

RIIO GD2 Business Plan Appendix

Work Management and Business Support December 2019



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Contents

1	Overview	1
2	Work management within the Business Plan.....	5
3	GD1 performance and learnings.....	6
3.1	Overview.....	6
3.2	Legislative background	9
3.3	GD1 output delivery	10
3.4	GD1 customer experience	12
3.5	Allowances and expenditure	16
3.6	GD1 lessons learned	22
4	Stakeholder insight	23
5	Relevance to GD2 cross sector issues	24
5.1	Decarbonisation and whole system	24
5.2	Innovation.....	24
5.3	Resilience.....	24
5.4	Environment	24
6	GD2 activity breakdown	25
6.1	a) Approach to GD2	25
6.1	b) Policy	25
6.1	c) Scenarios and sensitivities	25
6.2	GD2 Outputs and price control deliverables	25
6.3	Bespoke outputs.....	25
6.4	Investment in existing assets.....	25
6.5	CBAs and EJPs	25
6.6	Cost efficiency	26
6.7	Managing uncertainty: use-it-or-lose-it, volume drivers	32
6.8	Competition.....	32
6.9	Real price effects	33
6.10	Financial summary.....	34
6.11	Assurance	42
7	Glossary.....	44

1 Overview

Scope of this appendix

This appendix sets out the work management and business support costs and activities for our Scotland and Southern networks. Costs are shown at a total expenditure (totex) level, referred to as 'pre-allocation', and also on the basis of their allocation out to the different expenditure categories of operating expenditure (opex), capital expenditure (capex) and replacement expenditure (repex), referred to as 'post-allocation'. This approach is taken as the allocation structures between companies may vary, which may lead to distortion in comparisons across network companies, if the allocation methodology is not clearly established. We provide an explanation of the allocation methodology we use and have undertaken independent comparisons and assurance to ensure our work management and business support costs are efficient.

In addition, some overhead allocation for non-regulated activities (other group companies) and non-formula activities are identified.

Our work management and business support activities enable the core product of a safe network to be delivered, by providing the business with sufficient resources to function effectively and efficiently. As such, our work management and business support activities contribute to all customer priorities identified through our stakeholder engagement and discussed in our Enhanced Engagement appendix (022). For example, by appropriately managing the resources within Operations Management, we can quickly respond to emergency visits, therefore 'acting safely'. Similarly, Operations Management also facilitates our repair activities, which avoids customer interruptions wherever possible to 'keep the gas flowing'. Our Customer and Stakeholder teams ensure we consistently deliver against our customer satisfaction standards, while also seeking to develop new strategies to support the most vulnerable customers, therefore 'supporting communities'. Without the appropriate work management and business support strategy, our business would be unable to deliver any of our minimum standards or added value activities, and as such the costs discussed in this appendix facilitate delivery of all customer priorities.

Impact

The work management and business support activities enable the core product of a safe network to be delivered in an efficient manner. These activities also enable our networks to deliver the additional services our customers expect, such as providing the best customer service, enabling new sources of green gas to come onto the network, increasing the skill levels of our workforce, well trained and supported employees, and ensuring our customers are billed correctly. As a result, most costs in the appendix are driven by our 3,800¹ people, and the resource required to keep them productive and efficient are set by our business strategy. A company which seeks to do more for its customers, by definition, demonstrates an ambition to deliver high quality outputs. Higher quality outputs incur greater business support requirements, the costs of which need to be offset through improvements in efficiency to maintain the right balance between high quality standards, delivered at an efficient cost. Our approach to striking an appropriate balance between function (the quality of what we deliver) and efficiency (cost) has also been independently assessed by Arup, which is discussed in further detail in section 3.3.

Approach to GD2

Moving into GD2 we need to be focused on maintaining quality and efficiency as we continue to migrate from employment based on older-style contracts, where the structure of the pension plan strongly incentivises long-service, to an employment base on more modern contracts where employees have less long-term incentive and have a higher turnover rate as a result. This results in challenges in knowledge retention, process clarity,

¹ Average FTE in 2018/19

effectiveness, and efficiency improvements.

As well as the employee structure, the asset structure which supports our operations are also changing. There is a rationalisation of the asset base with the disposal of most of our gas holder sites and the associated demolition costs during GD1, and continued land remediation work required across the remainder of the estate in GD2 detailed in the Property/holder strategy appendix.

Demonstrating our ongoing commitment to keeping costs down for our customers, we have included a 1% year-on-year efficiency factor in our GD2 forecasts, delivering a total saving to the customer, pre-allocation, of £30m, across the GD2 period.

In Table 1: below, we set out the work management costs pre-allocation, as this provides the most complete picture. Most of these costs are broadly consistent with GD1 as the expected reductions in workloads are mitigated – for example, while emergency and repair workloads are reducing as a result of the iron mains replacement programme, the smart meter roll-out is anticipated to create an increasing profile of interventions. Land remediation and holders have a significant step-up in the first two years but then reduce to give a 25% saving on GD1 five-year equivalent (this is discussed further at Section 6.10).

For customer management and the business support costs (IT, property, HR, procurement and training) the costs are typically increasing compared to GD1. This is due to increasing pressures and expectations associated with each of these areas, such as increased customer expectations (including the vulnerability allowance) and a heightened requirement for cyber resilience and workforce resilience.

In this appendix, we have presented this table on a pre-allocation and post-allocation basis. Please note the pre-allocation cannot be summed across other appendix tables as this will create a double count of costs.

Table 1: RIIO-GD2 forecast expenditure profile - Pre-allocation (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Asset management	16.2	17.3	18.5	18.5	16.6	15.5	17.0	17.0	16.7	16.4	15.9	15.4	15.0
Land remediation and holders	3.8	7.3	13.7	7.2	9.6	18.3	3.6	3.6	7.5	11.3	6.1	3.6	3.5
Operations management	64.0	63.4	61.3	62.7	63.8	68.6	68.5	66.2	66.8	68.5	67.3	66.1	69.9
Customer management	6.1	5.4	4.9	5.2	4.8	5.7	5.8	5.8	5.9	5.8	5.8	5.7	5.6
System control	2.9	2.8	2.9	2.8	2.8	2.5	2.8	2.8	2.8	2.8	2.7	2.7	2.6
Total work management	93.1	96.2	101.3	96.5	97.7	110.6	97.8	95.4	99.7	104.8	97.8	93.5	96.7
IT and telecoms	21.2	22.6	24.1	27.3	27.7	36.9	33.1	29.2	31.7	33.7	35.7	37.4	39.3
Property management	10.2	10.5	11.1	11.9	10.5	10.9	10.3	10.3	11.5	11.9	11.9	11.8	11.8
HR & non-operational training and stakeholder of which	2.4	4.2	4.2	4.2	4.4	5.9	5.3	5.3	6.6	6.4	6.3	6.4	6.2
Stakeholder:													
Staff costs	0.2	0.6	0.8	0.7	0.7	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1
Other costs	0.1	0.2	0.2	0.6	0.7	1.0	0.8	0.8	0.9	0.8	0.8	0.9	0.8
Senior management, finance and regulation	20.3	21.7	22.4	22.8	23.3	23.0	26.9	25.8	22.9	22.5	23.9	24.7	23.6
Procurement and stores	3.1	3.0	3.2	3.5	4.5	6.5	7.4	7.4	7.3	7.3	7.2	7.1	7.0
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	9.4	11.4	11.0	10.7	10.3
Total business support	63.5	70.9	78.9	82.9	79.2	89.2	89.8	84.7	89.4	93.3	96.0	98.2	98.3
Transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	23.9	23.6	23.3	23.0	22.7
Total transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	23.9	23.6	23.3	23.0	22.7
Total overheads(*)	187.5	195.1	204.2	202.7	199.5	226.3	212.1	203.5	213.0	221.7	217.1	214.7	217.6

(*) this excludes the Innovation team and SIUs

References to the Business Plan Data Templates (BPDTs) can be found in section 6.11.

Table 2: RIIO-GD2 average forecast expenditure profile – Pre-allocation (SGN level)

SGN (£m)	Avg First 6 years	Avg Last 3 years	Avg GD2
Asset management	17.1	16.5	15.9
Land remediation and holders	10.0	8.5	6.4
Operations management	64.0	67.8	67.7
Customer management	5.4	5.8	5.8
System control	2.8	2.7	2.7
Total work management	99.2	101.3	98.5
IT and telecoms	26.6	33.1	35.6
Property management	10.8	10.5	11.8
HR & non-operational training	4.2	5.5	6.4
Senior management, finance and regulation	22.3	25.2	23.5
Procurement and stores	4.0	7.1	7.2
Training	9.5	6.6	10.6
Total business support	77.4	87.9	95.0
Transport and plant	25.9	24.5	23.3
Total transport and plant	25.9	24.5	23.3
Total overheads(*)	202.5	213.7	216.8

Discussion of our expenditure against allowances in the GD1 period can be found in section 3.5.

2 Work management within the Business Plan

This appendix provides an explanation of the work management and business support practices in which we engage to ensure we continue to operate and maintain an effective and efficient service for our customers.

Work management and business support are distinguished from each other as follows:

Work management is focused on the provision of management of the frontline services which we deliver. It includes assets, operations and customer management.

Business support is focused on the other support functions necessary to keep the business operational. It includes HR, legal, property management, IT, audit, regulation and finance and procurement.

Figure 1: Appendix structure

	Distribution Mains & Services	Distribution (Governors & Crossings etc)	Transmission	Other Assets	Cost Efficiency, Financeability, Procurement, Stakeholder Engagement
Management	Work Management & Business Support				
	Environmental Action Plan				
Systems	IT & Cyber Resilience		Electrical & Instrumentation		
	Energy Futures: Whole Systems & Scenarios, Energy System Transition, Innovation				
People	Workforce Management				
Other Assets	Property, Fleet, Plant & Equipment				
Customers	Customer Service & Vulnerability				
Emergency Service	Emergency Service			SIUs	
	Repair Service				
Inspection/ Maintenance		Asset Maintenance			
Repair & Revalidation	Repex	Integrity	Integrity & Compliance		
Refurbishment / Replace / Rebuild					
Growth/Resilience	Connections				
	Capacity Management				
Removal		Maintenance	Integrity & Compliance		

In GD1, work management accounts for approximately 19% of our overall opex costs, excluding holders and land. Business support accounts for approximately 20% of overall opex costs, including IT but excluding training and apprentices.

Work management and business support costs are not subject to cost benefits analysis (CBAs) or engineering justification papers (EJPs). In section 6.6 we discuss the independent assessments undertaken to demonstrate efficiency within our work management and business support costs.

3 GD1 performance and learnings

The allocation of costs to work management and business support is set-out below, along with the methodology by which we allocate these costs across the business.

3.1 Overview

Work management

Work management is the cost of management at depot level, supporting frontline operational employees. These include the salaries of General Managers, Performance Managers, Depot Managers and administrative employees. It does not include the time and costs of any frontline operatives, engineers or specialists whose costs are allocated to the work undertaken on the basis of timesheet records or invoices in the case of specialist contractors. Rather, these costs of frontline employees directly working on a replacement or an emergency repair are directly allocated to those projects. Work Management comprises the following cost areas as reported in our annual Regulatory Reporting Pack (RRP):

- **Asset management.** Employee costs associated with the network directorate responsible for managing our pipes and associated equipment. This includes network planning; network integrity (including gas quality monitoring); network capacity evaluation, investment and analysis, policy and procedures and remediation activities. In GD1, asset management (excluding land remediation and holders) accounts for an average of 17% of work management costs, as seen in Table 1:.
- **Operations management.** Operational cost of the daily planning and supervision of operatives and contractors working to deliver our core services. These include first line managers, depot managers, Business Performance Managers, Commercial Assistants, and associated health and safety costs and operational support costs such as dispatch, scheduling, plant protection, record keeping and data quality. This does not include the costs of the frontline field teams engaged in the work (which is allocated to that activity), only the time of those directly supporting the work. In GD1, operations management accounts for an average of 66% of work management costs, as seen in Table 1:.
- **Customer and contract management.** Employee costs associated with managing the team responsible for engaging with customers. The team directly involved in the customer engagement is included in the costs of customer service, discussed in the Customer and vulnerability plan appendix (023). Customer and contract management costs also include the costs of call centres (including the Cadent charge for the national gas emergency telephone service), customer service departments which monitor standards and handle complaints, and the costs of customer service and contract management (not only for work directly associated with customers but for the business as a whole). The Customer Service team accounts for less than £2m a year. Discretionary compensation costs, for example if we choose to pay a customer more than the specified compensation payment, are not included in this total, as this is an ad hoc cost. In GD1, customer and contract management accounts for an average of 6% of work management costs, as shown in Table 1:.

We have two support functions in Customer Service - our two Customer Service centres and our Customer Experience team. The team is responsible for supporting customers and colleagues, providing communication and motivating our people to deliver a 10/10 customer service.

