

# RIIO GD2 Business Plan Appendix

## Enhanced Engagement

December 2019



**SGN**

Your gas. Our network.

[www.sgn.co.uk](http://www.sgn.co.uk)

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# 1 Customer priorities underpinning the SGN business plan

## 1.1 Introduction

We are strong supporters of enhanced engagement to ensure that we meet the evolving expectations of our customers and stakeholders. We believe that we make better decisions in the interests of customers and all our stakeholders when we understand their requirements, needs and priorities.

The creation of our business plan has been underpinned by a programme of customer and stakeholder engagement, with lively dialogue, opportunities for challenge, review and iteration.

Over the last two years we have actively engaged with our stakeholders and customers to discuss our developing plans for the next price control period and beyond. Building on our existing annual programme of stakeholder engagement, we have deployed a wide variety of engagement and analysis techniques to gather views from over 23,000 stakeholders and customers, which have been instrumental in helping to shape our emerging business plan. This appendix supplements the information provided in chapter 4a of our business plan.

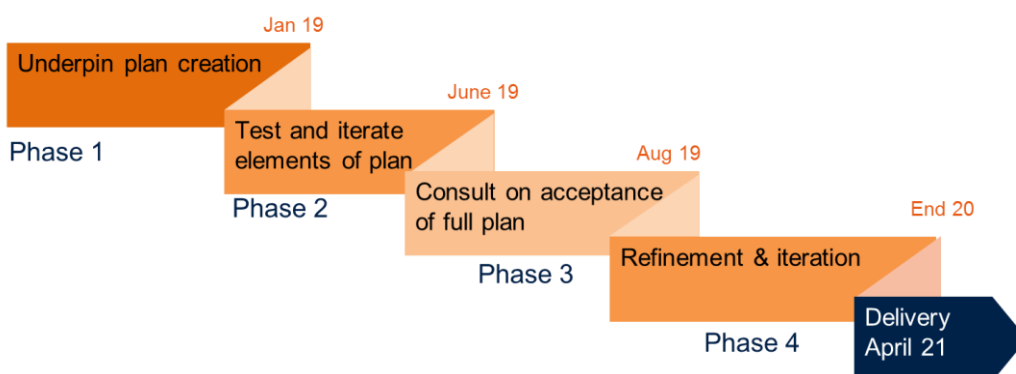
## 1.2 Overview of our engagement plan

Our comprehensive programme of stakeholder engagement has ranged from hosting live workshop events involving multiple stakeholders through to one-to-one bilateral meetings with topic experts, and a large variety of engagement activities in between. Direct engagement with customers and stakeholders has been supplemented by an independent programme of qualitative and quantitative research and analysis, utilising the skills of specialists such as research agencies and consultants where required.

At the outset we broke down our engagement programme into four broad phases to listen and respond to the views of customers and stakeholders in the creation and iteration of our business plan. These phases were conceptual, and although broadly time-bound, in some cases were overlapping.

The four phases of our engagement were as follow:

- ✓ Phase 1: to underpin creation of the draft plan
- ✓ Phase 2: to test and iterate elements of the plan
- ✓ Phase 3: to consult and test acceptability of the plan
- ✓ Phase 4: to iterate and refine the plan



An overview of our engagement plan is illustrated by the Gantt chart below, identifying the main engagement activities undertaken between April 2018 and December 2019 (see section 4 for further detail). An 'insight inventory', detailing the 104 documents and research reports used to inform our business plan proposals, is also provided at the end of this appendix.

Item	Description / Topic	2018											2019											
		FY 2018-19											FY 2019-20											
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Phase 1	Listen & Create the plan																							
Phase 2	Test & Iterate (elements of the plan)																							
Phase 3	Consult on the plan																							
Phase 4	Refine the plan																							
Public document milestone	Summary of early thinking on priorities & long-term context																							
Document milestone	Draft BP																							
Document milestone	Interim BP submission																							
Public document milestone	Final BP for submission to Ofgem																							
National Workshop	Moving Forward Together - Southern 2018																							
National Workshop	Moving Forward Together - Scotland 2018																							
National Workshop	Moving Forward Together - Southern 2019																							
National Workshop	Moving Forward Together - Scotland 2019																							
Specialist round-table event	Positive impact workshop (Southern)																							
Specialist round-table event	Positive impact workshop (Scotland)																							
Specialist round-table event	Safe & Efficient workshop (Southern)																							
Specialist round-table event	A shared future workshop (Scotland)																							
Specialist panel	Future of Gas 1 (Scotland)																							
Specialist panel	Future of Gas 2 (Scotland)																							
Webinar	What do customers want from a gas network?																							
Specialist round-table event	Environment & Sustainability (Scotland)																							
Specialist round-table event	Environment & Sustainability (Southern)																							
Specialist round-table event	Safety culture (Southern)																							
Workshop and Survey	Connecting to SGN's network																							
Survey and bilateral exchanges	Large Gas Customers																							
Specialist interviews	Financeability expert stakeholders																							
Specialist round-table event	Distribution entry connections (Biomethane) (Southern)																							
Specialist round-table event	Distribution entry connections (Biomethane) (Scotland)																							
Specialist round-table event	Social value round table (Southern)																							
Specialist round-table event	Carbon Monxide (CO) roundtable (Southern)																							
Specialist round-table event	Carbon Monxide (CO) roundtable (Scotland)																							
Specialist interviews	SIUs - local councils, etc																							
Customer Panel	Financeability customer panel																							
Survey	Local Authorities survey																							
Webinar	Energy Intensive User Group																							
Customer research	Acceptability testing - Planning																							
Customer research	Acceptability testing - Qualitative workshops																							
Customer research	Acceptability testing - Quantitative																							
Customer research	Exploration Report																							
Customer research	Prioritisation																							
Customer research	Valuation																							
Customer research	Final Report																							
Customer research	Additional WTP testing																							
Customer research	Financial Risk (Scotland)																							
Customer research	Customer Service (Scotland)																							
Customer research	Environmental Action Plan (Scotland)																							
Customer research	Financial Risk (Southern)																							
Customer research	Customer Service (Southern)																							
Customer research	Environmental Action Plan (Southern)																							
Stakeholder research	Wave 1																							
Stakeholder research	Wave 2 (Depth Interviews)																							
Stakeholder research	Wave 3																							
Stakeholder research	Wave 4 (provisional)																							
Market Research - F. William	Fieldwork																							
Market Research - F. William	Report																							
Market Research - F. William	Feasibility Study																							
Gas networks collaborative engagement	Survey of National Stakeholders																							
Gas networks collaborative engagement	Analysis and planning next steps																							
Gas networks collaborative engagement	Collaborative engagement - Decarbonisation / Whole Systems																							
Gas networks collaborative engagement	Collaborative engagement - Vulnerable customer GSOPs																							
Digital Engagement	Various platforms supporting the wider programme of engagement																							
Bilateral conversations	Topic-specific stakeholders																							



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## 2 Commencing our engagement programme (pre-Phase 1)

At the very outset of our GD2 engagement programme we undertook several internal meetings and workshops designed to help us build-up a picture of:

- a) Who do we need to hear from?
- b) What decisions are we trying to make that we need to ask them about?
- c) How are we going to engage?

### a) Identifying and segmenting stakeholders and customers

We held internal meetings and workshops with senior managers across our business to explore the questions we were trying to answer and the decisions we were trying to make in order to develop legitimate business plan proposals (see **b)** below). These conversations identified the stakeholders that were most impacted and/or the most influential for different areas of our business and activities.

As a result, we designed an engagement programme which has allowed us to hear from the following people and organisations during the formulation of our business plan:

- Domestic customers, from a representative range of demographics, including those customers who are seldom heard from and/or vulnerable
- Small and medium sized businesses
- Future customers (typically non-bill payers aged 18 to 24 / 'millennials')
- Industrial customers, in particular very large gas users
- Consumer representative bodies
- Third sector organisations, specialising in supporting customers who struggle to afford their energy bills, may be vulnerable or are at risk
- Local authorities, community energy groups and Local Enterprise Partnerships (LEPs)
- UK and Scottish government
- Leaders from other sectors in specialised topics such as safety or sustainability
- Academics with an interest in topics such as energy futures and vulnerable customers
- Industry partners and peers, such as other utilities, Independent Gas Transporters/Utility Infrastructure Providers (iGTs/UIPs) and biomethane producers.

### b) Identifying key decisions

To ensure we were engaging with a purpose, we identified a long-list of over 60 decisions or questions we would need input from customers and/or stakeholders to be able to answer, which we were able to broadly group into 13 key decisions.

Having a clearer picture of the topics of conversation we wanted to have with customers and stakeholders allowed us to identify engagement mechanisms we thought would be most appropriate and give us robust insight which would genuinely inform our decision-making.

The insight we have gathered from our engagement activities which have informed our decisions is described in more detail in section 5 below.

### c) Tailoring our approach to engagement

The stakeholder exchanges we have undertaken throughout our GD2 engagement programme have provided insight, views and perspectives from a wide range of different stakeholders and customers. Topics

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that are more complex in nature, requiring trade-offs to be made and with nuanced implications to decisions normally require a more considered, informed setting, where information can be shared and understood in an iterative process to facilitate reflective views and feedback. We have tailored our engagement programme to utilise a high number of workshops and direct engagements to ensure the insights generated are robust. These qualitative engagements have been supported by quantitative engagement with both stakeholders and customers, such as feedback surveys and online platforms.

**Customer research segmentation:** we specifically sought the views of harder to reach customer groups, customers in vulnerable circumstances, future customers, small and medium sized business customers, large gas users and businesses who make connections to our network (third parties and biomethane producers). We have also looked for differences in our customers' views by region, age, gender, income levels, faith, ethnicity and other demographics.

**Vulnerable and harder to reach customers:** circumstances which can make customers vulnerable include advanced age, pregnancy or very young children, disability, ill health including mental health, not speaking English as a first language and living in fuel poverty. Customers who can be harder to reach may include some of those who are vulnerable, but may also include future customers (millennials), ethnic minorities and carers, or other customers in complex circumstances. For both vulnerable and harder to reach customers we tailored our research methods – for example using one to one in-depth interview techniques for vulnerable customers and trying to find trusted intermediaries to solicit the views of harder to reach groups.

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### 3 Independent customer research

As we embarked upon Phase 1 we identified that we needed to hear from our customers in order to create a business plan that would deliver valued outcomes and meet their expectations. Consequently, with the help of specialist independent research agencies we have undertaken a comprehensive programme of research to ensure we better understand customers' views in relation to the services we provide, both now and in the future.

The initial programme of customer research consisted of three stages:

- i. Exploration: a series of qualitative workshops where customers told us what they believed should be our key priorities
- ii. Prioritisation: a quantitative research technique, called MaxDiff analysis, was used to better understand how customers would rank the relative importance of different activities we undertake
- iii. Valuation: further quantitative research using willingness to pay analysis to understand how much, if anything, customers would be prepared to pay for improvements and enhancements to our services. This research provides a way of assessing the relative priorities of customers expressed in monetary values.

As our business plan began to take shape on the basis of what we had heard, during Phase 2 we undertook further research with customers to test the acceptability of our proposals. This consisted of further qualitative workshops and face-to-face and tele-depth interviews to get feedback from customers on our insight-informed plans for outputs and investments; and to check levels of understanding to inform the next phase of *quantitative* acceptability testing, that was undertaken during Phase 4 of our engagement programme.

Additionally, in Phase 3 we completed a further round of customer workshops in August 2019 to test and refine elements of our emerging business plan. These workshops and depth interviews with harder to reach customers asked participants to consider topics including:

- The sharing of risk between the company and customers (trading-off different payment mechanisms)
- Incentivising the creation of social value
- Investment in innovation
- Customer service ambitions and investment, including restoration times
- Support for vulnerable customers
- The elements of our environmental action plan, and the level of ambition we should aim for when addressing environmental impacts.

We have set up an online customer panel via a research agency that has been running since March 2019. This customer panel is an enduring engagement mechanism through which we can test a variety of ideas and content with customers who already have a good understanding of our role and what we do as a business. We have used the panel to test stimulus materials prior to embarking on workshops and to explore customers' attitudes in relation to financeability considerations such as intergenerational fairness (for example, trading-off savings on current bills vs potentially higher bills in the future).

We commissioned a second wave of willingness to pay customer research in September 2019, the findings of which were received during Phase 4 of our GD2 engagement programme. The results of this quantitative research, along with the quantitative findings from our customer acceptability testing, have been used to further inform and refine our final proposals contained in our December 2019 business plan.

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## 4 Stakeholder engagement and research

We have used a variety of engagement techniques to allow stakeholders the opportunity to have their say and influence our plans. Some important examples we used during the creation of our business plan are described in this section.

### 4.1 Moving Forward Together (MFT) workshops

Our Moving Forward Together (MFT) workshops represent key opportunities for us to hear from a broad range of stakeholders on a variety of topics of interest to them. We hold each round of MFT workshops in both of our network areas, helping us to understand areas of commonality and divergence in the views of our Scotland and Southern stakeholders. These are attended by representatives from a wide range of stakeholder organisations, and multiple topics are discussed on the agenda.

#### MFT March 2018 events held in London and Edinburgh

We discussed with stakeholders the context of the UK's energy challenge and the elements of the 'energy trilemma'. We then explored with stakeholders their views in relation to the strategic business priorities we had formulated in light of these challenges, what the implications might be for stakeholders' organisations and what we could do more of or should focus more on.

#### MFT November 2018 events held in London and Edinburgh

At these workshops we sought stakeholder views on what we could do less of in order to keep energy bills down. We then held breakout conversations with stakeholders to gather their views on ideas we were considering in relation to the customer priorities of acting safely, supporting those vulnerable in the community, keeping the gas flowing and future energy solutions.

#### MFT January/February 2019 events held in London and Glasgow

We worked with stakeholders to define a set of criteria they would expect us to consider when making engineering decisions relating to completing our mandatory gas mains replacement programme. This included gaining a consensus from stakeholders as to which were the most and least important criteria. Stakeholders also provided us with views in relation to their support for our proposals for supporting customers in vulnerable situations during RII GD2, and the other ideas we should be considering further.

### 4.2 Specialist panels

Our specialist panels are live workshop events specifically designed to allow for in-depth conversations on a designated subject. Stakeholders in attendance are subject-matter-experts on the topic in question, and provide us with views, challenges and recommendations pertaining to both our current activities and our future plans. These provide a forum for us to share our challenges and ask stakeholders to co-create solutions to those challenges.

#### Supporting our communities (Scotland), Supporting those at risk (Southern) - November 17 & January 18

Stakeholders shared best practice and helped identify ways we can provide support to customers who are harder to reach, in particular by working in partnership with stakeholder organisations and developing referral networks. We also explored ways in which we could measure the success of our interventions. The specialist panel members developed a list of criteria they would use to judge our performance in relation to dealing with a widespread loss of gas supplies incident. Stakeholders also shared views as to how we could improve our approach to carbon monoxide safety.

#### Fuel Poverty (Southern) - November 17 & January 18

Fuel poverty was discussed as a standalone topic in our Southern network in response to the increased



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challenge of achieving fuel poverty connections in England. Funding for central heating systems in our Southern network is much more limited than in Scotland. Stakeholders helped us to identify methods of maximising what funding is available and how this can be targeted at fuel poor households that would benefit the most from connecting to our gas network.

### **Future of Heat (Scotland) - August 18 & December 18**

The Scottish Government has set Scotland-specific carbon reduction targets that go beyond the UK-wide 2050 carbon reduction targets. To better understand how we might play a role in meeting Scotland's decarbonised energy needs we held Future of Heat specialist panels. Panel membership was made up of a range of specialist stakeholders working across the energy sector, including renewable technologies and academic experts. The panels provided an opportunity for stakeholders to present details of their activities; sharing knowledge and building collective understanding of the ongoing work in Scotland. The panel provided guidance on what could be considered certain and uncertain over the GD2 period, and what might drive choices when deploying heat solutions in the future. At the second meeting of the panel we shared updates of the work we had been undertaking on the gas quality pathway to net-zero carbon emissions and explored stakeholders' views in relation to the pathway.

### **Round-table events with experts on safety and sustainability – January 2019**

We held round-table events in London and Glasgow with specialists in the field of safety (Southern only) and sustainability (Scotland and Southern). These events provided us with feedback on our existing and emerging strategies, and recommendations for our future plans.

### **Connecting to the SGN network event – February 2019**

We held a workshop event in Gatwick for customers who engage with us through our third-party connections application process. This event provided us with the opportunity to discuss with these stakeholders the trends they expected to see in this market when thinking ahead to the GD2 period, what stakeholders would therefore expect to see in our business plans, and what they would like to see us doing to go the extra mile in the next price control period.

### **Distributed entry connections (biomethane) workshops – September 2019**

We held workshops in both London and Edinburgh for stakeholders who are involved in the process of connecting to our network in order to supply alternative forms of gas such as biomethane. At the workshops we received feedback from these stakeholders as to how they find our connections process, and how they would like to be engaged on an ongoing basis now and in GD2. We also shared our GD2 business plan proposals and targets in relation to biomethane, all of which were well supported by stakeholder in attendance.

### **Cross-sector roundtable on social value – September 2019**

In collaboration with a specialist consultancy we held a cross-sector roundtable in London to discuss social value. Stakeholders discussed the landscape of social value in the UK, what the challenges are and how we can progress the integration of social value considerations into businesses. Representatives from key government bodies and industry experts provided a wealth of knowledge and input that will help to shape our future activities in this area, for example, in relation to delivering valued outcomes for a bespoke social value incentive.

### **Carbon Monoxide (CO) roundtables – November 2019**

We held expert stakeholder roundtable meetings in London and Edinburgh to discuss our Carbon Monoxide (CO) strategy. At these externally facilitated meetings we updated specialist stakeholders on our progress towards our GD2 business plan and received feedback on both the content of our CO strategy and how we implement it. We also discussed our short-term actions to be undertaken in the run-up to GD2.

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### 4.3 Workshops on our three commitments

In August 2019 we held workshops with informed, expert stakeholders to test whether we had got our business plan proposals about right in the view of these knowledgeable audiences.

#### Safe and efficient network workshop – August 2019

This workshop was principally attended by stakeholders with expertise in the field of engineering and asset management. We presented our proposals in relation to our intended investment in asset integrity, the gas mains replacement programme, and how we had formulated our approach to future growth of the gas network. Stakeholders were invited to ask questions and debate the ideas presented to help us understand whether we had got our proposals right.

#### Positive social impact workshops – August 2019

We held these workshops in both our Scotland and Southern networks. At both events we explored with expert stakeholders our customer ambitions, levels of investment in customer satisfaction and configuring our strategy for supporting vulnerable customers including innovation. We also discussed restoration times following gas interruptions and how to set appropriate targets for fuel poverty connections in GD2. Finally, stakeholders were asked to help us prioritise the longer-term challenges on which we should focus our future engagement during GD2.

#### Shared future workshop – August 2019

At this workshop we discussed with subject matter expert stakeholders our proposals on the future of energy (building on the previous Future of Heat specialist panels) and our Environmental Action Plan (EAP). Stakeholders shared views in relation to whether our proposals felt appropriate, and the level of ambition they expected us to aim for.

### 4.4 Collaborative gas networks engagement - 2019

We collaborated with the other gas network companies operating in GB to engage with subject-matter-expert stakeholders on topics including the future role of gas networks in a decarbonised energy system and potential enhanced service standards for vulnerable customers. This activity was undertaken with the support of a research agency and specifically targeted at national stakeholders, who were otherwise likely to be contacted by five separate gas networks all seeking to discuss and understand broadly similar topics.

### 4.5 Surveys, depth interviews and meetings - 2018-2019

We've undertaken a series of 'waves' of stakeholder satisfaction surveys over the last 18 months. These surveys have given us valuable and consistent insight into our stakeholders' perceptions of our business and engagement. These have been supplemented by further depth interviews to give us a deeper understanding of the views of a range of stakeholder types.

We have undertaken specialist interviews on subject-specific topics including our Scottish Independent Undertakings (SIUs) and Financeability. Managers from our local workforce undertook a series of in-depth interviews with stakeholders such as the local councils and social housing providers covering the SIUs to discuss topics including decarbonisation and collaborative working. During September 2019 we worked with a specialist consultancy to undertake a programme of in-depth one-to-one telephone interviews, each lasting up to one-hour, with expert stakeholders representing different groups within the financial community. Interviews were conducted with debt investors, foreign equity investors, UK equity investors and credit rating agencies.

More generally, representatives from across our business have engaged with a wide range of stakeholders via ongoing bilateral meetings, often as part of day-to-day activities, and also to discuss matters specifically

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pertaining to GD2. These bilateral engagements include conversations with industry bodies, gas suppliers/shippers, regulatory bodies and organisations supporting greater diversity and inclusion in the workplace. We engage with large commercial users to discuss opportunities for decarbonisation. Records of key meetings are retained in our Stakeholder Relationship Management (SRM) system.

Our network planners have engaged systematically with all local authority planning teams to understand local area development plans and inform our future network planning. They have extended the conversation to include energy teams from the authority wherever possible.

We've also surveyed specific stakeholder groups to embellish and address gaps in our insight, including large gas users (on the advice of our Customer Engagement Group), customers who engage with our third-party connections team, distributed connections (biomethane) stakeholders and local authority energy teams.

## 5 Insights informing our business plan

The following section provides more detail on the activities we have undertaken during the four phases of our GD2 engagement programme, and the resulting insights generated from these exchanges that have informed our business plan.

