> We don't think that sufficient evidence of additional value to consumers, or evidence that the proposal is innovative, has been provided to receive a CVP reward.</p>
<p><b>Financial savings to vulnerable households:</b> 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><b>Reject:</b> We expect GDNs to work with stakeholders to develop and implement their vulnerability strategies, and funding for this will be available through the consumer vulnerability and CO safety use-it-or-lose-it allowance, so it is not clear how this goes beyond BAU.</p>
<p><b>Health and wellbeing benefits = social value:</b> Health and wellbeing benefits of the proposed vulnerability initiatives, delivering £81m benefit to vulnerable customers.</p>	<p><b>Reject:</b> SGN does not provide sufficient evidence that its proposals go sufficiently beyond the strategy required for the vulnerability and carbon monoxide awareness allowance as part of the Business Plan minimum requirements.</p>
<p><b>Community action projects:</b> 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><b>Reject:</b> We think this CVP proposal constitutes corporate social responsibility (CSR) activities that are not within SGN's business footprint. We think CSR should be BAU for GDNs.</p>
<p><b>Innovation funding:</b> 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><b>Reject:</b> 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 don't think this is beyond BAU. In terms of innovation within BAU activities, also considered under the CVP, we have not identified any evidence to suggest that SGN is doing to this to a greater extent than other network companies.</p>

<sup>18</sup> 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.

CVP name	Consultation position
<p><b>Open Data:</b> Plans to make data more visible, more accurate, and more accessible, delivering £2m benefit to current customers and £1m to future customers.</p>	<p><b>Reject:</b> We have adopted a common IT&amp;T cost approach and proposed new licence conditions for Digitalisation Strategies and for meeting Data Best Practice. We don't think this CVP proposal adds additional value to consumers beyond our common proposals. Refer to Chapter 3 of the GD Annex for the technical assessment of 'IT&amp;T capex' and Chapter 4 of the Core Document for proposed reporting requirements for 'Modernising Energy Data'.</p>
<p><b>Supporting decision making:</b> 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><b>Reject:</b> We don't think that SGN has provided sufficient evidence of stakeholder support to justify why this proposal should receive a CVP reward.</p>
<p><b>GSMR standards:</b> 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><b>Reject:</b> We recognise, and encourage, SGN's proactive work to promote changing the GSMR standards. We recognise 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 think the CVP benefits provided cannot be solely attributed to SGN's work. There is 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 have been unable to separate out the costs directly associated with SGN's proactive work but would welcome further evidence. If attached to a clear deliverable, we will consider whether to allow these costs within SGN's baseline.</p>
<p><b>Hydrogen standards:</b> Focusing its innovation strategy on understanding the standards that would be needed for a hydrogen rollout, delivering £26m benefit to future customers.</p>	<p><b>Reject:</b> We found insufficient evidence that this goes beyond what we expect from SGN's innovation strategy.</p>

### CVP consultation questions

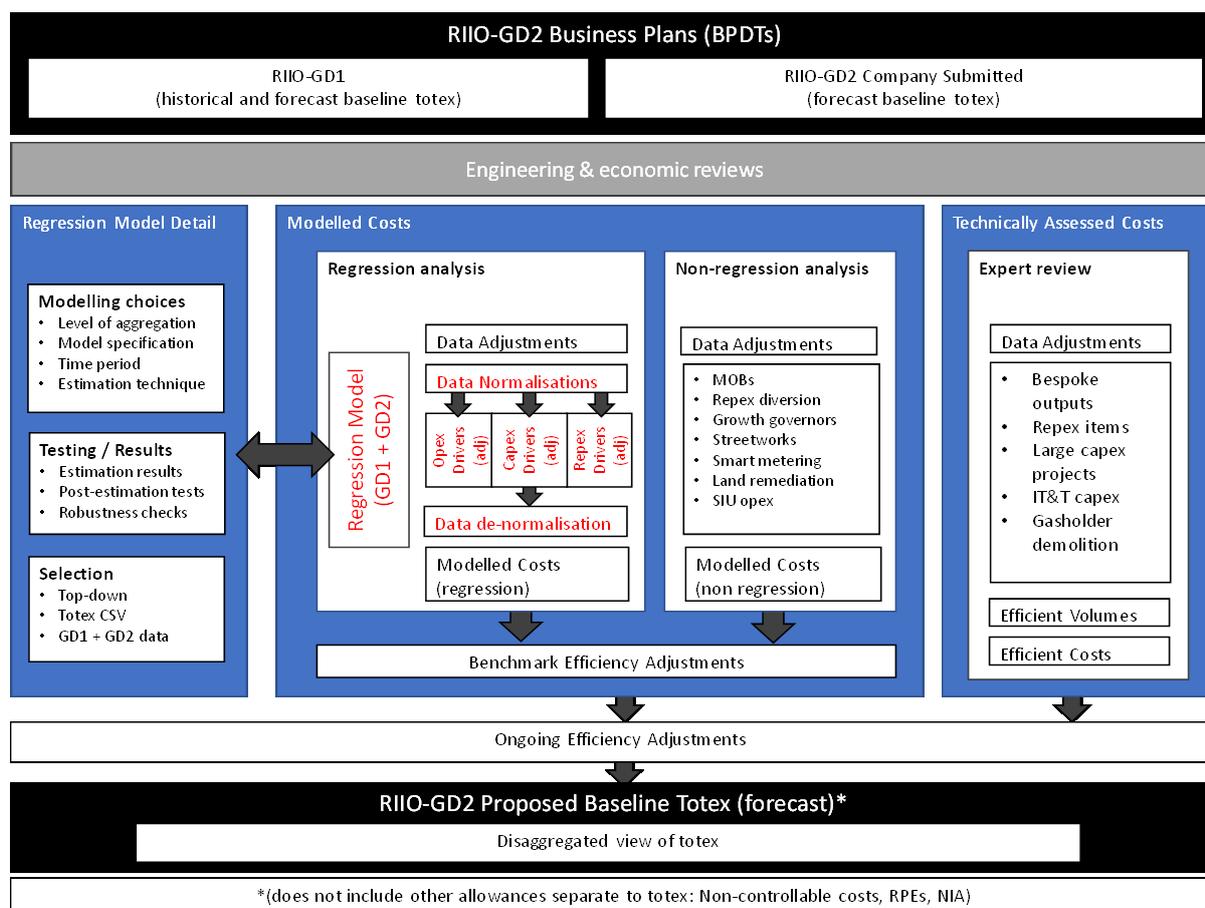
SGNQ7. Do you agree with our proposals on CVPs? If not, please outline why.

### 3. Cost of service - setting baseline allowances

#### Introduction

- 3.1 In this section we detail the steps taken to reach our proposed decision on SGN’s submitted baseline totex allowances for its Scotland and Southern networks.
- 3.2 We have used three approaches in determining totex allowances: totex regression modelling, non-regression modelling and technical assessment. We present the results from each of these approaches next, together with a breakdown of any pre-modelling adjustments prior to our assessment, and the final steps taken to arrive at our proposed baseline totex allowance.
- 3.3 An overview of our process and common terms used in this chapter is provided below.

Figure 2: Modelling Overview



3.4 We intend this chapter to be read alongside other parts of our Draft Determinations that set out our industrywide approach. We provide further detail in the following documents:

- on our totex regression and modelled cost approach in our Step-By-Step Guide to Cost Assessment (SBSG Annex)
- on our assessment of regional and company-specific factors in the Regional and Company Specific Factors Annex (Regional Factors Annex)
- on our engineering assessment in our QEM/ARV Engineering Review Annex (Engineering Annex).