- **System control.** The employee costs associated with running our network and system control functions, ensuring the gas demand from our customers can be met with a sufficient supply of gas, at appropriate pressures to maintain safety and minimise leakage. The team also monitors and responds to Supervisory Control and Data Acquisition system (SCADA) alarms in line with industry practice. In GD1, system control accounts for an average of 3% of work management costs, as Table 1:.

System control comprises three key teams: the Gas Control Shift, Gas Control Support and Network Control. The Gas Control Shift is the team responsible for managing the Gas Control Centre 24hrs per day, seven days a week, whose responsibilities include maintaining safe pressures within the network.

controlling strategically important pipelines and accurate demand forecasting. Gas Control Support is responsible for managing our Supervisory Control and Data Acquisition system (SCADA), managing the process associated with gas supply emergencies as well as any faults on the network, and producing daily and monthly network performance information. The Network Control team is responsible for ensuring compliance with Safe Control of Operation (SCO) procedures as well as preventing the unplanned loss of supply.

Business Support

Business Support costs are the costs incurred during the operation of the business which are not directly associated with day-to-day operations. For example, our property management and insurance functions. This includes employee salaries and contractor/professional costs associated with any work carried out externally for business support functions, rent, rates and facilities costs. Business support comprises the following cost areas as reported in our annual regulatory reports:

- **Property management.** Costs relating to managing, providing and maintaining property and premises which are not directly involved in asset operation (i.e. stores, offices, depots and training centres). These are in contrast to sites such as governors or offtakes, which are covered under Asset Management. Property management costs include rent, business rates, utilities costs, maintenance/repair costs of premises, facility provisions and security. In GD1, property management accounts for an average of 15% of business support costs, as seen in Table 1:.
- **Audit, finance and regulation.** Costs associated with the statutory, regulatory and internal cost management, performance reporting requirements and financial and regulatory compliance activities for the network. These include the processing of payments, financial planning, management information provision, treasury management, regulatory reporting, and audit and assurance. The costs of finance specific IT systems are included under IT and Telecoms and discussed further in the IT and Cyber Resilience appendix. In GD1, audit, finance and regulation accounts for an average of 9% of business support costs, as seen in Table 1:.
- **Insurance.** Costs associated with supporting and providing expertise to develop the business risk profile, managing the claims process and provision of information and understanding to the business in relation to insurable and uninsurable risks. This includes the cost of insurance premia and associated tax, contract negotiation, processing of claims and payments relating to uninsured claims. In GD1, insurance accounts for an average 6% of business support costs, as seen in Table 1:.
- **CEO and group.** Costs associated with the senior management and legal team. These include corporate communications, media and events management, community relations and corporate responsibility, group strategy, legal and risk compliance, investors relations and board governance costs. In GD1, CEO and group accounts for an average of 18% of business support costs, as seen in Table 1:.
- **Procurement.** Costs associated with the procurement of goods and services in the support of business operations, through the management of procurement contracts with suppliers. This includes the cost of carrying out market analysis, building the supply base, negotiating contracts, setting up vendor accounts and setting and implementing procurement guidelines. In GD1, procurement accounts for an average of 1% of business support costs, as seen in Table 1:.
- **Stores and logistics.** Costs associated with central stores, the delivery of material and stock to these stores and delivery out to satellite stores and depots. These include the monitoring of stock levels and testing of quality. The cost of property management of local (satellite) stores and depots are covered under property management. In GD1, stores and logistics accounts for an average of 5% of business support costs, as seen in Table 1:.
- **IT and telecoms.** Costs relating to the provision of IT services for the day-to-day service delivery, including the purchase, installation and maintenance of computer and telecoms systems which are not directly related to operational activities. This includes the provision of IT and telecom services for the day-to-day

service delivery, technical support, data storage, application development and network maintenance. It also includes the daily functioning of IT and telecoms - including software development, applications maintenance and running costs and associated licence fees. In GD1, IT and telecoms accounts for an average of 39% of business support costs, as seen in Table 1:.

- **Human resources (HR) and stakeholder.** Costs relating to the provisions of the HR function which delivers the full range of professional activity for our employees and their career paths from recruitment to retirement. Also included in HR are the costs associated with payroll, performance, policies and procedures, support for dispute management and stakeholder engagement. These costs are discussed in detail in the HR and Workforce Resilience appendix and the Customer and Stakeholder appendices. In GD1, total HR and stakeholder accounts for an average of 6% of business support costs, with specific stakeholder costs accounting for 2%, as seen in Table 1:.

Allocation methodology

The allocation methodology defines how costs are allocated across all operational activities. The objective is these costs should be allocated in proportion to the work that is undertaken (and use of that resource by a department). There are, however, several ways in which this can be defined and while they are all governed by good accountancy practices, there is not a single solution which is appropriate to all companies and structures. As such, the allocation methodology is reviewed on a regular basis and updated annually to ensure the costs allocated are broadly representative of resource usage. Similarly, the approach to allocation varies between network companies according to the business structure which they use.

Our allocation of costs follows a consistent methodology that is covered by external auditing and submitted to Ofgem as a part of our annual regulatory submission.

In addition to the regulatory activities, the allocation methodology needs to consider non-formula and non-regulatory activities.

- **Non-regulatory activities.** There are activities that we, as a group company, may undertake that are outside of the scope of our licenced activities. As an example, the SGN group is building and operating a gas network in Northern Ireland and the costs associated are subject to strict business separation rules; but they also need to carry an appropriate share of the overhead allocation.
- **Non-formula work.** This refers to activities that are typically small-scale and that are delivered under our de-minimis allowance. These may be small commercial contracts, such as the provision of metering services, which do not form a part of our regulated business but are not sufficiently substantial (and not expected to be sufficiently substantial) to separate out as a group company.

Our total overheads are fixed. However, as these activities take a share of the total overheads, this helps create broader efficiencies across the group and therefore creates a proportionate efficiency saving. This is reflected in the regression analysis in 0 and the independent assurance in section 6.6.

When calculating an allocation, consideration is given to whether the particular cost line impacts one network only ('direct' allocation) or is shared between both networks. As an example, operational management which relates to the direct operation of a Southern depot will be 100% allocated to Southern, with the same process applied for direct operation of a Scotland depot. However, other operational management costs, such as digitisation, will be incurred by both networks and are therefore allocated based on a weighted split. This allocation model takes the totex overheads for all entities within the regulated business and apportions the total costs between the Scotland and Southern network as shown in table 3 below.

Table 3: Percentage allocations between Scotland and Southern

	Southern	Scotland
Asset length	67%	33%
LTS length	56%	44%
Weighted split	63%	37%
Direct costs	100% or 0%	100% or 0%

The weighted split shown above is an average and takes in consideration the asset and LTS lengths as well as the number of customers per network, to calculate an accurate proportional split.

Upon the split being determined, the model further splits the costs for each network according to the relevant business activities. The allocation to individual categories will be dictated by workloads and therefore can create changes in apportionment throughout the year. The current methodology uses the following drivers:

Table 4: Activity Cost Allocation

Cost drivers to activities		
Work management	Asset management (inc. Network policy)	Employee templating
	Operations management (Inc. Contract management)	Employee templating
	Customer management	Employee templating
	System control	Employee templating
Business support	IT and telecoms	Direct labour and work Management
	Property management	Direct labour and work management
	HR and non-operational training	Direct labour and work management
	Audit, finance and regulation	Operational spend
	Insurance	Operational spend
	Procurement	Operational spend
	CEO and group management	Work management
	Stores and logistics	Operational spend
	Training	100% retained in opex
Other	Transport, plant, tools and consumables	Direct labour

3.2 Legislative background

All business areas within work management and business support are subject to legislative requirements, which drive our internal policies and advise our strategy and approach. Certain standards are specific to certain business areas as defined by industry-specific instruments, for example such as our licence or the Gas Act. An example would be our operations management strategy, which is driven by a requirement to sufficiently resource our emergency service, so we can respond in minimum timescales as defined by our licence, even during peak times. Other standards are legislative-based and apply more widely across the business. For example, health and safety standards apply not only to our field-based employees but also to those located in our offices and depots. Lastly, there are also more corporate legislative requirements, such as accountancy and compliance standards, as well as HR and procurement, which are more standard across multiple industries and govern our internal functions and procedures.

Details of the specific legislation and standards, as well as how these drive our policies and strategies, can be found in the relevant appendix.

3.3 GD1 output delivery

Our work management and business support costs are incurred through enabling the business to deliver our key responsibility of a safe and reliable network, as well as our defined regulatory outputs. Our full suite of outputs is shown below:

ANNUAL OUTPUT MEASURE 2018/19		ACTUAL	
Primary Output	Deliverable	Scotland	Southern
Connections	Guaranteed standards performance	●	●
Environmental	Leakage	●	●
Reliability (network capacity)	Achieving 1 in 20 obligation	●	●
Safety (emergency response)	97% controlled escapes	●	●
	97% uncontrolled escapes	●	●
Safety (management of repairs)	GS(M)R 12 hour escape repair requirement	●	●
	Management of repairs (repair risk)	●	●
Safety (major accident hazard prevention)	GS(M)R safety case acceptance by HSE	●	●
	COMAH safety report reviewed by HSE	●	●
Customer service	Planned interruptions survey	●	●
	Emergency response and repair survey	●	●
	Connections survey	●	●
	Complaints metric	●	●

RIIO-GD1 EIGHT YEAR OUTPUT COMMITMENT		FORECAST	
Primary Output	Deliverable	Scotland	Southern
Connections	Introduce distributed gas entry standards	●	●
Social obligation	Fuel poor connections*	●	●●
	Carbon monoxide awareness	●	●
Environmental	Leakage	●	●
	Provide biomethane connections information	●	●
Reliability (loss of supply)	Duration of planned interruptions	●	●
	Duration of unplanned interruptions	●	●
	Number of planned interruptions	●	●
	Number of unplanned interruptions	●	●
Reliability (network reliability)	Maintaining operational performance	●	●
Safety (mains replacement)	Iron mains risk reduction (based on MRPS)	●	●
	Sub-deducts networks off risk	●	●

Full details of the operational strategy for output delivery can be found in the relevant appendices. Discussion of the customer experience in relation to these outputs, as well as external comparison of our performance can be found in section 3.4.

Independent analysis² of 2018/19 output data demonstrates our networks are ranked first and third in respect of the aggregated GD1 outputs set by Ofgem, as seen in Figure 2:

Figure 2: Performance Against GD1 Outputs

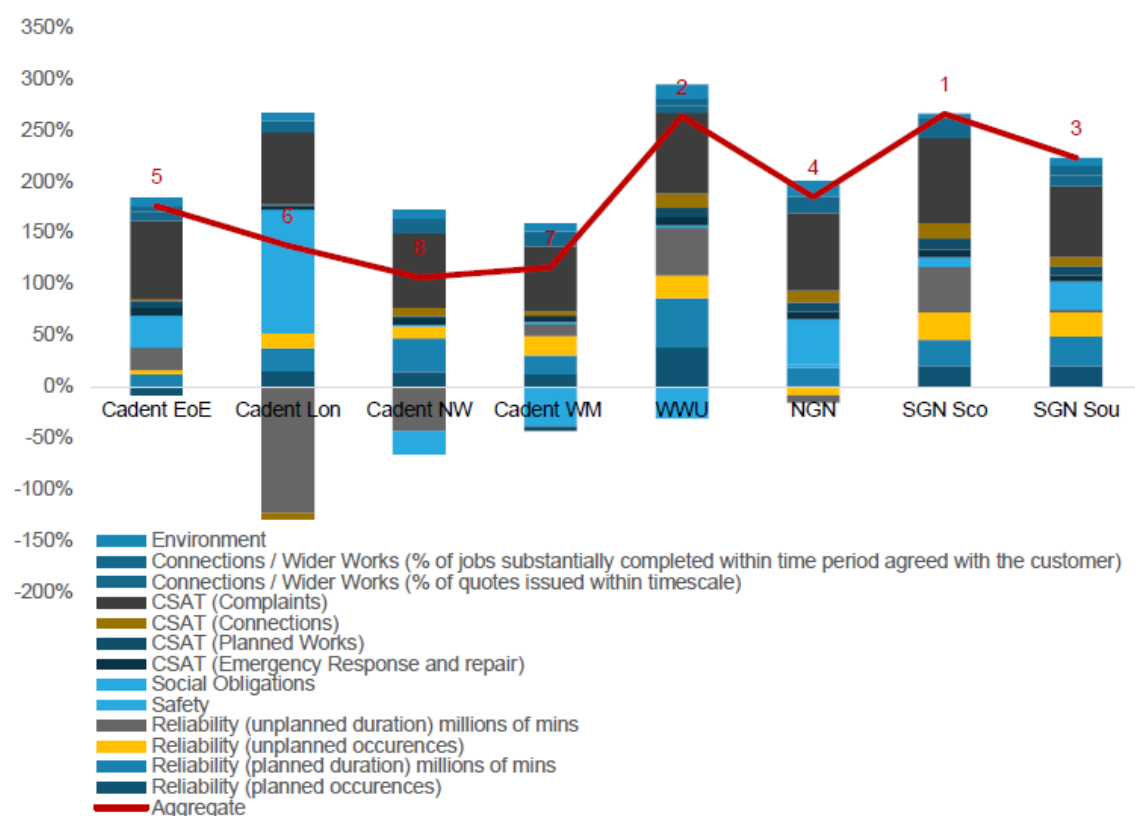


Figure 2 above compares an annualised target against 2018/19 performance. The majority of our performance is driven by our four reliability-based outputs, which account for 75% and 57% of the overall percentage performance in Scotland and Southern respectively. The rest of our performances is spread across the remaining outputs. Independent analysis concluded that this performance demonstrates 'class-leading functionality'.