### 5.1 Phase 1 - what we did

To listen to stakeholders and customers to underpin the initial creation of our draft business plan

**Table 1: Summary of what we did in Phase 1**

Phase 1		
Objectives	Research	Stakeholder exchanges
<ul style="list-style-type: none"><li>To understand customer and stakeholder priorities to shape decision-making in the creation of our draft business plan, including customers in vulnerable circumstances</li><li>To explore the future of energy with stakeholders to provide a context for the creation of the business plan that takes account of long-term stakeholder priorities and uncertainties</li></ul>	<ol style="list-style-type: none"><li>Qualitative, considered research to understand the investment priorities that customers would like SGN to focus future efforts on</li><li>Quantitative customer research to rank investment priorities</li><li>Quantitative stakeholder research<sup>1</sup> to understand the investment priorities of our stakeholders</li><li>Qualitative, more in-depth stakeholder research to explore priorities in more detail</li><li>Desk research to understand our harder to reach customers</li></ol>	<ol style="list-style-type: none"><li>Specialist panel discussions on the future of heat with stakeholders in Scotland</li><li>Collaborative industry-wide discussions with national stakeholders about the future of energy</li><li>Bi-lateral meetings with key stakeholders</li><li>Stakeholder workshops: Review and playback of what we have learned so far with further investigation and discussion of key decisions and priorities where we have gaps in knowledge or understanding of stakeholder views</li><li>Webinar<sup>2</sup> to playback what we've learned so far</li><li>Digital engagement through <a href="https://sgnfuture.co.uk">sgnfuture.co.uk</a>, promotional campaign and feedback survey</li></ol>

#### Outputs from Phase 1

- An insight bank:** a 150-page summary of information previously gathered from stakeholders and customers from ongoing engagement mechanisms shared with the Customer Engagement Group (CEG)
- Research results and feedback reports** from mechanisms 1-10 above, also shared with the CEG

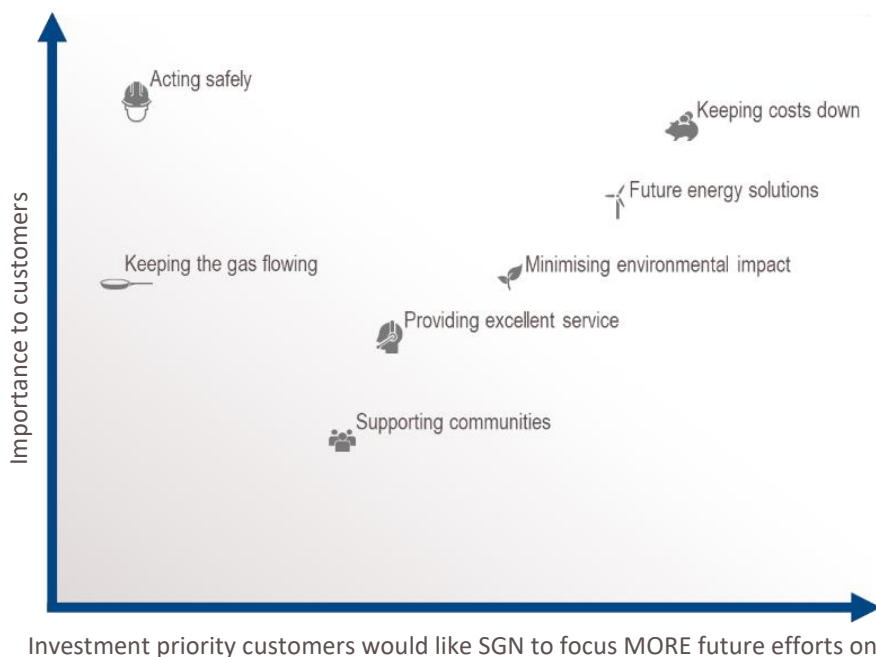
<sup>1</sup> Stage 2: MaxDiff Prioritisation Phase Report (Ref 002, 003)

<sup>2</sup> Webinar – 'What do customers want from a gas network?'

- **An engagement matrix** mapping the stakeholder and customer input onto the key business decisions being made, developed and shared with the CEG.
- **A public document ‘Planning our shared future’** providing a summary of our early thinking on priorities and the long-term context promoted widely for comment and input from all customers and stakeholders. Our targeted digital campaign reached more than 1 million people.

## 5.2 Phase 1 - key customer and stakeholder insights

- A. **Seven customer priorities** were identified from qualitative customer research<sup>3</sup> and are ranked in order of importance to customers, on the vertical axis below. The chart also shows the priorities which customers believed we should invest more in, on the right-hand side of the chart.



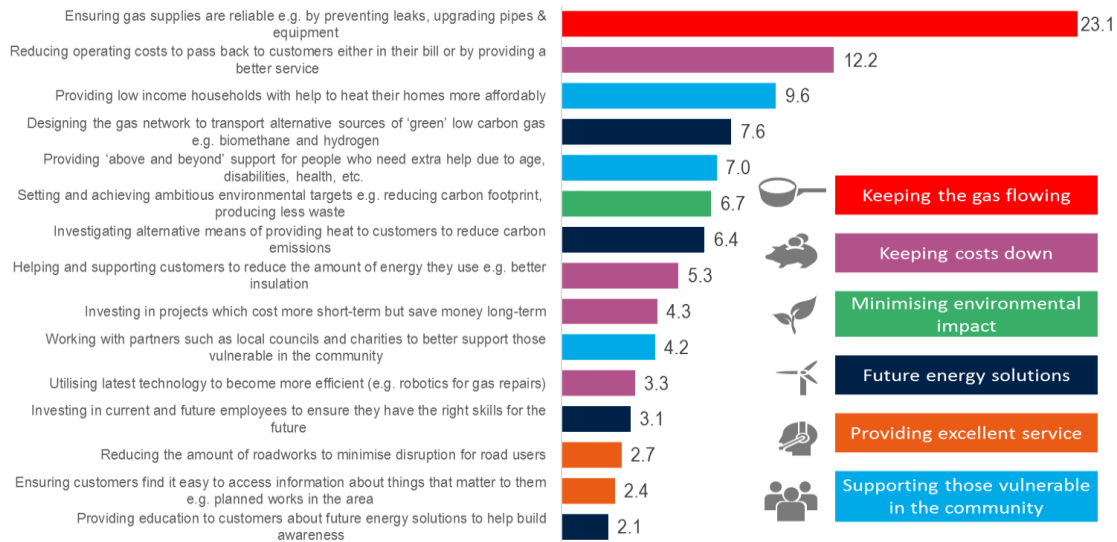
Keeping costs down, future solutions and minimising environmental impact are the areas in which customers would like us to invest more effort. Acting safely is the highest priority for customers, but they would like us to continue to maintain current high levels, rather than investing significantly more in this area.

- B. **Minimising environmental impact was of importance to customers** and was added as a priority in response to unprompted input from participants in the qualitative workshops.
- C. **Customers appeared more supportive of vulnerable communities** when we asked them to rank practical explicit examples of activities we could invest in, using a quantitative MaxDiff research<sup>4</sup> technique. Two of the top five priorities relate to support for vulnerable communities.

<sup>3</sup> Explorative Qualitative Workshops and interviews (Explorative Phase) (Ref 002)

<sup>4</sup> MaxDiff Prioritisation Phase Report (Ref 003, 004)





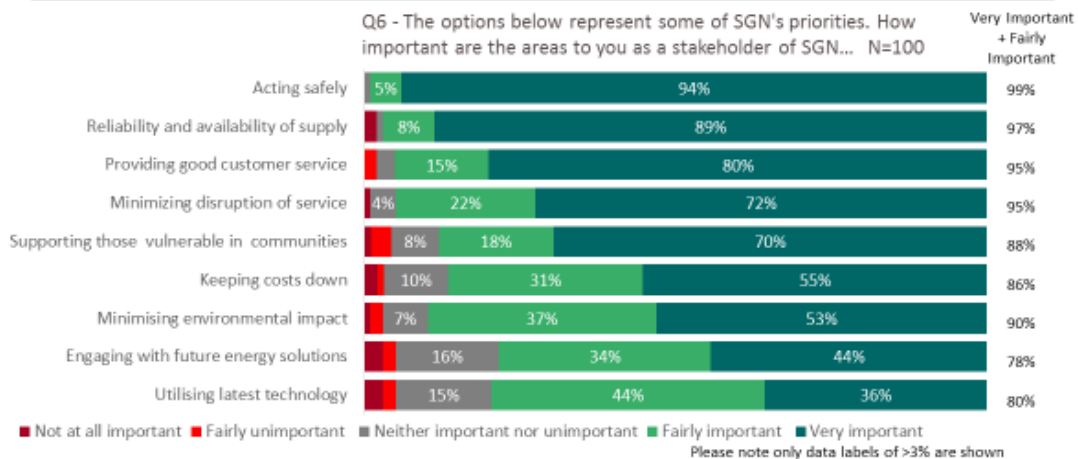
D. **Customers rank safety and reliability of supplies as their top priority** (preventing leaks in the above chart)

E. **Stakeholders rank the most important areas as acting safely, reliability and availability of supply, minimising disruption and good customer service** as their top four. Quantitative stakeholder research<sup>5</sup> asked stakeholders to rank the most important areas to them.

### In a recent stakeholder study: safety, reliable gas supply and good customer service were ranked as the most important to stakeholders

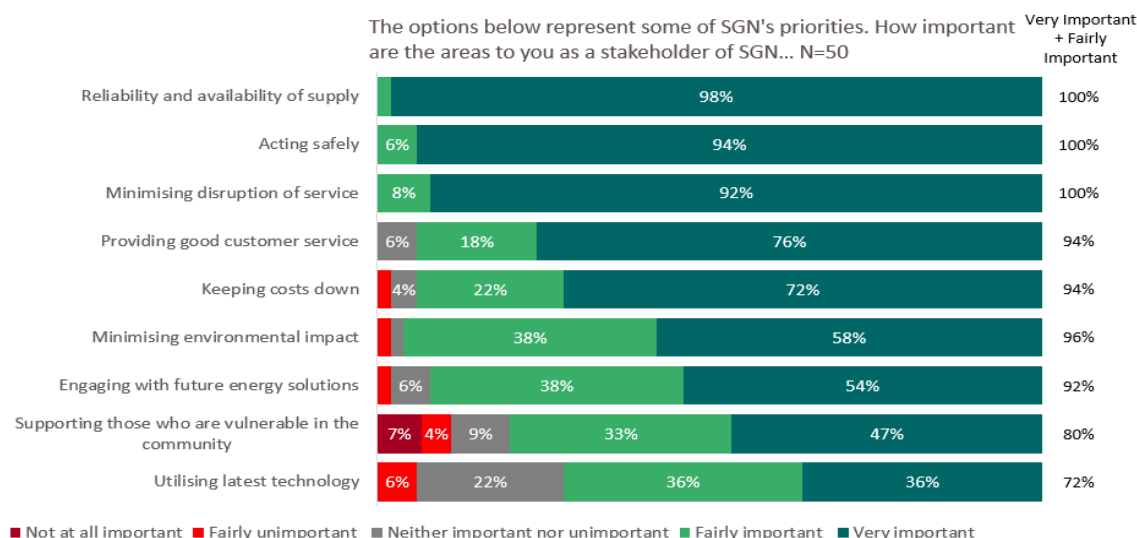
**Key Insight:** All priorities are important to stakeholders.

**Implications for GD2:** 'Supporting those vulnerable in communities' and 'providing good customer service' are higher priorities for stakeholders than for customers.

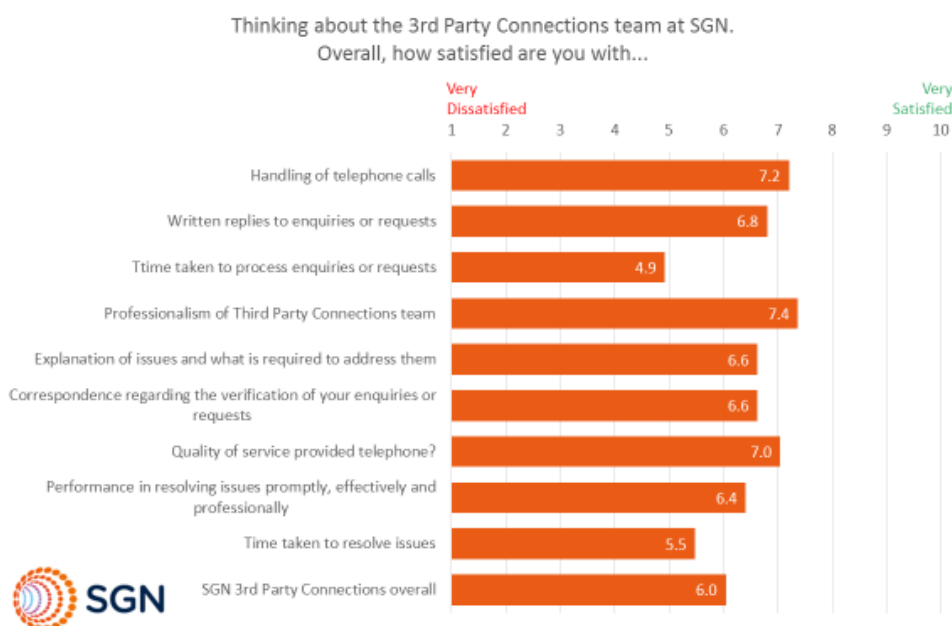


<sup>5</sup> SGN Stakeholder Satisfaction Wave 1, 2, 3 (Ref 071,072,073)

- F. **Large gas users rank reliability of supply as their top priority<sup>6</sup>** (followed by acting safely, minimising disruption and providing good service). 50% would experience a major business disruption if supplies were interrupted for more than 1 hour.



- G. **Customer service is an important priority for some groups**, particularly businesses who want to connect to our network, as highlighted in quantitative stakeholder satisfaction research<sup>7</sup> and a bespoke, in-depth connections workshop<sup>8</sup>



<sup>6</sup> Large Gas User survey results (Ref 076)

<sup>7</sup> Stakeholder satisfaction wave 1 (Ref 071)

<sup>8</sup> Connecting to our network workshop (Ref 069)

## Triangulation of key insights from Phase 1

We shared our customer research findings with stakeholders participating in a webinar and found general agreement with the customer priorities<sup>9</sup>

Previous Moving Forward Together stakeholder workshops<sup>10</sup> had also found similar themes among stakeholders, however minimising environmental impact had been less prominent at earlier workshops. Stakeholders at our Moving Forward Together workshop in 2017<sup>11</sup> also chose helping people in fuel poverty as the highest priority when asked about providing support for vulnerable customers and exhibited a strong appetite for continued investment in innovation.

## 5.3 Phase 1 - conclusions

We built the seven customer priorities into three commitments which we are making to customers and which run throughout our plan – that we will deliver a safe and efficient service, build a shared future and make a positive impact on the public we serve.

Delivering a safe and efficient service		
Keeping the gas flowing	Acting safely	Keeping costs down
Building a shared future		
Future energy solutions	Minimising environmental impact	
Making a positive impact		
Providing excellent service	Supporting vulnerable communities	

We created a ten-year vision for each of these commitments and identified ambitions for GD2 which will move us towards our ten-year vision. We shared our ambitions with customers during Phase 2 at qualitative workshops held in May 2019.<sup>12</sup>

<sup>9</sup> Webinar 'What do customers want from a gas network?'

<sup>10</sup> Moving Forward Together workshops March 2016 (Ref 006, 007)

<sup>11</sup> Moving Forward Together workshops March 2017 (Ref 008,009,010)

<sup>12</sup> Business Plan Acceptability Testing Phase 1 (Ref 078)

## 5.4 Our engagement activities in Phases 2, 3 and 4

### 5.4.1 Phase 2 – what we did

To test and iterate elements of the plan

**Table 2: Summary of what we did in Phase 2**

Phase 2		
Objectives	Research	Stakeholder exchanges
<ul style="list-style-type: none"><li>To test the levels of service improvements that customers value and are prepared to pay for</li><li>To support the development of detailed elements of our draft business plan</li><li>To provide constructive challenge to elements of the draft business plan</li><li>To support the definition and calibration of Output Delivery Incentives (ODIs) and price control deliverables</li></ul>	<ol style="list-style-type: none"><li>Willingness to pay research among customers and small and medium business customers <sup>13</sup></li><li>Online customer panel</li><li>Collaborative research with other gas networks to explore future energy solutions <sup>14</sup> and the needs of vulnerable customers <sup>15</sup></li><li>Qualitative workshops with customers to explore the full scope of the business plan<sup>16</sup></li><li>Analysis of customer contact records</li><li>Desk analysis of the volume of vulnerable customers</li></ol>	<ol style="list-style-type: none"><li>Bilateral meetings with key stakeholders</li><li>Round table discussions and reporting on specialist topics</li><li>Depot events</li><li>Specific events and specialist panels</li><li>Bilateral meetings with large energy users</li><li>Stakeholder workshops: review and playback of elements of the draft plan with further investigation and discussion of key decisions and priorities where we have gaps in knowledge or understanding of stakeholder views.</li></ol>

### Outputs from Phase 2

- A draft business plan comprising of elements which are linked to customer and stakeholder expectations and priorities
- High level proposals for ODIs and price control deliverables aligned to customer and stakeholder priorities.

<sup>13</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>14</sup> Collaborative future of gas networks workshop (Ref 070)

<sup>15</sup> Collaborative research – enhanced GSOPs for vulnerable customers (Ref 097)

<sup>16</sup> Business Plan Acceptability Testing Phase 1 (Ref 078)

### 5.4.2 Phase 3 – what we did

To consult and test acceptability of the draft plan

**Table 3: Summary of what we did in Phase 3**

Phase 3		
Objectives	Research	Stakeholder exchanges
<ul style="list-style-type: none"><li>To understand the criteria used by stakeholders to judge whether our plan is acceptable</li><li>To identify and understand any areas of concern or disagreement with our proposed plan</li></ul>	<ol style="list-style-type: none"><li>Qualitative research with customers (and future customers) to further understand any areas of concern and test bespoke outputs incentives and targets</li><li>Testing with online panel of informed customers</li></ol>	<ol style="list-style-type: none"><li>Engagement with stakeholders at workshops on the draft business plan including bespoke outputs, incentives and targets</li><li>Interviews with local councils and social housing providers at SIUs</li><li>Cross sector roundtable on social value</li><li>Distributed entry connections (biomethane) workshops</li><li>Financeability specialist depth interviews</li></ol>

### Outputs from Phase 3

- Feedback from stakeholders and customers as to the acceptability and appropriateness of our business plan proposals



### 5.4.2 Phase 4 – what we did

To iterate and refine the plan

**Table 4: Summary of what we did in Phase 4**

Phase 4		
Objectives	Research	Stakeholder exchanges
<ul style="list-style-type: none"><li>To assess whether the business plan is considered acceptable and affordable by customers and stakeholders</li><li>To test any further amendments proposed by customers, stakeholders, or Ofgem, RIIO2 Challenge Group, final CEG report</li></ul>	<ol style="list-style-type: none"><li>Quantitative research with customers – second wave of willingness to pay</li><li>Engagement with online customer panel</li><li>Quantitative research with customers – acceptability testing</li><li>Local authority survey</li></ol>	<ol style="list-style-type: none"><li>Online engagement with stakeholders</li><li>Bilateral stakeholder meetings</li></ol>

#### Anticipated outputs from Phase 4:

- A final business plan acceptable to our customers, stakeholders and Ofgem

## 5.5 Phases 2, 3 and 4 - key customer and stakeholder insights

Due to the iterative nature of conversations held with customer and stakeholders during Phases 2, 3 and 4 we have presented the collective insights gained from these phases in the tables below. These are in relation to the topics we were engaging upon, and the mechanisms used to triangulate views.

As described above, we initially designed our engagement strategy to be undertaken in four discrete phases. However, as we embarked upon the creation of our business plan, some elements advanced more quickly while others developed at a slower pace. In addition, it was necessary to undertake a significant volume of engagement and research in a challenging timeframe, for example, to respond to additional guidance issued by Ofgem during Phase 3, when much of our engagement activity was either completed or already in-flight. Taking the learning from our engagement activities earlier in our programme, we realised it was necessary to retain a degree of flexibility in the way we designed and undertook our engagements. Consequently, our 'phases' of engagement beyond Phase 1 were less distinct than we initially expected.

**Table 5: Safe and Efficient key insights from Phases 2, 3 and 4**

Delivering a safe and efficient service				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Acting safely	Are our investment proposals justified given future uncertainties?	We asked customers about their priorities during our programme of research.	Customers and stakeholders have told us that ensuring the safety and reliability of the network is of paramount importance. <sup>17</sup>	7.1, 7.1.4
Keeping costs down	What level of investment in our network is necessary to maintain reliable, safe and secure gas supplies?	At our Jan/Feb 2019 MFT workshops stakeholders created a framework of criteria that they would use to make investment decisions about replacement works. These criteria were tested against two different scenarios, illustrating the ability to apply them to other asset investment decisions.	Stakeholders expect us to make safe investment decisions while avoiding asset stranding by investing to ensure flexibility. In particular, stakeholders in Scotland expect us to consider future-proofing the network and ensuring flexibility as a top priority.	9.14 7.1.4 7.4.1 13.4.4
	Does our asset investment strategy represent value based		Stakeholders in Southern view minimising disruption and reducing long-term costs as top priorities.	