## Baseline allowances

3.5 Baseline totex referenced in this chapter comprises forecast controllable costs.<sup>19</sup> This includes direct and indirect opex, capex and repex and is inclusive of our proposed ongoing efficiency. Non-controllable costs, pass-through costs and real price effects (RPEs), while included in overall allowed revenue recoverable by GDNs, are not included in baseline totex and are treated separately<sup>20</sup>.

3.6 Table 23 compares SGN's submitted baseline totex for each of its networks with our proposed view of baseline totex.<sup>21</sup>

**Table 23: RIIO-GD2 submitted totex vs Ofgem proposed totex (£m, 2018/19)**

Network	Submitted totex (£m)	Proposed totex (£m)	Difference (£m)	Difference (%)
Sc	998	840	-157	-16%
So	2,060	1,687	-373	-18%
<b>SGN Total</b>	<b>3,058</b>	<b>2,527</b>	<b>-531</b>	<b>-17%</b>

3.7 A breakdown of proposed totex at the activity level is provided in Appendix 2 for each network. Our proposed methodology for disaggregating allowances is set out in the GD Annex and the SBSG Annex.

## Summary of our assessment

3.8 Prior to modelling SGN's forecast totex, we separate out costs associated with activities considered more suited to technical assessment. For the remaining

<sup>19</sup> Baseline totex and forecast controllable costs will be used interchangeably.

<sup>20</sup> Any costs not included in baseline totex, but included in allowed revenue, are captured in the licence model.

<sup>21</sup> Both company submitted baseline totex and our proposed baseline totex include the same items for easy comparison

modelled totex, we also distinguished between costs suitable for regression analysis and non-regression analysis. Table 24 details our breakdown of submitted totex for each of SGN’s networks.

**Table 24: SGN totex breakdown by assessment approach (£m, 2018/19)**

Network	Submitted totex	Modelled totex		Technical assessment costs
		Regression	Non Regression	
Scotland	998	717	99	181
Southern	2,060	1,643	206	211
<b>SGN Total</b>	<b>3,058</b>	<b>2,360</b>	<b>305</b>	<b>392</b>
<b>% of submitted costs</b>	<b>100%</b>	<b>77%</b>	<b>10%</b>	<b>13%</b>

3.9 Adjustments to submitted costs under each of our assessment approaches are summarised in Table 25. 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 25: Step by step breakdown of adjustments and reductions (£m, 2018/19)**

Network	Modelled cost		Technically assessed adjustments	Ongoing efficiency adjustments	Total adjustments
	Pre modelling adjustments	Benchmark efficiency adjustments			
Scotland	-53	4	-73	-35	-157
Southern	-129	-53	-126	-65	-373
<b>SGN Total</b>	<b>-182</b>	<b>-49</b>	<b>-215</b>	<b>-100</b>	<b>-531</b>

[Further details on proposed adjustments](#)

### Proposed pre-modelling adjustments

3.10 For costs subject to totex modelling (regression), we propose a number of pre-modelling adjustments to volumes and removed any costs made subject to an uncertainty mechanism. These adjustments for SGN’s networks are summarised in the table below.

**Table 26: Proposed pre-modelling adjustments, SGN (£m, 2018/19)**

Network	Volume-related adjustments	UM related adjustments	Total pre-model adjustments
Scotland	-26	-27	-53
Southern	-82	-47	-129
<b>SGN Total</b>	<b>-108</b>	<b>-73</b>	<b>-182</b>

3.11 We propose to remove £108m due to volume-related adjustments includes repex and reinforcement activities where we did not consider the needs case to have been justified.

3.12 We also propose to remove £73m of costs associated with IT and Telecoms capex (£36m), process safety (£15m), iron stubs repex (£9m) and fatigue-related costs (£8m) and customer vulnerability (£6m), to potential re-openers and other uncertainty mechanisms.

#### **Proposed benchmarking efficiency adjustments**

3.13 SGN’s networks were ranked the second and third most efficient network. Overall, Scotland received a slightly positive adjustment, being near the 85<sup>th</sup> percentile, while Southern received a negative adjustment being below.

#### **Proposed technically assessed cost adjustments**

3.14 For technically assessed costs, we have made the following adjustments, listed in the table below. Our proposed view of bespoke proposals is presented in Chapter 2. Further details on other items is provided later in this chapter.

**Table 27: Technically assessed costs adjustments, SGN (£m, 2018/19)**

Network	Bespoke outputs	Capex projects	IT&T capex	Resilience	SIU capex	Repex projects	Total adjustments
Southern	-85	-27	-1	-12	0	-2	-126
Scotland	-49	-16	0	-7	-1	0	-74
<b>SGN Total</b>	<b>-134</b>	<b>-43</b>	<b>-1</b>	<b>-19</b>	<b>-1</b>	<b>-2</b>	<b>-200</b>

## Regression Analysis

### Introduction

- 3.15 In this section, we describe our proposed 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. Adjustments were made following engineering and cost assessment reviews of SGN's Business Plan.
- 3.16 Details are provided for each of our cost categories, opex, repex and capex, listing out any changes to drivers used in the regression model. For reference, values provided by SGN are referred to as submitted, and values used in our regression model as modelled.

### Opex proposals

- 3.17 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.
- 3.18 In our totex regression modelling for RIIO-GD2, we propose not to make any adjustments to SGN's opex-related drivers.

**Table 28: SGN’s opex drivers**

Network	Driver Value	
	Submitted	Modelled
<b>MEAV (£m, 2018/19)</b>		
Sc	45,138	45,138
So	87,107	87,107
<b>SGN Total</b>	<b>132,245</b>	<b>132,245</b>
<b>Maintenance MEAV (£m, 2018/19)</b>		
Sc	16,253	16,253
So	32,867	32,867
<b>SGN Total</b>	<b>49,120</b>	<b>49,120</b>
<b>Emergency CSV</b> (No., 80% customers number, 20% total external condition reports)		
Sc	2,859,105	2,859,105
So	6,718,387	6,718,387
<b>SGN Total</b>	<b>9,577,492</b>	<b>9,577,492</b>
<b>Total External Condition Reports (No.)</b>		
Sc	24,898	24,898
So	72,217	72,217
<b>SGN Total</b>	<b>97,115</b>	<b>97,115</b>

### Repex proposals

3.19 For repex regression modelling, we use workloads to define the totex CSV together with synthetic costs.<sup>22</sup> The resultant synthetic cost driver is the sum of the products of workload volumes and synthetic unit cost for each activity.

3.20 Where we have disallowed workloads, we have also removed any corresponding costs from submitted totex. In the following section, we present the adjustments we made to repex workloads.