Our 2018/19 social obligations (fuel poverty) figures demonstrate a marked increase in performance in relation to our Southern network, following the suggestion by stakeholders at our Southern fuel poverty specialist panels last year, we extend our understanding and identification of fuel poor households. As such, we have worked with the Energy Saving Trust to develop a predictive model using relevant datasets to forecast the likelihood an off-gas property is in fuel poverty. The model uses a range of data sources such as EPC ratings, off-gas properties mapped to geographical coordinates, listed buildings, property type/tenure, energy efficiency characteristics, income data and ECO eligibility. This allows us to target our partnership and engagement activities in areas where there is likely to be a high concentration of fuel poor households.

We launched our mapping tool at the House of Commons, in partnership with York University. Over 50 attendees from housing associations, local authorities, fuel poverty charities, community interest companies and MPs discussed opportunities to work in partnership to help households in England overcome fuel poverty. By implementing this improvement in strategy, throughout the year we have built over 30 partnerships in targeted areas, each tailored to local circumstances and organisations. Our partnership approach is supported

² Undertaken by Arup, August 2019

by our Central Heating Grant Fund which provided a contribution towards the costs of first-time central heating systems for 121 of the 1,626 fuel poor households in Southern during 2018/19.

3.4 GD1 customer experience

Customer service

In 2013 our customer experience team launched our '10 out of 10' internal campaign to ensure all colleagues seek to ensure all customers receive a top-marks service from ourselves. This is reported to Ofgem under our GD1 outputs. Our expenditure over GD1 has varied as we have built our capability and flexed the team to support the business needs. Successful adoption of agile working principles in 2015 has delivered a general trend of reducing expenditure over the period to 2017/18, as shown in Table 1:

It should be noted costs relating to our customer experience team include contract management as well as the National Gas Emergency telephone Service (NGES) which has increased recently. The customer team itself accounts for less than £2m a year.

Our return on investment has been positive, with us ranking highest among the GDNs for customer satisfaction. This can be seen in Figure 3: below which demonstrates our satisfaction scores against target:

Figure 3: Customer service scores against target

Scores out of 10	Scotland		Southern		Base target
	2017/18	2018/19	2017/19	2018/19	
Emergency work	9.48	9.49	9.34	9.40	8.81
Planned work	8.96	8.95	8.70	8.78	8.09
Connections work	9.36	9.27	8.89	8.77	8.41
Average	9.27	9.24	8.98	8.98	8.44

Detailed discussion of how we provide our customers with top-ranking customer service in each of these operational areas can be found in the relevant appendices.

Complaints resolution

Our customer service outputs also include a complaints metric, with performance measured by an overall score derived by multiplying the volume of complaints against four factors. These are as follows:

- Resolution within D+1 of the complaint being received: 10% weighting
- Resolution within D+31 of the complaint being received: 30% weighting
- Repeat complaints: 50% weighting
- Complaints directed to the energy ombudsman: 10% weighting

Applying a heavier weighting to complaints not immediately resolved ensures all complaints are actively managed, as it means even a very low volume of long-standing complaints would significantly impact the overall score.

Applying the largest weighting to repeat complaints ensures all complaints are genuinely resolved as opposed to being closed down.

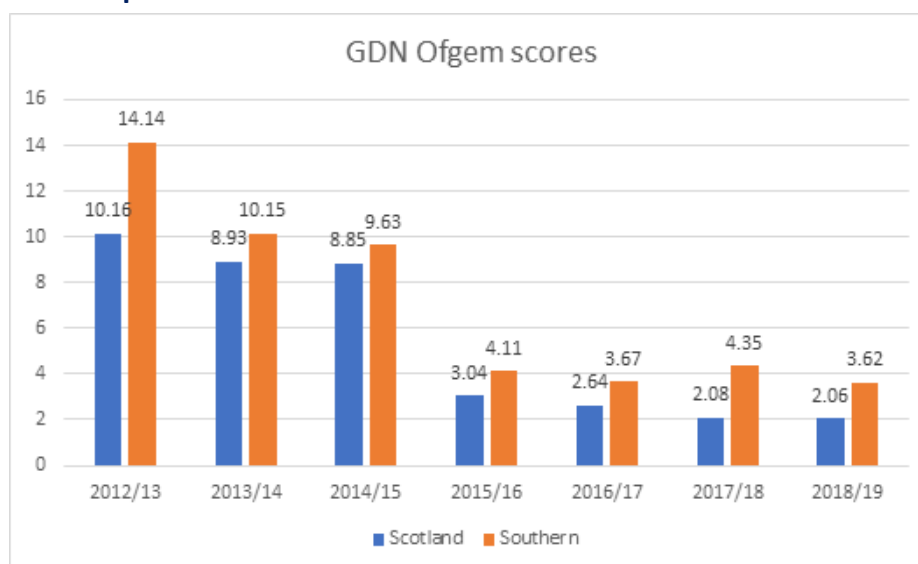
The relatively low weighting of complaints to the ombudsman reflects very few complaints are directed this

way, and as such enables a heavier weighting to be applied to the factors which attract a higher volume.

Our Ofgem target in relation to complaints is 11.57, meaning our calculated score based on the above factors should not exceed this level.

Figure 4: below demonstrates our performance scores in relation to complaints over the last seven years:

Figure 4: SGN complaints resolution scores



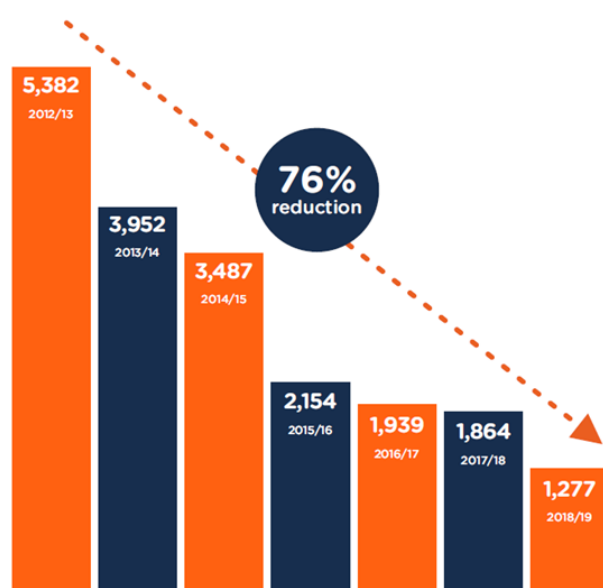
As shown by Figure 4:, since 2013/14 both our networks have out-performed the Ofgem target.

Furthermore, Figure 4: also shows a material improvement in our score since 2015/16. At this point we implemented a new monitoring process whereby, in the event that a complaint has not been resolved by D+1, the Business Performance Manager at the responsible depot holds a daily teleconference with our Head of Operations and Customer Team to explain the issue and highlight the remediation actions being taken. By implementing this process and the associated customer-centric behaviours it drives, we have demonstrated our commitment to excellent customer service, as we have not only sought further improvements beyond an acceptable performance (i.e. below our target) but also to ensure a focus on prompt resolution of complaints when they arise.

Volume of complaints received

While the above demonstrates our commitment to resolving complaints as they occur, we have also sought to improve our customers' experiences by removing the trigger for a complaint in the first place. Figure 5: below shows the volume of complaints received each year and demonstrates we have been able to deliver a 76% reduction over the course of GD1 to date:

Figure 5: Complaints resolution



As the volume of complaints reduces, the impact of each individual complaint on our overall complaints resolution score increases, meaning the focus upon prompt and satisfactory resolution of each complaint becomes increasingly important.

Customer service benchmarking

Our customer experience team benchmark our performance not only against the other GDNs but also against other sectors such as retail and aviation, regularly meeting with large organisations operating outside our industry to share best practice and identify new technology trends to support our service level ambitions. Our customer satisfaction scores regularly reflect those of major retailers, and independent analysis of our organisation has led to feedback saying: “as part of the tailored operating model, Arup considers the customer-centred approach to be reflective of industry trends and cross-sector (namely Water) best practice and appropriate for the delivery of a high functioning network.”.

In its assessment, Arup supported our view our investment over GD1 has delivered measurable customer satisfaction benefits, and made the further observations:

- Despite our networks featuring a relatively greater variation in customer demographic, geographical distribution and expectations, we continue to be leading in performance in customer satisfaction;
- There is a clear link between Ofgem’s strategic objectives, our customer value proposition and the performance drivers within our customer management function;
- Our focussed customer experience strategy (‘10/10’ service), dedicated to providing local teams with training and data-driven recommendations has transformed the experience of our customers over the past four years;
- We prioritise the response to vulnerable customers, and closely monitor incoming data to drive improvements in this area;
- Our customer service strategy is informed by real-time, anonymous customer satisfaction survey results, gathered by our FCOs on a tablet-based app;
- We are involved in both GDN and network user forums to understand and respond to user needs;
- The customer experience function is leading the way within the organisation with agile work practices to pilot initiatives in a cost-effective way;
- Active engagement is undertaken with industry working groups, best practice forums and market research companies to gain insight to inform best fit solutions for customer experience;

-
- Aligned with the tailored operating model, employees are located in contact centres, depots and offices across the network to understand local needs and adapt advice/training/support accordingly; and
 - Tailored customer service to customer needs across the network. For example: monitoring the impact of cold weather for vulnerable consumers in Scotland and monitoring the impact of disruption such as roadworks on service provided in the Southern network.

Delivery of outputs through a tailored operating model

To achieve the above frontier performance, we have adopted a tailored operating model, building a bespoke operating structure with a greater degree of de-centralisation than our peers.

For example, where possible and where it complements our business activities, we seek to retain centralised functions rather than at an individual network, or even individual depot, level. Where required, these functions may include resources acting as business partners, whom are responsible for focussing on a team or department, in order to provide tailored support. Managing a centralised function with business partner support is a strategy which is utilised by our HR and Finance business support functions.

Conversely, there are some activities where it would not be appropriate to manage in a centralised manner, as they require network-specific knowledge. An example would be our Operations Management, which is managed separately by our Scotland and Southern networks. This facilitates differing strategic approaches to our operational activities – for example with Southern maintenance being managed by the Network directorate, while our Scotland maintenance activities are undertaken by, and are the responsibility of, our Scotland Operations team. This flows through to our customer experience by enabling rapid decision making and an enhanced responsiveness to customer needs – for example by using local knowledge when responding to an emergency, we are able to better protect our vulnerable customers and understand the requirements of the wider community. This is an example of where our bespoke operating structure has enabled us to achieve, and exceed, our GD1 outputs in relation to safety as well as customer satisfaction.

Lastly, there are certain functions for which the most appropriate strategy is localised. An example is our operational depot management structures – while both Scotland and Southern follow the same methodology, each operational depot within both networks has a General Manager role, responsible for the management and performance of the depot.

Workloads can also drive our operational strategy – for example our Southern network has a sufficient repex workload to enable the use of dedicated replacement depots and associated support teams. By contrast, the workloads in Scotland depots tend to be insufficient to support specialist teams, and therefore replacement, as well as further operational activities, are managed within the same depot and delivered by cross-skilled resources. This is an example of where our bespoke operating structure has enabled us to create an efficiency saving, reducing the relative apportionment of work management expenditure, while delivering the relevant output (in this case Iron Mains Risk Reduction) as well as enhancing our in-house skills mix and building organisational resilience.

3.5 Allowances and expenditure

GD1 allowances in relation to work management and business support were provided as a total allowance for opex on a post-allocation basis, with the allocation of overheads associated with other business activities (for example capex, repex) being built in to the respective allowance provisions, as shown in table 5.