<sup>17</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

	on the combined benefits of: - maintaining safe and reliable supplies - reducing environmental impact - supporting opportunities for decarbonising the future of heat?		Reducing short-term costs of repex over the 5 years of GD2 was a lower priority for all stakeholders. <sup>18</sup>	7.5.1
Acting safely  Future energy solutions	What are our people and skills requirements and what is our role in attempting to close the 'skills gap'?	We asked stakeholders for their views at our MFT workshops in November 2018.  This was raised as a consideration by stakeholders at our Safe & Efficient workshop in August 2019.  This was included as a consideration in willingness to pay customer research.	Stakeholders are supportive of us providing STEM career opportunities for current and future employees. <sup>19</sup> Meeting our skills needs was seen as a key consideration when seeking to understand whether our proposals were appropriate overall.  79% of customers would support paying an additional 30p per year to invest in staff training. <sup>20</sup>	4.14.1, 6.14, 6.14.2  8c, 8.6.2, 8.8
Acting safely	How do we maintain safety standards efficiently?	We asked stakeholders for their views at our MFT workshops in November 2018.	Customers and stakeholders support suggestions to increase safety of multi-occupancy buildings (MOBs). <sup>21 22 23</sup>	7.5.7, 7.5.8, 7.5.9, 7.5.10

<sup>18</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016,017)

<sup>19</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

<sup>20</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>21</sup> Business Plan Acceptability Testing Phase 1 (Ref 078)

<sup>22</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>23</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

	Should we do more to increase safety of gas in multi-occupancy buildings (MOBs)?	This was included as a consideration in willingness to pay customer research.	81% of customers were prepared to pay an additional 11p for these options. <sup>22</sup>	
Acting safely  Keeping the gas flowing	What level of investment do we need in cyber security?  What investment do we need to meet security standards at critical sites?	We asked stakeholders for their views at our MFT workshops in November 2018.  This was included as a consideration in the first wave of our willingness to pay customer research.  Customers were asked a question in relation to enhancing our cyber security systems in our quantitative acceptability testing.	Both stakeholders and customers recognise it is important to safeguard the security of our assets from both physical and cyber threats <sup>23</sup> .  Three quarters of customers would support additional investment to enhance cyber security, and 81% support investment to prevent physical attacks. <sup>22</sup>  This additional element of our plan attracted fairly high total levels of acceptability from both customers in Scotland and Southern, at 75% in Southern and 80% in Scotland. SME business customers tended to score this element the same or slightly higher than domestic customers (79% for SMEs Southern and 80% for SMEs in Scotland). <sup>24</sup>	8b 8d 12.3.5
Acting safely  Keeping the gas	Should we replace steel pipes alongside iron mains?	We asked stakeholders for their views at our MFT workshops in November 2018, and further outlined our intentions to proactively address steel mains with expert stakeholders at our Safe &	Stakeholders and customers have indicated that proactively addressing steel pipes that have a history of failure due to issues like corrosion is justified where safety and reliability of supplies are impacted. <sup>26 27 28</sup>	7.5.2 8.2

<sup>24</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>26</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>27</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)

<sup>28</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

flowing		Efficient workshop in August 2019. <sup>25</sup>  Customers were asked a question in relation to improving reliability in areas that suffer more frequent interruptions in our quantitative acceptability testing.	Customers in Scotland gave high levels of acceptability for this proposed additional element of our plan (85% for domestic customers, 84% for Scottish SMEs). Southern customers were similarly affirmative, giving 80% acceptability in total across both groups. <sup>24</sup>	12.2.4
Acting safely  Keeping the gas flowing	What level of investment in our network is necessary to maintain reliable, safe and secure gas supplies?  Should we replace steel tails?	We asked stakeholders for their views at our MFT workshops in November 2018. How much customers prioritise 'ensuring gas supplies are reliable' was included in the MaxDiff customer research.  This was included as a consideration in the first wave of our willingness to pay customer research.  Customers were asked a question in relation to improving the reliability and safety of gas pipes in our quantitative acceptability testing.	Stakeholders have indicated that investment decisions relating to resilience (where the probability of an event is low, but the impact is high) are challenging, but agree that relocating vulnerable assets should be undertaken if the risk of damage is high. <sup>29</sup>  83% of customers support this idea. <sup>30</sup> , and ensuring gas supplies are reliable was the top priority for customers. <sup>31</sup>  Customers exhibited high levels of acceptability for our proposals to enhance the reliability & safety of gas pipes, for example by removing steel tails from gas services, removing redundant pipework and doing more inspections of medium-rise block of flats. <sup>32</sup>	2.2.2 7.1.2 7.5.6 8.3, 8.3.2   7.4.4, 7.5.3  17.1.1

<sup>25</sup> Safe & Efficient workshop London (Ref 089)

<sup>29</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

<sup>30</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>31</sup> Max Diff Prioritisation Phase (Ref 003, 004)

<sup>32</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)



			This additional element attracted the highest acceptability levels of all the options tested, scoring 85% in total for southern customers and 89% in total for customers in Scotland.	
Keeping costs down	Are our investment proposals justified given future uncertainties?	Customers were asked to consider trade-offs between different payment mechanisms, outputs, certainty, timing and risks at research workshops in August 2019.	Customers accept the arguments for using different investment types (such as fixed-price, volume driver, use-it-or-lose-it and reopener) and expect us to be clear as to the rationale for which types are being used and where. <sup>33</sup>	12a 12.2 7.2
Acting safely  Keeping the gas flowing	Do our capex and repex asset investment strategy represent value based on the combined benefits of: - maintaining safe and reliable supplies - reducing environmental impact - supporting opportunities for decarbonising the future of heat?	We discussed our asset investment strategy with expert stakeholders at our Safe & Efficient workshop in August 2019.	<p>The majority of stakeholders supported our approach to asset management in GD2 in principle, based on the summary explanation we had provided.<sup>34</sup> Stakeholders advised that we should base decisions on well-justified engineering considerations and not be entirely led by public perception (particularly following safety incidents).</p> <p>Stakeholders were less certain as to whether our repex proposals were appropriate, principally because they would like to see more explanation of the benefits, delivery model, procurement strategy and workforce planning strategy.<sup>34</sup> Stakeholders suggested it would be helpful to better understand the context of how repex plans account for future-proofing/the future of gas, whether greater certainty can be achieved by offering longer contracts for contractors to deliver and recruit skilled workers, and whether there could be greater coordination with other utilities.</p>	<p>7.1.4 7.2</p> <p>8c, 8.6, 8.6.1, 8.13, 14.2</p> <p>6.14.3</p>

<sup>33</sup> Qualitative workshops - Sharing Financial Risk. Innovation investment (Ref 083)

<sup>34</sup> Safe & Efficient round table event London (Ref 089)

		<p>We held a series of bilateral meetings with key stakeholders from across the energy sector, such as energy suppliers and distribution network operators. We hosted an online meeting for members of the Energy Intensive Users Group (EIUG). This engagement was tailored to focus on these stakeholders' needs and was informed by our previous engagement activities with large gas users, who had previously told us what was important to them.</p>	<p>These key stakeholders were keen to see the reductions in bills associated with our GD2 proposals, and valued certainty over costs in the future. The need for uncertainty mechanisms was acknowledged. Reliability of supply was identified as the top priority for some stakeholders.</p> <p>A number of these stakeholders were supportive of initiatives to support vulnerable customers, with specific requests to align with other schemes (such as ECO) and focus on areas we are uniquely placed to support.</p> <p>Future plans for decarbonisation by transitioning to hydrogen was of particular interest to most stakeholders, with many supportive of further well-managed investment in this area.</p>	<p>12a</p> <p>7.1</p> <p>6.4.1, 6.5.2</p> <p>10 11</p>
<p>Keeping the gas flowing</p> <p>Future energy solutions</p>	<p>What is the feasibility of, and appetite for, extending the gas network into non-gas areas?</p>	<p>We have undertaken extensive engagement with organisations such as LEPs and local authorities across our network areas to better understand the likely growth of our network. We hosted a workshop for customers who connect to our network and engaged directly with peaking plant operators to discuss their likely needs over the coming years. We discussed our network growth strategy with expert stakeholders at our Safe &amp; Efficient workshop in August</p>	<p>Gas remains an effective and affordable means of heating homes. Local authorities have indicated areas of planned development and preferences for future heating technologies that use the gas network. Peaking plant operators anticipate greater demand for flexible generation in the next five years<sup>35</sup> and 66% of the local Fort William community were in favour of a natural gas supply.<sup>36</sup></p> <p>Our proposals in relation to network growth were judged to be about right by stakeholders at our Safe &amp; Efficient workshops.<sup>25</sup> Stakeholders acknowledged that the current uncertainty around future energy policy makes forecasting network growth particularly</p>	<p>11.3 11.4</p> <p>9.14, 11.6.1,</p> <p>12.2.5, 12.2.6, 12.2.7</p>

<sup>35</sup> Connecting to our network workshop (Ref 069)

<sup>36</sup> Safe & Efficient round table event London (Ref 089)

		<p>2019.</p> <p>At our customer workshops in August 2019 customers discussed different payment mechanisms, with the example of uncertainty in network growth used to illustrate some of the challenges we face when business planning.</p>	<p>challenging.</p> <p>Customers recognised the need for different investment types to address uncertainty when presented with the example of planning for network growth.<sup>37</sup></p>	
Keeping costs down	How much should we invest in innovative ways of working?	<p>Customers were asked about their appetite for investing in innovation at different Technology Readiness Levels (TRL) at research workshops in August 2019.</p> <p>This was raised by stakeholders at our Safe &amp; Efficient workshop in August 2019 when seeking to understand whether our proposals were appropriate.</p>	<p>MaxDiff analysis identified that investing in projects that cost more in the short-term but save money in the long-term is only a moderate priority for customers.<sup>38</sup></p> <p>In a considered, informed setting, customers said that they want us to invest in innovation, provided we carefully assess the potential outcomes before heavily investing in low TRL ideas. The majority of customers at our workshops supported investing in innovation that could reduce customers' bills in the long-run. They did however want SGN to fund some of the cost of innovation.<sup>37</sup></p> <p>Stakeholders encouraged us to be innovative at our Safe &amp; Efficient workshop<sup>39</sup>, a theme we have seen at MFT workshops in previous years.<sup>40</sup></p>	<p>13</p> <p>13.4.2</p>
Keeping costs down	What is the optimum approach to	Customers were presented information about how our activities impact upon	Customers find it difficult to talk about finance and investment concepts, but with sufficient time it is	12

<sup>37</sup> Qualitative workshops - Sharing Financial Risk. Innovation investment (Ref 083)

<sup>38</sup> MaxDiff Prioritisation Phase (Ref 003, 004)

<sup>39</sup> Safe & Efficient round table event London (Ref 089)

<sup>40</sup> Moving forward together orkshop March 2016 London & Edinburgh (Ref 006,007)

<p>Providing excellent service</p>	<p>financeability that will be acceptable to Ofgem, shareholders, stakeholders and customers?</p> <p>How do we ensure costs are apportioned fairly between current and future gas bill payers?</p> <p>How do we demonstrate our business plan is efficient and represents value for money for consumers and stakeholders?</p>	<p>their gas bills, and for their views on our profits in relation to achieving outputs at our informed research workshops in August 2019.</p> <p>During September and October 2019, we asked our Customer Panel for their views in relation to apportioning costs between current and future customers, encouraging stability in bills and long-term investment.</p>	<p>possible to obtain considered opinions. The majority of customers understood the different funding mechanisms and could identify the pros and cons of the different mechanisms. Future customers found the funding mechanisms very complex.</p> <p>Awareness among customer that a proportion of their gas bill funds our activities is generally very low. When presented with the information on how we apportion money, many domestic customers queried the significant proportion allocated to debt repayment. In particular, future customers struggled to understand the need for debt repayment.</p> <p>Customers find it acceptable that we make a profit as long as we are achieving targets. If profits are higher they would like us to fund activities such as investing in innovation and supporting vulnerable customers.<sup>41</sup></p> <p>Our Customer Panel were divided on whether current customers or future customers should pay a greater proportion of high-cost investments made today. Rather than pay a greater proportion, the panel advocated both current and future customers paying their fair share.</p> <p>There was strong agreement that a company that is lowering gas bills and performing well should receive a fair return. The majority of the panel wanted stable bills and also would be willing to forgo an additional £7 annual bill saving to maintain a good credit score and keep future bills down.<sup>42</sup></p>	<p>18</p> <p>18.2.2</p>
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<sup>41</sup> Qualitative workshops - Sharing Financial Risk. Innovation investment (Ref 083)

<sup>42</sup> Financeability customer panel (Ref 093)

		<p>With the help of a specialist consultancy we undertook a programme of in-depth one-to-one telephone interviews, each lasting up to one-hour, with expert stakeholders representing different groups within the financial community. Interviews were conducted throughout September 2019 with debt investors, foreign equity investors, UK equity investors and credit rating agencies.</p>	<p>Most financial stakeholders consider that the risk of investing in energy networks since RIIO-1 has materially increased. This group felt that the regulatory regime could do more to enable companies deal with longer-term industry risks, such as the asset stranding risk for gas distribution networks and suggested that there should be greater incentives for innovative investment in energy networks. The reduction in returns does not make sense in light of the increased risk position and the proposed 4.3% cost of equity makes the sector very unattractive to investors, making it a struggle to raise capital. Debt investors and ratings agencies generally agreed that target ratings for the sector should be around A/BBB. Some interviewees suggested that networks would find it difficult to secure financing at ratings lower than BBB.<sup>43</sup></p>	18.2.1
		<p>We have undertaken quantitative acceptability testing with a representative group of our customers to establish levels of acceptability, affordability and value for money among our customers.</p> <p>This research allowed us to gather both 'uninformed' and 'informed' views from customers to understand any changes as customers become more informed on our business plan.</p>	<p>Both domestic and SME business customers across our networks gave high acceptability scores of our plan. Total <i>acceptability</i> scores for uninformed customers were 85% in Southern and 88% in Scotland. Once informed, total acceptability scores rose by 1% in Southern to 86% and 4% in Scotland to 92%. Informed acceptability was lowest for domestic customers in Southern (86%) and highest for SME business customers in Scotland (95%).</p> <p>Affordability scores were lower for all customer groups, as expected with this type of research study. Total <i>affordability</i> scores for uninformed customers</p>	18.4.1  18.6 18.3

<sup>43</sup> Financial stakeholder engagement - summary of findings (Ref 098)



		<p>Our quantitative acceptability testing also included questions relating to bill profiles, such as stability vs variability, and apportionment of long-term high-cost investments between current and future bills. Unlike other elements of the business plan, by design these questions were asked of ‘uninformed’ customers so we understand how they react when presented with the impact on their bills. Questions relating to bill profiles were also included as a consideration in wave two of our willingness to pay customer research.</p>	<p>were 65% in Southern and 74% in Scotland. Once informed, total affordability scores rose by 6% in southern to 71% and 3% in Scotland to 77%. When customers informed about our plan were asked “to what extent do you agree or disagree that the proposed average gas distribution charges you would pay from 2021 - 2026 would represent good value for money?”, only 5% of domestic customers in both networks disagreed.<sup>44</sup></p> <p>A strong majority of customers thought it was important that their bill was stable, so they pay a consistent amount over the coming years. Only around a third of customers agreed, when asked if they would rather bills decreased more now and risk paying more in the future when investment is required.</p> <p>A majority of customers are in favour of current and future customers paying their fair share for long term high cost improvements, i.e. preferring that costs are spread over time.</p> <p>Our willingness to pay results showed that most customers want stable bills in the future, even if it means a smaller reduction now. However, they are unsure about how the cost of investment should be spread between current bills and future bills (with 27% answering ‘Don’t know’).<sup>45</sup></p>	
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<sup>44</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>45</sup> Stage 3: Valuation Phase (Conjoint & WtP) Summary report (Ref 094)

**Table 6: Shared Future key insights from Phases 2, 3 and 4**

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Future energy solutions	What is our role in the Future of Heat?	We have held a series of specialist workshops in Scotland on the Future of Heat. These sought to understand stakeholders' views as to what they saw as the challenges to a decarbonised energy future, what they believed our role should be, and whether the action and investment we were undertaking was appropriate. This was an iterative process, with Future of Heat workshops held in August and December 2018, and a Shared Future workshops in August 2019.	Stakeholders want us to work collaboratively with others across the whole energy system. <sup>46 47</sup> They support our proposal to work with others to provide evidence for decarbonising the gas network, but they also want us to consider other heat solutions. <sup>48</sup>	11 11.6
	What level of investment should we put into alternative sources of gas research and development?		The Future of Heat panel endorsed our proposed approach in GD2 to keep options open by continuing to invest in research & development and decarbonisation projects (subject to suitable governance), with investment 'reopeners' for larger projects. The panel also requested that the social and consumer impacts were considered and clarity provided around the value of this investment. <sup>46 48</sup>	12.2.5 12.3.2, 12.3.3
	What is our role and contribution in a diversified set of local energy solutions (whole systems approach)?		Stakeholder views at our Shared Future workshop were divided as to whether SGN proposals on the future of energy were 'about right'. Around half of the stakeholders attending thought they were, with the other half either thinking the ambition was too low or that they did not yet have enough information to make a judgement. <sup>49</sup> Although the funding	11

<sup>46</sup> Future of Heat specialist panel Aug 2018 (Ref 023)

<sup>47</sup> Collaborative future of gas networks workshop (Ref 070)

<sup>48</sup> Future of Heat specialist panel Dec 2018 (Ref 024)

<sup>49</sup> Share Net Zero Future round table event - Scotland (Ref 090)

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		<p>stakeholders).</p> <p>We have consulted customers on their views in relation to future energy solutions throughout our programme of customer research, including workshops and via willingness to pay surveys.</p>	<p>mechanisms looked reasonable to stakeholders, it was difficult to assess whether our investment proposals were right in terms of scale and corresponding ambition.</p> <p>Stakeholders were supportive of the actions and activities described in relation to a responsive network incentive.<sup>49</sup> They also expressed a desire for us to influence policy and exhibit leadership in this area.</p> <p>Customers consistently rated future energy solutions as a high priority for further investment.<sup>50 51 52</sup></p>	11.5, 11.6
Future energy solutions	<p>How do we manage the potential risk of asset stranding in our GD2 proposals?</p> <p>What is the feasibility of, and appetite for, extending the gas network into non-gas</p>	<p>We issued an online survey to all local authorities throughout our network areas to understand whether these stakeholders value the strategic grid reviews we have provided and the extent to which these meet their expectations. Respondents were also asked about their plans for decarbonisation.</p> <p>We are active participants in 20 Local</p>	<p>Local authorities (LAs) were generally fairly satisfied with SGN and indicated that the strategic grid reviews we had supplied were of some use. A number exhibited a desire to collaborate more closely to improve growth forecasts further. Reliability is important for this group, but minimising environmental impact and future solutions are more important priorities for LAs when compared to other stakeholder groups. The majority reported to have decarbonisation strategies under development.<sup>53</sup></p>	11.4, 11.8.1

<sup>50</sup> Explorative Qualitative Workshops and interviews (Exploratory Phase) (Ref 002)

<sup>51</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>52</sup> Financeability customer panel (Ref 093)

<sup>53</sup> Local Authority survey (ref 086)

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
	<p>areas?</p> <p>What is our role and contribution in a diversified set of local energy solutions (whole systems approach)?</p>	<p>Area Energy Planning (LAEP) groups in both Scotland and Southern.</p> <p>Customers were asked a question in relation to growing and reinforcing our network in response to customer demand for more gas as an additional element of our quantitative acceptability testing.</p>	<p>Customers in both Scotland and Southern gave the lowest acceptability scores for this option of all the additional elements tested, although scores were still fairly high. Total acceptability in Scotland for this element was 77%; customers in Southern scored this 9% lower at 68%.<sup>54</sup></p>	
Minimising environmental impact	How should we invest in making our business more sustainable and producing environmental benefits?	<p>We have consulted customers on their views in relation to improving our environmental performance throughout our programme of customer research, including at workshops and via willingness to pay surveys.</p> <p>We discussed our environmental strategy with subject-matter-expert stakeholders in both London and Glasgow in January 2019.</p> <p>We subsequently tested our</p>	<p>Customers have told us that minimising our environmental impact is the area that they would be prepared to pay most for us to invest in.<sup>55</sup> Domestic customers would pay £3.18 for a 10% reduction in our carbon footprint.</p> <p>Current customers rated this topic as less important than future customers or SMEs at acceptability workshops.<sup>56</sup></p> <p>Stakeholders with expertise in the field of sustainability have told us to concentrate on reducing natural gas leakage from our network as this is &gt;95% of our overall carbon footprint.<sup>57</sup></p> <p>Both customers and stakeholders felt the components</p>	<p>9</p> <p>9.5</p> <p>9.4</p>

<sup>54</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>55</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>56</sup> SGN Business Plan Acceptability Testing Phase 1 (Ref 078)

<sup>57</sup> Expert round tables on sustainability (Ref 065,066)

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		<p>Environmental Action Plan (EAP) with expert stakeholders at our Shared Future workshop in August 2019 and concurrently at customer workshops.</p> <p>In our quantitative acceptability testing customers were asked a question in relation to the additional element of reducing our carbon footprint by 25%.</p> <p>A number of elements of our EAP were included as a consideration in wave two</p>	<p>of our Environmental Action Plan covered the right areas.<sup>58 59</sup></p> <p>When presented with the overview of our environmental impacts, both customer and stakeholders exhibited a strong desire for more action on shrinkage due to the significant environmental impacts associated with gas leakage.<sup>59 59</sup></p> <p>Overall, they wanted us to aim for high ambition in all areas of the EAP, but prioritise reducing leakage as the most important element.</p> <p>88% of our customers would be willing to pay 9p more on their gas bill to speed up the replacement of corroded pipes. Southern customers gave this element an acceptability score of 78% in total, which was 3% lower than customers in Scotland, who gave this element a score of 81%. This element attracted highest acceptability from domestic customers in Scotland (81%), and lowest from Scottish SMEs (76%).<sup>60</sup></p> <p>Attributes to improve our environmental performance consistently attracted the highest willingness to pay</p>	<p>9 9.3</p> <p>9.3, 9.6</p>

<sup>58</sup> Qualitative workshops - Environmental Action Plan (Ref 084)

<sup>59</sup> Shared future workshop – Scotland (Ref 090)

<sup>60</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		of our willingness to pay customer research.	values from both domestic and SME business customers. <sup>61 62</sup> Domestic customers would be willing to pay an additional £5.05 on their gas bills for the best improvement of making 100% of our fleet (where possible) ultra-low emission vehicles such as hybrid, hydrogen-powered or electric cars and vans by 2026. The same group would be willing to pay slightly more (£5.36) for us to ensure 80% of our electricity is carbon-neutral. Customers also exhibited a fairly high willingness to pay for our improvements to positively enhance the natural environment. Domestic customers were willing to pay up to £3.77 to create biodiverse habitats at 30 sites.	9.6.1  9.6.3, 9.6.4, 9.6.5, 9.6.6  9.7
Minimising environmental impact  Future energy solutions	How should we support and prioritise green gas and alternative connections?	Encouraging greater amounts of green gas onto our network was discussed at both our specialist panels/workshops and our MFT events.	Stakeholders and customers want us to continue to put more green gas, such as biomethane and blended hydrogen, into our network. <sup>63 64 65</sup> This was a higher priority area for most customers, with the exception of hard to reach/vulnerable customers. <sup>66</sup>	10 10.6.1, 10.6.3