<sup>22</sup> Synthetic unit cost is common across all networks

Tier 1 mains and steel mains <=2"

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

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Tier 1 (km)</b>			We have disallowed all workloads associated with dynamic growth and accelerated growth for Tier 1 (see the GD Annex).
Sc	1,055.2	954.8	
So	3,119.0	2,937.7	
SGN	4,174.2	3,892.5	
<b>Steel &lt;=2" (km)</b>			We allowed in full SGN's submitted steel mains <=2" workloads.
Sc	107.7	107.7	
So	101.4	101.4	
SGN	209.1	209.1	
<sup>1</sup> Include workloads due to dynamic growth and accelerated growth			

*Further details on our proposed position*

3.21 SGN requested £14.72m (Scotland) and £33.59m (Southern) to deliver an accelerated programme of 75km (Scotland) and 125km (Southern) additional Tier 1 mains (plus associated services) replacement as a bespoke PCD in RIIO-GD2. Given the current uncertainty around the future of the gas network we do not think it is appropriate to accelerate funding for the Tier 1 mains replacement programme at the current time. We are also concerned that funding additional workloads above the minimum level could put further pressure on the labour market, which several GDNs noted as potentially tightening in RIIO-GD2.

Tier 2A mains

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

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Tier 2A (km)</b>			We have included in full SGN's proposed Tier 2A workloads as part of baseline modelling. <sup>23</sup>
Sc	2.5	2.5	
So	13.5	13.5	
SGN	16.0	16.0	

<sup>23</sup> See RIIO-2 Draft Determinations Gas Distribution Sector Annex for further discussion of the Tier 2A volume driver.

Tier 2B and Tier 3 mains

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

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Tier 2B (km)</b>			We have not allowed the proposed Tier 2B workloads for the either Scotland or Southern networks, as the CBA supporting this investment did not pay back before 2037.
Sc	23.2	0.0	
So	37.7	0.0	
SGN	60.8	0.0	
<b>Tier 3 (km)</b>			We have allowed Tier 3 workloads for Southern. We have disallowed Tier 3 workloads for Scotland, as the CBA support this investment did not pay back before 2037.
Sc	8.6	0.0	
So	22.2	22.2	
SGN	30.8	22.2	

*Further details on our proposed position*

- 3.22 We have not allowed for the workloads submitted for Tier 2B for either Scotland or Southern in RIIO-GD2. The CBAs supporting the submitted investments show they do not pay back by 2037<sup>24</sup>. We are concerned that these investments do not offer value for customers, given the uncertainty around the future of the gas network.
- 3.23 We have allowed in full the workloads for the Tier 3 submitted for Southern, as we consider the engineering needs case to have been justified and the investment is supported on a Cost Benefit Analysis (CBA) basis. We have not allowed the workloads submitted for Tier 3 in Scotland, as the supporting CBA does not payback by 2037. We are concerned that this investment does not offer value for customers, given the uncertainty around the future of the gas network.
- 3.24 In general, we did not think that the CBAs gave sufficient consideration to the option of deferring investments or presented detailed sensitivities of the assumptions underpinning the needs case for these proposed investments.

<sup>24</sup> In SGN's original CBA submission, it used different capitalisation rates between the baseline and option. In assessing the payback periods of SGN's proposed options, we set the capitalisation rate to be the same for both the baseline and option, ensuring consistency with the assessment approach used for other networks.

Steel mains >2"

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

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Steel mains &gt;2" (km)</b>			We have not allowed for any workloads associated with replacing steel mains >2", as we did not think the supporting CBAs had sufficiently justified the proposed investments.
Sc	44.7	0.0	
So	107.6	0.0	
SGN	152.3	0.0	

*Further details on our proposed position*

3.25 We have not allowed for any workloads associated with replacing steel mains >2"<sup>25</sup> for both Scotland and Southern. We do not think that the needs cases have been sufficiently justified in all networks given the significant increases in submitted annual costs and workloads between RIIO-GD1 and RIIO-GD2. We did not think that the CBAs gave sufficient consideration to the option of deferring investments or presented detailed sensitivities of the assumptions underpinning the needs case for these proposed investments. Additionally, there was insufficient clarity on how different elements of the proposed workloads contribute to the aggregate-level benefits presented in the CBAs.

<sup>25</sup> Associated services costs have also been removed completely.

Iron mains >30m and Other Policy and Condition mains

**Table 33: Iron mains >30m and Other Policy and Condition mains commissioned workloads (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Iron mains &gt;30m (km)</b>			We have allowed all workloads for iron mains >30m in full.
Sc	6.3	6.3	
So	3.3	3.3	
SGN	9.6	9.6	
<b>Other Policy &amp; Condition mains (km)</b>			We have allowed the workloads for other policy & condition mains for Scotland in full. We have not allowed the workloads for Southern, as this workload was not justified through CBA.
Sc	9.2	9.2	
So	18.7	0.0	
SGN	28.0	9.2	

*Further details on our proposed position*

3.26 We have allowed in full the submitted workloads for iron mains >30m in both Scotland and Southern.

3.27 We have also allowed in full the submitted workloads for other policy and condition mains in Scotland. SGN's submitted other policy and condition workloads in its Southern network was not been supported with a CBA. Therefore, we do not consider this workload to have been fully justified, given the materiality of the associated costs, and have not allowed any costs for it at Draft Determinations.

Services associated with mains replacement

**Table 34: Services associated with mains replacement commissioned workloads<sup>1</sup> (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Tier 1 (No.)</b>			Where we have disallowed mains replacement workloads (discussed above), we have made corresponding downward adjustments to service interventions. All adjustments were made on a pro rata basis.
Sc	87,010	84,965	
So	284,131	279,091	
SGN	371,141	364,056	
<b>Tier 2A (No.)</b>			
Sc	55	55	
So	414	414	
SGN	469	469	
<b>Tier 2B (No.)</b>			
Sc	1,473	0	
So	4,819	0	
SGN	6,291	0	
<b>Tier 3 (No.)</b>			
Sc	62	0	
So	25	25	
SGN	87	25	
<b>Iron Mains &gt;30m (No.)</b>			
Sc	5	5	
So	9	9	
SGN	14	14	
<b>Steel Mains &gt; 2" (No.)</b>			
Sc	828	0	
So	1,997	0	
SGN	2,825	0	
<b>Other Policy &amp; Condition (No.)</b>			
Sc	325	325	
So	881	0	
SGN	1,206	325	
<sup>1</sup> Includes relays, and test and transfer for both domestic and non-domestic properties			

*Further details on our proposed position*

3.28 We have made corresponding pro rata adjustments to services associated with mains where we have not allowed funding for submitted workloads. These

adjustments are based on submitted services:mains ratios for each network and submitted proportions between intervention types<sup>26</sup> and domestic/non-domestic.

Services not associated with mains replacement

**Table 35: Services not associated with mains replacement commissioned workloads (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Non-Domestic: Relay (No.)</b>			We have allowed in full the proposed workloads for non-domestic relays
Sc	103	103	
So	512	512	
SGN	615	615	
<b>Domestic: Relay after escape (No.)</b>			We have allowed in full the proposed workloads for domestic relays after escape
Sc	3,823	3,823	
So	20,436	20,436	
SGN	24,259	24,259	
<b>Domestic: Relay other<sup>1</sup> (No.)</b>			We have allowed in full the proposed workloads for other domestic relays
Sc	4,376	4,376	
So	22,541	22,541	
SGN	26,917	26,917	
<sup>1</sup> 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)			

*Further details on our proposed position*

3.29 We have allowed in full SGN's submitted workloads for services not associated with mains replacement in both of its networks.

**Capex proposals**

3.30 Reinforcement and Connections workloads are the only capex components of the totex CSV used in the regression modelling for RIIO-GD2.

3.31 We adjusted Southern’s reinforcement workloads to account for the disallowance of three projects: CPM7607 Marden MP, CPM6843 Brackley and CPM6944 Wivelsfield. These were disallowed due to insufficient evidence that the capacity constraints driving these projects will materialise in RIIO-GD2.