Table 5: GD1 opex allowances

SGN allowances (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Work management	58.1	57.4	56.3	58.2	56.4	57.5	57.1	56.3	457.2
Business support	47.5	47.7	47.8	47.9	47.9	48.0	48.2	48.3	383.2
Training	7.7	8.3	8.5	8.4	8.5	8.7	8.8	8.6	67.5
Total allowances	113.3	113.3	112.6	114.5	112.8	114.2	114.1	113.1	907.9

SGN expenditure (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Work management	42.6	45.0	52.0	43.9	43.7	57.1	42.0	41.1	367.4
Business support	30.3	33.0	28.9	38.6	36.6	47.3	49.4	46.0	310.0
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	70.7
Total allowances	79.2	86.8	94.7	95.6	89.1	110.5	98.3	93.9	748.0

Opex expenditure in comparison to these allowances as determined according to post-allocation work management and business support costs, can be seen in table 6 below:

Table 6: Expenditure vs Allowance

SGN Variance to Allowances (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Work Management	15.6	12.3	4.3	14.2	12.7	0.4	15.1	15.2	89.8
Business Support	17.2	14.6	18.9	9.3	11.4	0.7	1.2	2.2	73.2
Training	1.4	0.5	5.3	4.7	0.3	2.6	2.0	1.8	3.1
Total Allowances	34.1	26.5	17.8	18.9	23.8	3.7	15.8	19.2	159.9

Our pre-allocation expenditure to date and forecast expenditure to the end of GD1 is set out in 0 below:

Table 7: Pre-allocation overheads (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Asset management	16.2	17.3	18.5	18.5	16.6	15.5	17.0	17.0	136.6
Land remediation and holders	3.8	7.3	13.7	7.2	9.6	18.3	3.6	3.6	67.2
Operations management	64.0	63.4	61.3	62.7	63.8	68.6	68.5	66.2	518.7
Customer management	6.1	5.4	4.9	5.2	4.8	5.7	5.8	5.8	43.8
System control	2.9	2.8	2.9	2.8	2.8	2.5	2.8	2.8	22.5
Total work management	93.1	96.2	101.3	96.5	97.7	110.6	97.8	95.4	788.6
IT and telecoms	21.2	22.6	24.1	27.3	27.7	36.9	33.1	29.2	222.1
Property management	10.2	10.5	11.1	11.9	10.5	10.9	10.3	10.3	85.5
HR & non-operational training	2.4	4.2	4.2	4.2	4.4	5.9	5.3	5.3	35.9
Senior management, finance and regulation	20.3	21.7	22.4	22.8	23.3	23.0	26.9	25.8	186.3
Procurement and stores	3.1	3.0	3.2	3.5	4.5	6.5	7.4	7.4	38.6
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	70.7
Total business support	63.5	70.9	78.9	82.9	79.2	89.2	89.8	84.7	639.1
Transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	203.1
Total transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	203.1
Total overheads(*)	187.5	195.1	204.2	202.7	199.5	226.3	212.1	203.5	1,630.9

(*) this excludes the innovation team and SIUs

Our pre-allocation expenditure includes the following movements in costs:

- Our 2018/19 land remediation and holders costs (£18.3m) relate to the movement of land and holders to SGN Place, with the associated allowance (covering the last three years) also moving. Costs in the final two years therefore now relate purely to retained regulatory land and holder requirements.
- In operations management, 2017/18 to 2018/19 shows a step-change due to the incremental pension deficit now being held in totex rather than non-controllable costs. This year also includes the impact of the recently negotiated SGN pay award.
- Senior management, finance and regulation shows an increase in the final two years of GD1 due to the increased requirements in preparation for the GD2 price control period, including an increase in legal and stakeholder resources.

- Procurement and stores shows an increase in the last three years of GD1 due to the increase in procurement requirements focussing on designing and implementing contracting strategies. An increase is also created by the costs associated with storemen having been re-captured, moving from property management.
- Training costs show a diminishing profile towards the end of GD1 due to the strategic focus upon apprenticeship recruitment early in the price control, enabling us access to fully-developed resources as the period progressed.

0 below demonstrates our total overheads following allocation into their relevant business area, consistent with the methodology described in section 3.1 above:

Table 8: Allocation of overheads to relevant business area (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Opex	97.5	103.2	111.6	111.8	105.2	127.6	113.9	111.0	881.8
Repex	55.9	56.0	55.2	52.9	53.3	55.4	54.0	50.1	432.8
Capex	23.5	25.6	25.7	26.0	27.1	29.5	30.0	28.3	215.8
Non-formula	9.3	8.9	9.0	8.4	8.8	9.2	9.3	9.2	72.0
Non-regulated Innovation (overhead apportionment only)	1.3	1.0	2.0	2.5	3.9	3.5	3.8	3.8	21.8
	-	0.4	0.7	1.1	1.1	1.1	1.1	1.1	6.6
Total allocations	187.5	195.1	204.2	202.7	199.5	226.3	212.1	203.5	1,630.9

Table 9 shows our post-allocation overheads:

Table 9: Post-allocation overheads (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	GD1
Asset management	6.2	5.0	5.2	4.8	6.1	6.2	6.1	6.1	45.8
Land remediation and holders	3.8	7.3	13.7	7.2	9.6	18.3	3.6	3.6	67.2
Operations management	26.6	26.9	26.8	26.2	22.8	26.1	25.8	24.9	206.1
Customer management	3.6	3.4	4.1	3.7	3.4	4.8	4.4	4.5	31.9
System control	2.4	2.4	2.2	2.0	1.7	1.7	2.0	2.0	16.4
Total work management	42.6	45.0	52.0	43.9	43.7	57.1	42.0	41.1	367.4
IT and telecoms	11.7	12.7	11.9	17.0	15.4	21.6	22.2	19.6	132.2
Property management	6.5	6.7	5.7	7.2	6.2	5.9	6.3	6.3	51.0
HR & non-operational training	1.3	2.7	2.7	3.1	3.3	4.6	4.1	4.1	25.8
Senior management, finance and regulation	9.7	10.3	8.1	10.6	10.6	13.0	15.3	14.6	92.1
Procurement and stores	1.0	0.7	0.4	0.7	1.1	2.2	1.5	1.5	9.0
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	70.7
Total business support	36.6	41.8	42.7	51.7	45.4	53.3	56.2	52.8	380.6
Transport, plant and tools	18.3	16.4	16.9	16.2	16.1	17.1	15.7	17.1	133.8
Total transport, plant and tools	18.3	16.4	16.9	16.2	16.1	17.1	15.7	17.1	133.8
Total overheads(*)	97.5	103.2	111.6	111.8	105.2	127.6	113.9	111.0	881.8

(*) this excludes expenditure on the innovation team and SIUs

Total overheads have shown a gradual increase across the period, primarily due to increased labour costs and the impact of the 'SGN C' pay deal which commenced in 2018/19. This is offset by a decline in the final two years of the period due to the gradual increase in 'SGN C' resources and the commensurate reduction in 'SGN D' resources, resulting in a greater proportion of employees enrolled in less expensive pension contracts. Further discussion of our contracting strategy can be found in the HR and Workforce appendix and the Emergency Services appendix.

GD1 work management expenditure has benefitted from a focussed commitment to driving efficiency at an operational level, which has created operational savings beyond those expected at the start of GD1.

Examples of these efficiency initiatives are:

- **Performance management.** Implementation of our new performance management scheme; driving efficiencies through well targeted and reportable KPIs. This is supported by monthly reviews with the Finance Business Partners and Operations Director, with a specific focus upon the depot reporting the lowest performance each month;

- **Depot restructuring.** This has delivered efficiencies in property and deployment of employees and consolidation of new depots at key locations (e.g. Paisley, London West and Surrey);
- **Vehicle use.** Vehicle fuel efficiencies through targeted communication strategies encouraging best practice, plus location monitoring through technology partnerships. Further information can be found in our Emergency Services appendix;
- **Facilities management.** Efficiencies have been created by close relationships and location sharing with electricity networks in the same licence area. Further information can be found in our Property Management appendix; and
- **Best practice.** Reviewing and re-engineering back-office processes consistent with ERICA (Eliminate, Reduce, Innovate Control and Automate) principles.

These localised operational efficiencies have been further supported by strategic decisions at a company level which realise benefits at a depot level, for example:

- **Tailored operating model.** As discussed in section 3.43.3 our tailored model facilitates regional variations in operational structure based on relative workload, enabling the associated allocation of work management to each activity and apportionment of overall opex. This is delivered using regional contracting models – for example in Scotland, we use a greater proportion of direct labour for activities such as replacement, resulting in a greater proportion of overhead being apportioned to replex;
- **Organisational contracting strategy.** Changing our contracting strategy to offer reduced cost contracts (such as those with a less expensive pension scheme) has enabled us to reduce our associated employment costs. This, combined with the natural turnover of employees, means a greater proportion of the workforce are now ‘C business’ – i.e. on a reduced cost contract - driving a gradual reduction in our overhead costs. Further detail can be found in the HR and Workforce appendix;
- **Overheads reallocation.** By reallocating overheads out of opex, and into non-formula and non-regulated, we are able to reduce our overall opex expenditure. For example, we re-utilise our emergency service’s waiting time to deliver commercial metering contracts, which moves the associated overhead cost and reduces cost to the regulated business. Further information can be found in the Emergency Services appendix;
- **Cloud-based IT.** We were one of the first networks to proactively move to a cloud-based IT system with associated security and resilience benefits; and
- **Use of mobile applications.** Deployment of Geofield software to enable FCOs to undertake more accurate record management and more efficient working practices, with data being captured in real time, eliminating unnecessary administration and document-handling.

We have also taken targeted strategic steps to reduce specific cost lines within our work management expenditure, such as:

- An anticipated reduction in holder and land costs due to our gas holder demolition programme, due to be completed by the end of 2029. Land remediation and security costs will continue to be incurred at certain retained sites, however, the majority have now moved to an unregulated entity, SGN Place. This strategy will realise an efficiency saving in GD2 by no longer representing a cost for the regulated business.

Work management regression analysis

The work management regression analysis highlights that our networks are among the top performing, due to decisions at an organisational and functional level. Taking a strategic approach to centralisation and separation (as discussed in section 3.3) enables us to create savings; the former by avoiding duplication of resource and expenditure; and the latter enables us to take a more tailored approach when it is required. This ensures processes are fit-for-purpose and removes any inappropriate generality which could ultimately create costs through inefficiency.

Table 10: Regression analysis

	Standardised efficiency score				
	2013/14	2014/15	2015/16	2016/17	2017/18
EoE	1.37	1.29	1.23	1.24	1.22
Lon	1.28	1.14	1.17	1.14	1.11
NW	1.18	1.21	1.08	1.06	1.07
WM	1.18	1.23	1.21	1.22	1.18
NGN	0.61	0.68	0.79	0.72	0.71
SC (SGN)	0.84	0.73	0.63	0.83	0.77
SO (SGN)	0.64	0.85	0.95	0.83	0.92
WWU	0.90	0.88	0.92	0.97	1.03

At a functional level, our performance is driven by our commitment to reduce overheads through our efficient use of resources. For example, the use of cross-skilled resources and re-utilisation of emergency waiting time. We have also sought to drive costs out of the business where they do not deliver a benefit – for example by dismantling or selling our gas holders. This has reduced the ongoing maintenance costs which would otherwise be associated with a non-operational site. Further detail of these strategies can be found in each of the specific business area appendices. Independent assurance regarding the efficiency of our work management costs is discussed in section 6.6.

Business support efficiency assessment

Business support is not subject to industry regression testing due to the variations in how each GDN structures expenditure. Independent assurance regarding the efficiency of our work management costs is discussed in section 6.6.

3.6 GD1 lessons learned

Our expenditure in GD1 included cost drivers due to emerging issues, for which we have identified and implemented remedial activities. Examples are:

Requirement for insourced expertise

In our Scotland network, we identified a growing need for insourced expertise in our maintenance department. This was due in part to the increasing work which the team undertakes in supporting the Statutory Independent Undertakings (SIUs) and major projects capex investment programme, but also as part of our succession planning strategy. As such, there have been employee number increases in our maintenance department, the costs of which are captured in operations management.

Requirement for activity-dedicated depots

In our Southern network, we identified a need to increase our non-industrial headcount, primarily due to the increase in delivery of the repex programme and the necessitated creation of three new replacement depots. Additionally, a team was set up to manage the specialist function of riser replacement. These were set up as specialist teams as this work category differs significantly from the Tier 1 replacement works. The work requires specialist contractors, for example scaffolding contractors for risers, and robotics contractors for Tier 3 works, and therefore requires specialist knowledge of these processes to ensure the repex programme is delivered in a safe and efficient manner.

Increase in customer expectations

From an IT perspective, we have observed an increase over the GD1 period in customer expectations – for example requiring the option to communicate through social media and live chat. Similarly, our colleagues expect a greater degree of IT functionality, with all now using smartphones and field-based teams using tablets with applications such as Geofield to support their daily activities. Activities such as time-sheeting have now also moved to become electronic and automated. One of the greatest areas of unexpected change during GD1 has been the significant increase in frequency and severity of cyber-attacks, and the associated increasing requirements for enhanced cyber security. Further discussion on all elements of these lessons can be found in the IT and Cyber Resilience appendix (011).

4 Stakeholder insight

As discussed in section 1, our research has identified the key priorities which are most important to our customers. Our work management and business support strategy is fundamental to delivering against these priorities. While we seek to exceed our customers' expectations and deliver added value wherever possible, we are also acutely aware our network must be operated efficiently, and in-line with the key priority of 'keeping costs down'³.

Our totex is typically within the upper quartile, demonstrating our GD1 costs are highly efficient. We intend to continue this efficiency into and through GD2 by maintaining the underlying opex as close to the existing levels as possible. By this, we mean that we will seek to ensure any base costs which are comparable across GD1 and GD2 are kept as closely aligned as possible, reducing and mitigating the impact of any increases in GD2 where we can. Customers should not be asked to pay more for the same service, and by excluding exceptional cost drivers, customers will be able to see this direct comparison for themselves.