<sup>61</sup> Qualitative workshops - Environmental Action Plan (Ref 084)

<sup>62</sup> Valuation Phase (Conjoint & WtP) Summary report (Ref 094)

<sup>63</sup> MaxDiff Prioritisation Phase (Ref 003, 004)

<sup>64</sup> Future of Heat specialist panel Dec 2018 (Ref 024)

<sup>65</sup> Expert round tables on sustainability (Ref 065,066)

<sup>66</sup> SGN Business Plan Acceptability Testing Phase 1 (Ref 078)



Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		<p>Customers provided views on this topic at qualitative acceptability testing workshops.</p> <p>This was included as a consideration in willingness to pay customer research.</p> <p>In our quantitative acceptability testing customers were asked a question in relation to the additional element of encouraging more low carbon 'green gas' into the network.</p> <p>We also held specific engagement with biomethane stakeholders. This group were invited to complete a satisfaction survey prior to attending workshops in either Scotland or Southern.</p>	<p>Customers are prepared to pay £3.36 for additional investment to enable 20% of green gases to be carried in our network.<sup>67</sup></p> <p>This additional element of our plan attracted fairly high total levels of acceptability from both customers in Scotland and Southern, at 77% in Southern and 81% in Scotland. Domestic customers in Scotland gave this element the highest acceptability (81%), Scotland SME business customers gave this the lowest acceptability (78%)<sup>68</sup>.</p> <p>Biomethane stakeholders endorse actions to encourage more consistency across the industry, facilitate entry capacity for green gas and reduce the need for propanation. They also support an ambitious target to increase the number of households supplied with green gas during GD2.<sup>69</sup></p> <p>These stakeholders value the ability to contact us directly, in particular for operational/engineering reasons, and support occasional face-to-face workshops or similar engagements.</p>	9.13

<sup>67</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>68</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>69</sup> Biomethane and Gas Entry connections round table event (Ref 095)

Planning a shared future				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Future energy solutions	What is our role in the future of heat at SIUs?	Our local workforce, based at the SIUs, undertook a series of in-depth interviews with stakeholders such as the local councils and social housing providers operating in these regions to discuss topics including decarbonisation, expected future gas demand and collaborative working.	Local councils covering the regions in which our SIUs are located generally expect gas usage to stay the same or increase in the next 5-10 years. Many of these councils are adopting ambitious energy decarbonisation programmes and would like to work with us to assist in achieving their goals. <sup>70</sup>	10.6.2
Keeping costs down  Future energy solutions	How much should we invest in innovative ways of working?	Customers were asked a question in relation to investing in innovation, in particular to develop alternative energy sources, such as hydrogen, which produce zero or very low emissions in our quantitative acceptability testing research.	Southern customers gave this element an acceptability score of 69% in total; Scottish customers gave a score of 73%. Acceptability was lower among domestic customers in both networks when compared to SME business customers <sup>71</sup> .	11.7

<sup>70</sup> SIU interviews (Ref 087)

<sup>71</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

**Table 7: Positive impact key insights from Phases 2, 3 and 4**

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Supporting those vulnerable in the community  Providing excellent service	How much should we invest in supporting vulnerable customers and how are these most effectively delivered e.g. carbon monoxide (CO) safety?	At our MFT workshops in Jan/Feb 2019, we reviewed with stakeholders ideas for additional support for vulnerable customers. The relative popularity of suggestions was measured by live electronic voting.	Proposals to progress with setting up a triage team, referral network and improved care package were all strongly supported. Stakeholders helped create and prioritise a range of additional ideas for supporting vulnerable customers, the most popular of which was providing a means for assisting with appliance servicing and promoting the Priority Services Register (potentially as a national register). <sup>72</sup>	2.3.1, 4.10.1, 5.1
		Enhancing services for vulnerable or fuel poor customers was included as a consideration in willingness to pay customer research.	Customers are willing to pay £1.26 for vulnerable customers to be referred to partners and an additional 85p for a hardship fund. <sup>73</sup>	6.2, 6.3, 6.4, 6.5
		Customers provided views on this topic at qualitative acceptability testing workshops.	Initiatives to support vulnerable customers were in the top two priority areas for all customers at acceptability testing workshops. <sup>74</sup>	6.5.2
		We held independently facilitated roundtable meetings with specialist stakeholders in both our networks to review our strategy and actions in relation to addressing the dangers of carbon monoxide. This was also	Our CO expert stakeholders support our CO strategy, ideas from engineers and initiatives for GD2, requesting that outputs are recorded and shared with the wider CO community. Stakeholders requested that outputs are recorded and shared with the wider CO community to encourage collaboration to most-	13.3 13.5

<sup>72</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)

<sup>73</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>74</sup> Business Plan Acceptability Testing Phase 1 (Ref 078)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		included as a consideration in wave two of our willingness to pay customer research.	effectively address the dangers posed by CO. <sup>75</sup> Both domestic and SME business customers exhibited a willingness to pay for additional services to keep our customers safe from the dangers of carbon monoxide, but these were of a lower priority than other improvements tested in the research <sup>76</sup> . Domestic customers would be willing to pay an additional £1.48 on their gas bills for the best improvement of fitting CO alarms for all customers and undertaking appliance servicing for vulnerable customers.	
Providing excellent service	Are the Guaranteed Standards of Performance (GSOPs) fit for purpose or should they be revised?	We used live voting at our MFT workshops in November 2018 to gather views from stakeholders relating to potential changes to GSOPs. We collaborated with the other gas networks to investigate customers' appetite for changes in service levels. Customers' willingness to have gas supplies restored more quickly after an unplanned incident was included as a consideration in willingness to pay customer research.	Stakeholders expressed views about whether guaranteed standards should be tightened, and payments increased <sup>77</sup> and customers have indicated their appetite for reducing the length of time off gas following an unplanned interruption. Domestic customers were prepared to pay £0.56 for a restoration standard of 21 hours rather than 24 hours. <sup>78</sup> Restoring gas supplies quickly is a top three investment priority for small and medium	6.9 6.12 6.13

<sup>75</sup> CO Specialist round table event - combined report (Ref 102)

<sup>76</sup> Valuation Phase (Conjoint & WtP) Summary report (Ref 094)

<sup>77</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

<sup>78</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		Customers provided views on this topic at qualitative acceptability testing workshops.	<p>businesses.<sup>79</sup></p> <p>A relatively small proportion of customers (17%) whose supply had recently been interrupted for replacement works would like to be able to book a timed appointment to have their supply restored.<sup>79</sup></p> <p>A broader range of customers were prepared to pay £1.58 for a guaranteed 4-hour time slot.<sup>80</sup></p> <p>Customers at acceptability testing workshops viewed reduction of average restoration time after an interruption as fairly important, in particular hard to reach/vulnerable customers.<sup>81</sup></p>	
Supporting those vulnerable in the community	Should Guaranteed Standards of Performance (GSOPs) be enhanced for vulnerable customers?	Support for vulnerable customers has featured at many of our MFT workshops, and we held specialist panels with expert stakeholders in both Scotland and Southern to explore the ways in which we can most effectively	<p>Customers and stakeholders believe we should offer an enhanced level of service to those who are vulnerable or at risk, potentially including specific guaranteed standards of performance (GSOPs) for vulnerable customers.<sup>82 83 84 85</sup></p> <p>However, some stakeholders are concerned that the</p>	<p>6.3</p> <p>6.4</p> <p>6.5.2</p> <p>2.2.7</p>

<sup>79</sup> TTI research for all GDNs April 2019

<sup>80</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>81</sup> SGN Business Plan Acceptability Testing Phase 1 (Ref 078)

<sup>82</sup> Moving Forward Together workshops London & Edinburgh Nov 2018 (Ref 013,014)

<sup>83</sup> Specialist panels - Supporting our communities Scotland (Ref 018,019)

<sup>84</sup> Specialist panels - Supporting those at-risk South (Ref 020,021)

<sup>85</sup> Collaborative research – enhanced GSOPs for vulnerable customers (Ref 097)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Providing excellent service	What initiatives should we invest in that best support vulnerable customers and those in fuel poverty?	<p>serve this group.</p> <p>At our Positive Impact stakeholder workshops in August 2019 we outlined our proposals and levels of ambition for supporting varying numbers of vulnerable customers, depending on the depth of support provided.</p> <p>We sought customers' views in relation to customer service and additional support for vulnerable customers at workshops in August 2019, including our level of ambition for supporting greater numbers of vulnerable customers.</p> <p>We collaborated with the other gas networks to undertake a desk review of the services we provide to vulnerable customers. This was followed by 16 telephone interviews with stakeholders working with or in the interests of customers in vulnerable circumstances.</p>	<p>same standard is not applicable to all vulnerable circumstances and flexible solutions would be better.<sup>86 87</sup></p> <p>Customers would be willing to pay £0.82 for better forms of alternative heating and cooking, and £2.22 for additional solutions for vulnerable customers during a supply interruption.<sup>88</sup></p> <p>Customers want us to help those truly in need, rather than trying to help everyone. Customers want us to communicate clearly, invest in providing the right information and support, and work collaboratively with other agencies where possible.<sup>89</sup></p> <p>Stakeholders also emphasised the importance of collaboration, and of measuring the effectiveness of our actions to support vulnerable customers<sup>88</sup></p>	<p>6.5.4</p> <p>6.5.5</p> <p>6.5.6</p> <p>6.5.7</p>

<sup>86</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)

<sup>87</sup> SGN Positive Impact round table event - (London combined with Scotland) (Ref 088)

<sup>88</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>89</sup> Qualitative workshops - Customer Service & Supporting Vulnerable (Ref 085)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		Improving services for vulnerable customers in the event of gas supply interruptions was included as a consideration in willingness to pay customer research.		
Providing excellent service	How should we invest to improve and enhance customer service and engagement?	<p>Views on changing customer expectations were discussed with stakeholders at our MFT workshops in March 2018.</p> <p>Our ambitions were tested with stakeholders at our Positive Impact workshops in August 2019.</p> <p>Customer service was discussed with customers at our workshops in August 2019.</p>	<p>Analysis of our regular customer contacts tells us that communication, timescales and site tidiness are areas of concern for customers.<sup>90</sup></p> <p>Customers suggested that we should use the latest technology to ensure the service provided is as good as it can be. Customer expectations are increasing<sup>91</sup>, and clear simple communication methods that are available to all should be used.<sup>92 93</sup></p> <p>A large proportion of customers and stakeholders feel 9/10 service is acceptable. Customers in our Southern network expect performance to improve and be closer to Scotland's scores.<sup>93</sup></p> <p>Stakeholders support investment in innovation to support vulnerable customers.<sup>94</sup></p>	<p>6.10</p> <p>6.10.1</p> <p>6.10.2</p> <p>6.10.4</p>

<sup>90</sup> Analysis of customer contact data and satisfaction drivers (Ref 043)

<sup>91</sup> Moving Forward Together workshops London & Edinburgh 2018 (Ref 011,012)

<sup>92</sup> Explorative Qualitative Workshops and interviews (Exploratory Phase) (Ref 002)

<sup>93</sup> SGN Positive Impact round table event - (London combined with Scotland) (Ref 088) Qualitative workshops - Customer Service & Supporting Vulnerable (Ref 085)

<sup>94</sup> Moving Forward Together workshops London, Portsmouth, Edinburgh 2017 (Ref 008,009,010)



Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		Customers were asked a question in relation maintaining excellent customer service in our quantitative acceptability testing research.	This additional element of our plan attracted fairly high levels of acceptability. Domestic customers in Southern gave this element the lowest acceptability (73%), 8% lower than Scottish domestic customers. SME business customers gave comparable acceptability for these elements in both networks (80% in Scotland and 78% in Southern). <sup>95</sup>	
Providing excellent service	How much should we prioritise and invest in avoidance of disruption?	<p>Stakeholders have helped shape our approach to reducing disruption at our MFT workshops. Disruption (either to the road network as a result of streetworks, or as a result of losing gas supplies) is a common topic stakeholders have discussed at multiple workshops.</p> <p>At our workshops in August 2019 ways to improve customer service were discussed with customers, including in relation to reducing disruption. This was</p>	<p>Stakeholders and customers are keen for us to collaborate to reduce disruption, in particular by working with other utilities.<sup>96 97</sup></p> <p>Customers are willing to pay £0.97 to reduce the average duration of our roadworks by 15%.<sup>98</sup></p> <p>Customers advocated collaborative working wherever possible, believing this would have extensive benefits.<sup>99</sup></p> <p>Willingness to pay for working in collaboration with</p>	<p>6.14</p> <p>6.14.3</p> <p>6.14.4</p>

<sup>95</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>96</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)

<sup>97</sup> Safe & Efficient round table event London (Ref 089)

<sup>98</sup> Conjoint & WtP Summary report (Valuation Phase) (Ref 005)

<sup>99</sup> Qualitative workshops - Customer Service & Supporting Vulnerable (Ref 085)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
		included as a consideration in wave two of our willingness to pay customer research.	other utilities like water companies to reduce overall disruption by digging up the road once indicated that domestic customers would be prepared to pay an additional £1.69 for 20 joint projects per year. <sup>100</sup>	
Supporting those vulnerable in the community	What should our fuel poverty connections targets be?	<p>We have discussed our fuel poverty connections scheme at MFT workshops and with expert stakeholders at specialist panels.</p> <p>We outlined our approach to setting connections targets at our Positive Impact workshops in both Southern and Scotland in August 2019, and sought views as to whether targets were appropriate.</p> <p>We had detailed discussions with a small group of third sector experts after the Positive Impact workshop to continue the discussion about methodology and broader vulnerable customer support.</p>	<p>Stakeholders want us to play a role in addressing fuel poverty through interventions including connections to the gas network and referrals to partner organisations.<sup>100 101</sup></p> <p>Stakeholders understood the process we followed to set fuel poverty connections targets and suggested it was a difficult exercise given the current range of factors that impact upon levels of uptake. Suggested targets were seen as appropriate.<sup>102</sup></p>	<p>4.14.1</p> <p>4.18</p> <p>6.4</p> <p>6.4.1</p>

<sup>100</sup> Valuation Phase (Conjoint & WtP) Summary report (Ref 094)

<sup>101</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017)

<sup>102</sup> SGN Positive Impact round table event - (London combined with Scotland) (Ref 088)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
Supporting those vulnerable in the community Future energy solutions	Is there value in us sharing more open data?	<p>Opportunities for sharing information, including data, is a common theme discussed at most stakeholder workshops.</p> <p>Customers provided views on this topic at qualitative acceptability testing workshops.</p>	<p>Stakeholders are interested in the concept of increased data sharing,<sup>103</sup> for a range of circumstances e.g. a national PSR, whole energy systems demand.<sup>104</sup></p> <p>This is a topic that is less relatable for customers, who did not see it as an area for investing in at acceptability testing workshops.<sup>105</sup></p>	10.10 6.5.2 11.4 11.5
Providing excellent service  Supporting those vulnerable in the community	How should the quality of our services and activities be measured and incentivised?	<p>We hosted a cross-sector round table event to discuss social value and understand examples of best practice adopted in other sectors and central government.</p> <p>Customers provided views on this topic at qualitative acceptability testing workshops.</p>	Stakeholders at our social value round table outlined the numerous benefits associated with promoting social value, in particular where a common industry approach is adopted. <sup>106</sup> Customers support incentives if the schemes are carefully managed with clear benefits, <sup>107</sup> although customers at acceptability workshops rated this as an area that was less important. <sup>105</sup>	6.14
Supporting those vulnerable in	How much should we invest in supporting vulnerable customers	Customers were asked a question in relation to providing additional support to 250,000 vulnerable customers in our	Southern domestic customers gave this additional element of our plan an acceptability score of 79% in total. Scottish domestic and SME business customers	6.5.2

<sup>103</sup> Moving Forward Together workshops London & Edinburgh November 2018 (Ref 013,014)

<sup>104</sup> Moving Forward Together workshops London & Glasgow Jan/Feb 2019 (Ref 016, 017) Future of heat specialist panels Edinburgh 1 and 2 (Ref 023,024)

<sup>105</sup> Business Plan Acceptability Testing Phase 1 (Ref 078)

<sup>106</sup> Simetrica Social Value Roundtable Event Report (Ref 096)

<sup>107</sup> Qualitative workshops - Sharing Financial Risk. Innovation investment (Ref 083)

Making a positive impact				
Customer priority	Topic / decision	Engagement mechanisms	Key insights	Business plan reference(s)
the community	and how are these most effectively delivered?	quantitative acceptability testing research.	gave even higher acceptability scores of 86% and 87% respectively, making this the second highest scoring element for these groups. Acceptability was lowest amongst southern SME businesses at 75%. <sup>108</sup>	
Providing excellent service  Supporting those vulnerable in the community	What are our people and skills requirements and what is our role in attempting to close the 'skills gap'?  Is there value in us providing a training ground and doing more than the bare minimum to develop skilled people?	This was included as a consideration in wave two of our willingness to pay customer research.  We have held a number of bilateral engagements with stakeholders specialising in enhancing diversity and inclusion in the workforce.  The link between social value and employee satisfaction was discussed at our social value roundtable event.	Domestic customers would be willing to pay an additional £1.48 for us to extend our programme for helping young people develop life skills to reach 6000 young people per year, up from the current number of 2000. This was a lower priority for domestic customers when compared to other attributes tested in the research. <sup>109</sup>  Domestic customers were slightly more willing to pay for us to increase work opportunities for disadvantaged groups in society, with a value of £1.78 for the best level of support we can offer. With an appropriate and consistent methodology to measure the impact, the benefits of embedding the creation of social value into business operations can be substantial and wide-reaching. <sup>110</sup>	8c  8.10 8.12 8.13  6.14.2

<sup>108</sup> Business Plan Acceptability Testing Phase 2 (Ref 079)

<sup>109</sup> Valuation Phase (Conjoint & WtP) Summary report (Ref 094)

<sup>110</sup> Simetrica Social Value Roundtable Event Report (Ref 096)

## 6 Understanding the needs of different groups of customers and stakeholders

We have taken customer and stakeholder views into account throughout the many sections of our plan, as described above. We will continue to analyse the differences between the perspectives of diverse groups of customers and stakeholders, throughout GD2. A few illustrations of some of these differences are included below.

In relation to our customer research, findings have generally indicated a high degree of commonality between different customer groups and customers in different regions.

MaxDiff analysis showed that future customers (millennials) rate reliable gas supplies, reducing costs and alternative sources of gas more highly than average, and attribute a lower priority to supporting vulnerable customers and providing excellent service.

Millennials rate reliable gas supplies, reducing costs and alternatives sources of gas higher than supporting vulnerable and providing excellent service



SGN

Max diff analysis, August 2018, SGN customers N = 511

10

Our first wave of willingness to pay research identified a small number of statistically significant differences between different regions that we serve, principally Scotland and London.

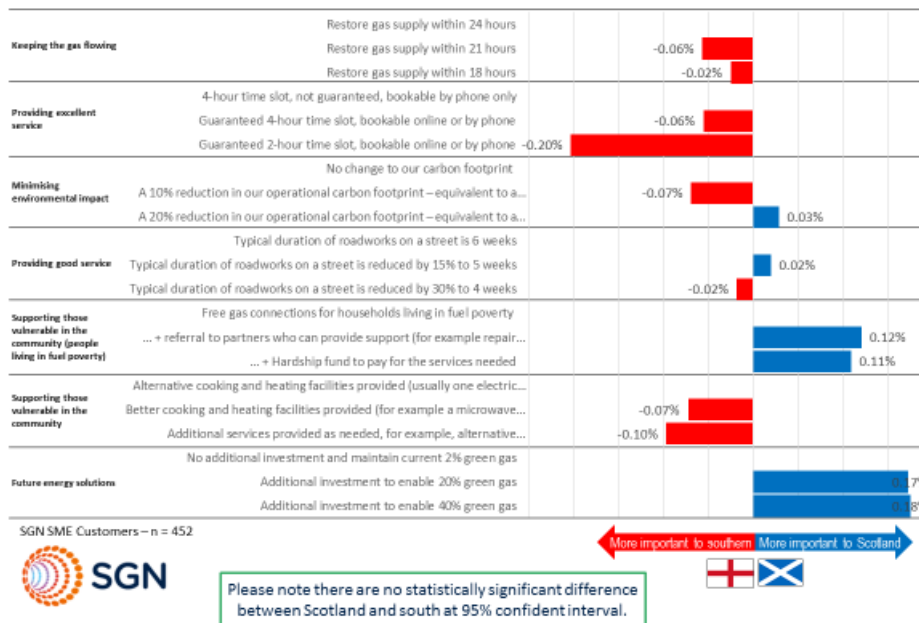
**Customers in Scotland rate reliable gas supplies, reducing costs and supporting vulnerable higher than customers in south. Customers in south rate environment, utilising technology and reducing roadworks higher than those in Scotland.**



Domestic customers in Scotland were generally prepared to pay more for service improvements than customers in the South East, with customers in London prepared to pay the least. There was a statistically significant difference between Scotland and London around willingness to pay for “Typical duration of roadworks on a street is reduced by 15% to 5 weeks” (Scotland = £1.19, London = £0.72).

There are less obvious differences between the regions among SME customers. Although some differences were identified, these were not statistically significant at the 95% confidence level.

### SGN SME investment priorities – regional differences: Future Energy Solutions and Supporting Vulnerable were more important in Scotland



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In wave 2 of our willingness to pay research there were no statistically significant differences between regions.

We have undertaken specific willingness to pay research with vulnerable groups through trusted intermediaries. Customers who struggle to pay their bills are less willing to pay for additional services in all regions. During all phases of research, we have compared overall results with the results for vulnerable groups to ensure we have a good understanding of the perspective of these customers.



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## 7 Evaluating the effectiveness of our engagement

With early input from our CEG we created a scoring mechanism to evaluate the effectiveness of our engagement activities in respect of informing the decisions we were trying to make during the creation of our business plan. We scored effectiveness on a scale of 1 to 5, based on the following factors:

- Sample size or number of stakeholder participants
- Representativeness - an appropriate mix of stakeholders/customers views
- Inclusion of the views of hard to reach groups
- Methodology - objectivity, ability to capture views effectively
- Satisfaction or feedback survey results.