<sup>26</sup> Services relays; services test and transfer

**Table 36: Reinforcement workload drivers (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>General<sup>1</sup> (km)</b>			We have allowed the workloads for reinforcement for Scotland in full. We have reduced reinforcement workloads for Southern as a result of three disallowed projects.
Sc	0	0	
So	0	0	
SGN	0	0	
<b>Specific<sup>1</sup> (km)</b>			
Sc	73.4	73.4	
So	68.9	63.9	
SGN	142.3	137.3	
<sup>1</sup> Includes mains only, as growth governors have been assessed separately, similar to RIIO-1.			

3.32 As shown in Tables 37 and 38, we have included SGN’s proposed Connections workloads in full. As discussed in our GD Annex and Chapter 2 of this document, we propose to include common domestic and FPNES connections volume drivers to handle any material variations in outturn workload volumes.

**Table 37: Connections - mains workloads (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Domestic: all types (km)</b>			We have allowed in full the proposed workloads for connections - mains.
Sc	105.0	105.0	
So	205.7	205.7	
SGN	310.7	310.7	
<b>Non-domestic: all types</b>			
Sc	20.9	20.9	
So	22.4	22.4	
SGN	43.3	43.3	
<b>FPNES</b>			
Sc	26.9	26.9	
So	10.1	10.1	
SGN	36.9	36.9	

**Table 38: Connections - services workloads (RIIO-GD2 total)**

Network	Driver Value		Summary of proposed workload adjustments
	Submitted	Modelled	
<b>Domestic: all types (No.)</b>			We have allowed in full the proposed workloads for connections – services.
Sc	25,990	25,990	
So	59,139	59,139	
SGN	85,129	85,129	
<b>Non-domestic: all types (No.)</b>			
Sc	1,995	1,995	
So	3,500	3,500	
SGN	5,495	5,495	
<b>FPNES (No.)</b>			
Sc	12,950	12,950	
So	5,010	5,010	
SGN	17,960	17,960	

## Non-regression Analysis

3.33 This section presents an overview of the non-regression analysis we undertook for SGN, including adjustments that we made to costs and workloads. The analysis covered the following categories: Multiple occupancy buildings (MOBs), diversions, growth governors, streetworks, smart metering and land remediation. For each category, we present a summary of submitted and modelled costs and workload volumes. Modelled costs from our non-regression analysis are added to modelled costs from our regression analysis, which are then subject to our benchmark efficiency challenge.

3.34 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. Where we present modelled costs in the tables below, these are pre-application of benchmarking and ongoing efficiency adjustments.

## Multiple occupancy buildings (MOBs)

**Table 39: MOBs interventions proposed gross costs and workloads (RIIO-GD2 total)**

Network	Costs (gross)		Workloads	
	Submitted (input)	Modelled (output)	Submitted (input)	Modelled (output)
	£m	£m	No.	No.
<b>MOBs Repex</b>				
Sc	13.8	13.7	626	624
So	73.2	73.2	3,441	3,438
SGN	87.0	86.9	4,067	4,062
<b>MOBs Maintenance<sup>1</sup></b>				
Sc	0.0	0.0	n/a	n/a
So	0.0	0.0	n/a	n/a
SGN	0.0	0.0	n/a	n/a
<b>MOBs Connections</b>				
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
<sup>1</sup> MOBs maintenance costs only capture repex maintenance costs. Maintenance costs for services associated with MOBs are not included.				

### *Further details on our proposed position*

- 3.35 We have made a minor adjustment to SGNs submitted MOBs repex workloads. SGN’s submitted data included some workloads, defined in number of MOBs, 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 MOBs repex workloads represent a feasible forecast.

## Diversions

**Table 40: Diversions mains commissioned and associated services proposed costs and workloads (RIIO-GD2 total)**

Network	Costs		Workloads	
	Submitted Costs	Modelled Costs (output)	Submitted Costs	Modelled Costs (output)
<b>Diversions</b>				
	£m	£m	km	km
Sc	16.7	16.4	49.1	49.1
So	27.9	25.8	45.2	45.2
SGN	44.6	42.2	94.3	94.3
<b>Services Diversions</b>				
	£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

### Further details on our proposed position

3.36 We adjusted SGN's unit costs for some categories of submitted diversions activities. The unit costs submitted by SGN for these categories were significantly higher than those reported historically, and we did not think the increase was justified. Specifically, we have made downward adjustments to other policy and condition diversions for Scotland and Southern, as well as steel <2" diversions for Scotland. The adjustments were made by applying the average annual historical unit cost for each network across RIIO-GD2.

## Growth governors

**Table 41: Growth governors costs and workloads (RIIO-GD2 total)**

RIIO-GD2 Network	Costs		Workloads	
	Submitted	Modelled (output)	Submitted	Modelled (output)
	£m	£m	No.	No.
Sc	3.2	1.6	23	23
So	9.4	2.6	37	37
<b>SGN</b>	<b>12.6</b>	<b>4.1</b>	<b>60</b>	<b>60</b>

### Further details on our proposed position

3.37 The modelled cost reductions are driven by the unit cost benchmark which is lower than the submitted RIIO-GD2 unit cost for both Scotland and Southern.

## Streetworks

**Table 42: Streetworks costs (RIIO-GD2 total)**

RIIO-GD2 Network	Costs	
	Submitted	Modelled (output)
	£m	£m
Sc	15.4	13.0
So	60.4	51.7
<b>SGN</b>	<b>75.8</b>	<b>64.7</b>

Workload/volume data not used for cost assessment.

*Further details on our proposed position*

3.38 We disallowed costs for fines and penalties, and reduced SGN’s costs in line with their average costs in years 2016/17 to 2019/20.

## Smart metering

**Table 43: Smart metering costs and workloads (RIIO-GD2 total)**

RIIO-GD2 Network	Costs		Workloads	
	Submitted	Modelled (output)	Submitted	Modelled (output)
	£m	£m	No.	No.
Sc	9.1	5.3	48,153	21,134
So	19.6	11.9	96,072	42,104
<b>SGN</b>	<b>28.6</b>	<b>17.2</b>	<b>144,224</b>	<b>62,239</b>

*Further details on our proposed position*

3.39 We adjusted SGN’s forecast of smart metering costs by £11.4m, reflecting our reduction to the forecast number of smart meter interventions in the RIIO-GD2 period. Our forecast of workloads assumes a 2.5% smart meter intervention rate.

## Land remediation

**Table 44: Land remediation costs and workloads (RIIO-GD2 total)**

RIIO-GD2 Network	Costs		Workloads	
	Submitted	Modelled (output)	Submitted	Modelled (output)
	£m	£m	No. of sites	No. of sites
Sc	8.2	8.2	112	112
So	15.2	15.2	96	96
SGN	23.4	23.4	208	208

*Further details on our proposed position*

3.40 We made no adjustments to SGN’s forecast land remediation expenditure.

## SIU opex

**Table 45: SIU opex and workloads (RIIO-GD2 total)**

RIIO-GD2 Company/ Network	Costs		Workloads <sup>1</sup>	
	Submitted	Modelled (output)	Submitted	Modelled (output)
	£m	£m	No.	No.
Sc	33.0	33.0	-	-

1 Workload data not used for cost assessment.

*Further details on our proposed position*

3.41 We made no adjustments to SGN’s forecast SIU opex.

## Technically assessed costs

3.42 This section presents an overview of the technical analysis undertaken for SGN, including discussion of the adjustments that we made to submitted costs. For each category, we present a summary of submitted and proposed costs (excluding ongoing efficiency). Our QEM/ARV consultancy report sets out how we assessed costs, including an expert review of potential capex and repex investments.