By the nature of work management and business support, the costs within these areas facilitate positive stakeholder outcomes to be delivered by the more directly-impacting activities, such as our emergency service, or our repair teams. We have undertaken an extensive programme of engagement and research with customers and stakeholders in developing our business plan. This is described in more detail in chapter 4 of our business plan, the Enhanced Engagement appendix (022) and in our other business plan appendices where relevant.

³ Stage 1: Explorative Qualitative Workshops and interviews (ref 002)

5 Relevance to GD2 cross sector issues

As discussed, work management and business support facilitates the activities delivered by ourselves, and enables us to develop and implement our strategies for the future. For each of the cross-sector issues, the costs associated with the teams which deliver the work are reflected in this appendix, while the output of that work is reflected in other appendices. For example – the cost of our emergency service is contained within operations management in work management, while the outputs associated with this team can be found in the Emergency Services appendix.

5.1 Decarbonisation and whole system

The future of our network and the future of the energy landscape is of critical importance to us and our customers. As such, we have a team dedicated to supporting government policy surrounding the future of energy systems and the energy system transition. Further detail can be found in our Energy Futures Whole Systems appendix. In the meantime, our strategy is to maintain optionality while delivering ‘no-regrets’ investment in the network, which in-turn, drives our maintenance regimes and investment decisions. Further detail of our approach can be found in our Asset Maintenance appendix.

5.2 Innovation

Our commitment to the development and improvement of techniques and procedures is demonstrable through our dedicated team supporting innovation, the roll-out of innovation and the management of innovation projects, including liaising with partnering companies. Further detail of our innovation strategy can be found in our Innovation appendix, while details of innovative solutions already delivered can be found in our operational appendices, such as Emergency Services, Repair Services and Asset Maintenance.

5.3 Resilience

Resilience of our network is a key priority for our network planning team, which is dedicated to delivering a safe and reliable network for existing and future customers. This priority is supported by our maintenance teams, which undertake the appropriate inspections and remediations on our network assets to ensure they are fit-for-purpose and subject to appropriate, no-regrets investment decisions. Both teams are facilitated by the overheads within asset management, with further detail available in the associated operational appendix.

Similarly, we must also ensure we have a resilient organisation which is fit for the future, through ongoing development, leadership training and succession planning. Further detail can be found in our HR/Workforce appendix.

5.4 Environment

Our Environmental Action Plan sets out our commitments to contribute to a net-zero future, including the steps which we will be taking throughout GD2. Further details can be found in our Environmental Action Plan, delivery of which is supported by our Work Management and Business Support infrastructure.

6 GD2 activity breakdown

6.1 a) Approach to GD2

As seen in GD1, our business strategy decisions will define our overhead costs. Operational management is expected to continue as the main driver of costs within the work management category, primarily due to resourcing and wage rates. Operations management is driven by our emergency and repair workloads, both of which have been subject to independent review and challenge by Arup. Further detail can be found in the Emergency Services and Repair Services appendices.

As part of our ongoing commitment to reducing our customers' bills, we are committing to a 1% year-on-year efficiency factor, creating a total saving, pre-allocation, of £30m over the course of the price control.

6.1 b) Policy

Policy and legislative requirements will continue to be a significant driver of our operational activities in GD2. Where policy decisions are outstanding – such as smart metering – we have built our plan based upon clear and reasonable assumptions, articulated within the relevant opex appendix.

We do not anticipate any policy amendments in relation to work management and business support in GD2.

6.1 c) Scenarios and sensitivities

Our GD2 work management and business support costs are forecast based on the scenario of supporting and facilitating an organisation with a changing workforce demographic, characterised in both the employment basis (change in pension schemes) and the skills mix required to support the future of the network assets. Our activities are also set firmly in the context of a continued focus upon customer service and the steps we take to add value to the users of our network – especially those who are most vulnerable.

Further detail regarding the assumptions and sensitivities in our forecast can be found in section 6.10.

6.2 GD2 Outputs and price control deliverables

Discussion of our expected GD2 outputs and price control deliverables can be found in each of the detailed appendices.

6.3 Bespoke outputs

In GD2 we plan to extend our vulnerable customer support and have included £1.2m a year within our forecasts for a use-it-or-lose-it allowance for supporting flexibility in our vulnerable service provision, currently held within our business support costs. Further detail can be found in our Customer Service appendix.

Bespoke outputs in relation to IT and cyber security, the costs of which are included in business support, can be found in the IT and Cyber Security appendix.

6.4 Investment in existing assets

Work management and business support costs are overheads, and as such are not related to investment in new assets beyond supporting the relevant business department.

6.5 CBAs and EJPs

Work management and business support costs are overheads, and as such are not subject to cost benefit analysis (CBAs) or engineering justification papers (EJPs). Where our overheads are supporting work which would be subject to a CBA or EJP, for example our capex or repex activities, the detail and analysis can be found in the relevant associated appendices.

6.6 Cost efficiency

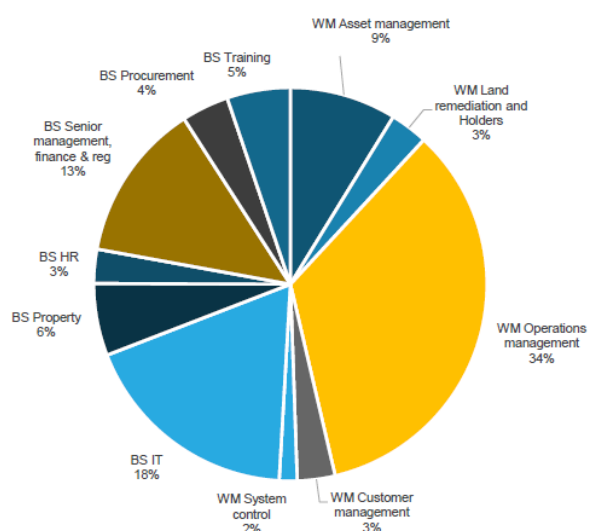
As demonstrated by O, work management is subject to industry regression testing, which demonstrates our cost efficiency to be within the upper quartile. However, we have sought to further test the efficiency of our expenditure and have therefore engaged Arup to undertake independent assessment of both our work management and business support costs. This has the added benefit of providing an efficiency assessment of our business support costs, which are not subject to industry regression testing due to the wide variations of the allocation methodology used.

Arup independent benchmarking

Arup has undertaken independent assessment and benchmarking of our pre-allocation work management and business support costs against how we deliver our service to our customers. A supporting report from Arup is provided alongside this appendix, with the content discussed below.

Areas of critical strategic importance were identified and reviewed, on the basis of the high proportion of costs for which they account, as shown by Figure 11:

Figure 11: Total work management and business support costs



Areas assessed by Arup were:

- Asset management
- Operations management
- Senior management, finance and regulation

Arup also selected the following additional functions for review, given their potential impact on the business, and the value created for customers:

- HR (noting that training is driven by HR)
- Stakeholder (costs held within HR for RIGs purposes)
- Customer management

In total, the areas subject to Arup's detailed review account for 82% of our work management and business support costs⁴.

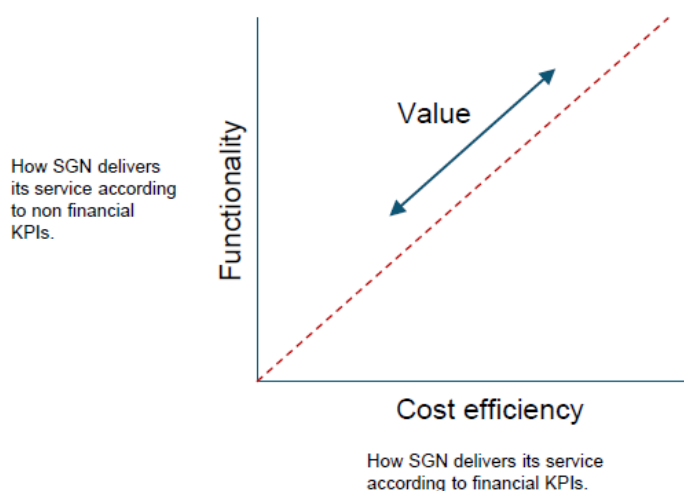
⁴ IT has been subject to separate Gartner assurance and is therefore outside of Arup's scope

Cost efficiency and functionality

In reviewing our work management and business support costs, Arup describes the relationship between cost efficiency and functionality, as seen in Figure 12:

Figure 12: Arup's assessment principle

Value can be considered as the frontier between 'Functionality' and 'Cost efficiency'



An improvement in cost efficiency can often sacrifice function – i.e. to save costs, an organisation may inadvertently diminish the value of customer service they provide. When assessing the above it is therefore important to identify an appropriate balance for the organisation in question, identifying the point at which reasonable costs are incurred in the areas which drive customer value. Arup recommend that a 'balanced scorecard' is required – i.e. a model which drives customer value by achieving totex efficiency, while delivering against our outputs.

Figure 13: Arup's cost vs function assessment

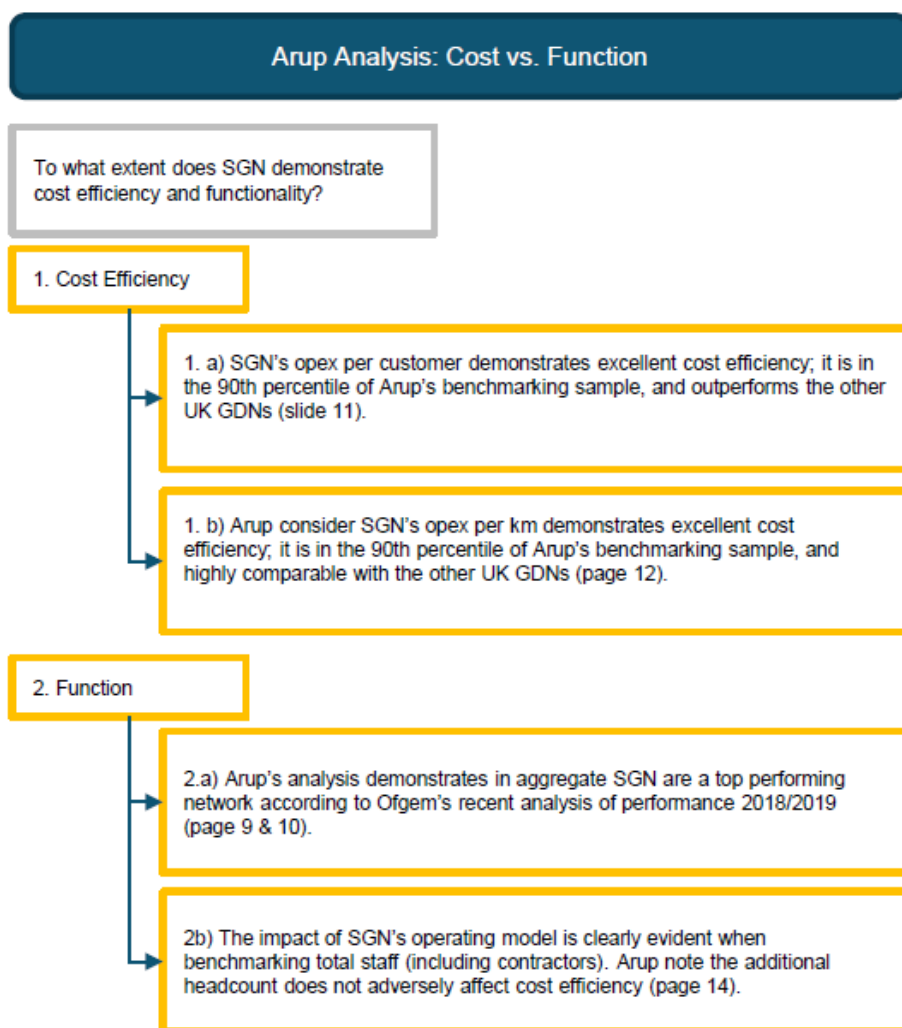


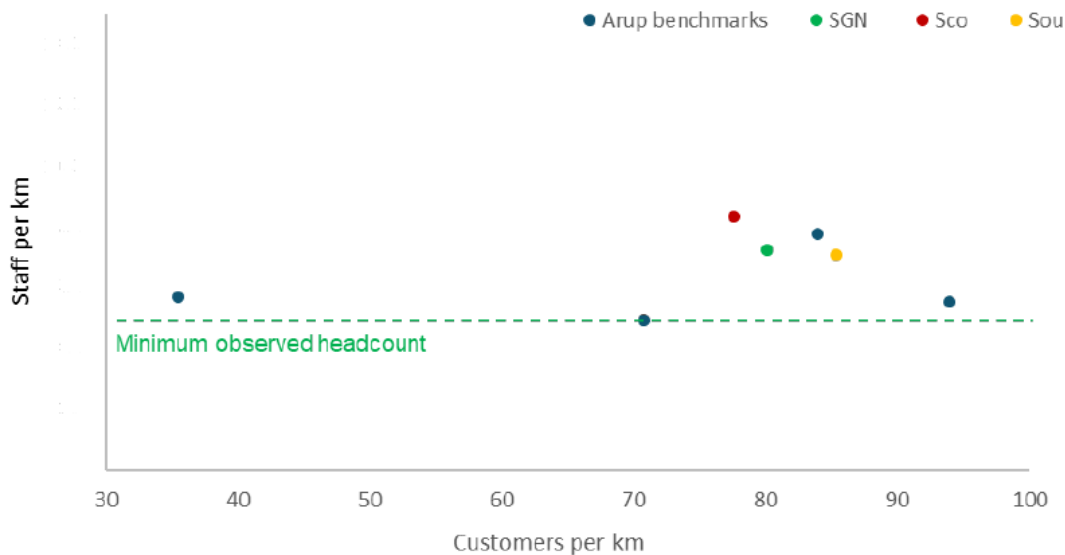
Figure 13 above confirms that Arup consider SGN to be “successfully achieving an optimal balance between cost efficiency and function”⁵.