Although our ratings are somewhat subjective, we found the systematic use of a consistent tool to be helpful in learning lessons to continuously improve our engagement programme.

We rated all the engagement mechanisms used in Phases 1 and 2 at a score of 3 or above, with the initial customer research programme scoring 5. The majority of our engagements were rated as 'effective' (4) or 'extremely effective' (5), although a few engagements were scored as only 'somewhat effective' because some stakeholders had indicated decisions of a more technical nature, requiring specialist engineering knowledge and understanding, were harder for them to comment upon. For example, stakeholders told us at workshops in Phase 2 that while proposals to enhance the safety and resilience of our network seem reasonable, they would expect us as subject-matter-experts to make well-informed and justified investment decisions based on a balanced evaluation of risks and benefits (this feedback was acted upon in Phase 3 by holding our Safe and Efficient workshop with specialist stakeholders who had the requisite knowledge and experience to offer more informed views).

We further refined the evaluation matrix and scoring during the transition from Phase 2 into Phase 3, which we shared with the CEG. In our evaluation of Phases 3 and 4 we rated the majority of our engagement as 'effective' (4) or 'extremely effective' (5). As with previous phases, a small number of our engagement activities were evaluated as only 'somewhat effective' (a score of 3). This was primarily driven by the level of detail/information we were able to share in relation to our emerging plans at the time of the engagement events. In particular, we found during our qualitative acceptability testing workshops that customers struggled to comprehend some of our proposals. We learned from this in designing and improving the later quantitative phases of our research (both acceptability testing and wave 2 of our willingness to pay research). Consequently, these activities scored much higher, both being rated as 'extremely effective' (5).

Overall, we believe that our customer research and stakeholder engagement has generally been very effective, with feedback from stakeholders attending workshops being highly positive. We designed much of our customer research to be undertaken in qualitative workshop settings, ensuring customers had the time to digest the ideas presented and ask questions of clarification. Customers reported strong levels of comprehension in relation to the questions we were asking in our quantitative research.

Although our evaluation scores are subjective, we have found the scoring system effective in learning lessons and helping us plan subsequent engagement. The CEG has developed its own criteria to judge effectiveness, and will detail their evaluation of our engagement programme in their report submitted to Ofgem following submission of our final business plan.

## 8 Assuring our stakeholder engagement and the role of the CCG and CEG

We appointed PwC to independently assure our GD2 stakeholder engagement plan. The findings of this assurance are included alongside the submission of our business plan as supporting evidence.

Throughout our entire engagement programme we have met on a number of occasions with Ofgem's Consumer Challenge Group (CCG), and frequently (typically monthly) with our Customer Engagement Group (CEG). Both bodies have provided challenge and review of our business plan, with the CEG in particular examining our engagement activities closely.

Our CEG was appointed to fulfil its formal role of challenge and reporting determined by Ofgem during Phase 1. Our engagement with the CEG, and the constructive challenge they have brought during the development of our proposals, is described in detail in chapter 4a of our business plan. In addition, comments from both the CEG and CCG on earlier drafts of our business plan, and our responses, are contained in the annex to this appendix.

### 8.1 Assurance statement

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 Director of Stakeholder Engagement was appointed as the Sponsor for the Enhanced Engagement appendix which has 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 stakeholder engagement, research, evidence and productivity. Both Senior Manager and Director sign-off was obtained.

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
Stakeholder Advisory Panel	Consulted throughout development of the Business Plan.
DJS Consultancy	Consultancy advice and support to underpin the creation of the plan; and test and iterate elements of the plan.
Impact Utilities Consultancy	

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#### 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
PwC	Review of Stakeholder appendices against the Ofgem Business Plan Guidance and PwC Stakeholder Engagement Framework.

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## 9 Glossary

All acronyms and associated descriptions can be found within the Glossary appendix.

## 10 Annex

1	Insight inventory .....	52
2	CEG report to the RIIO Challenge Group on the SGN October draft plan .....	54
3	CEG comments on July draft plan and SGN responses.....	59
4	RIIO-2 Challenge Group response.....	65

# 1 Insight inventory

Table 8: Insight inventory (December 2019)

Publication Date	SGN Research or Engagemen	Research Type	Doc prefix #	Title
Jan-18	R	QT	001	How to improve stakeholder satisfaction 2018 SUMMARY
Mar-18	R	QL	002	Stage 1: Explorative Qualitative Workshops and interviews (Exploratory Phase)
Aug-18	R	QT	003	Stage 2: Max Diff Prioritisation Phase Report FINAL
Aug-18	R	QT	004	Stage 2: Max Diff Regional slides V2 (Prioritisation Phase)
Jun-19	R	QT	005	Stage 3: Conjoint & WtP Summary report (Valuation Phase)
Sep-16	E	EV	006	MFT Workshop March 2016 London & Edinburgh PDF
Sep-16	E	EV	007	MFT Workshop March 2016 London & Edinburgh Word
Apr-17	E	EV	008	MFT Workshop March 2017 London
Apr-17	E	EV	009	MFT Workshop March 2017 Portsmouth
Apr-17	E	EV	010	MFT Workshop March 2017 Edinburgh
Mar-18	E	EV	011	MFT Workshop March 2018 London
Mar-18	E	EV	012	MFT Workshop March 2018 Edinburgh
Nov-18	E	EV	013	MFT Workshop November 2018 London
Nov-18	E	EV	014	MFT Workshop November 2018 Edinburgh
Nov-18	E	EV	015	Moving Forward Together 2018 - Best company ideas
Feb-19	E	EV	016	MFT Workshop January 2019 London
Feb-19	E	EV	017	MFT Workshop February 2019 Glasgow
Nov-17	E	EV	018	Specialist panel Scotland - Supporting our communities Meeting 1
Jan-18	E	EV	019	Specialist panel Scotland - Supporting our communities Meeting 2
Nov-17	E	EV	020	Specialist Panel Southern - Supporting those at risk Meeting 1
Jan-18	E	EV	021	Specialist panel Southern - Supporting those at risk Meeting 2
Nov-17	E	EV	022	Specialist panels - Fuel poverty (South)
Aug-18	E	EV	023	Specialist panel: Future of heat, Edinburgh 1
Dec-18	E	EV	024	Specialist panel: Future of heat, Edinburgh 2
Jul-18	R	QT	025	Future energy solutions for Lochaber (Fort William)
Sep-17		SE	026	Consumer Engagement in the Energy Market 2017
Oct-16		SE	027	Investigating UK electricity consumer preferences for bearing DNO pension cost and risk Consumer-led pension
Oct-16		SE	028	Derivation of a social discount rate for assessing UK electricity consumer preferences for bearing
Oct-16		SE	029	Consumer-led pension strategy Determining the optimal strategy
Oct-16		SE	030	Consumer-led pension strategy – overall conclusions
2018		SE	031	Energy for all - Innovate for all - Summary Report
2018		SE	032	Energy for all - Innovate for all - Full Report
Oct-17		SE	033	Vulnerable consumers in the retail energy market: 2017
Nov-16		SE	034	Living without mains gas
2017		SE	035	Vulnerable consumers in regulated industries
Jun-18		SE	036	Beyond ECO The Future of Fuel Poverty Support
Jun-18		SE	037	Simpler registration for consumers in vulnerable situations
2018		SE	038	BEIS Public Attitudes Tracker – Wave 24 summary report
2018		SE	039	BEIS Public Attitudes Tracker – Wave 25 summary report
2018		SE	040	BEIS Public Attitudes Tracker – Wave 26 summary report
2018		SE	041	BEIS Public Attitudes Tracker – Wave 26 summary tables (excel)
2018		SE	042	BEIS Public Attitudes Tracker – Wave 27 summary report
2018	R	QT	043	Connections, Planned and Repair Key Driver Analysis by region 2017 18
Jul-13		SE	044	Consumer Vulnerability Strategy
Jun-18		SE	045	Vulnerable consumers in the energy market 2018
Sep-18	R	QT	046	Joint Gas Network Stakeholder Engagement report
Aug-18		SE	047	FoE Literature analysis - Heat
Aug-18		SE	048	Decarbonisation of Heat Draft Minutes
Jul-16		SE	049	The UK Gas Networks role in a 2050 whole energy system
2018		SE	050	Northern-Gas-Networks-Stakeholder-Submission-2017-18
Sep-09		SE	051	Surveying Hard to Reach Groups – Final Report
2007		SE	052	Ofgem Electricity Distribution Customer Service Reward Scheme 2007
2007		SE	053	Ofgem Customer Service Reward Scheme
Jan-18		SE	054	Driving awareness of CO <sub>2</sub> ; a data-driven strategy
Sep-18		SE	055	SGN Customer Fuel Poor Analytics, Project Plan
Jun-05		SE	056	Customer Service Reward Scheme Submission Wider Communication Strategies
2018		SE	057	Engaging vulnerable energy customers in the smart meter roll-out:
2018		SE	058	Engaging fuel poor and hard to reach households on energy initiatives
2018		SE	059	UKPN Talking to our diverse customers

2018		SE	060	Making better use of data: identifying customers in vulnerable situations
Nov-17		SE	061	Research into the behaviours and attitudes of the fuel poor in England
2018		SE	062	Rough Guide to Engaging Communities
Dec-13		SE	063	Report to Ofwat on Thames Water Business Plan
Oct-18		SE	064	Consumer Engagement in the Energy Market 2018
Aug-18		SE	URL	People in the UK have £19 billion of hidden debt
Jul-05		SE	URL	Vulnerable customers to pay more for energy after Ofgem allows higher tariffs
Feb-19	E	EV	065	SGN Sustainability Roundtable - London
Feb-19	E	EV	066	SGN Sustainability Roundtable - Glasgow
Jan-19	R	QT	067	Third Party Connections survey Full Report Jan 2019
Jan-19	E	EV	068	SGN Safety Culture Roundtable Event - Key Feedback and Recommendations - Final
Feb-19	R	QT	069	Third Party Connections Jan 2019 report
Feb-19		SE	070	ENA Future of gas report
Aug-18	R	QT	071	SGN Stakeholder Satisfaction Wave 1
Nov-18	R	QL	072	SGN Stakeholder Satisfaction Wave 2 (teled depths)
Feb-19	R	QT	073	Stakeholder Satisfaction Wave 3 (data only)
TBC	R	QT	074	Stakeholder Satisfaction Wave 4
Sep-18	R	QT	075	Customer Service key driver analysis
Feb-19	R	QT	076	Large Gas User survey results 2019 FINAL, updated with breaks for usage category
May-19	R	QL	077	LSx - hard to reach report
May-19	R	QL	078	SGN Business Plan Acceptability Testing Phase 1
Nov-19	R	QT	079	Business Plan Acceptability Testing Phase 2
Feb-19		SE	080	Consumer Perceptions of the Energy Market
Aug-19	R	QL	081	Scope - SGN Focus Group report 2019_08_23 -
Sep-19	R	QT	082	Biomethane and Gas Entry Connections Customer Survey DRAFT
Sep-19	R	QL	083	Shaping the Business Plan Qualitative workshops - Sharing Financial Risk. Innovation investment
Sep-19	R	QL	084	Shaping the Business Plan Qualitative workshops - Environmental Action Plan
Sep-19	R	QL	085	Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable
Nov-19	R	QT	086	Local Authorities
Oct-19	R	QL	087	Scottish Independent Undertakings Summary
Aug-19	E	EV	088	SGN Positive Impact round table event - (London combined with Scotland)
Aug-19	E	EV	089	Safe & Efficient round table event - London
Aug-19	E	EV	090	Shared Net Zero Future round table event - Scotland
Jun-19			091	Agility eco report
Feb-19			092	Frontier work on vulnerability
Sep-19	R	QT	093	Panel - financeability report
Nov-19	R	QT	094	Stage 3: Valuation Phase (Conjoint & WtP) Summary report wave 2
Oct-19	E	EV	095	Biomethane and Gas Entry connections round table event
Sep-19	E	EV	096	Simetrica Social Value Roundtable Event Report
May-19	R	QL	097	Guaranteed Standards of Performance – Phase 1 report
Sep-19	R	QL	098	Financial stakeholder engagement - summary of findings 25Sept
Sep-19	R	QL QT	099	CEG Research update Regional Differences v 4
Oct-19			100	Large Gas Users - Environmental Responsibility Desk research
Oct-19			101	Collated SME research 20191022
Nov-19	E		102	CO specialist round table report
TBC			103	Stage 3: Valuation Phase (Conjoint & WtP) wave 2 Excel
Oct-19			104	SGN Simetrica Valuation of the Impact of work disruptions Report 311019 Final
Nov-19	E		105	CO safety and awareness roundtable event London Final Report

For more details or access to these reports please contact [GD2@sgn.co.uk](mailto:GD2@sgn.co.uk)



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## 2 CEG report to the RIIO Challenge Group on the SGN October draft plan

### CEG's report to the RIIO Challenge Group on SGN's October Plan

#### Context

Since the 1 July plan SGN have carried out a significant amount of consumer and stakeholder research to inform some of the aspects of the draft plan that remained open. As a CEG we have been impressed with how much engagement they have managed to do in that short time and the way that has shaped the latest draft of the plan.

Through the summer SGN have kept us up to date with their engagement plans and some of the changes that they have made to the plan as a result. We have also had specific discussions on their early thinking on the Consumer Value Proposition (CVP) and on the Environmental Action Plan (EAP). However, we have not met as a CEG since the 1 October plan was shared with us and as such these comments are based on calls and email exchanges among members of the group. We have a two-day workshop planned for 22-23 October when we will be working through the full plan and can share any further significant points with the CCG at the meeting on 31 October.

We are also in parallel reviewing all the engagement that SGN has undertaken throughout the process to ensure we have a full and well evidenced basis for what we say about their engagement in our final report.

As requested, we have focussed here on the CVP and the EAP as the new elements of the framework, together with a few high-level reflections on other aspects of the plan.

#### Consumer Value Proposition (CVP)

As a CEG we do not feel that we yet have a clear understanding of what Ofgem are expecting in terms of a CVP, notwithstanding the latest update to the business plan guidance. As such we have found it hard to provide appropriate challenge to SGN in this area. In our early discussion with them we counselled against simply focussing on what was easily measurable and suggested they try to distill out what the story was in terms of where they were adding value for consumers over and above business as usual, even if it could not be quantified. They have heeded that advice but it remains unclear to us whether that delivers what Ofgem are looking for and in particular we note that the Ofgem guidance talks throughout in terms of "proposals" whereas SGN have looked more broadly at what their plan overall delivers.

#### SGN response

*We have continued to work on our CVP, taking the CEG's guidance about specific proposals into account (see chapter 5 of our business plan).*

In terms of quantification we have been very supportive as a CEG of SGN's efforts to use the methodology of "social value" to understand the wider societal value of what they do, which we see as best practice across government and more widely. However we have noted that in Ofgem's report on the stakeholder engagement incentive for this year that they raise concerns about SGN's use of both social return on investment and willingness to pay as ways of quantifying benefits. We are unclear what this means for the CVP.

We have not yet had a chance to properly scrutinise the methodology SGN used for quantifying the CVP

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but are aware that the approach taken on, for example, uncertainty mechanisms and the value of learning to inform government policy involve some critical assumptions. We are concerned that the CVP risks becoming about finding clever ways to quantify things rather than a focus on what this really delivers for consumers.

Given these concerns we are likely to highlight this as an area we would like to explore through the open hearings process once all company plans are in the public domain. We are concerned that without some sort of additional step like this Ofgem are likely to find it hard to compare what are likely to be very different approaches and our own assessment of SGN's CVP is hampered by the lack of comparators against which to judge what good looks like.

### **Environmental Action Plan (EAP)**

SGN has been aware of the importance attached to environmental issues by consumers from its very early research for RIIO2, and the CEG – which includes members focussed on the needs of future consumers - has consistently pressed for more to be done in this area. SGN was therefore already exploring opportunities in this area, through a focus on the UN Sustainable Development Goals, in advance of Ofgem's decision to require an Environmental Action Plan (EAP). SGN has had only limited time to develop its EAP since the guidance was produced but has, as a part of this process, carried out extended qualitative research with customers on its EAP proposals, as well as engaging with specialist stakeholders and with ourselves. However, we are aware that SGN would still see its EAP as a work in progress and we have highlighted to them a number of areas in which more clarity and potentially more ambition is needed.

### ***SGN response***

*We have continued to work on our EAP and reviewed it in more detail with the CEG at their October meeting.*

The overwhelming message from the consumer research was that SGN should prioritise action on leakage given this accounts for 95% of their carbon footprint (and is squarely their responsibility). That said there was general support for other actions given the limited impact on bills.

In terms of the proposals currently in SGN's EAP:

We are of the view that there is still not enough focus in the plan around leakage – given the priority that consumers attach to it - and indeed the way the proposals are presented does not bring out the particularly pernicious effects of methane as a greenhouse gas (e.g. the plan treats theft of gas and leakage as equivalent). We welcome the proposals for accelerated repex and the innovations that SGN are exploring around 3<sup>rd</sup> party damage. However, we have raised concerns about the numbers in Table 9.1 which suggest a significant backward step on leakage savings from pressure management. SGN have provided assurance that they remain focussed on finding innovative solutions on pressure management and are looking again at the numbers. More generally there is a need for SGN to be much clearer on the numbers in this area (getting the correct units, being clear on the assumptions they have made on the Global Warming Potential of methane, showing the base levels of leakage as well as the change and what is known about the technical sources of leakage) and to present the full picture of all they are doing. This will allow the CEG to form a clearer view of whether the plan is sufficiently ambitious in this area.

## SGN response

*We have focussed particularly on leakage in the December plan, see section 10.5. We have also revised table 9.1 in the business plan.*

Similarly we remain concerned about the level of the target around biomethane injection. While SGN has, from the start, had an ambition to have the equivalent of 400k homes provided with biomethane we have consistently questioned the level of this ambition which, as the latest plan shows, represents a lower annual run rate than in GD1. We recognise that levels of connections will be driven by the policy context but, as a minimum, would like an explanation of how SGN see this evolving and a commitment to keep their targets under review. We would also like to see targets for levels of biomethane constrained off the system from existing connections (e.g. on a seasonal basis or linked to gas quality issues). We welcome the innovation projects that SGN are undertaking to enable more biomethane to be injected and their efforts to amend standards to avoid the need for propanation (reducing cost and carbon) but would like to see some assessment of the impact these might have. We note the commitment to improved engagement with biomethane producers (in the enhanced engagement chapter) but would like to see this more tied in to an overall biomethane strategy, including drawing on lessons on engagement with renewable generators from ED1.

## SGN response

*Taking the feedback from the CEG into account and drawing on our engagement with biomethane producers at two bespoke events we have increased our target to supply biomethane to 450,000 equivalent homes.*

On the other elements of the EAP we welcome the clear internal commitment that we have seen on these issues but consider the EAP itself is still under-developed and clearly has not been subject to the same levels of assurance and checking as other parts of the plan. We still need to discuss the proposals properly as a group and recognise that SGN are still developing their thinking. However, some initial reactions and areas we will be exploring further with SGN are:

- There is a need for a clear presentation of SGN's overall carbon footprint and how it is derived, trends over time etc. (i.e. not just a high-level pie chart) and the impact of the different initiatives on their 2045 net zero ambitions;
- It also needs to be clearer how the individual proposals are being funded, with assurance that this represents the net cost (where the upfront investment leads to lower ongoing costs);
- We welcome the bold commitment on low emission vehicles even though a technical solution is not available for all vehicle types currently (which responds to an early CEG challenge) but are unclear about the value for money of the accelerated replacement;
- We welcome the commitment to move to renewable electricity for their own use (but want to understand why this does not result in a faster reduction in their scope 2 emissions, whether they have looked at using long term PPAs and the interplay with the use of green tariffs referred to elsewhere);
- We welcome the focus on the supply chain (but would like the code progressed more quickly and want to understand whether SGN have an ambition in future to measure their Scope 3 emissions beyond the embedded carbon in e.g. PE pipes);
- We welcome the consideration given to biodiversity but have questions about the level of costs in the plan (including wanting to understand how this might benefit SGN themselves in terms of the value of their property portfolio);

- We welcome the focus on climate adaptation as a critical element of resilience (notwithstanding that this is not an area that Ofgem have highlighted in their guidance).

## **SGN response**

*The very constructive feedback from the CEG has been instrumental in developing the EAP between October and December and we believe we have taken each of their points into account (see chapters 9 and 10). We have also had further detailed feedback from members of the CEG.*

### **Other issues**

On the customer service / vulnerability aspects of the plan we recognise that this has been underpinned by customer research which we will be reviewing carefully to ensure that how differences between Scotland and the South are handled is in line with customer expectations (for the 9/10 satisfaction target and the average interruption time in particular). We support the need for the plan to evolve – both in relation to the specific activities to be covered by the use-it-or-lose-it vulnerability allowance and the fuel poor network extension scheme targets. We agree with SGN that there could be a role for the CEG in providing ongoing scrutiny in this area.

We are pleased that they have been able to limit the investment proposed on the SIUs and particularly welcome the proposal to explore how they could play a role in building the evidence around the future of gas which we had urged them to do. The proposals in this area have been changing fast and we will want to explore further with SGN what they now envisage (given there are separate references in the plan to exploring the potential for biomethane and hydrogen).

In terms of the individual investment projects referenced in chapter 8 some of the CBA paybacks are very long (up to 22 years). Given the uncertainty about the future of the network we have concerns about long payback projects. SGN have been looking at ways to try to capture this uncertainty in their analysis (as set out in 15.6.2) which they claim supports the use of a 35 year payback. We welcome the thinking that SGN have done around the handling of uncertainty but would have liked a clearer steer from Ofgem in this area as they provided in GD1.

On workforce resilience we are pleased that SGN acknowledge the CEG advice on BAME groups and the need for wider engagement to support their plan. We look forward to seeing the evidence from this further engagement and their plans for ongoing engagement in the December plan. We continue to stress the importance of a strategic approach to workforce issues.