## Bespoke outputs

3.43 We excluded £150.1m of forecast incremental expenditure associated with bespoke outputs from our regression and non-regression modelling, and instead

assessed under our technical assessment category. We have accepted approximately £16.5m of expenditure associated with shrinkage projects and biomethane outputs (improved access roll out and additional maintenance). Detail on our proposals for all bespoke outputs is provided in Chapter 2. Table 46 summarises our proposals on SGN’s forecast bespoke outputs that we technically assessed.

**Table 46: Proposed assessment of SGN’s submitted bespoke outputs**

Network	Submitted	Proposed (excludes OE)	Adjustments	Adjustment (%)
Sc	55.1	6.3	-48.8	-89%
So	95.0	10.2	-84.8	-89%
SGN (all)	150.1	16.5	-133.6	-89%

## Repex proposals

**Table 47: Technical assessment of repex projects**

Network	Investment name	Costs		
		Submitted £m	Proposed <sup>1</sup> £m	Confidence
Sc	Intermediate Pressure Service reconfigurations	3.68	2.33	Low
So	King’s Ferry	4.91	4.91	Low
So	Cams Hall	1.44	0.00	Low

1 Proposed costs do not include ongoing efficiency

### Further details on our proposed position

- 3.44 Intermediate Pressure Service reconfigurations: We have allowed costs of £2.3m for IP services in RIIO-GD2 and will set a bespoke PCD to ensure delivery of the project. Please see the ‘Bespoke PCDs’ section of Chapter 2 for further information.
- 3.45 [REDACTED]: We have allowed costs of £4.91m for the [REDACTED] project in RIIO-GD2 and will set a bespoke PCD to ensure delivery of the project. Please see the ‘Bespoke PCDs’ section of Chapter 2 for further information.
- 3.46 Cams Hall: This bespoke project has been rejected following an engineering review which concluded that the engineering case for it is not justified. This was submitted as part of a combined PCD, alongside [REDACTED].

## Capex proposals

### LTS (Local Transmission System), storage & entry

**Table 48: Technical assessment of LTS, storage & entry projects**

Network	Investment name	Costs		
		Submitted	Proposed <sup>1</sup>	Confidence
		£m	£m	
Sc	RO2 Dunkeld	25.77	23.10	High
Sc	T8: Pitcairngreen to Huntingtower - R04 and R05	6.71	5.67	High
Sc	E&I Upgrade Programme (5 sites)	1.56	1.05	High
Sc	ICMDL	3.07	1.99	High
Sc	Telemetry Upgrades (8 Offtakes)	0.50	0.46	High
Sc	Dreghorn PRS	2.42	2.04	High
Sc	E&I Upgrade Programme (4 sites)	0.81	0.55	High
Sc	New PRS (Edinburgh South East Wedge)	2.77	2.34	High
Sc	Newton Means and Waterfoot PRS	8.54	7.54	Low
Sc	Provan PRS	14.41	11.96	High
Sc	Telemetry Upgrade (73 PRS')	3.65	3.33	High
Sc	Tranent PRS	2.83	2.39	High
So	E&I Upgrade Programme (2 sites)	0.72	0.48	High
So	ICMDL	4.47	2.89	High
So	Mappowder	6.08	3.86	High
So	Telemetry Upgrades (2 Offtakes)	0.13	0.12	Low
So	Winkfield Offtake - System 1 (South East)	8.23	4.84	High
So	Winkfield Offtake - System 2 (South)	7.79	3.81	High
So	E&I Upgrade Programme (23 sites)	5.07	3.41	High
So	East Morden	4.49	3.80	High
So	Telemetry Upgrade (82 PRS')	4.15	3.78	High
So	Wavendon	4.31	3.65	High
Sc	Lockerbie Offtake	1.74	1.74	Low

Network	Investment name	Costs		
		Submitted	Proposed <sup>1</sup>	Confidence
		£m	£m	
Sc	Metering Uncertainty Programme (6 sites)	4.15	3.32	High
Sc	Aberdeen (Craibstone) PRS	0.59	0.59	Low
Sc	Airth	1.23	1.07	High
Sc	Carleith PRS	0.83	0.83	Low
Sc	Fairmilehead	1.79	1.79	Low
Sc	Granton	0.68	0.68	Low
Sc	Lauder	1.13	0.98	High
Sc	St Andrews PRS	2.56	2.11	High
So	Metering Uncertainty Programme (1 site)	0.25	0.20	High
So	Aylesham PRS	1.27	1.27	Low
So	Battle PRS - System 1	1.08	0.49	High
So	Boxhill PRS	1.55	1.55	Low
So	Braishfield C	1.23	1.23	Low
So	Godstone PRS	1.69	1.69	Low
So	Hillside	1.87	1.87	Low
So	Hurst Green PRS	1.69	1.69	Low
So	Reading A	3.23	3.09	High
So	Shalford	4.24	4.24	Low
So	Shatterling PRS	1.43	1.43	Low
So	Smarden PRS	1.53	1.53	Low
So	Westerham PRS - System 1	3.08	2.90	High
So	Woking	2.32	2.09	High
All (total)		159.64	131.46	

<sup>1</sup> Proposed costs do not include ongoing efficiency

*Further details on our proposed position*

3.47 We have made £28.18m of cost reductions to SGN's LTS, storage and entry projects. The proposed cost reductions for these projects are explained below.

3.48 Projects in the LTS Capacity Works Programme<sup>27</sup> have had costs for overheads, risk and contingency reduced as these were deemed excessive and poorly justified.

<sup>27</sup> The LTS Capacity Works Programme includes the following projects: T8: Pitcairngreen to Huntingtower - R04 and R05; Dregghorn PRS; New PRS (Edinburgh South East Wedge); Tranent PRS; East Morden; and Wavendon.

- 3.49 The E&I Upgrade Programme costs have been reduced to account for the efficiencies associated with packaging multiple sites into one programme. Reductions have been made to the design, project management, materials and main works contractor (MWC) components of the programme.
- 3.50 The Industrial and Commercial Automated Meter Reading Equipment Replacement Programmes (ICMDL) have had a reduction to the costs associated with software and implementation. Submitted costs in this area were deemed high considering a centralised system can cover both networks. The costs associated with the purchase and implementation of data loggers has been reduced because the additional installation costs have not been justified.
- 3.51 The Ulysses Telemetry Replacement Programme costs associated with design, project management and materials have been reduced because we consider that the savings associated with having a larger number of sites in this programme were not fully captured in the submission.
- 3.52 The Winkfield Offtake System 1 project design costs have been reduced because they were captured twice in the submitted costs. Materials and civil/mechanical contract costs have been reduced to match the project-specific cost estimate provided by SGN's third party estimator. Overheads have also been reduced due to a lack of justification. Reductions of the same nature have been made to Winkfield Offtake System 2 (South).
- 3.53 RO2 Dunkeld project costs for design, project management, indirect company costs and contingency were deemed excessive and have been reduced accordingly.
- 3.54 The indirect company costs for Newton Means and Waterfoot PRS haven't been clearly justified and have therefore been reduced in line with other projects.
- 3.55 For the Provan PRS project, material costs for PRS modules, uncertainty and other unspecified costs have been deemed excessive and reduced accordingly.
- 3.56 The Mappowder project costs for the main works contractor include some costs for materials which were deemed unjustified. A reduction has been made because materials costs are also accounted for separately in this project submission. Overheads have also been reduced in line with other projects.