⁵Arup benchmarking report, provided as supporting information

Internal and external benchmarking

Through their assessment, Arup has benchmarked our opex expenditure against external comparators, by calculating unit rates against a variety of metrics, as follows:

Figure 14: Staff per kilometre



Staff per kilometre can be used as an indicator of the relative number of employees against the overall length of the network. Our Scotland network has a greater number of staff per kilometre than Southern, in-line with the relatively lower number of customers associated with a more sparse area of the network.

We show a relatively higher number of staff per kilometre than the benchmarked sample, due to unique factors within our operating model, such as:

Active contractor management

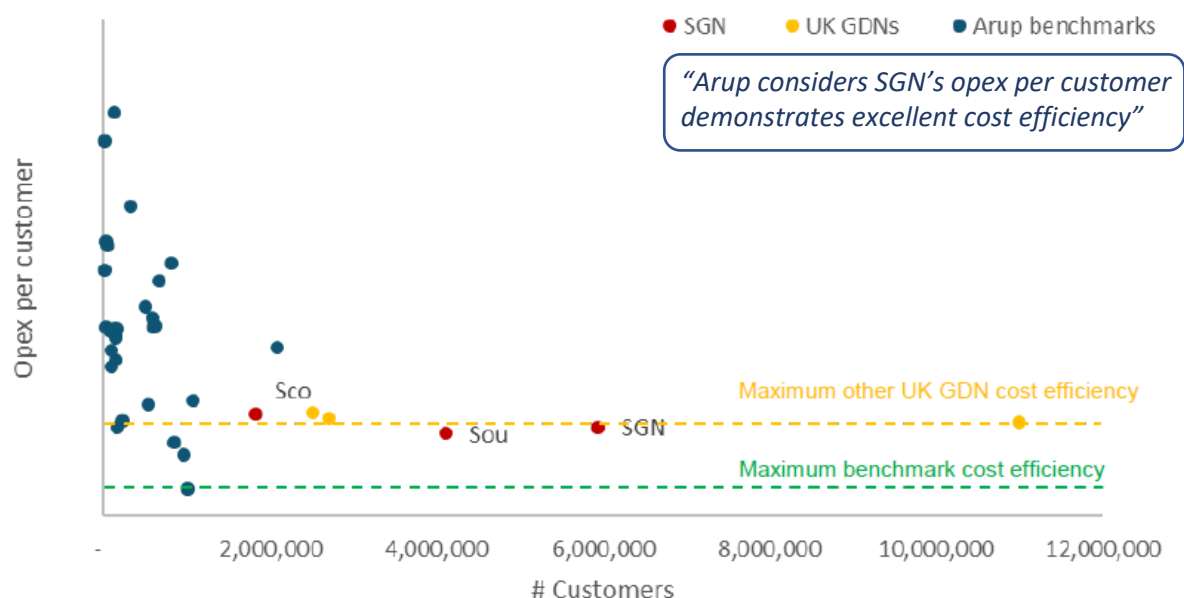
Our strategic decision to actively manage several smaller contractors, in contrast to a larger framework agreement, creates an additional workload which requires increased in-house resources. (it should be noted that this delivers an overall opex savings due to the removal of management overheads within the contracts themselves);

Decentralised operating model

Our relatively de-centralised operating model discussed in section 3.4 enables us to deliver a more dedicated and bespoke service to our customers. While this creates an incremental additional requirement in depot resources, this strategy enables empowered resourcing decisions to be taken at a local level, creating a more efficient delivery by removing unnecessary process layers and avoiding the risk of re-work and/or duplication.

Our staff per kilometre unit rate could initially lead to the conclusion that our overall operating costs would be similarly relatively higher than seen in comparable organisations. However, consideration of our opex per customer unit rate demonstrates that this is not the case:

Figure 15: Opex per customer

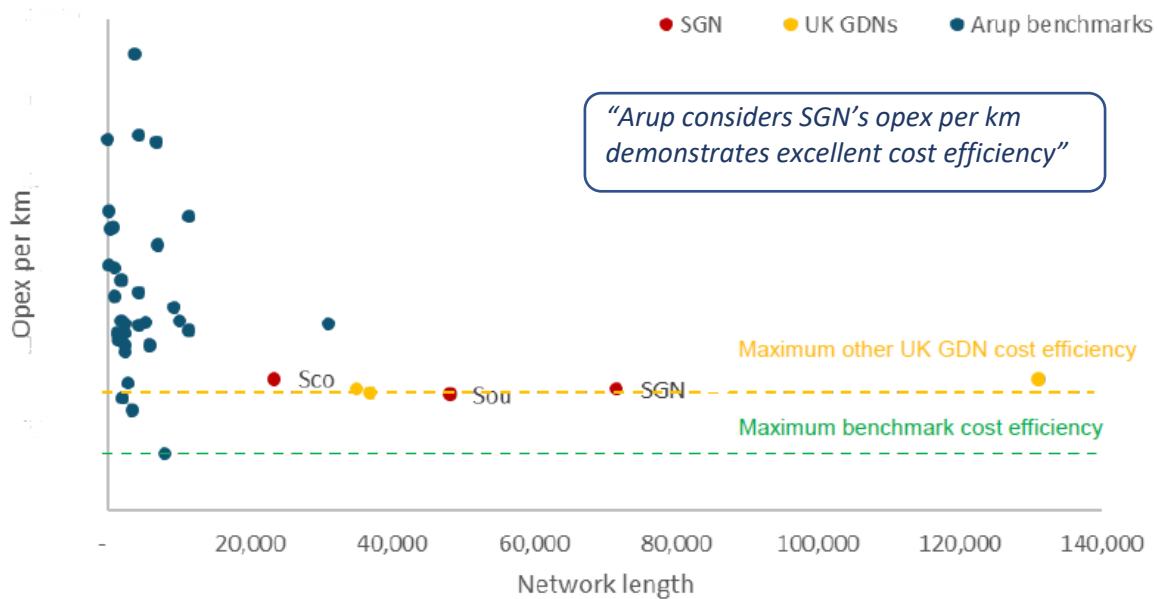


Opex per customer can be used as an indicator of the relative cost to serve customers, the relative cost of which can be impacted by the scale and density of the customer base. The chart above demonstrates as a unit rate, our opex cost per customer is in the 90th percentile of Arup's benchmarking sample, outperformed only by benchmarked networks which have a significantly reduced customer base. At a Southern network level and also at an SGN level, we outperform the UK cost efficiency line, meaning we are the top performing GDN in the UK. While many of the benchmarked organisations (shown in blue) show a relatively lower opex cost per customer, these networks are servicing a greatly reduced customer population and as such may experience lower workloads and therefore be subject to fewer cost drivers.

Our Southern network outperforms Scotland primarily due to the economies of scale through a larger customer base and relatively reduced sparsity, demonstrating the increased costs which these geographic challenges drive. Despite these challenges, Scotland is still shown to be highly efficient, as demonstrated by its outperformance against a benchmarked network with a larger customer base.

Our opex per customer demonstrates, despite certain elements of our operating model acting as cost drivers, such as our high repex workload and the associated work management costs driven by our in-house contractor supervision (leading to the relatively higher staff per kilometre seen above), our overall cost vs network length is not compromised and remains at the efficiency frontier.

Figure 16: Opex per kilometre



Opex per kilometre can be used as an indicator of the relative costs of servicing the network on a per-kilometre basis. Again, scale and density of the network are impacting factors.

Figure 15 above demonstrates that at a unit rate, our opex cost per kilometre is also highly efficient, again falling in the 90th percentile of Arup's benchmarking sample. We are highly comparable with the other UK GDNs, with our Southern network equalling the maximum UK efficiency observed, again only outperformed by benchmark networks with a significantly smaller customer base. Our Southern network outperforms Scotland primarily again due to the economies of scale through a relatively denser network and relatively reduced sparsity, demonstrating the increased costs which these geographic challenges drive. Again, despite these challenges and a relatively smaller customer base, our Scotland network still significantly outperforms a benchmark network of a larger size.

Our cost per kilometre is shown to be highly efficient despite us not being the largest network – and therefore not gaining the maximum benefit of network scale and density – demonstrating that our opex costs are more efficient than would be typically expected of a network of our size.

By considering our opex per customer and per kilometre unit rates in combination, we are able to demonstrate increased expenditure in certain areas has delivered functional benefits. This is the optimal balance between efficiency and function which Arup describes above. For example, our strategy of providing inhouse contractor supervision, while creating an increase in our work management costs, is balanced by an efficient kilometre unit rate. This demonstrates our strategic internal investment has enabled us to drive lower contract costs at the point of delivery, and also that our internal costs are more efficient than the equivalent contractor costs. Consideration of our opex costs in comparison to customer and network density also indicates that our approach is efficient even with the challenge of cost drivers such as geographic sparsity, as demonstrated by the comparable performance of our Scotland network against other GDNs without equivalent challenges.

6.7 Managing uncertainty: use-it-or-lose-it, volume drivers

As discussed in section 6.3, we intend to include a use-it-or-lose-it allowance aiming to support flexibility in our vulnerable service provision. This is included in our business support forecasts, and further detail can be found in our main Business Plan document.

6.8 Competition

Procurement

We are committed to facilitating and utilising a fair competitive market, and as such undertakes all procurement activities in line with the prevailing EU legislation. Further detail can be found in our Procurement appendix.

We also seek to drive competition and realise financial savings for the benefit of our customers wherever possible. Where necessary, we may change our approach if we consider this may enhance competition or create a new opportunity to deliver opex efficiencies. An example can be seen in our contracting strategy.

Contracting strategy

We utilise a varied mix of direct labour and contract (agency) labour in order to maximise output delivery versus operational expenditure.

For example, when undertaking our replacement (repex) activities, our Scotland network operates a ratio of 45% direct labour and 55% contracted labour, while our Southern network operates a ratio of 10% direct labour to 90% contracted labour. This variation in strategy between networks is primarily in response to the differing contractor markets and workload – for example the Scotland market was previously dominated by a large contractor with a direct workforce. At the start of GD1, we took the strategic decision to in-source our replacement work and as such we gained many of the employees as our own direct resources through TUPE arrangements. In Southern, our primary contractor delivered the work through a series of sub-contractors, and as such we were able to reduce overheads by building relationships directly with the smaller subcontracting organisations.

Our strategy continues to favour utilising a large number of smaller contractors, rather than a single larger contractor. By avoiding reliance on a single organisation, we increase our operational resilience and reduce our financial risk in the event of contractor company failure. The key benefit however is through the creation of high cost efficiencies – by working with smaller contractors, we remove the management overhead and reduce the procurement costs from the contract, and instead provide the management function in-house. This enables us to drive performance through close active management and ensure that our commitment to quality and wider policies is also reflected in the work delivered. We create a competitive market by issuing tenders appropriate for a wider range of organisations.

As an example, our previous emergency contract utilised through GD1 in our Southern network enables us to benchmark our internal costs. For example we utilise historic unit rates and job durations to benchmark our direct labour emergency service against the equivalent contractor unit rates and use the comparison to drive cost reductions in both areas.

Independent evaluation of our approach has led Arup to conclude that our contracting strategy is a key success factor in our organisational approach, commenting that it is: “reflective of a more agile, high performing organisation and appropriate for the delivery of a high functioning network”, and they also believe the “active management of smaller contractors to be a good fit for our SGN operating model.”

Further detail on our contracting strategy can be found in the Workforce Management appendix (009) and within the relevant detailed appendices for Emergency Service and Repair.

6.9 Real price effects

Our GD2 work management and business support forecasts do not include any anticipated real price effects.

Ofgem has determined the GD2 price control will use CPIH as the measure of inflation through which allowances should be adjusted year on year. While we consider CPIH to be a reasonable indicator of overall prices, our labour costs typically tend to exceed this index. As such, we have experienced real price effects in excess of those which would be applied through CPIH. We discuss this further, and propose alternative indices, in our Cost Efficiency appendix.

