

Report

RIIO-GD1 Annual Report 2019-20



This report covers the period up to 31 March 2020 and the full impacts of the Covid-19 pandemic were yet to be experienced. We do however acknowledge the collaborative arrangements that were put in place from March 2020 across all the energy networks to tackle the pandemic. These arrangements helped to maintain security of supply and high levels of system reliability, deliver essential services to consumers, while also ensuring safety for all.”

Note: The forecast figures stated in this annual report and supplementary datafile are based on pre Covid-19 projections.

Introduction

This report presents a summary of the Gas Distribution Networks' (GDNs) output delivery and financial performance for the seventh year of the eight-year RIIO-GD1 price control. It provides data and supporting information on the following areas:

1. **Annual Outputs:** Actual delivery in 2019/20 against output targets.
2. **Totex performance:** Updated Year 7 costs based on actual expenditure; the key drivers of any under/overspend against allowances and forecast spend for year 8 of RIIO-GD1 price control.
3. **RoRE:** Updated Return on Regulated Equity (RoRE); and
4. **Customer bill impact:** An estimate of an average Great Britain (GB) domestic gas customer will pay in 2020/21 for gas distribution costs.

Key messages

Annual outputs: Most GDNs are exceeding their annual output targets and are on track to achieve their RIIO-GD1 (8 year) targets.

However, there are outputs that some GDNs are currently failing, or at risk of, not achieving at the end of RIIO-GD1. Ofgem is actively monitoring performance to protect consumers where appropriate.

Totex performance: GDNs forecast to spend a combined £17.3 billion over RIIO-GD1 which is £2.0 billion (10.3%) less than their collective totex allowances. Key areas of underspend are the iron mains replacement programme expenditure (repex) and operational expenditure (opex).

RoRE: GDNs' current RoRE range is between 8.3% and 13.3% for RIIO-GD1.

Customer bill impact: Based on estimates, the average GB customer in 2020/21 will pay £121.35 per year in real 2019/20 price terms for gas distribution costs.

Unless otherwise stated, all financial values in this report are in 2019/20 prices.

Gas Distribution Network overview and context

Gas Distribution Networks (GDNs) are responsible for operating, maintaining and extending the gas distribution network, and for providing a 24-hour gas emergency service within Great Britain (GB).

There are eight GDNs operating in GB, managed by four companies. To ensure value for money for consumers, we regulate the GDNs through periodic price controls that determine the amount of revenue that can be earned by the GDNs and stipulate levels of performance they are required to deliver. To set our price controls we use the RIIO (Revenue = Incentives + Innovation + Outputs) framework. 2019/20 was the seventh year of the eight-year RIIO-GD1 price control.

Figure 1: Gas Distribution Networks

Company	Gas Distribution Network (GDN)	GDN abbreviation
Cadent	East of England	EoE
	North London	Lon
	North West	NW
	West Midlands	WM
Northern Gas Networks Limited	Northern	NGN
SGN	Scotland	Sc
	Southern	So
Wales & West Utilities Limited	Wales and West	WWU



1. Outputs performance

Table 1: GDN 2019/20 output performance

Output	Safety	Reliability	Connections	Customer service	Social obligations	Environmental
Sector Performance						

Key	Score based on annual, cumulative performance and Ofgem's view of GDNs achieving RIIO-GD1 target
	GDNs have successfully achieved an annual output or are on-target to meet RIIO-GD1 target.
	Some GDNs at risk or failing the eight-year output commitment.
	Some GDNs failed to achieve an annual output or we forecast that an eight-year output commitment will fail.

As part of RIIO-GD1, we set a range of outputs which the GDNs have committed to deliver during the price control period. Outputs form the cornerstone of the RIIO price control framework, against which GDNs allowances have been set. There are six categories and a summary of GDNs’ performance in each is provided below:

Safety – Iron mains risk reduction is one of the primary measures of the safety output category and in 2019/20 GDNs continued to undertake the long-term programme of replacing iron mains (repex) on their networks as mandated by the HSE. Consistent with last year’s report, five out of the eight networks have exceeded their total GD1 primary output target of risk removed. All GDNs are forecasting to achieve their total GD1 output targets.