3.57 For the remaining projects, the cost reductions come from overheads, contingency, or other unspecified costs that were deemed to be excessive and poorly justified.

Capex projects

**Table 49: Disallowed projects**

Network	Investment name	Costs		
		Submitted	Proposed <sup>1</sup>	Confidence
		£m	£m	
So	Battle PRS - System 2	2.59	0	Low
So	E&I Minor Works	1.46	0	Low
So	St. Mary Cray 1 – Boiler	1.97	0	Low
So	St. Mary Cray 1 - CHP Unit	2.47	0	Low
So	Westerham PRS - System 2	2.63	0	Low
Sc	Replace atmospheric vaporisers	0.96	0	Low
Sc	E&I Minor Works (~15 sites)	0.50	0	Low
Sc	Georgetown PRS	3.39	0	Low
All (total)		15.97	0	

1 Proposed costs do not include ongoing efficiency

*Further details on our proposed position*

3.58 We propose to disallow the costs for Battle PRS System 2, E&I Minor Works, and Westerham PRS System 2 because the engineering review identified that these projects duplicate or overlap with other SGN projects.

3.59 We propose to disallow the other LTS, storage and entry projects listed above where engineering review concluded that the needs case for investment hasn't been met. For the Georgetown PRS rebuild, there was insufficient evidence of poor condition to justify the need for a full rebuild of the PRS rather than maintaining the current system. The engineering review also concluded that the needs case is not justified for the St Mary Cray 1 projects or the Replace Atmospheric Vaporisers project.

IT and Telecoms

**Table 50: Allowed IT and Telecoms projects**

RIIO-GD2 Network company/Network	Costs	
	Submitted	Proposed <sup>1</sup>
	<i>£m</i>	<i>£m</i>
Sc	8.8	8.4
So	12.6	12.0
<b>SGN</b>	<b>21.4</b>	<b>20.4</b>

1 Proposed costs do not include ongoing efficiency.

*Further details on our proposed position*

3.60 The IT and Telecoms and systems operation costs (excluding cyber) were assessed as part of a separate review by our consultant Atkins. See our GD Annex and IT and Telecoms Assessment Annex for the details of the assessment approach.

3.61 SGN submitted £57.8m of costs for IT and Telecoms projects. Atkins’ review highlighted that only some projects (amounting to £21.4m, see Atkins’ report for details) are at a sufficient stage of maturity to enable us to propose ex ante funding. We consider Atkins’ review appropriate and thus propose ex ante allowance for these projects, which we labelled as high confidence costs under the BPI. We have applied a £1.0m reduction to these projects based on expert review. We have proposed a re-opener to allow funding for the other submitted projects as their needs case become clear. Details of the proposed uncertainty mechanism can be found in the Core Document.

PSUP (Physical Security Upgrade Programme)

**Table 51: PSUP capex costs (RIIO-GD2 total)**

Network company/Network	Submitted	Proposed
	<i>£m</i>	<i>£m</i>
Sc	2.0	2.0
So	0.0	0.0
<b>SGN</b>	<b>2.0</b>	<b>2.0</b>

3.62 We have accepted SGN’s justification for this investment, since this category of security upgrade is mandatory and the security specifications are agreed with BEIS.

3.63 SGN’s costs are based on historically-incurred actual costs from RIIO-GD1, and SGN provided a detailed breakdown of the scope of work required and their unit cost assumptions. We think SGN’s submitted costs are reasonable and therefore propose to allow them in full.

## Non totex cost items

### Non-controllable opex

3.64 We propose to make some minor adjustments to submitted non-controllable opex. We adjusted shrinkage costs based on updated cost of gas forecasts<sup>28</sup>, and adjusted the established pension deficit recovery plan payments based on the 2017 reasonableness review. Table 52 summarises our allowances for SGN’s non-controllable opex.

**Table 52: RIIO-GD2 non-controllable opex (£m, 2018/19)**

	SGN	Sc	So
Total non-controllable opex	1,068.0	252.4	815.6
Shrinkage	50.5	13.9	36.6
Ofgem Licence	22.0	6.8	15.2
Network Rates	574.1	181.0	393.0
Established Pension Deficit Recovery Plan Payment	28.2	11.3	16.9
NTS Pension Recharge	82.7	24.9	57.7
Bad Debt	1.9	0.8	1.0
NTS Exit Costs	274.8	1.2	273.7
Xoserve	30.9	9.5	21.4
Other	2.9	2.9	0.0

<sup>28</sup> Based on BEIS 2019 Gas Price Assumptions.

## 4. Adjusting baseline allowances to allow for uncertainty

### Introduction

4.1 In this chapter we cover two main areas:

- Firstly, we set out the SGN-specific parameters for common GD sector UMs.
- Secondly, we set out our views on the bespoke UMs that SGN proposed in its Business Plan.

### Common UMs

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

4.3 We set out more detail on the common UMs in the GD Annex, including the broader consultation position and rationale.

#### Repex - Tier 2A iron mains volume driver

**Table 53: Consultation position - Tier 2A iron mains decommissioned Baseline Target Workloads for SGN Scotland (RIIO-GD2 total)**

	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>	<i>Km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>
<b>Tier 2A mains decommissioned</b>						
9" diameter	0.2	0.2	0.2	0.2	0.2	<b>0.8</b>
10"-12" diameter	0.2	0.2	0.2	0.2	0.2	<b>1.2</b>
>12"-17" diameter	0.1	0.1	0.1	0.1	0.1	<b>0.5</b>
Totals	0.5	0.5	0.5	0.5	0.5	<b>2.5</b>

**Table 54: Consultation position - Tier 2A iron mains decommissioned Baseline Target Workloads for SGN Southern (RIIO-GD2 total)**

	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Target Workloads
<i>Workload Activities</i>	<i>Km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>	<i>km</i>
<b>Tier 2A mains decommissioned</b>						
9" diameter	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
10"-12" diameter	1.6	1.6	1.6	1.6	1.6	<b>7.8</b>
>12"-17" diameter	1.1	1.1	1.1	1.1	1.1	<b>5.7</b>
Totals	2.7	2.7	2.7	2.7	2.7	<b>13.5</b>

4.4 Table 55 presents our proposed Baseline Cost Allowances for the Tier 2A volume driver.

**Table 55: Consultation position - Tier 2A iron mains and services Baseline Cost Allowances (RIIO-GD2 total £m, 2018/19)**

	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Baseline Cost Allowances
<i>Baseline Cost Allowances</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>	<i>£m</i>
<b>Tier 2A mains and services Baseline Cost Allowances</b>						
Southern	0.4	0.4	0.4	0.4	0.4	<b>2.2</b>
Scotland	2.2	2.2	2.2	2.2	2.2	<b>11.0</b>
SGN	5.4	6.0	6.4	6.3	6.3	<b>30.5</b>

## Bespoke UM Proposals

4.5 We invited companies to propose bespoke UMs with suitable justification in our SSMD. We have considered the extent to which the supporting information justifies the key criteria outlined in the Business Plan Guidance (BPG):

- materiality and likelihood of the uncertainty
- how the risk is apportioned between consumers and the network company
- the operation of the mechanism
- how any drawbacks may be mitigated to deliver value for money and efficient delivery.