Costs in this appendix are shown in 2018/19 prices, and are subject to the following cost drivers:

- Reduction in non-formula work undertaken in resource downtime (such as meter work) due to the smart metering programme gradually replacing the legacy meters to which our commercial contracts apply. In order to continue to resource our peak winter emergency workloads, we must maintain a stable workforce regardless of any complementary work, and as such, our overheads are fixed. Non-formula work such as complementary meter work creates an efficiency by removing an element of these overheads from opex. However, as this complementary work reduces, this results in a reduction in the proportion of overheads which can be allocated into non-formula work, and as such a greater proportion of the costs are retained in opex. Further detail in relation to the use of emergency waiting time and our workforce requirements can be found in the Emergency Services appendix;
- Land activities will require some specific project funding, primarily to cover secure boundary fencing, new safety signage and re-inspection of the gasholder frames in 2021/22. Funding is also required for the repainting of holders in line with our seven-year policy, although our strategy involves use of a new material which is expected to extend future paint lifecycles. Further detail can be found in the Property appendix;
- Increase in IT expenditure, primarily in relation to cyber security and also general mandatory business change, driving opex investment. Further detail can be found in the IT appendix;
- Audit, finance and regulation show an increase at the end of GD2 in anticipation of significant regulatory activity within the industry. For example implementation of the Ofgem Switching Significant Code Review, and the BEIS Code Reform. In preparing for GD2, we have experienced a new process with new and emerging requirements, which has driven increased demands within our stakeholder and regulatory activities. There is the expectation that similar, or higher, levels of activity to those seen at the end of GD1 will be required throughout GD2 to prepare for the new price control (GD3).
- Due to an increase in 'D business' retirees during GD2, it is anticipated that a year-on-year increase will be seen in training as a result of apprenticeships and trainee positions being created to ensure a sufficient level of knowledge and resourcing, as well as to facilitate succession planning to build a resilient workforce for the future. This will be partially mitigated by a reducing cost pressure due to D business retirees. A particular focus will be on developing a wider skills base – this will include new skillsets to support future energy solutions and the transition to net zero, as well as enhancing our organisational people skills - implementing our People Management strategy and ensuring our employees have robust people management skills. The use of HR Business Partners will assist managers in becoming more empowered to make localised decisions, reducing the amount of transactional HR activity and reducing the requirements on the centralised function. There will also be a greater emphasis on identifying and developing leaders for a changing future in an environment of increasing employee churn – through talent management, succession planning and leadership development. Further information can be found in the HR and Workforce appendix;
- Creation of added-value customer roles: Local Area Energy Plans Officers (LAEP) to coordinate with Local Authorities and Infrastructure Developers, and a Vulnerable and Social Manager to liaise and assess vulnerable customer needs. Further information can be found in the Customer Strategy appendix; and
- Increase in anticipated procurement costs due to an increase in scope to include post contract commercial support for major works and repex.

Cost increases relating to the incremental pension deficit (post 2013 pensionable service) are charged to totex. Prior to this, established deficits (pre-2013 pensionable service) were charged to non-controllable outside of totex. We are seeing a move of deficit payments into totex in GD2. This commenced in 2018/19 and will continue throughout GD2 on an increasing basis. These costs are ringfenced within Operations Management (pre-allocation).

6.10 Financial summary

Funding rationale

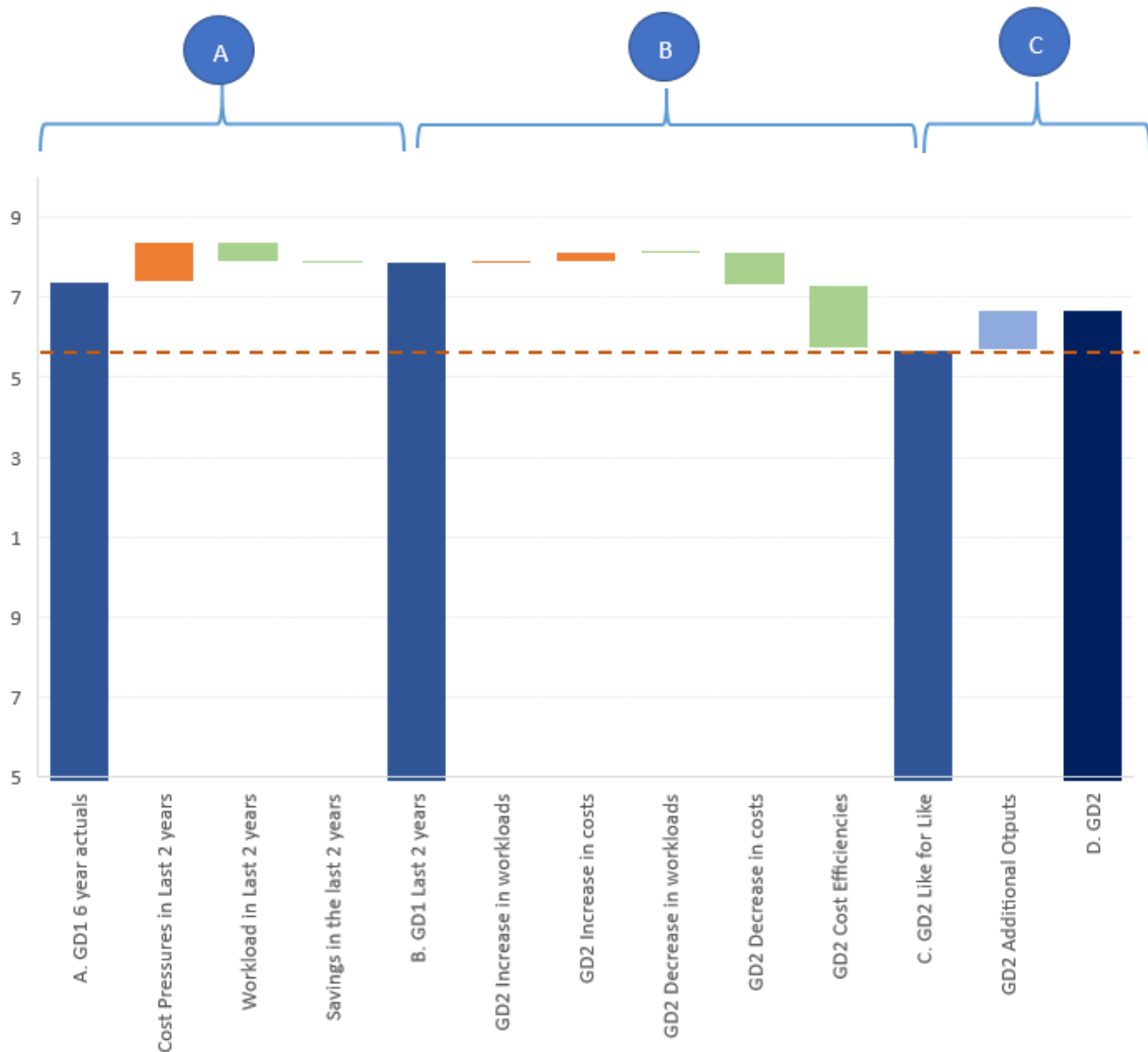
For the purposes of the business plan submission on 9 December we have made our current forecast on the following assumptions:

- Reductions in repair and emergency workloads as a result of repex activities being partially mitigated by the anticipated increase in Smart Meter interventions;
- An assumed 5% D to C churn, resulting in reduced employee costs;
- Forecasts include the impact of the SGN C Business pay deal, commencing in 2018;
- Incremental pension deficit payments now being charged to totex (primarily impacting Operations Management);
- Holder and land continues to include holder (Provan) and land remediation for the regulated business;
- Overhead cost adjusted in line with expected loss of meter work and associated return of costs from non-formula; and
- Continuation of the Management Services Agreement with SSE, with reduced IT services.

The costs used to inform this forecast are based on current staffing costs and historical workloads, with a 1% efficiency factor applied year-on-year, driven by continued process improvements. This will deliver a total benefit to customers of £30m (pre-allocation) across the GD2 period, demonstrating our ongoing commitment to keeping costs down.

Figure 17 below demonstrates a trace between our GD1 to GD2 costs in relation to work management:

Figure 17: Work management trace (Excl holders and land)



A: Movements in the final two years of GD1 compared to the first six years:

- Increase of £1m average a year due to pay award;
- Allocation of overheads across business activities decreasing opex overheads by £0.5m average a year.

B: Movements from the last two years of GD1 to GD2, excluding new outputs:

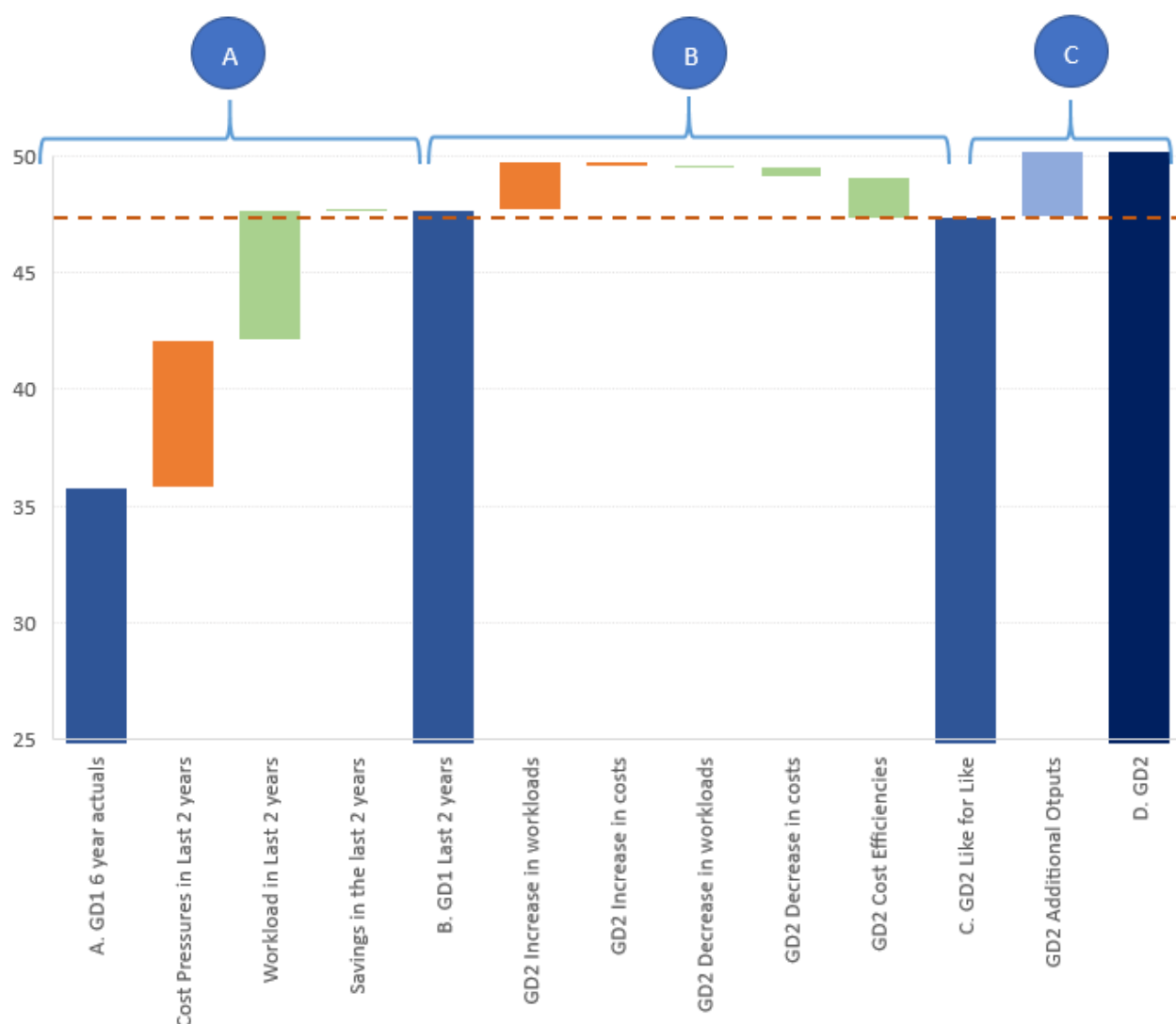
- Increase in incremental Pension Deficit (additional £1.2m) offset by the D to C Business churn (saving £1m), resulting in an increase of £0.2m average a year;
- Allocation of overheads across business activities decreasing opex overheads by £0.8m average a year.
- Cost Efficiency delivering £1.6m average decrease a year.

C: Additional outputs in GD2

- LAEP Officers and Environmental Personnel creating an additional £1m average a year.

Figure 18 below demonstrates a trace between our GD1 to GD2 costs in relation to business support:

Figure 18: Business support trace (Incl IT, excl training)



A: Movements in the final two years of GD1 compared to the first six years:

- Increases due to pay award, costs associated with the GD2 price control project and growing opex IT expenditure of £11.9m average a year.

B: Movements from the last two years of GD1 to GD2, excluding new outputs:

- Increasing IT expenditure creating an additional £2.1m average a year;
- D to C business churn creating a saving of £0.3m average a year.
- Allocation of overheads across business activities decreasing opex overheads by £0.4m average a year;
- Cost efficiency delivering £1.7m average decrease a year.