Network Reliability – The reliability of the distribution networks for 2019/20 averaged 99.998%. This is consistent with the high network reliability rates recorded so far over the RIIO-GD1 period.

With regards to improving the restoration times for customers living in Multiple Occupancy Buildings (MOBs), Cadent has made good progress since the introduction of Cadent’s Improvement Plan in 2019¹. There is still more to do, however, Cadent and other GDNs indicate they are using innovative techniques such as Microstop bypass systems which enables gas to keep flowing to customers whilst a repair is being carried out to improve restoration times and customer experience for its customers living in MOBs. Ofgem continue to monitor Cadent’s performance in this area.

¹<https://www.ofgem.gov.uk/publications-and-updates/cadent-pays-24-million-past-failures-and-establishes-20-million-community-fund>

Connections – Guaranteed Standards of Performance (GSOPs) are minimum service levels. If a GDN fails to meet the service level specified in the GSOP, it must make a payment to the customer affected. In 2019/20 GDNs made GSOP mandatory payments of c.£4.2m (refer to supplementary Datafile tables 2.310 and 2.320 for payment breakdown).

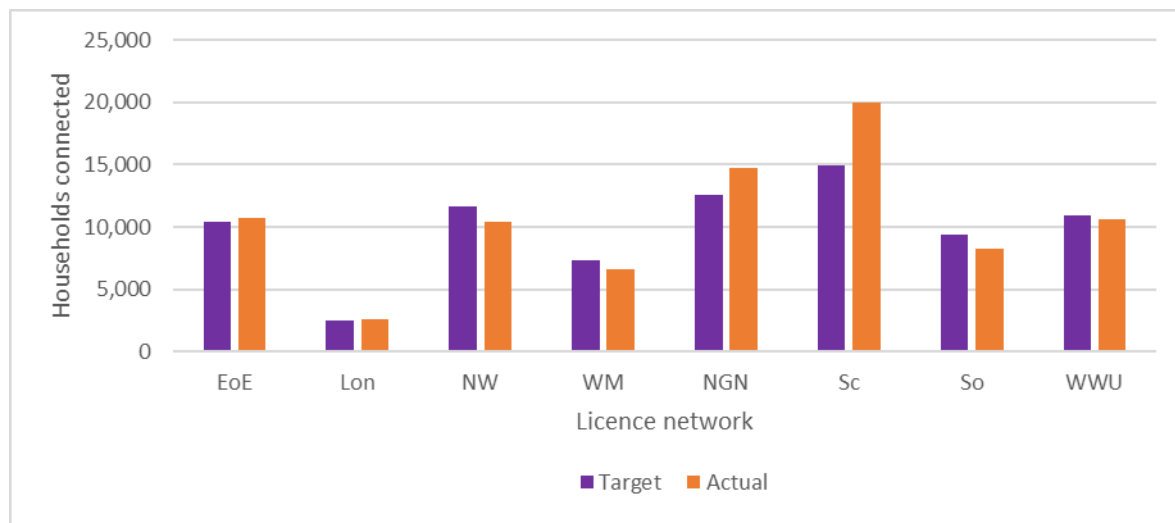
Customer satisfaction – This is measured by customer survey scores. The average survey score has consistently improved over RIIO-GD1 from 8.41 in 2013/14 to 8.92 in 2019/20 (10.00 being maximum score). All GDNs achieved their customer survey targets in 2019/20 except Cadent North London which failed to meet the planned work survey (refer to supplementary Datafile table 2.260 for additional data).

Social obligations – GDNs have committed to connecting over 91,200 fuel poor households to the gas distribution network over RIIO-GD1 under the Fuel Poor Network Extension Scheme (FPNES).

During 2019/20 the number of FPNES connections delivered was 7,500 which is the lowest recorded in RIIO-GD1. This was partly driven by the onset of Covid-19 restrictions in the last quarter of the year.

To date, the GDNs have connected 84,100 fuel poor households which is 92% of the eight-year commitment. We recognise that Covid-19 restrictions may continue to impact the delivery of these connections in year 8 (2020/21).

Figure 2: RIIO-GD1 FPNES connections - cumulative as at year 7



Refer to supplementary Datafile Table 2.330 for GDNs forecast figures against the 8 years target.