## **SGN response**

*We increased our engagement on the people plan, engaging with disability and ethnic minority advocacy groups to inform further development of the plan. We have also created an ongoing engagement plan for training and broader people planning in GD2.*

In terms of innovation, we recognise that SGN have a very strong commitment to helping build the evidence base on hydrogen to inform future policy decisions on the key challenge of heat decarbonisation. We welcome the major effort SGN are putting into this important area but note that their plan includes significant expenditure (c £230m) on potential energy transformation projects which they suggest could be funded through re-openers or the NIC successor. We note that if funded through a re-opener SGN customers would pay whereas if the NIC is used all GB customers would pay (which feels more appropriate as the aim is to inform national policy). However we believe there should be a wider

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public policy debate on how such innovation is funded and the link with other government funding which is paid for through taxation and hence is seen as less regressive (but which SGN suggest can be problematic in relation to their licence). We are also keen to understand how the impartiality of the evidence developed through these trials will be assured given SGN have an obvious interest in continued use of the gas networks.

We note that SGN have increased their productivity assumption from 0.6% pa to 1% pa – responding to a challenge we made on their 1 July plan - but also that they have identified additional cost pressures which push up the base to which the productivity assumption is applied. This is still much lower than the historic trend which led to strong outperformance in GD1. We are continuing to explore with them the basis for their “like for like” assessment and what appears a conservative assumption about the effects of innovation on costs going forward.

### ***SGN response***

*We discussed like for like comparisons with the CEG at their October meeting.*

### 3 CEG comments on July draft plan and SGN responses

Table 9: SGN Consumer Engagement Group (CEG) - summary of comments on SGN's 1 July 2019 draft plan

CEG Comments	SGN Response
<p><b>Process</b></p> <p>The CEG have had an opportunity to see and discuss SGN's early thinking on most areas of the plan as individual papers through the earlier part of this year. Through this process we have provided a number of suggestions and challenges to SGN (including through a formal challenge log), many of which they have taken on board. We discussed the first version of the full plan (without numbers) at our meeting on 30 May. However this was drafted ahead of the Ofgem Sector Specific Methodology decision and hence in some areas, in particular on environmental issues and the Consumer Value Proposition, the plan needed significant further work. We provided SGN with comments on that first draft plan which included the need for a clearer articulation of which options were still open.</p> <p>We discussed a very near to final version of the plan at a CEG only meeting / workshop on 27 June and then reviewed our conclusions in the light of the final 1 July draft plan at a meeting on 8 July where we shared our reactions with SGN. The key issues that we shared at that meeting are set out below.</p> <p>We have always been keen that SGN should use the summer to properly consult and engage with customers and stakeholders on the options they have identified – and be able to change the plan in the light of that engagement. The current plan includes proposals for four financial ODIs (that have not yet been discussed with the CEG) and a number of specific investment proposals (many of which have been talked through with us but where we have not seen detailed business cases for example). We have made clear to SGN that they will need much stronger evidence to support any of these bespoke outputs, including (where appropriate) engagement with customers and stakeholders.</p> <p>Given the limited time over the summer it is vital that SGN move swiftly and in a focussed way to do this.</p>	<p>The Environmental Action Plan and the Consumer Value Proposition, introduced in the Ofgem Sector Specific Decision Document, were both discussed at a meeting with the CEG in September.</p> <p>For the Environmental Action Plan we incorporated feedback from the CEG, from the August deliberative/qualitative customer workshops and from the stakeholder workshop into the October 1 draft.</p> <p>The Consumer Value proposition was still a work in progress and we recognised the need to monetise our value proposition. Feedback from the CEG was helpful, but it remains a challenge.</p> <p>3 of the 4 bespoke ODIs were not taken forwards due to the difficulty of quantification despite some stakeholder support.</p> <p>The social value incentive is still being proposed, with support from a social value roundtable engagement event and further detailed statistical analysis.</p>

## Extent to which the plan is informed by customer and stakeholder engagement

SGN have a clear sense of what customers' broad priorities are based on previous engagement they have done and a strong programme of research to inform the plan. This seems to be understood across the business and hence informs thinking across most of the plan. SGN have also tested some of their ideas for additional optional spend through consumer research. However the CEG have stressed that this testing is based on consumers having only a very superficial view of what is proposed and as such cannot be relied on as evidence to support specific proposals. The CEG is disappointed that the opportunity for proper deliberative research with consumers was missed in this previous round of engagement.

SGN have also engaged with stakeholders on many of these issues through generic "Moving Forward Together" events and more tailored expert events such as on the future of gas. In general these have been well run with a sense that SGN is genuinely listening.

At the 8 July meeting we explored with them how they proposed to consult and engage on this next version of the plan. The CEG view is that the appropriate approach will vary depending on the topic. In some cases it will be important to get consumers' direct input which should involve use of more deliberative techniques to get informed views on more complex topics. In other cases (such as on specific engineering projects or future options for decarbonisation) it may be sufficient to say that this is a priority area for customers and to engage with expert stakeholders on specific options. The CEG cautioned against over-reliance on the superficial precision of willingness-to-pay research in areas outside customers' understanding. SGN have confirmed they are only using this to get a sense of relative priorities.

While there are some good examples (such as repex), overall, the CEG feels that more needs to be done to provide a consistent line of sight between the engagement that has been conducted and the business plan commitments throughout the plan. In some cases SGN is under-selling what it has done and

Over the summer and autumn we ran extensive engagement with both stakeholders and customers, including:

- 6 deliberative/qualitative workshops with customers covering 3 topics (environmental action, customer and vulnerable customer initiatives and targets and the trade off of outputs, investment and risk)
- 2 workshops for biomethane producers
- Social value roundtable
- 2 specialist stakeholder workshops on positive impact, 1 on shared future and 1 on safe and efficient
- Local authority survey of energy teams and planners underway
- SIU engagement with local authorities and large gas users
- A second round of willingness to pay
- Quantitative acceptability testing on our business plan

We increased the line of sight between engagement and outputs and the systematic linking of evidence in updated versions of the plan.



<p>a more systematic approach linking statements in the Plan to the underlying evidence would help the CEG in its task.</p>	
<p><b>The need for further detail on specific consumer initiatives</b></p> <p>We recognise that SGN is committed to maintaining its current high standards of customer service as well as supporting customers who are more vulnerable. We also recognise that some of the technological developments and innovations that will help to achieve this have yet to be developed and tested, and that SGN wants to retain flexibility to respond to new opportunities and challenges through the GD2 period. The CEG is broadly supportive of this approach but feels that there is a need for additional detail in this chapter to make clear SGN's ambitions and commitments to meeting customers' needs, the outcomes it hopes to achieve and how success will be measured. In many areas there is also a need for further supporting information to provide the evidence base for SGN's chosen priorities and, in particular, to set the context for some of the numerical targets and investment budgets.</p> <p>The CEG have challenged the 9/10 satisfaction target as being a worsening of performance in Scotland. We recognise that with rising expectations it may not be justified to make further investment in this area (given customer concerns on costs) but this case has not been made in the Plan or tested with customers.</p> <p>The Plan does not mention the work that we know SGN have been doing looking at the service provided to third party connection providers.</p>	<p>We ran 2 deliberative/qualitative workshops with customers (one in Scotland and one in Southern) in August focused on customer experience, including investment levels, targets and measures of success. Customers were broadly supportive of our ambitions, 9 out of 10 targets and approach.</p> <p>We also ran two specialist stakeholder workshops focusing on how we make a positive impact, which included discussion of customer experience, investment and targets. Stakeholders were also supportive of our 9 out of 10 ambition</p> <p>We have made it clear that we will not reduce our efforts to provide an excellent service for our customers. We have maintained the target that we set at the start of GD1, which has produced very strong results for customer satisfaction. We are maintaining our levels of investment and effort, recognising (as our customers do) that we have to work harder to maintain the same levels of satisfaction as customer expectations increase.</p> <p>We have implemented service improvements for third party connection providers now for GD1, rather than wait for GD2.</p>
<p><b>The need for more action to address environmental challenges in GD2</b></p> <p>We are aware that there has been a significant shift in Ofgem's stance on environmental issues in their Sector Specific Methodology Decision for GD2 and that SGN have had limited time to take this on board (albeit that it is an angle the CEG have been consistently encouraging more action on, reflecting the strong support from customers and stakeholders on the environment and the wider policy imperative around climate change).</p> <p>We welcome the strong emphasis that SGN places on</p>	<p>We have produced an Environmental Action Plan and tested it with customers and stakeholders, incorporating the feedback received into our plan. We also carried out additional willingness to pay research on the individual elements of the environmental action plan.</p> <p>We held an expert stakeholder workshop on the environment and future of heat in August.</p>



<p>developing the evidence base around hydrogen and the future of gas. However we urge SGN to engage further with expert stakeholders and develop clearer plans around its contribution to reducing carbon during the GD2 period (in particular on biomethane connections and leakage). The basis for the 400k homes ambition for biomethane has not been explained so we cannot judge how ambitious it is.</p> <p>SGN's adoption of the UN SD Goals is a welcome step but more needs to be done to turn this into a practical Environmental Action Plan for GD2 that is in line with the Ofgem guidance. There are some welcome initiatives around vehicles and property but these need to be brought together in an overarching Plan. SGN mention having 22 KPIs in this area but these are not set out and the current GreenPlan which they refer to is not in the public domain. More needs to be done to set out their thinking in this space and to engage relevant stakeholders.</p>	<p>We also ran two workshops with biomethane producers in September, with good feedback from attendees. The workshops discussed the results of a survey of biomethane producers. We have fed the findings of the survey and engagement into the plan.</p> <p>Building on a sustainability roundtable event that we ran with expert stakeholders and working with the Carbon Trust we have developed performance indicators linked to the UN sustainability goals. We want to be ambitious in this area to respond to our customers' priorities and to support the net zero target. We have taken on board comments and the recent guidance from Ofgem and will develop a plan underpinned by stakeholder engagement.</p> <p>We had a detailed discussion with the CEG on our environmental action plan in September.</p>
<p><b>Embedding the wider strategy into all aspects of the Plan</b></p> <p>There are some areas of the Plan which feel like they have been developed in isolation and would benefit from being linked more closely to the overall direction. In particular we are concerned that the proposed investment in the SIUs is hard to justify unless they can be seen as having a valuable role as a part of the energy transition (building on the previous successful project in Oban). Similarly, the workforce resilience section seems disconnected from both the new challenges of the energy transition but also the opportunity to use their social purpose and wider ambitions as a way to attract a more diverse workforce. We would like to see SGN engaging with relevant stakeholders including, but not limited to, current employees, to develop a full People Plan. Finally, the IT/ cyber section needs to link more clearly to the customer ambitions.</p>	<p>We have re-evaluated the longer-term options for delivering energy to the SIUs and found that current arrangements are significantly more cost effective than any available alternatives today. We are launching detailed studies on maximising the potential for biomethane to enter the SIU networks and the purchase of biopropane. As part of the energy system transition we expect the SIUs to play an early role in the pathway to decarbonisation however initial pilot projects will take place in more accessible locations to ensure learning and knowledge sharing is maximized.</p> <p>We have refined the workforce resilience section to be a broader people plan and following discussions with the CEG, and ensured that it is more closely linked to the overall strategy in the plan. Some engagement has taken place with trades unions and employees, and broader ongoing engagement with specialist stakeholders has also been undertaken.</p>
<p><b>Questioning the case for more spend on a "safe and resilient" network</b></p> <p>We recognise the evidence that SGN present that customers see safety and keeping the gas flowing as top priorities but would not expect to see more</p>	<p>We narrowed down the additional options included in our plan based on additional customer/stakeholder insight, cost benefit</p>

<p>spent in that area as SGN are already delivering to a high standard. However we note that of the additional options put forward by SGN there is close to an additional £100m on projects to improve safety and reliability, the largest area of additional spend. We believe that in most cases SGN has the engineering expertise to judge where projects are needed and should not be trying to demonstrate consumer willingness to pay for individual projects. However we do want them to be able to explain strategically why expenditure is needed above current levels to maintain the same level of network performance. This could be because of increased threats in some areas (e.g. cyber, climate adaptation) but in general SGN should be tempering its plans to reflect the evidence they have on overall willingness to pay for improved safety / reliability.</p>	<p>analysis and engineering assessment. A total of £53m across all three commitments was included in the October version of the plan. £15m of these additional services related to enhancements linked to safety and reliability.</p>
<p><b>Greater clarity required around how SGN proposes to address uncertainty in growth projections</b></p> <p>The CEG has highlighted from an early stage the uncertainty that exists around not only the long-term future of gas but the short-term implications for connections growth and reinforcement with e.g. policy decisions imminent on no new gas connections. We are pleased that SGN seems to have largely taken this on board (although there are still some inconsistencies in tone between different chapters). However given the importance of this issue we believe there is still more that SGN should do to keep on top of fast changing policy developments at a local level through increased engagement (with local authorities, large gas users and the transport sector) and to be really clear about how it is addressing that uncertainty in its plan.</p> <p>Given the uncertainty, we see the merit in a volume driver on connections / growth but want reassurance that SGN would still look to mitigate the effects of e.g. increased volumes of peaking plant on</p>	<p>We systematically engage with all local authorities in our footprints with data sharing agreements in place to cover local authority development plans and our network plans as part of our regular stakeholder engagement. Increasingly these discussions with local authorities involve their energy teams as well as their planning teams.</p> <p>In addition, we surveyed all local authorities (planners and energy teams) to understand their plans and policies.</p> <p>We have carried out a survey of 50 large gas users to understand their business and decarbonisation plans. We are supplementing this with analysis of the public policy landscape for industrial and commercial users.</p> <p>We have had a number of bilateral meetings with key stakeholders in our network in the transport sector, and will continue to engage with these stakeholders on an ongoing basis.</p> <p>We also held an online meeting with the members of the Energy Intensive Users Council.</p> <p>One of the topics that we discussed with customers at two deliberative/qualitative workshops was the balance of risk between the company and customers.</p>

<p>network costs. More generally we note that the large number of proposed uncertainty mechanisms seems to be taking a lot of risk off SGN and want reassurance that this not at customers expense.</p> <p>Given the uncertainty, we see merit in the 4Rs approach to maintenance decisions but will want to test further that this is being applied sensibly (and not leading to an over emphasis on minimising short-term costs).</p>	<p>We agree that policy drivers are uncertain and potentially inconsistent. For example, the high levels of ambition for decarbonisation are at odds with short-term mitigation of fuel poverty. The policy of not fitting new gas boilers post 2025 may result in a slow decline in new connections for GD2, a quicker decline, or a burst in activity to 'beat the deadline'. We believe that a volume driver reduces risk for both customers and the company in this uncertain context.</p> <p>We discussed the process of cost justifications with the CEG at September's meeting and provided examples of CBAs and Engineering Justification Papers.</p>
<p><b>The need to ensure that productivity targets are sufficiently stretching</b></p> <p>We know that the top priority for customers is cost and hence the CEG are concerned to ensure that the productivity assumptions assumed in the plan are sufficiently ambitious. With the lower cost of capital proposed by Ofgem there will almost certainly be a reasonable level of bill saving through GD2. However other elements of the bill may increase over this period and affordability remains a major concern for customers, in particular those on low incomes. We would like to see stronger evidence that SGN is pushing itself in this area and is cognisant of the overall bill implications for customers. The level of productivity improvement being planned for GD2 seems relatively modest compared with what was achieved in GD1.</p>	<p>We increased the productivity assumption in our October draft from 0.6% to 1%. The Bank of England forecast for productivity is 0.3%, so our assumption is significantly higher. We are one of the most efficient networks at present, with some other networks 5% - 10% less efficient than SGN.</p> <p>The cost base of our supply chain has increased, particularly as a result of almost full employment in the south. We are in continuing discussions with contractors.</p>

## 4 RIIO-2 Challenge Group response

We reviewed the constructive feedback from the RIIO Challenge Group on both the July and October drafts of our plan across our extensive project teams. We combined it with feedback from the CEG and additional customer and stakeholder insight to refine our plan as we have summarized below.

### 4.1 Response to the RIIO Challenge Group Comments on October draft plan

#### Challenge Group Feedback

The Challenge Group has evaluated the SGN plan using the following criteria for each plan area:

- Ambitious - how ambitious are the proposed plan targets, compared to other company plans and to companies' historic performance?
- Stakeholder-focused - have proposals clearly been formed and challenged by good quality stakeholder engagement? Have they addressed our feedback on their July plan?
- Cost effective - is the expenditure reasonable and well justified? Is there clear evidence of net consumer benefit?
- Delivery confidence - considering past track record and current company commitments, is there good evidence that the plan outputs and expenditure profile will be achieved?

**Table 1: Indicative business plan evaluation**

Area of business plan	RAG Rating	Area of business plan	RAG Rating
Track Record	Green	Digitalisation strategies	Amber
Business plan commitment	Red	Enabling whole systems solutions	Amber
Giving consumers a stronger voice (Stakeholder engagement)	Amber	Managing Uncertainty	Amber
Outputs: meet the needs of consumers and network users		Driving efficiency through innovation and competition	Amber
a. Addressing customer vulnerability	Amber	Forecasting and scenarios (and net zero)	Amber
b. Customer Satisfaction, GS, complaints, emergency response	Red	Costs	Amber
c. Maintaining safe and resilient network	Amber	CBA and engineering justification	Amber
d. Delivering an environmentally sustainable network	Amber	Financing	Red

**Note:** this table follows the structure of the business plan guidance issued by Ofgem on 09 September 2019. Ratings explanation: **RAG** – Red (R) Amber (A) Green (G)

## Key issues

Overall, your plan has shown improvement from July although there is still some missing information that will need to be provided by December.

The plan should show a clear direct linkage between your ambitions for the RIIO-2 period, the key activities and efficient resources to deliver them, the associated outputs and performance targets, and how delivery risks are addressed.

RIIO Challenge Group Feedback	SGN Response
<b>1. Track record</b>	
The plan explains the transition from RIIO-1 to RIIO-2, how efficiency savings have been carried over and how innovation has been deployed from RIIO-1 to RIIO-2. You state that you are not expecting any work planned in GD1 to be deferred to GD2.	<p>We are pleased to see that we have scored green on this.</p> <p>We had some feedback from the CEG to which we have responded to improve the clarity of the explanation in chapter 2.</p>
<b>2. Business plan commitment</b>	
This is not expected to be complete until submission of the December plan.	We have in place a comprehensive assurance strategy that has been actively supported by the SGN Board and is summarised in chapter 3.
<b>3. Stakeholder engagement</b>	
In your December plan ensure that you set out clearly how any bespoke incentives proposed meet the high bar that Ofgem has set for these so that it is clear why these activities are significantly different from business-as-usual activities.	We have proposed one bespoke financial incentive on social value collaboration. It is set out in section 6.14 with clear justification.
You say the LTIP now recognises 'non-financial measures': Can you clarify the weighting of these non-financial measures, and the way that any other bonus arrangements across the organisation incentivise delivery (including the weighting that they have on non-financial measures).	The weighting is 50/50 between financial measures and measures aligned to customer priorities. Bonus related performance objectives for employees are aligned to corporate priorities developed with stakeholder input.
You give a breakdown of stakeholder engagement costs of £2.03m pa by 2021. Please clarify whether these are all in your baseline costs and demonstrate how you have ensured that this level of spend is proportionate and represents value for money.	Engagement costs are included in baseline costs. Value for money and proportionality have been clarified in section 4.18.
<b>4. Outputs</b>	
Further information has been provided to fill some of the gaps identified in the July	A three way map is included in the plan in chapter 16c. This shows the reconciliation

plan. The plan should show how totex forecasts map onto ODIs and PCDs.	<p>between</p> <ul style="list-style-type: none"> <li>• PCD and ODI outputs described in the plan</li> <li>• totex forecasts</li> <li>• business plan data templates</li> </ul>
<b>5. Vulnerability</b>	
Your overall approach is satisfactory. There is a solid plan, with a moderate level of ambition, with a highlight to help 250,000 vulnerable consumers to use energy safely, efficiently and affordably. There are several points of improvement since the summer. Consumer vulnerability and carbon monoxide safety use-it-or-lose-it allowance stands out as a well evidenced and justified area and has responded to challenge raised by CEG.	Positive feedback noted.
We note that the social value bespoke output has not yet been justified (which puts the overall rating at risk of being Red/incomplete).	Full justification now included in section 6.14 with regression analysis methodology in our Customer and Vulnerability Plan appendix.
We note that your ambition on fuel poverty has increased since July, but that, overall, the level of ambition still sits below GD1 levels.	We have discussed our targets extensively with stakeholders and have found broad support for the targets proposed. We are proposing 3600 a year – compared with 3328 a year over the last 3 years of GD1. It is appropriate to compare with recent performance because of significant changes to qualifying criteria that Ofgem has made to the fuel poor scheme. Although we made 4349 a year over the first 6 years, that was during a time when for the first couple of years people over 70 on a low income qualified. Ofgem have restricted the criteria several times during GD1. We have achieved high levels of connections in Southern during GD1 only through the support of our shareholders funding first time central heating grants as part of their £145m voluntary contribution. Therefore, we think our targets for GD2 are very ambitious (see section 6.4).
<b>6. Customer outputs</b>	
There is little justification for the additional costs you say you will incur to deliver the GSOPs.	Costs for extending the customer notice required for planned interruptions from 5 to 7 days will increase scheduling, planning and unproductive time costs. We listened to the CCG's feedback and continued discussions with our procurement team and repex contractors. We have decided to absorb the risk of this enhanced requirement driving increases in contractor rates, given the re-tender process for