C: Additional outputs in GD2:

- Customer vulnerability allowance creating an increase of £1.2m average a year;
- Additional opex expenditure associated with cyber, open data and DCC membership creating an additional £2.2m average a year.

Table 11 and Table 12 show our pre-allocation overheads for the GD1 to GD2 period:

Table 11: Pre-allocation overheads (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Asset management	16.2	17.3	18.5	18.5	16.6	15.5	17.0	17.0	16.7	16.4	15.9	15.4	15.0
Land remediation and holders	3.8	7.3	13.7	7.2	9.6	18.3	3.6	3.6	7.5	11.3	6.1	3.6	3.5
Operations management	64.0	63.4	61.3	62.7	63.8	68.6	68.5	66.2	66.8	68.5	67.3	66.1	69.9
Customer management	6.1	5.4	4.9	5.2	4.8	5.7	5.8	5.8	5.9	5.8	5.8	5.7	5.6
System control	2.9	2.8	2.9	2.8	2.8	2.5	2.8	2.8	2.8	2.8	2.7	2.7	2.6
Total work management	93.1	96.2	101.3	96.5	97.7	110.6	97.8	95.4	99.7	104.8	97.8	93.5	96.7
IT and telecoms property	21.2	22.6	24.1	27.3	27.7	36.9	33.1	29.2	31.7	33.7	35.7	37.4	39.3
Management	10.2	10.5	11.1	11.9	10.5	10.9	10.3	10.3	11.5	11.9	11.9	11.8	11.8
HR & non-operational training	2.4	4.2	4.2	4.2	4.4	5.9	5.3	5.3	6.6	6.4	6.3	6.4	6.2
Senior management, finance and regulation	20.3	21.7	22.4	22.8	23.3	23.0	26.9	25.8	22.9	22.5	23.9	24.7	23.6
Procurement and stores	3.1	3.0	3.2	3.5	4.5	6.5	7.4	7.4	7.3	7.3	7.2	7.1	7.0
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	9.4	11.4	11.0	10.7	10.3
Total business support	63.5	70.9	78.9	82.9	79.2	89.2	89.8	84.7	89.4	93.3	96.0	98.2	98.3
Transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	23.9	23.6	23.3	23.0	22.7
Total transport, plant and tools	30.9	28.0	23.9	23.4	22.6	26.5	24.5	23.4	23.9	23.6	23.3	23.0	22.7
Total overheads(*)	187.5	195.1	204.2	202.7	199.5	226.3	212.1	203.5	213.0	221.7	217.1	214.7	217.6

(*) this excludes expenditure on the innovation team and SIUs

Table 12: Average Pre-allocation overheads (SGN level)

SGN (£m)	Avg First 6 years	Avg Last 3 years	Avg GD2
Asset management	17.1	16.5	15.9
Land remediation and holders	10.0	8.5	6.4
Operations management	64.0	67.8	67.7
Customer management	5.4	5.8	5.8
System control	2.8	2.7	2.7
Total work management	99.2	101.3	98.5
IT and telecoms	26.6	33.1	35.6
Property management	10.8	10.5	11.8
HR & non-operational training	4.2	5.5	6.4
Senior management, finance and regulation	22.3	25.2	23.5
Procurement and stores	4.0	7.1	7.2
Training	9.5	6.6	10.6
Total business support	77.4	87.9	95.0
Transport and plant	25.9	24.5	23.3
Total transport and plant	25.9	24.5	23.3
Total overheads(*)	202.5	213.7	216.8

Table 13 demonstrates our total overheads following allocation into their relevant business area, consistent with the methodology described above and how on a percentage basis the overheads are split.

Table 13: Allocation of overheads to relevant business area (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Opex	97.5	103.2	111.6	111.8	105.2	127.6	113.9	111.0	116.7	122.8	119.4	117.6	120.9
Repex	55.9	56.0	55.2	52.9	53.3	55.4	54.0	50.1	54.3	55.3	54.2	54.2	56.2
Capex	23.5	25.6	25.7	26.0	27.1	29.5	30.0	28.3	29.6	31.4	31.6	31.2	29.3
Non-formula	9.3	8.9	9.0	8.4	8.8	9.2	9.3	9.2	8.5	8.3	8.1	7.8	7.5
Non-regulated Innovation (Overhead apportionment only)	1.3	1.0	2.0	2.5	3.9	3.5	3.8	3.8	3.3	3.2	3.2	3.2	3.1
	-	0.4	0.7	1.1	1.1	1.1	1.1	1.1	0.6	0.7	0.6	0.7	0.7
Total overheads	187.5	195.1	204.2	202.7	199.5	226.3	212.1	203.5	213.0	221.7	217.1	214.7	217.6

Table 14: Average Allocation of overheads to relevant business area (SGN level)

SGN (£m)	Avg First 6 years	Avg Last 3 years	Avg GD2
Opex	109.5	117.3	119.5
Repex	54.8	53.1	54.8
Capex	26.2	29.3	30.6
Non-formula	8.9	9.2	8.0
Non-regulated	2.4	3.7	3.2
Innovation (overhead apportionment only)	0.7	1.1	0.7
Total overheads	202.5	213.7	216.8

Total overheads have shown a gradual increase across the period, primarily due to increased labour costs and the impact of the SGNC pay deal commencing in 2018/19. This is offset by a decline in the final two years of the period due to the gradual increase in SGN C resources and the commensurate reduction in SGN D resources, resulting in a greater proportion of employees enrolled in less expensive pension contracts.

Table 15: GD2 forecast expenditure profile - Post-allocation overheads (SGN level)

SGN (£m)	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24	24/25	25/26
Asset management	6.2	5.0	5.2	4.8	6.1	6.2	6.1	6.1	6.4	6.0	5.5	5.5	6.0
land remediation and holders	3.8	7.3	13.7	7.2	9.6	18.3	3.6	3.6	7.5	11.3	6.1	3.6	3.5
Operations management	26.6	26.9	26.8	26.2	22.8	26.1	25.8	24.9	24.6	24.7	24.0	23.4	25.4
Customer management	3.6	3.4	4.1	3.7	3.4	4.8	4.4	4.5	4.6	4.5	4.5	4.4	4.4
System control	2.4	2.4	2.2	2.0	1.7	1.7	2.0	2.0	1.9	1.9	1.9	1.9	1.9
Total work management	42.6	45.0	52.0	43.9	43.7	57.1	42.0	41.1	45.1	48.4	41.9	38.8	41.2
IT and telecoms	11.7	12.7	11.9	17.0	15.4	21.6	22.2	19.6	21.8	23.0	24.2	25.4	27.0
Property management	6.5	6.7	5.7	7.2	6.2	5.9	6.3	6.3	7.3	7.5	7.4	7.4	7.5
HR & non-operational training	1.3	2.7	2.7	3.1	3.3	4.6	4.1	4.1	5.3	5.2	5.1	5.2	5.1
Senior management, finance and regulation	9.7	10.3	8.1	10.6	10.6	13.0	15.3	14.6	10.8	10.5	13.3	13.9	13.3
Procurement and stores	1.0	0.7	0.4	0.7	1.1	2.2	1.5	1.5	1.5	1.5	1.4	1.4	1.5
Training	6.3	8.8	13.9	13.1	8.8	6.1	6.9	6.8	9.4	11.4	11.0	10.7	10.3
Total business support	36.6	41.8	42.7	51.7	45.4	53.3	56.2	52.8	56.1	59.2	62.4	64.0	64.8
Transport, plant and tools	18.3	16.4	16.9	16.2	16.1	17.1	15.7	17.1	15.5	15.3	15.0	14.8	14.9
Total transport, plant and tools	18.3	16.4	16.9	16.2	16.1	17.1	15.7	17.1	15.5	15.3	15.0	14.8	14.9
Total overheads(*)	97.5	103.2	111.6	111.8	105.2	127.6	113.9	111.0	116.7	122.8	119.4	117.6	120.9

(*) this excludes expenditure on innovation and SIUs

Table 16: Average GD2 forecast expenditure profile - Post-allocation overheads (SGN level)

SGN (£m)	Avg First 6 years	Avg Last 3 years	Avg GD2
Asset management	5.6	6.2	5.9
Land remediation and holders	10.0	8.5	6.4
Operations management	25.9	25.6	24.4
Customer management	3.8	4.6	4.5
System control	2.1	1.9	1.9
Total work management	47.4	46.7	43.1
IT and telecoms	15.1	21.1	24.3
Property management	6.4	6.2	7.4
HR & non-operational training	2.9	4.2	5.2
Senior management, finance and regulation	10.4	14.3	12.4
Procurement and stores	1.0	1.7	1.4
Training	9.5	6.6	10.6
Total business support	45.3	54.1	61.3
Transport and plant	16.8	16.5	15.1
Total transport and plant	16.8	16.5	15.1
Total overheads(*)	109.5	117.3	119.5

Business Plan Data Templates (BPDTs)

Below we have included direction to the relevant section of the BPDTs on a summary and activity-specific basis, broken down into work management and business support sub-categories. Where possible, we have also included reference to the rows in which total values can be found. Where this is not possible, the activity is included in overall costs.

Cost influences and trends are discussed in section 6.9.

Categories	Summary (pre-allocation)	Activity-specific (pre-allocation)	Opex (post-allocation)	Repex (post-allocation)	Capex (post-allocation)
Work Management					
Asset Management	-	-	2.01 Row 41	3.07 Row 58	3.07 Row 29
Land remediation	2.01	2.20 Row 12	2.01	-	-
Holders	2.01	2.19 Row 12	2.01	-	-
Operations management	-	-	2.01 Row 60	3.07 Row 58	3.07 Row 29
Customer management	-	-	2.01 Row 79	3.07 Row 58	3.07 Row 29

System control	-	-	2.01 Row 98	3.07 Row 58	3.07 Row 29
Business support					
IT and telecoms	2.05 Row 12	2.07 Row 23	2.01 Row 228	3.07 Row 61	3.07 Row 32
Property management	2.05 Row 13	2.08	2.01 Row 247	3.07 Row 62	3.07 Row 33
HR and non-operational training and stakeholder	2.05 Row 15	2.06 Row 136	2.01 Row 266	3.07 Row 64	3.07 Row 35
Audit, finance and regulation	2.05 Row 16	2.06 Row 148	2.01 Row 285	3.07 Row 65	3.07 Row 36
Insurance	2.05 Row 14	2.09 Row 48	2.01 Row 304	3.07 Row 63	3.07 Row 34
Procurement	2.05 Row 17	2.06 Row 160	2.01 Row 323	3.07 Row 66	3.07 Row 37
CEO and group management	2.05 Row 19	2.10 Row 18	2.01 Row 342	3.07 Row 68	3.07 Row 39
Stores and logistics	2.05 Row 18	2.06 Row 172	2.01 Row 361	3.07 Row 67	3.07 Row 38
Training	2.14 Row 11	2.14 Row 11	2.01 Row 385	-	-

6.11 Assurance

Our Business Plan, including appendices, has been subject to a rigorous assurance process which is detailed in Chapter 3 of the Plan and the Board Assurance Statement.

Our Chief Financial Officer was appointed as the Sponsor for the Work Management Business Support appendix and associated Business Plan Data Templates (BPDTs), which have been through the following levels of review and assurance:

First Line

This was undertaken at project level by the team producing the document, as a regular self-check or peer review.

Second Line

This was undertaken independently within the organisation to review and feedback on product development, including a workshop on resource modelling for GD2. Internal Audit reviewed the third line assurance work

conducted by Ove Arup and Partners against scope.

Both Senior Manager and Director sign-off was obtained and our RIIO-GD2 Executive Committee: (1) considered the appropriateness of assurance activity for the Appendix and (2) provided assurance to the SGN Board that the Business Plan meets Ofgem's assurance requirements.

Third Line

This was undertaken by external advisors and groups providing critical challenge during the development of products within the Business Plan. In addition to the feedback and challenge provided by the Customer Engagement Group (CEG) and Customer Challenge Group (CCG), this Appendix was developed after consultation with and advice from:

Advisor / Group	Contribution
Ove Arup and Partners	(1) Work management and business support costs were subject to independent assessment and benchmarked against the other GDNs in addition to comparable European network organisations. (2) Workload model for emergency, repair and maintenance (which drives overhead requirements captured in Business Support) was reviewed. (3) Assessment against Business Plan guidelines.

Fourth Line

This was undertaken by independent and impartial external providers, who provided a detailed and comprehensive report to both the Executive Committee and Board of Directors:

Advisor / Group	Contribution
Ove Arup and Partners ('Clean' Team)	Review of Appendix against Ofgem's assurance requirements.
PwC	Business Plan Data Template review; Opex Cost Matrix; Controllable Activity Costs, Business Support Group, Business Support Allocation, IT & Telecoms Group, CEO & Corporate - Network costs, FTE and Insource / Outsource and Capitalised Overheads.

7 Glossary

All acronym definitions and explanations can be found within the Glossary appendix.