As part of their social obligation requirements, GDNs also continue to actively promote carbon monoxide awareness, particularly focusing on vulnerable groups such as the elderly as well as targeting families with primary age children through schools.

Environmental outputs – The sector total annual business carbon footprint (from running their business, excluding shrinkage), measured in tCO₂e, rose by 4.1% from 141,065 tCO₂e in 2018-19 to 146,906 in 2019/20. The increase was consistent across GDNs, except for SGN's two networks which performed better and recorded reductions their business carbon footprints. All GDNs met their 2019/20 targets for shrinkage and leakage (refer to supplementary Datafile Tables 2.030 and 2.040 for additional data on GDNs business carbon footprint, shrinkage and leakage volumes).

In 2019/20, GDNs delivered just under 57,000 new gas connections, around 7000 less than the previous year. The breakdown of new connections in 2019/20 were 37% for new housing, 45% for existing housing, 5% for non-domestic and 13% for fuel poor connections as part of the GDNs' social obligation output (refer to supplementary Datafile table 2.300 for more information).

2. Innovation

GDNs innovation falls into two basic categories. Firstly, operational innovation which is applied in their working processes, tools and equipment, support functions, etc to improve operational effectiveness and improve safety and efficiency. Secondly, using innovation to explore and define the future of gas including for heat.

The sector is continuing to use innovative solutions such as a robotic roadworks and excavation systems. These projects are helping to reduce operational costs and improve the safety and environmental impact of utility excavations and activity.

GDNs also continue to research hydrogen supplies to gain quantified safety-based evidence required to validate that the current gas distribution networks are suitable to transport 100% hydrogen (refer to industry wide note below for further information).

3. Totex Performance and Drivers

The totex approach to setting price controls aims to incentivise companies to deliver outputs at the lowest total cost, without preferring cost savings derived from capital expenditure (capex) or operating expenditure (opex) solutions. This approach encourages GDNs to choose the most efficient way of meeting their outputs.

GDNs are incentivised to outperform their totex allowance as part of the Totex Incentive Mechanism (TIM). Through the TIM process, any underspend against allowed totex is shared between the GDN and consumers. GDNs will retain approximately 63% of this underspend and the remainder will go back to consumers after allowing for corporation tax. It is estimated that consumers will benefit by over £700m from this arrangement over the RIIO-GD1 period.

At the start of RIIO-GD1, we provided GDNs with totex allowances. Those allowances have been adjusted during the price control to account for uncertainty mechanisms and voluntary company returns, and now represent a combined value of £19.3 billion (2019/20 prices).

Table 2: GDN cumulative expenditure against allowance to date

£m, 2019-20 prices	(Cumulative to date - 2013-14 to 2019-20)			
	Adj'd Allowance	Expenditure	Difference	
	£m	£m	£m	%
EoE	2,545	2,439	(105)	(4.1%)
Lon	2,257	1,995	(262)	(11.6%)
NW	1,895	1,750	(145)	(7.7%)
WM	1,473	1,272	(202)	(13.7%)
NGN	1,965	1,718	(247)	(12.6%)
Sc	1,602	1,302	(300)	(18.7%)
So	3,237	2,769	(468)	(14.5%)
WWU	1,998	1,607	(392)	(19.6%)
Total	16,973	14,850	(2,123)	(12.5%)

Table 3: Forecast GDN expenditure against allowance across RIIO-GD1

£m, 2019-20 prices	(Current RIIO-GD1 GDN forecast)			
	Adj'd Allowance	Expenditure	Difference	
	£m	£m	£m	%
EoE	2,886	2,839	(47)	(1.6%)
Lon	2,565	2,404	(160)	(6.3%)
NW	2,152	2,055	(97)	(4.5%)
WM	1,675	1,498	(177)	(10.6%)
NGN	2,238	1,960	(278)	(12.4%)
Sc	1,806	1,482	(324)	(17.9%)
So	3,660	3,185	(475)	(13.0%)
WWU	2,275	1,843	(431)	(19.0%)
Total	19,257	17,267	(1,990)	(10.3%)

The cumulative underspend for the sector against this allowance to date is 12.5% and forecast to reduce to 10.3% by the end of RIIO-GD1 period. This underspend is predominately driven by savings from the three key cost categories summarised in Table 4 below. GDNs are forecasting lower underspend for 2020/21 primarily due to undertaking more complex iron mains replacement works, anticipated higher labour and market cost pressures.