	GD2.
You also give no details of how you plan to maintain your complaints performance (we understand that performance baselines will be set next year but still want to understand how you expect to deliver in this area).	Section 6.11 now includes details of our plans to maintain our strong complaints performance.
<b>7. Resilience</b>	
Your plan provides a reasonable description of resilience policies and measures covering IT security, physical security and a workforce plan.	Positive feedback noted.
During RIIO-2, new regulations to ban gas boilers in new houses will come into force, impacting IGTs and gas engineering resources. At the same time, expertise may be needed for development of hydrogen. What are the resourcing implications and how do you plan to address them?	Further details of resourcing challenges for future decarbonisation and our plans to respond have been included in section 8.13.
<b>8. Environment</b>	
Your EAP shows considerable work and some genuine ambition on avoidable waste, biodiversity and business carbon reduction. There is extensive coverage of contribution to low-carbon transition, in particular in relation to hydrogen and biomethane).	Positive feedback noted.
Although we note that the summary of outputs in 9.1 shows a reduction in annual biomethane volumes which requires explanation - and would not show sufficient ambition; also some of the business plan discussion relates to GD1 initiatives	Responding to feedback from our CEG and the CCG, we have increased our run rate and overall ambition to supply the equivalent of 450k households by the end of GD2 (an increase of 50k from the previous target).
Greater specificity about targets, effects of various proposals and consistent presentation (both percentage and absolute reductions or increases where possible to make comparisons easier) would all improve the plan and EAP. For example, it is not clear what level of fleet replacement would be required to meet science-based targets	We have clarified our plan and EAP in chapters 9 and 10, to include further discussion of science-based targets (9.6), and our plans to accelerate decarbonisation including our plans for fleet replacement (9.6.1)
Further detail could also usefully be added	We have included more detail as requested.

to use of aggregates and recycling of construction spoil.	Recycling of construction spoil is an emerging issue under discussion with the Environment Agency. We have included a base cost (9.8.1) and re-opener mechanism (12.2.9) to accommodate the uncertainty.
<b>9. Digitisation</b>	
Your plan suggests a focus on a BAU digital continuation but not much evidence/detail on plans to go further. The plan could show even more ambition in exploiting digitisation.	We have created and published a separate digitalisation strategy with summary details added to the plan at 11.5.
What are your plans to use smart meter data to improve network planning and possibly identify capacity and also opportunities to reduce gas pressures (and leakage)?	<p>We clarify our plans for smart meter data in 10.7 and opportunities to reduce gas pressures and leakage in 9.5.</p> <p>Our real time networks project will deliver extensive gas demand research and allow greater visibility on whole system opportunities as well as improving forecast accuracy (15.5)</p>
<b>10. Enabling whole system solutions</b>	
The plan sets out a description of whole system issues and includes some specific projects planned for GD2. These include volatility of GDN connected gas Peaker's, and decarbonisation of SIUs. Are there opportunities to use the SIUs to be beacon projects for any move away from gas central heating, for example with a hybrid heat pump approach?	<p>In chapter 11 we assess options for electrification of SIUs, including evaluation of air source and ground source heat pump and district heating.</p> <p>In section 11.7.2 we set out feasibility studies for moving towards hydrogen or biomethane injection plant at SIUs.</p>
A number of projects are identified for potential development in GD-2, but cost benefit assessments or detailed development plans are not provided.	<p>These are very early stage innovation projects (section 11.7.2 - 11.7.4) that are expected to be funded through the energy system transition funding structures. As such they are included in the innovation funding expectations set out in section 13.5 and a CBA would be premature.</p> <p>Through our whole systems charter we will work with other networks to bring out projects like these as efficiently as possible.</p>
There is some evidence that NetZero is causing a significant shift towards heat pumps for new commercial buildings and away from gas, particularly in cities. Is this something you are seeing and what are the implications for your assets?	<p>We have not seen a reduction in industrial and commercial acceptances in the last 3 years. However, we acknowledge that this may be likely in future and would reduce the need for reinforcement. We have included a volume driver in 12.2.6 to cover this.</p> <p>We have set out more details of</p>
How have you engaged on biomethane with your customers? For example, to reduce the cost of biomethane injection and ensure efficient use of biomethane in	We have set out 9.13 the projects that we have progressed and the consultation that we have undertaken. This has been focused on gas connection costs, gas regulation standards and capacity constraints. We hosted two specialist



the gas system?	events for biomethane producers and have also engaged with ENA and ABDA.
<b>11. Managing uncertainty</b>	
<p>The plan sets out a wide range of uncertainty mechanisms, including:</p> <ul style="list-style-type: none"> <li>• Volume drivers and reopeners' for repex and capex</li> <li>• Reopeners for policy changes e.g. heat policy, HSE, cyber, legislation</li> </ul>	We learned from our GD1 experience and looked forward to decarbonisation policy to set out where we have the greatest areas of uncertainty in our forecasts and how we can rebalance the risk between ourselves and customers.
Please set out the potential costs associated with these and justifications for any additional uncertainty mechanisms to those proposed in Ofgem's planning guidance	Full details are included in chapter 12.
We would welcome more information on how you have determined the potential cost and impact implications of these risks and how they have been allocated between consumers and your company.	<p>More information is included in chapter 12 and at 15.6.1. We think our approach will provide a well-balanced plan.</p> <p>In key areas of uncertainty, where we expect technology and evidence to move quickly, such as the environmental uncertainty mechanism, we are proposing that external stakeholder steering groups help us maintain the balance of risk, ambition and performance. (12.2.10)</p>
<b>12. Innovation</b>	
The innovation area contains a wide range of potential innovation initiatives, and how these will be approached. It also includes what appears to be organisational/management initiatives to gain efficiency savings. Please clarify whether these initiatives refer to BAU innovation out of totex or plans to use NIA	Costs in the plan do not include innovations that are targeting organisational or management initiatives to gain efficiency savings. Projects in 13.4.1 are fully funded by SGN and included for completeness only.
<p>The plan does not clearly explain how innovation will deliver benefits to consumers in RIIO-2 and beyond.</p> <p>What innovation have you identified from other similar companies (e.g. EU based) that could be brought to the UK?</p>	<p>Greater clarity is provided in section 13.2. We anticipate financial benefits of a further £2.2m a year carried forward into GD2.</p> <p>The innovation appendix 008 contains more detail of potential innovation projects.</p>
<b>13. Efficiency</b>	
Like for like cost reduction is proposed of 0.7% pa and real price effects are forecast to be just over 1% pa over CPIH. This draft of the plan says these increases haven't been included. However, your response to	The CCG refers to 0.7% productivity, however in our October draft we increased our productivity target to 1% per annum. We think the confusion arose because we split productivity between Opex (1.5%) and repex and capex (0.7%) to give an average of 1%. We have tried to make this

our August feedback question says you will achieve a 1% pa productivity target. Please clarify	clearer throughout the plan.
<b>14. Competition</b>	
There is little information provided on native and early/late competition, with the plan stating that no projects fit in the £50m threshold. Effective procurement appears to be embedded within the plan – please describe your approach and the expected benefits for consumers.	Our understanding is that native competition and effective procurement are largely the same thing. We have clarified in chapter 14.
<b>15. Forecasting, scenarios and net-zero</b>	
Future demand scenarios have been considered but peak demand is shown to remain at high levels. There is little impact shown on SGN investment plans e.g. any deferment of expenditure.	In considering our investment we have only targeted the projects that need to be completed for maintaining the safety and resilience of our network, where possible we have deferred expenditure through our 4Rs strategy (chapter 7.2). We recognise that there is a risk that our forecasts are incorrect, in order to mitigate that we have proposed a volume driver for new connections and associated reinforcement on the transmission and distribution network so that the customer is protected if our forecasts are incorrect (chapter 12).
The CBAs used to test whether expenditure should take place assumes that in 2040 the decision will be taken that gas assets may no longer be required. Further detail on this analysis is requested, including if this decision is made sooner.	The basis for that assumption was that a decision would be made mid 2020s with a role out path between 2030 and 2050 with 50% of assets being either operational or not in 2040 and therefore have a value at risk. CBAs have been re-run with most below 10 years and all but one below 20 years.
Have you considered any projects for injection of hydrogen produced by electrolysis.	Section 13.6.6 sets out the Methilltoun project that we were looking to fund under the BEIS Hydrogen Supply competition and would progress using electrolysis for hydrogen production.
<b>16. Costs</b>	
The totex has increased from July. Sensitivities are provided highlighting the implications and risks of expenditure deferments or cancellations.  Overall, your plan proposes year on year efficiency gains of only 0.7% which appears unambitious.	Our plan makes a 1% year on year productivity assumption, which is three times the Bank of England forecast.
Your plan says you have increased	The increase in capex is due to an increase in

expenditure to deliver new outputs and as a result of EJ assessments, resulting in an increase of £6m pa although they will look to save £6m of this. Please provide a breakdown of your evidence supporting cost increases.	fuel poor connection targets from 6000 to 18000, and a review of required expenditure on the LTS. Details are given in chapter 16.
Repex - please provide a clear profile for your chosen mandatory and non-mandatory volumes, and associated unit costs, setting out the key changes and reasons for change over RIIO-1 and 2, including the efficiency gains you have realised and planned.	Details are given in chapters 7, 16 and the Repex appendix.
Opex – your business support costs have increased since GD-1. Please explain the options you have considered to reduce these costs.	Details are given in chapter 17. Expenditure is flat in GD2. There is a step up between the first six years of GD1 to start of GD2 is due to the GD2 project and its ongoing workload, increase in HR, legal and stakeholder costs due to increased governance and regulatory requirements.
<b>17. Engineering justifications and CBAs</b>	
Significantly more information has been provided since the July plan. While, reasonable evidence appears to have been provided to support expenditure plans, further evidence should be provided as needed to ensure full justifications are available in your December plan.	Noted and provided.
The SGN Real Time Networks project has indicated 40% reduction in peak demand. What impact on the proposed expenditure would there be if this was confirmed as a significant number of projects are capacity related?	Reference to a perceived 40% drop in consumer pk6 demand has been derived from the Real-Time Networks technical report 'Project Progress Report 5'. However, this statement in isolation of the complex considerations of demand and diversity could be open to misinterpretation. A monitored reduction in pk6 demand does not necessarily equate to a like for like reduction in modelled demand. The results published within the technical report are merely a snapshot of a single monitored network over a restricted time period. However to answer the spirit of the question, if there was a reduction in peak demand, then that would require less investment in reinforcement which would be covered by a volume driver (12.2.6)
<b>18. Consumer value proposition</b>	
Your CVP is a work in progress. You have	Further work has been carried out on our CVP

<p>summarised and sought to quantify the consumer value which you believe your plan will generate, including the impact on different groups of customers but noted that there will be further iteration and discussion with your CEG. We would stress that since the purpose of CVP is to reward delivery of additional consumer benefit beyond that from the expected efficient operation of a network, claims relating to efficiency and productivity will need to meet a particularly high threshold. Furthermore, the Ofgem minimum requirements in relation to meeting the needs of customers, including those in vulnerable circumstances, and addressing the environmental impact of the network and innovation set a high bar. We consider that you have identified some aspects of your plan, such as your proposals in relation to open data and the impact of refined uncertainty mechanisms, which might deliver additional value. Your final CVP will need to meet the requirements of the Ofgem guidance, showing evidence of additional value being delivered, rather than the consumer benefit which we would expect to be derived from efficient operation of the network. We recognise quantification of benefits is challenging and that quantifying the value of contributions to thought leadership and regulatory change is particularly difficult but would suggest that a sensible methodology will not seek to claim all the possible benefit arising from actions but, for example, to identify some measure of the incremental impact of your contribution, which should itself be additional.</p>	<p>taking the feedback below into account (chapter 5).</p>
<p><b>19. Finance</b></p>	<p><b>SGN response in chapter 18 and Financeability appendices 004 and 004a</b></p>
<p>We have evaluated the financeability section of your plan against your adherence to Ofgem's financial plan requirements, financeability and how far relevant measures to aid financeability have been considered, value for money for consumers and evidence of effective engagement with consumers (and our prior feedback).</p> <p>Working assumptions (WAs) - Both the Notional and Actual Companies have been modelled using</p>	

Ofgem's WAs and a full suite of the sensitivities required by Ofgem has been presented on a consumer-friendly basis (e.g. using minimum ratios for investment grade in the downside scenarios). Your non-compliant 'Base Case' has been clearly distinguished from the Ofgem required cases.

However, the main business plan analysis relates only to a single, non-compliant SGN proposed scenario.

You have also not complied with Ofgem's request that you should analyse key alternative inputs to those they propose; this particularly applies to gearing levels.

It is acceptable at this stage (though not in December) to use your own financial model but we expect transparency (i.e. clear cross-referencing to supporting files) and submission of any model or tool used for any supplementary analysis included in the business plan, including bill impact estimations.

Although SGN state that the notional company is unfinanceable at a 4.8% return to equity, the data tables in the business plan for the Notional Company indicate to us that it could well be financeable at a 4.8% return to equity even without substantial mitigating actions).

It is disappointing that your analysis of the Notional Company does not include an assessment and interpretation of ratio results alongside the qualitative factors rating agencies would include in their assessment and that there is so little focus on optimising financeability.

There is no evidence that the proposed mitigating actions have been drawn up with the view of minimising costs to the consumer. We note that you reject all mitigating actions other than a higher return to equity and also that the equity allowance which you propose (6.5% real CPIH, assuming 60% notional gearing or 7.3% assuming 65% notional gearing), is considerably higher, in our view, than necessary to make the Notional Company financeable.

The Actual Company appears unfinanceable without mitigating actions, but this seems to be largely driven by unnecessarily high levels of gearing and a not very clearly explained assumption that actual refinancing costs will be significantly higher in RIIO2 than Ofgem's WA.

You have rejected changes to both depreciation and capitalisation rates as routes to improving financeability but have not sufficiently engaged consumers on what intergenerational equity means for this decision nor why these measures, which were accepted in RIIO1, will not be feasible in RIIO2.

You appear to have considered changes in depreciation and capitalisation rates only as an aid to financeability and do not appear to have considered a shorter regulatory depreciation period in the context of the future of the gas sector and the potential for asset stranding.

Overall your financeability assessment was very disappointing: much greater clarity is required about your proposals for making the Actual Company financeable in the absence of a higher cost of equity allowance.

Consumer engagement was evidenced but was limited to high level questions on intergenerational equity and willingness to pay. We were pleased to note you intend to provide more detailed analysis in December but remind you that we had asked for full analysis in October.

We note your proposal for a 65% gearing assumption for the Notional Company in RIIO2 but would have liked to see a more detailed analysis of its potential benefits to the consumer, balanced against financeability and cost of capital considerations.

We can see the reason for having headroom in target ratios above the minimum required to maintain an investment grade rating (BBB-), but we have not seen sufficient evidence of the cost and benefit to the consumer of targeting a rating higher than BBB-. We appreciate your provision of the sensitivity based on a 4.3% cost of equity allowance and note that, even in this scenario, key ratios for the Notional Company are either above or only moderately below BBB+ thresholds

## 4.2 Response to the RIIO Challenge Group Comments on July draft plan submitted with October draft plan

RIIO2 Challenge Group Comment	SGN Response (section references pertain to October draft plan)
<b>Track record and business commitment</b>	
Requires an explanation of past performance and the consequent implications for RIIO-2.	<p>Section 2.2 provides an explanation on past performance by output category.</p> <p>Section 2.5 provides an explanation on past performance of allowances compared to actual expenditure and provides reasoning why.</p>
In October plan, in particular, please provide a description of any impacts on RIIO-2 from additional or delayed costs caused by RIIO-1 performance, such as deferral of work.	<p>In section 2.7 'Our track record' we have provided how we have built on our GD1 experience, and its implications for GD2 and identified that there is no deferral work from GD1 to GD2.</p> <p>Greater detail on GD1 experience is provided in the following sections of the business plan and relevant appendices:</p> <ul style="list-style-type: none"> <li>• Section 3.3 - GD1 Output delivery</li> <li>• Section 3.4 - GD1 Customer Experience</li> <li>• Section 3.5 - GD1 Allowances and Expenditure</li> <li>• Section 3.6 - GD1 Lessons Learnt</li> </ul> <p>This standardised structure is applied to the major totex expenditure categories:</p> <ul style="list-style-type: none"> <li>• Appendix 012 - SGN - Distribution Integrity and Governors</li> <li>• Appendix 013 - SGN - Emergency Service</li> <li>• Appendix 014 - SGN - Repair</li> <li>• Appendix 015 - SGN - Work Management Business Support</li> <li>• Appendix 016 - SGN - Asset Maintenance</li> <li>• Appendix 017 - SGN - SIU</li> <li>• Appendix 018 - SGN - Capacity Management</li> <li>• Appendix 019 - SGN - Repex</li> <li>• Appendix 020 - SGN - Connections</li> <li>• Appendix 021 - SGN - Transmission Integrity &amp; Compliance</li> <li>• Appendix 025 - SGN - Fleet</li> </ul> <p>A similar approach GD1 evaluation and lessons learnt has been undertaken for other areas such as Appendix 011 - SGN - IT &amp; Cyber Resilience Appendix 026 - SGN - Electrical &amp; Instrumentation although the section numbering may differ.</p> <p>The implications for GD2 are embedded through-out the plan, in particular in chapter 8: Asset Resilience, and the bespoke uncertainty mechanisms set out in chapter 12: Managing Uncertainty.</p>
<b>Giving consumers a stronger voice:</b>	
<b>Stakeholder engagement</b>	
You have acknowledged that your stakeholder engagement to develop the plan is incomplete. Please ensure that this work is	In September 2018 we agreed a 4-phase engagement strategy with our CEG. The first three phases are complete with additional engagement undertaken since July described in section 4.3.2. The fourth phase to test the full October draft plan for acceptability



complete and fully justified as part of your October plan.	and further engagement as needed is already underway.
How each of your proposals has been built on high-quality engagement with relevant stakeholder groups.	The engagement that underpins our proposals is described in chapter 4. Section 4.4 describes the steps we have taken to determine the quality and effectiveness of engagement, including an internal scoring methodology discussed with our CEG.
What difference this engagement has made to your plans	<p>We have refined our overall ambitions based on further engagement with customer and stakeholders as described in the Executive Summary, and sections 6.1, 7.1 and 9.1. Chapters 6, 7 and 9 explain how outputs and targets have been influenced by customer and stakeholder engagement. Changes made in response to our engagement with CEG and CCG are set out in sections 4.7 and 4.8 respectively. Further details are in our Enhanced Engagement appendix.</p> <p>Greater detail on stakeholder engagement and insight is provided in the following sections of relevant appendices according to our three customer priorities.</p> <ul style="list-style-type: none"> <li>• Section 4.1 - Positive Impact</li> <li>• Section 4.2 - Shared Future</li> <li>• Section 4.3 - Safety and Efficiency</li> </ul> <p>The relevance of each section will depend on the investment proposal being considered. Supporting information is provided in the Stakeholder Annex (normally Annex 7).</p>
That any bespoke incentives you propose are supported by relevant stakeholders and deliver clear additional value.	Section 6.14 describes our proposal for a bespoke social value incentive and the engagement that supports it. Section 6.15 describes the incentives that we have discussed over the summer with stakeholders and decided not to take forwards in this draft of the plan.

### Engagement strategy

Set out briefly how your RII02 strategy for engagement matches the principles in Ofgem's business plan guidance	Our ongoing stakeholder engagement strategy can be found in chapter 4b, and we believe our approach is in full alignment with the principles in Ofgem's business plan guidance.
Show the cost of your approach, and explain how you will measure the value and impact of your engagement strategy at all levels in the business	<p>The cost of our approach can be found in section 4.17 demonstrating an efficiency improvement during GD2. Measurement of outcomes is described in section 4.16, which includes</p> <ul style="list-style-type: none"> <li>• measures of progress against our commitments</li> <li>• demonstrating the effectiveness of our engagement</li> <li>• and the value generated for stakeholders.</li> </ul>
Summarise as succinctly as possible: the trade-offs that exist in your plan; any evidence you have to show how rigorously you have engaged stakeholders (including consumers) in resolving those trade-offs; and how you	<p>We have described three explicit trade-offs in the Executive summary:</p> <ul style="list-style-type: none"> <li>• Reducing cost while enhancing service</li> <li>• Reducing cost while managing uncertainty and risk</li> <li>• Balancing the interests of current and future customers</li> </ul> <p>In each case we explain how we have acted on the insight from our customer and stakeholder engagement. More details of our</p>

acted on the input provided.	engagement to explore the trade-off between future and current customers are given in section 4.7.1.
Summarise (in a short appendix, if necessary) where and how your engagement with your Customer Engagement Group and with the RIIO-2 Challenge Group has influenced your plan.	<p>A summary of the changes made in response to our engagement with CEG can be found in section 4.7 and in the Enhanced engagement appendix.</p> <p>Our engagement with the RIIO2 Challenge Group is included at section 4.8. We are providing further details of our response to the Challenge Group's feedback on our July plan in this table which will also be included as an addendum to our October plan.</p>
You say that PWC tested your engagement approach against the AA1000 standard. We would be interested to understand whether any ranking or comparative score resulted from this work.	In their latest independent assessment against AA1000 SES, PWC identified no significant gaps between our practice and the standard. No comparative score is generated from the assessment. (see section 4.16.3).
<p>Forward engagement strategy</p> <p>Please also clarify: what type of commitment you are making to consumer engagement specifically in the future, and how you will ensure that you use methods that enable consumers to give meaningful input on complex issues.</p>	<p>We have defined 9 performance commitments, each with an associated measure of progress in chapter 4B, sections 4.13 and 4.14.</p> <p>We list 10 complex challenges on which we plan to engage with customers and stakeholders. Details of our plans to gather insight from customers are included in this chapter at section 4.11.3, in the Stakeholder Engagement appendix and the Customer and Vulnerability Plan appendix.</p>
If you plan to continue with a Customer Engagement Group in RIIO-2, please set out what additional value you believe you will derive from this compared with the approach used in RIIO1.	<p>We have begun discussions with our CEG about an ongoing role for the group, (see section 4.16.2) in assuring the performance commitments and outputs set out in our plan and in supporting an assessment of our performance as part of the reputational ODI for stakeholder engagement. We also propose that members of all the network CEGs could fulfil an oversight role for a common, industry-wide measurement framework for outcomes (see Section 4.16.4).</p> <p>We have also identified a number of opportunities throughout the plan for us to enhance accountability and transparency through regular interaction with independent stakeholders in a steering group role. These opportunities include a Vulnerability and CO steering group, (section 6.5.6) an Environmental Action steering group for uncertainty mechanisms, (section 12.2.10) and a Fuel Poverty stakeholder panel (section 4.13.1). These steering groups may include members of our CEG, our Stakeholder Advisory Panel or other expert stakeholders.</p> <p>We will continue to discuss all these proposals with our CEG for our December plan.</p>
What options if any have you explored to benchmark your approach and performance in this	Evaluation by PwC against AA1000SES provides an assessment of our approach against a cross sector standard (section 4.16.3). As well as providing their own expert feedback, members of our



area with companies outside your sector?	<p>Stakeholder Advisory Panel shared our ongoing stakeholder strategy with their own colleagues outside the panel from other industries to help benchmarking.</p> <p>We carried out a desk top review of published engagement strategies from companies inside and outside our sector. And we sought advice from an independent facilitation agency, working across several sectors on the best ways to benchmark our approach.</p>
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#### What consumers want from networks: Meeting the needs of consumers and network users

That your specific proposals in response to all Ofgem-defined outputs and incentives are fully detailed and justified (including any evidence of cost benefit analysis you have carried out) in the October plan.	Our response to the Ofgem outputs is being set out in chapters 6, 7 and 9 and we continue to work with Ofgem on the structure of Ofgem defined outputs and incentives through working groups.
That the next draft of the plan includes full details of any bespoke incentives you propose. This should include evidence to demonstrate whether these are in line with Ofgem's business plan guidance. Overall, we are looking for evidence that all proposals are: supported by stakeholders, cost effective and backed up by delivery plans.	<p>In section 6.14 we set out the full details of our social value incentive and supporting evidence. In section 6.15 we set out that whilst there was stakeholder and customer support in principle for three other incentives we could not create a structure that delivered against the Ofgem guidance and have therefore removed them from the plan.</p> <p>Our bespoke outputs are set out in chapters 6, 7 and 9 along with a summary of the stakeholder evidence. More stakeholder evidence is provided within the appendices.</p>
Please also clarify whether you have or propose any link between executive pay and rewards and customer satisfaction or other measures of consumer benefit.	A description of the Long-Term Incentive Plan and how it will be aligned to the GD2 determination is set out in section 3.2.