4.6 We also considered whether the uncertainty was regionally specific, or industry wide, to assess whether a common re-opener could be more appropriate. You can find the background and our assessment approach in our Core Document.

4.7 The table below summarises the bespoke UM proposals that WWU submitted and outlines our consultation position. For full details on the bespoke UMs, refer to SGN's Business Plan.

**Table 56: SGN's bespoke UM proposals**

UM name	Consultation position
<b>Bespoke UMs we propose to reject</b>	
<p><b>Streetworks:</b> Single re-opener for streetworks in general that covers three specific areas of uncertainty:</p> <ul style="list-style-type: none"> <li>• permitting and lane rental</li> <li>• reinstatement costs</li> <li>• hazardous waste management.</li> </ul>	<p><b>Reject:</b> We propose 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 (see Chapter 3 of our GD Annex for totex and Chapter 4 of our GD Annex for the mechanism).</p>
<p><b>Smart meter:</b> Re-opener for uncertainty around pace and complexity of installations for the rollout.</p>	<p><b>Reject:</b> We propose to merge this proposal into a new common UM to address the uncertainty associated with the timing of the programme (see Chapter 3 of our GD Annex for totex and Chapter 4 of our GD Annex for the mechanism).</p>
<p><b>Tier 1 iron stubs:</b> SGN proposed a PCD with an associated use-it-or-lose-it (UIOLI) allowance to fund the decommissioning of Tier 1 iron stubs<sup>29</sup> during RIIO-GD2.</p>	<p><b>Reject:</b> We think there is significant uncertainty around the decommissioning of Tier 1 stubs in RIIO-GD2 and have proposed a common re-opener (see Chapter 4 of the GD Annex for further details).</p>
<p><b>&lt;=2" steel:</b> A volume driver to adjust repex allowances for variations in outturn steel mains ≤2" workloads in RIIO-GD2.</p>	<p><b>Reject:</b> We do 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>

<sup>29</sup> Tier 1 iron stubs are short lengths of Tier 1 iron mains attached larger diameter parent mains.

UM name	Consultation position
<p><b>New connections:</b> 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><b>Reject:</b> We propose to merge this UM into a new common UM. We consider that there is sufficient evidence the network company cannot manage the uncertainty within its baseline allowance. However, we consider the need for risk mitigation applies to all GDNs and we propose a common volume driver. Chapter 4 of our GD Annex details our proposed Domestic Connections volume driver.</p>
<p><b>Below 2 bar reinforcement:</b> Volume driver for possible reinforcement resulting from new connections above.</p>	<p><b>Reject:</b> Insufficient needs case. We provide a baseline allowance through our modelled capex for all GDNs. We think a volume driver would weaken the incentive for GDNs to adopt non-build capacity solutions.</p>
<p><b>Greater 2 bar reinforcement:</b> 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><b>Reject:</b> Insufficient needs case. We provide a baseline allowance through our modelled capex for all GDNs. We think a volume driver would weaken the incentive for GDNs to adopt non-build capacity solutions.</p>
<p><b>Process safety:</b> £15m UIOLI allowance to resolve critical defects impacting asset reliability or condition.</p>	<p><b>Reject:</b> 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 consider the work is BAU activities and SGN can manage the associated costs within its totex baseline.</p>
<p><b>Environmental Action Plan:</b> 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.</p>	<p><b>Reject:</b> We set out our assessment of the individual PCDs for each UIOLI allowance in Chapter 2. We do not consider an UM relating to a multitude of different outputs and uncertainties meets our BPG criteria for a well-defined mechanism. Therefore, we propose to reject this overarching UM.</p>
<p><b>Environmental Action Plan (Carbon capture and storage):</b> a re-opener for the legal and regulatory uncertainty around implementing CCS for biomethane produced from food waste.</p>	<p><b>Reject:</b> We found insufficient justification for the need of a re-opener in this area beyond our proposed net zero and innovation investment mechanisms, set out in Chapter 8 of our Core Document.</p>

UM name	Consultation position
<p><b>External and environmental resilience:</b> re-opener for environmental change or external direction that requires a substantial change in its assets.</p>	<p><b>Reject:</b> We consider land development claims and flood risk to be part of the BAU activities associated with operating a distribution network. We do not have sufficient evidence to support the suggestion that the number, or materiality of the claims will rise in RIIO-GD2. In RIIO-GD1, the GDNs are treating these costs as totex overspend and therefore share the costs with customers. We will continue this approach for RIIO-GD2.</p>
<p><b>Cyber Security – Cyber Assessment Framework:</b> 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><b>Reject:</b> We consider the uncertainty is addressed by our proposed common cyber resilience OT and IT re-openers. Refer to Chapter 7 of our Core Document for the two common re-openers.</p>
<p><b>Energy System Transition Projects:</b> 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><b>Reject:</b> We propose to respond to hydrogen projects using the net zero and innovation investment mechanisms set out in Chapter 8 of the Core Document. See Chapters 2 and 4 of the GD Annex for our approach to decarbonisation of heat proposals.</p>
<p><b>Legislative Change:</b> general re-opener to accommodate the cumulative impact of legislative or regulatory change from either government or HSE.</p>	<p><b>Reject:</b> SGN did not identify any specific examples to support this re-opener. Some of the common re-openers we propose deal with legislative changes in key areas (further details are in the Core Document and GD Annex Chapter 4).</p>

### Bespoke UM consultation questions

SGNQ8. Do you agree with our proposals on the bespoke UMs? If not, please outline why.

## 5. Innovation

5.1 Our SSMD and the Core Document identify the criteria that we have used to assess Network Innovation Allowance (NIA) funding requests.<sup>30</sup> The Core Document also details our proposals for the RIIO-2 NIA Framework and the Strategic Innovation Fund.

### Network Innovation Allowance

5.2 We set out below our draft determinations on SGN’s RIIO-2 NIA funding.

#### Consultation position

Network Innovation Allowance	Network company proposal	Consultation position
Level of NIA funding	£65.9m	£30m *Conditional on an improved industry-led reporting framework.

#### Rationale for consultation position

5.3 SGN’s Business Plan contained a range of NIA-related proposals. It focused on the energy system transition and addressing consumer vulnerability, spending NIA in three areas:

- Innovation at low technology readiness levels, with the aim to provide ongoing funding for SMEs for solutions focused on efficiency and improved processes.
- Vulnerable customers, by seeking to mitigate the risk associated with the energy system transition for vulnerable consumers and finding new ways to minimise the impact of supply disruptions.
- Energy system transition, to help develop the evidence base.

5.4 SGN’s NIA proposals focus on initiatives that appear either high risk, or would not deliver benefits during the price control period. Based on this, we have reasonable confidence that projects will require the NIA in order to progress. Over RIIO-2, it is for SGN to determine which projects it will undertake and, for each, it will need to demonstrate why the project cannot be funded through baseline totex, why it needs to be funded via the NIA, and how it supports the energy system transition

<sup>30</sup> SSMD Core Document, paragraph 10.62; Core Document, Chapter 8.

or addresses consumer vulnerability. This will be part of the RIIO-2 NIA governance arrangements.