Table 4: Forecast cost category underspend against allowance across RIIO-GD1

GD1 FORECAST UNDERSPEND BREAKDOWN (£m)				
	GD1 Allowance	Forecast	Overspend (Underspend)	Over/underspend Percentage
CAPEX	3226	3229	3	0.1%
REPEX	8407	7140	(1,267)	(15.1%)
OPEX	7624	6898	(726)	(9.5%)
TOTAL	19257	17267	(1,990)	(10.3%)

Capital expenditure (capex):

At sector level capex forecasts are broadly in line with RIIO-GD1 allowance. SGN and WWU are forecasting underspend derived from better long term capex planning, reducing procurement costs and contract awards. In contrast, Cadent and NGN forecast overspend arising from implementing transformational strategies which include additional investment in information systems, properties and vehicles and expected to yield additional operational efficiencies in the coming years.

Iron mains replacement expenditure (repex):

The combined forecast underspend for repex is c.£1.3bn. This represents the largest component (64%) of total forecast totex underspend. Underspend in this programme has been driven by networks' greater use of inserting smaller polyethylene mains into larger iron mains instead of relaying new mains. Additional underspend is from long term contracting approaches and the use of predictive analytics solutions/strategies to optimise the selection of pipes based on risk removed.

Operational expenditure (opex):

The combined forecast underspend for opex is c.£0.7bn but Cadent forecast an overspend partly driven by one off costs associated with its business transformation activities which is expected to yield savings in future years. For the remaining GDNs, the underspend is driven by greater efficiencies in emergency/repair work undertaken and better utilisation of their workforce.

GDNs continue to report that skilled labour shortages due to growth in infrastructure and construction markets is making it difficult for them to recruit and retain skilled labour, as well as other rising market cost pressures.

In addition to the efficiencies highlighted above, GDNs underspend can be partly attributable to factors outside of the control of GDNs and which were unforeseeable at the time of setting the price control, such as milder weather and a decline in the retail price index in RIIO-GD1.

4. Rate of Regulatory Return on Equity (RoRE)

RoRE is made up of several components:

1. Allowed Equity Return – The allowed equity return is the return on equity that a company would earn if their expenditure and allowance matched and there were no other incentives.
2. Operational performance (totex) - This compares the totex allowance to actual totex expenditure and any underspend or overspend is then shared between the company and consumer through the totex incentive mechanism.
3. Operational performance (other)² – This accounts for GDN’s overall incentive performance.

Putting these three component parts together produces operational RoRE. Financing and tax performance is finally added to produce total RoRE.

We have calculated the total RoRE (with financing and tax) based on notional gearing to be between 8.3% and 13.3% across the different GDNs. This is based on the value of GDNs’ latest forecast performance at the end of the eight-year period. A summary of our assessment of the GDNs’ RoRE performance is shown in the figure 3 (comparing this year to the previous two years) and table 5 on the RoRE based on notional gearing for RIIO-GD1 period.

² ‘Operational performance (other)’ consists of: 1. Output incentives – A financial reward or penalty based on the licensees’ performance against defined incentives. 2. Innovation – This represents the amount licensees cannot recover through revenue or contributions they make in relation to funded innovation projects. 3. Penalties or fines – An adjustment is made to licensees return for any Ofgem related penalties and fines, and guaranteed standard payments made to customers. These costs are borne by the shareholders.

Figure 3: A summary of GDNs’ RoRE performance is shown below.

RoRE based on Notional Gearing - RIIO-1 period

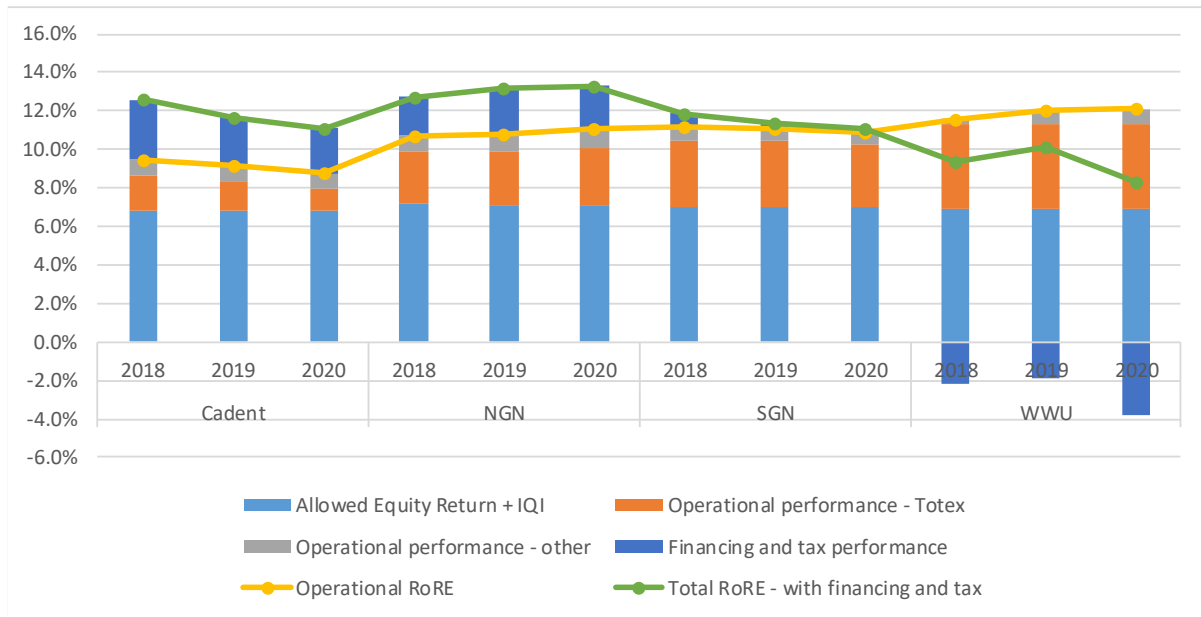


Table 5: RoRE based on Notional Gearing - RIIO-GD1 period

	RIIO-GD1			
	Cadent	NGN	SGN	WWU
Operational RoRE	8.8%	11.0%	10.9%	12.1%
Financing and tax performance	2.3%	2.3%	0.1%	-3.8%
Total RoRE - with financing and tax	11.1%	13.3%	11.1%	8.3%

Accompanying this report is a regulatory financial performance annex that sets out our assessment of RIIO-GD1 network companies’ regulatory financial performance. The view is based on information that the companies have provided using the regulatory financial performance reporting (RFPR) process.

5. Customer Bill Impact

Our tariff methodology provides an estimate of the overall cost of domestic energy bills. This includes estimates of the proportion of the overall cost of energy which is related to gas distribution. The methodology uses an average gas demand applied uniformly across all regions and over time.

Our latest bill assessment using this methodology estimates that the average GB domestic gas customer in 2020/21 will pay £121.35 per annum in real 2019/20 price terms for gas distribution costs.

6. Industry wide note

Decarbonising the UK economy and achieving the shared goal of Net Zero carbon emissions by 2050 remains a significant challenge for energy companies within the United Kingdom.

GDNs are responding positively to this challenge, making preparations on future heat policy and working collaboratively with other stakeholders to be at the forefront of decarbonisation solutions.

These solutions include looking into both bio-gas and hydrogen as an alternative to natural gas. Cadent and NGN are continuing with their trials, under the H21 and HyDeploy pilots, investigating the safety of transporting Hydrogen on the current networks.

SGN is also accelerating the pace of evidence gathering on the role hydrogen can play in the net zero economy and committed to delivering net zero by 2045, in line with the Scottish Government's own target. WWU's long term plan includes increased injection of biomethane and investing in smart control systems to favour low carbon transportation on its gas network.

As the energy regulator, Ofgem is supporting GDNs to meet the national Net Zero targets, whilst ensuring the networks are run efficiently and costs are kept down for consumers.

Additional NOTE

For additional performance data and GDN comparative analysis please refer to the supplementary Datafile which is published along with this report.

The forecast figures stated in this annual report and supplementary datafile are based on pre Covid-19 projections.