5.5 Our assessment of SGN’s Business Plan against the criteria from our SSMD and Core Document in the table below.

**Table 57: Assessment of SGN’s Business Plan against NIA criteria**

SSMD/Core NIA criteria	Ofgem view
Undertaking other innovation as BAU	<b>Does not satisfactorily meet the criterion:</b> we were disappointed with SGN’s level of ambition and the conditionality attached to the plans to do innovation within BAU activities. SGN stated innovation plans are conditional on what they view is a satisfactory rate of return within the RIIO-2 framework, which we consider means there is a risk that SGN may not take forward such innovation considering its desire for a higher rate of return than we have proposed. Additionally, SGN stated it ‘will embrace a BAU strategy focusing on implementing new products, processes and services with the greatest commercial benefit coupled with rapid deployment potential’, which we consider suggests a limited desire to innovate with anything that is not already near market ready. We note similar feedback was provided from the RIIO-2 Challenge Group and SGN’s CEG.
Application of best practices	<b>Satisfactorily meets the criterion including:</b> evidence of the use of best practice methodologies for innovation projects.
Processes in place to rollout proven innovation and the evidence that this is already happening	<b>Satisfactorily meets the criterion including:</b> evidence of key learnings from RIIO-1 innovation and examples of rolled out projects.
Processes in place to monitor, report and track innovation spending and the evidence that this is already happening	<b>Does not satisfactorily meet the criterion:</b> consistent with our assessment of all NIA requests, we do not consider that SGN has demonstrated that it has tried and tested processes in place to monitor, report and track innovation spending and benefits.

5.6 We have several concerns with the level of NIA funding SGN requested and do not consider it aligns with the challenge we set in our SSMD. In our SSMD, we stated that companies should not rely solely on additional innovation stimulus funds but should fund more innovation in RIIO-2 as BAU using their totex allowance.<sup>31</sup> SGN’s request for NIA funding was also disproportionately high relative to other companies and represented a substantial increase relative to RIIO-1.<sup>32</sup>

<sup>31</sup> SSMD Core Document, paragraph 10.16.

<sup>32</sup> In RIIO-1, SGN received 0.5% of base revenue as NIA funding, roughly equivalent to £5m per year.

- 5.7 Additionally, considering the increased NIA funding request, SGN did not clearly demonstrate how it would deliver increased innovation activity, nor that it was more ambitious rolling out innovation than other network companies.
- 5.8 We accordingly propose to provide SGN with £30m of NIA funding for RIIO-2, which is broadly comparable to the level of funding received in RIIO-1.
- 5.9 As detailed in the Core Document, we propose that NIA funding is conditional on the implementation by the start of RIIO-2 of an improved, industry-led reporting framework. If this condition is not satisfied, our proposal is that we will not award NIA funding for RIIO-2.

**Innovation consultation question**

SGNQ9. Do you agree with the level of proposed NIA funding for SGN? If not, please outline why.

## Appendix 1 Consultation questions

- SGNQ1. Do you agree with our proposals on the bespoke ODIs? If not, please outline why.
- SGNQ2. Do you agree with our proposals on the bespoke PCDs? If not, please outline why.
- SGNQ3. Do you agree with our proposal for SGN’s bespoke biomethane technology rollout PCD?
- SGNQ4. Should we include [REDACTED] within the Capital Projects PCD, rather than setting a separate PCD?
- SGNQ5. Do you agree with our proposal for SGN’s IP services reconfigurations PCD?
- SGNQ6. Do you agree with our approach for SGN’s Remote Pressure Management PCD?
- SGNQ7. Do you agree with our proposals on CVPs? If not, please outline why.
- SGNQ8. Do you agree with our proposals on the bespoke UMs? If not, please outline why.
- SGNQ9. Do you agree with the level of proposed NIA funding for SGN? If not, please outline why.

## Appendix 2 Proposed baseline totex allowances in detail

**Table 58: RIIO-GD2 proposed baseline totex allowance, SGN Scotland (£m, 2018/19)**

Cost activity	2022	2023	2024	2025	2026	RIIO-GD2 Total
Work Management	12.7	12.4	11.5	10.3	11.3	58.2
Emergency	6.5	6.4	6.5	6.2	6.5	31.9
Repair	6.6	6.5	6.3	6.1	6.0	31.5
Maintenance	14.3	15.3	10.5	10.5	10.4	61.0
Other Direct Activities	3.2	2.8	2.7	2.5	3.4	14.6
SIU opex	6.5	6.4	6.4	6.3	6.2	31.9
<b>Total Direct Opex</b>	<b>49.9</b>	<b>49.8</b>	<b>43.8</b>	<b>41.8</b>	<b>43.9</b>	<b>229.1</b>
Business Support	15.2	15.2	16.3	16.4	16.7	79.7
Training & Apprentices	3.3	4.3	3.9	3.6	3.4	18.4
<b>Total Indirect Opex</b>	<b>18.5</b>	<b>19.5</b>	<b>20.2</b>	<b>19.9</b>	<b>20.0</b>	<b>98.1</b>
LTS, Storage and Entry	17.1	26.8	27.5	23.2	14.9	109.5
Connections	8.0	7.9	7.5	7.2	7.1	37.7
Mains Reinforcement	5.4	6.4	6.5	5.0	2.9	26.3
Governors	2.6	2.6	2.7	2.7	2.7	13.5
Transport & Plant	4.0	4.1	2.9	1.9	2.1	15.0
Other Capex	7.2	6.0	7.2	7.8	8.5	36.7
<b>Total Capex</b>	<b>44.3</b>	<b>53.8</b>	<b>54.4</b>	<b>47.9</b>	<b>38.3</b>	<b>238.7</b>
<b>Total Repex</b>	<b>55.6</b>	<b>55.8</b>	<b>54.6</b>	<b>54.1</b>	<b>54.2</b>	<b>274.4</b>
<b>Totex</b>	<b>168.3</b>	<b>179.0</b>	<b>172.9</b>	<b>163.8</b>	<b>156.4</b>	<b>840.3</b>

**Table 59: RIIO-GD2 proposed baseline totex allowance, SGN Southern (£m, 2018/19)**

Cost activity	2022	2023	2024	2025	2026	RIIO-GD2 Total
Work Management	26.0	27.3	26.4	24.6	24.4	128.7
Emergency	16.0	15.9	15.7	14.9	15.0	77.5
Repair	18.7	17.7	16.7	15.9	15.1	84.1
Maintenance	19.4	19.3	19.0	19.0	18.9	95.6
Other Direct Activities	5.4	4.6	4.4	4.3	5.6	24.3
Total Direct Opex	85.5	84.8	82.3	78.7	78.9	410.2
Business Support	27.4	27.7	29.4	30.2	30.2	145.0
Training & Apprentices	5.6	6.6	6.4	6.4	6.1	31.0
Total Indirect Opex	33.1	34.3	35.8	36.6	36.3	176.0
LTS, Storage and Entry	11.8	18.9	23.0	17.2	12.4	83.3
Connections	12.4	12.1	11.2	10.4	9.9	56.0
Mains Reinforcement	7.6	7.6	6.9	4.5	7.4	33.9
Governors	8.3	8.1	8.0	7.9	7.8	40.0
Transport & Plant	3.2	3.6	4.8	3.8	4.6	20.0
Other Capex	12.4	9.7	10.2	11.0	12.4	55.6
Total Capex	55.6	59.9	64.0	54.9	54.4	288.8
Total Repex	165.1	165.0	162.1	160.2	159.2	811.7
Totex	339.2	343.9	344.3	330.4	328.8	1,686.7