#### Consumers in vulnerable situations

Please ensure that all parts of this area are completed for your October submission including ensuring that all Ofgem-defined outputs and incentives are fully detailed and justified. Overall, we are looking for evidence that all proposals are: supported by stakeholders, cost effective and backed up by delivery plans.	Our stakeholders, customers and CEG support our approach to customers in vulnerable situations. We give details of our approach, cost effectiveness and our stakeholders' support in sections 6.2 through to 6.7.
Minimum standards: Your level of ambition for fuel poor connections is lower than in GD1. Please ensure that this level of	Our July plan explained that our ambition for fuel poor connections was likely to increase on further engagement with stakeholders following Ofgem's clarification of the scheme in the SSMD.

ambition is fully justified for cost effectiveness and consumer and or stakeholder evidence.	Following that further engagement and with the support of our stakeholders and CEG, our ambition for fuel poor connections has increased from 6,000 to 18,000 (section 6.4). With an annual target of 3,600 our ambition is slightly above the numbers we expect to achieve in the last three years of GD1.
Supporting flexibility: How do you propose to evaluate proposals for the use it or lose it allowance? How do you propose to bring evidence into this process? Please ensure that your proposals for using innovation or other allowances to support vulnerability are fully justified with stakeholder evidence and evidence these are deliverable.	Our detailed proposals are included in sections 6.5 and 6.6, including the detailed and iterative conversations that we have had with stakeholders over the last 12 months. Outcomes from pilot initiatives that we have carried out in GD1 have informed our target setting and plans for delivery, giving us a framework against which to monitor, evaluate and report on outcomes to our stakeholders.
Incentives supporting ambition and delivery: These proposals are incomplete. Please ensure these are fully justified for cost effectiveness, deliverability and stakeholder/consumer insight. You state an ambition to help 50% of your vulnerable customers by 2026. What evidence do you have that this is cost effective and deliverable?	<p>Proposals for the consumer vulnerability and stakeholder incentives are described in sections 6.7 and 6.8 and include performance commitments. Our proposal to create a common, industry-wide measurement framework for social value is viewed positively by our Stakeholder Advisory Panel and cross-sector experts in social value measurement (see section 4.4.4). This would provide a way of providing ongoing justification of cost effectiveness across all networks.</p> <p>Our detailed engagement with customers and stakeholders since July has led to a change in our approach, providing deeper, more targeted support for our customers in vulnerable circumstances. We explain in section 6.5.2 the insight and subsequent outcome of that engagement. We will provide deeper levels of support for 25% of our vulnerable customers (250,000) during GD2. We have identified the anticipated financial and social outcomes we expect to deliver, based on evidence from similar pilot programmes.</p>

### Maintaining a safe and resilient network

Ofgem's business plan guidance requires you to set out your proposals for asset resilience, workforce planning and cyber resilience, including Business IT security and Operational Technology resilience plans.	<p>This is set out in sections 8a, 8b, 8c, and 8d, where we set out resilience strategy for assets, workforce, cyber and security for critical sites.</p> <ul style="list-style-type: none"> <li>• Section 8a is supported by information in Appendix 012 - SGN - Distribution Integrity and Governors; Appendix 019 - SGN – Repex; Appendix 021 - SGN - Transmission Integrity &amp; Compliance</li> <li>• Section 8b is supported by information in Appendix 011 – SGN - IT &amp; Cyber Resilience</li> <li>• Section 8c is supported by information in Appendix 009 – SGN - Workforce Management.</li> </ul>
The business plan must set out the outputs that will be delivered in the RIIO-2 period and how you	These outputs are set out in chapters 6, 7 and 9. These are set according to the type of output type or NARMs methodology. Across these chapters we have set out 51 different outputs that

expect to do this and deliver against LOs, PCD and ODIs.	are proposing to deliver in GD2 and where these link to one of the 18 identified uncertainty mechanisms.
While much information is provided, your plan has some gaps in this area. We look forward to seeing the required information, including justifications of targets and associated costs and benefits, in your October plan.	<p>Following feedback from stakeholders, the RIIO Challenge Group and CEG we have restructured the document to bring out this information.</p> <p>Each output and investment proposal is supported by a suite of 139 Engineering Justification Papers and 154 cost benefit analysis assessments that compare alternative investment options and the justification as to why an investment decision was deemed appropriate.</p>
<b>Delivering an environmentally sustainable network</b>	
In the October plan, we expect you to provide more evidence and explanation of your proposed targets, actions and reporting measures with justification for level of ambition (including in the case of carbon footprint reduction, relationship to net zero by 2050) and to ensure that your Environmental Action Plan complies with the minimum requirements set out in the Ofgem business plan guidance.	<p>The Environmental Action Plan is set out in chapter 10 with accompanying appendix of 003 – SGN – EAP. This sets out our environmental plan as identified by the Ofgem guidance.</p> <p>The bespoke outputs associated with the EAP are set out in section 9.2 and these are supported in section 12.2.10 by uncertainty mechanisms that support the appropriate balance of value for consumer and ambitious delivery.</p> <p>The environmental action plan and these uncertainty mechanisms are being discussed with our CEG following recent stakeholder and customer panels. We will continue to refine the EAP before the December submission to Ofgem.</p>
There is some ambition demonstrated in relation to low carbon transition, including facilitation of bio-methane injection and low regret network enhancement to prepare for hydrogen.	This is set out in chapter 10 and has been brought out in the EAP in SGN Appendix 003 – SGN – EAP section 7.3 where we identify strategies for propane reduction, pressure management and within grid compression.
There is also some evidence of a well- developed wider sustainability strategy but as yet a shortage of stretching targets – for example on aggregates reuse.	This is set out in section 10.15 and has been brought out in the EAP in SGN Appendix 003 – SGN – EAP section 7.5 where we identify targets for waste management.
Whilst there is a welcome commitment to working with the supply chain on PE the degree of ambition with regard to wider supply chain sustainability is unclear.	<p>In section 10.13 and has been brought out in the EAP in SGN Appendix 003 – SGN – EAP section 7.4 where set out approach to the supply chain. With an assessment of the extent to which this will impact on smaller companies. As set out in the Procurement Strategy (Appendix 010 – SGN - Procurement &amp; Native Competition) over the course of GD1 we have promoted small companies entering the supply chain. We are still working with stakeholders on this.</p> <p>With regard embedded carbon of the supply chain we are looking to cover PE pipe, aggregate materials and steel pipes and fittings in the first instance in GD2 as these have the highest embedded</p>

	carbon content.
Leakage targets (excluding repex) are not clear and in several other areas statements of intention are not supported by targets	Ambitions have been set out in section 9.11. It should be noted that leakage as modelled is likely to increase in GD2 as we consider ourselves to be at the minimum viable pressure. Live insertions and growth are likely to increase this pressure.
<b>Consumer Value Proposition (CVP)</b>	
You have started to identify value which your plan will deliver for customers in terms of a CVP. In the October draft we expect to see your CVP articulated in compliance with the Ofgem business plan guidance, identifying clearly in what respects the plan goes beyond minimum requirements and what additional value, and for which consumers, the plan is expected to deliver. We would expect claimed consumer benefits to have been the subject of appropriate engagement, including with your Customer Engagement Group.	<p>The customer value proposition is set out in chapter 5 of the business plan. This sets out areas where we add the most value as supported by customer and stakeholders' feedback but do not have an appropriate methodology, that we are currently aware of, to monetise them.</p> <p>The second is a set of values that we can attribute to specific actions that we will be delivering over GD2 which is over and above the investment value. The assumptions have been set out for these, but we are still discussing the appropriateness of each methodology and will continue to refine this before the December submission.</p>
<b>Enabling whole system solutions</b>	
Please provide further details of the actions you will be taking during the RIIO-2 period to identify and implement cross-vector solutions i.e. electricity, gas, transport, water and heat, and how these activities will help capture wider whole system benefits and support achieving the NetZero target. In particular:	<p>We welcome Ofgem's widening the scope of "whole systems" and we have always considered the wider aspects to achieve net zero; this is fully documented in chapters 9 and 11, and associated appendices.</p> <p>It is our ambition to fully contribute to net zero through collaboration across the gas industry and across sector, and provide evidence to Government for re-purposing the network, which is fully documented in chapters 9 and 11.</p>
The graph on page 85 of the plan shows rollout of Hydrogen networks from 2026. Please provide evidence to support this assumption in your October plan.	The graph reflects our ambition to deliver net zero, once government make the decision on the provision of heat and is based on each of the steps in the decarbonisation pathway being achieved in a timely manner. It is now shown in section 11.11.
Have you considered using the four SIUs as towns suitable for 2050 related projects given that the customers already receive significant subsidies for LNG supplies and this funding could be proposed to support net zero projects?	<p>During GD1, we completed the Oban network innovation competition project, which allowed us to move to a wider specification for natural gas. This has seen significant cost reduction, as we load LNG from the Isle of Grain importation terminal, and do not have to procure the production of LNG from Avonmouth.</p> <p>In chapter 11, we fully explore the range of options for the SIUs as a specific case study. We are proposing in chapter 9 feasibility</p>

	studies for the development of biomethane plants, this should further reduce the delivery of LNG and also our own carbon footprint.
How will you fund your proposed H2 projects?	As we set out in section 13.8 we consider the range and diversity of NIC projects to be too broad for a single approach to be applied to all circumstances.
Ofgem's May decision gave networks much greater scope to submit proposals which produce benefits for the whole system and not just your gas consumers. It would also be of assistance if you could clearly demarcate how you have incorporated this broader scope into your planning (as opposed to a plan built on the previous narrower scope of whole system).	<p>Following extensive engagement with the planning departments of many local authorities in our footprint, we have a clear understanding of the future need for new housing requirements in each area and the likelihood that these developments will progress to completion. Following feedback from our CEG and other stakeholders, we have also started engaged with heat teams, decarbonisation teams and energy transition teams within these authorities to gain a better understanding of how energy and heat will be delivered to these new developments. Feedback has been mixed with some of authorities have well-coordinated goals whilst others are still in the early stages of building these cross departmental links.</p> <p>We have also engaged with Local Energy Partnerships who, facilitated by companies such as Siemens, are taking a more regional approach to whole systems.</p> <p>We expect through this liaison to identify opportunities to adapt our plans whilst still ensuring the core principles of safety and reliability are maintained.</p>

### Managing uncertainty

You have outlined several potential uncertainty mechanisms without any details of the potential probability or impacts. Please provide further detail to quantify and justify your proposed uncertainty mechanisms, including the ones that you have decided to include within your baseline plan.	We have set out more detail on the uncertainty mechanisms that we are proposing in chapter 12. This is an area we will continue to develop as we continue to work through the practicalities of each structure.
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### Driving efficiency through competition and innovation

Innovation - the plan should separately identify innovation related to business as usual and innovation related to the energy system transition/NetZero, including H2/whole system.	This has been clearly set out in this manner in chapter 13, with section 13.6 focused on Business as Usual Innovation and section 13.7.2 focused on the decarbonisation pathway which is then supported by NIC and NIA projects in section 13.7.3.
The former should explain why innovation funding is required from customers and not a normal business investment.	This is set out in section 13.6 and focuses on the duration of the price control, and hence the ability to recover a return, risk, and the overall commercial proposition.



For the latter, why are you best placed to spend this money and not others, for example companies already with H2 pipelines and competency.	Where we demonstrably have the requisite skills and competency to lead innovation in this area we will seek to build partnerships and target appropriate funding. However, we expect others with expertise in the wider sector to also come forward with innovative solutions and potentially alternative funding models. In these cases, we would want to offer our support, resources and potentially some financial backing to help progress these projects.
In relation to the CISBOT technology, the plan should advise if pipelines using this technology to seal joints would be suitable for transporting H2. Or will the main need to be replaced later?	This is set out in section 16.1.5 of our business plan setting out our plans for CISBOT in GD2.
Competition – have you given consideration to allowing the new connections infrastructure providers to carry out diversions and mains reinforcement as competitive activities?	<p>All of the gas connections activities up to 7 bar are within the competitive market, however we do have a team at SGN committed to meeting our customers' needs as when required. We are reviewing the &gt;7 bar procedures to allow customers to undertake this work, however to date most customers want us to undertake this work due to the engineering requirements.</p> <p>We have not had any stakeholder feedback asking us to explore allowing customers to undertake diversions or reinforcements. We have an open approach to explore new ways of working.</p>
Ofgem's Business Plan guidance requires potential projects to be identified for early and late competition, as well as a 'competition plan' as part of your approach to native competition. We note this document is intended to demonstrate your alignment with the best practice principles, additional commitments to share information and data in relation to competitions, commitments to go 'above and beyond' the minimum requirements of the relevant procurement rules, and any public commitment to better embed the concept of 'technological agnosticism' in your competitive processes. Your plan currently does not address any of these issues. We look forward to seeing this information in your October draft	<p>We have set out our competition plan in section 14.1 of the business plan where we run through each best practice principle, how our existing practices align to them and the measures that we are undertaking to extend competition across our procurement activity.</p> <p>Further details have been set out in Appendix 010 – SGN - Procurement &amp; Native Competition.</p>
Efficiency – Your plan aims to position you at the efficiency	Chapter 12 demonstrates that SGN have been consistently upper quartile or better on the Totex benchmarking, demonstrating we

frontier by the end of RIIO-2. How have you identified this frontier and what are your targets as a result?	are starting from an efficient base. This chapter also sets out independent evidence of what productivity improvements to the frontier can be expected based on UK Bank of England projections. We believe we can do better and have set productivity targets of 1% per annum which we believe will keep SGN a frontier company.
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### A consistent view of the future

Ofgem's business planning guidance requires you to design your baseline plan against parameters that are no greater than the lowest point of the ranges provided in the ENA Scenarios Working Group. In October plan, please demonstrate how your plan is consistent with these parameters.	Chapter 15 sets out our approach to forecasting and scenarios and the role of forecasting in determining network investment. The common scenario is specifically addressed in section 15.2 along with the implication of net-zero and the impact on the plan's investment proposals.
Ofgem have also requested that you ensure your plan can flex to support the pathways to Net Zero - could you please demonstrate this in your plan.	In chapter 12 we have also identified flexibility mechanisms that cover the majority of reinforcement workloads to ensure that level of flexibility is designed into the plan.

### Cost information

We welcome the information that you have provided with respect to your totex proposal but we are concerned that your totex bid is higher than necessary.	Cost information and trends are summarised in chapter 17 of our plan. With traces and sensitivities this includes a breakdown of efficiency between new productivity and innovation carried forward.
We have concerns about many of the assumptions you have made and of your supporting evidence, including engineering evidence.	Chapter 16 covers the projects and programmes of work we will deliver over the course of GD2. For each cost category, we list the specific asset type or activity described in that section, ending with the cost breakdown and how, if at all, it differs from our Draft 1 Business Plan submitted in July. In each case we explain how we know our costs are efficient and high confidence.  Where appropriate, we have presented evidence in our plan and for our major Capex and Repex programs we have also provided comprehensive engineering justification papers and cost benefit analysis. In total 139 engineering justification papers have been provided to you with confidence about the assumptions used.
We are also concerned that the efficiencies and innovations you realised during RIIO-1 may have not all been bought forward. The evidence may be available but has not been provided in your July plan.	In section 13.1 we set out how we are building on GD1 and the success that we have achieved during GD1 to develop innovations, implement them and in section 13.3 we set out the importance of the innovation culture in delivering these innovations. In section 13.4 we set out what innovation we will carry over from GD1 into GD2. In the Appendix 008 – SGN – Innovation, we have provided a comprehensive review of the innovations undertaken in GD1.

<p>In accordance with Ofgem’s business planning guidance, in proposing costs for operating and developing their networks, we expect you to explain your cost and workload forecasts, particularly where these diverge from historical trends.</p> <p>In particular, we expect you to comply with Ofgem’s guidance to provide information on cost drivers, consideration of options, justification of costs, including the proposed profiling of costs, and how efficiency/innovation will be used to reduce costs.</p>	<p>Chapter 17 provides explanations where costs have varied from historical trends, splitting these out between cost and workload changes.</p> <p>We supply appendices covering all major cost categories setting out phasing of expenditure across GD2 and the drivers of workload. For example, we categorise workload into sufficient detail (e.g. diameter bands) to aid understanding of key movements over time impacting on costs.</p>
<p>For your October plan submission, we would request that you provide information on your cost forecasts in the main body of the Plan document, showing how you have justified a change from your current run rate for opex, repex and capex.</p> <p>We would also like you to provide a clear explanation of how you define RIIO-1 v RIIO-2 like-for-like costs in your plan.</p>	<p>Section 17b of our plan provides traces of costs movements as set out in the feedback letter i.e. from the first six years of GD1 to GD2 explaining where movements are down to cost pressures, workload changes, new outputs or productivity savings (including innovation roll forward).</p> <p>We have included traces for Totex and separately for Opex, Repex and Capex.</p> <p>Section 17b also clarifies that we have separated new GD2 outputs from the total GD2 forecasts to leave a ‘like for like’ cost which can be compared against GD1.</p>
<b>Capex and Repex</b>	
<p>Please provide detailed CBA justifications for all non-mandatory works.</p>	<p>CBA justifications have been provided for all projects that exceed a value of £0.5m; 154 in total. This threshold is below the Ofgem guidance threshold of £2.0m which has increased the coverage of our CBAs to over 90% of total mandatory and non-mandatory Repex and Capex.</p>
<p>In particular, please describe the options you have considered for the £14.5 M Dunkeld LTS project (19 bar, 4” diameter). For example, the option of reinforced plastic should be considered if this is now approved by the HSE.</p>	<p>In our July business plan, we confirmed that our preferred option for this project is to replace the current transmission infrastructure (Pipeline and two PRSs) with a new PRS at the start point of the project and then to lay an Intermediate Pressure system with a new District Governor at Dunkeld. This eliminates the need for new transmission pipework. The reason for this is the extreme routing difficulties (associated with the terrain and other factors) and the improved flexibility of routing options on the lower pressure tier.</p> <p>However, regarding the potential to use reinforced thermoplastic pipe (RTP) for a transmission option, IGEM/TD/19 allows its use in certain circumstances however it states in the scope under clause 2.4 that an RTP system has different operation and maintenance requirements to those of a steel system and therefore may only</p>



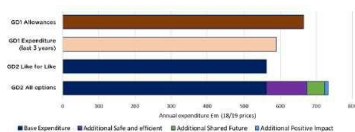
	<p>be installed where it is possible to decommission the RPT section without implication for security of supply.</p> <p>This is because the material cannot be revalidated periodically using techniques such as In Line Inspection and therefore a regime of periodic hydrotest is the current means of validating continued FFP. This periodic revalidation methodology would be incompatible with PGT security of supply obligations. It is therefore envisaged that at present this product is only of limited use where isolation and retesting is possible such as a connection for a biomethane entry point where periodic revalidation can be accommodated by having a periodic outage written into the biomethane facility network entry agreement.</p>
<p>We would also like to see more hard evidence of why you believe your unit and project cost assumptions represent good value for customers.</p> <p>What options have you considered? For the proportion of NLRE attributable to NARM, we would like to see evidence of the sensitivity of NARM output versus cost, and how this justifies your choice of planned interventions and proposed NARM output target.</p>	<p>Sitting alongside our CBAs are 139 detailed Engineering Justification Papers that, amongst other things, set out clearly how cost forecasts for GD2 have been established for projects and programmes of work. These are also underpinned by our Procurement and Native Competition appendix which sets out our approach to market competition for labour, materials and services do support the delivery of our planned work.</p> <p>We have been working closely with Ofgem on establishing the NARMs methodology, this is still in progress. Monetised benefits from the current model have been used in many of the CBAs that we have developed to compare the options considered. We have considered as appropriate the 4Rs range of potential interventions.</p>
<p>Opex</p> <p>Please describe the options you have considered to reduce your current cost forecasts.</p>	<p>The development of our Opex plan has taken place alongside the development of our Capex and Repex programs. In determining appropriate interventions, we consider opex/capex trade-offs through the 4Rs process and we have selected the most value adding Totex option irrespective of whether this is a capex, repex or opex solution.</p> <p>We have looked at our resourcing strategy considering appropriate levels of outsourced and insourced labour and training requirements to maintain an appropriately skilled labour force and this is covered in our workforce resilience section.</p> <p>We also set out our IT strategy which details the choice of moving to a more opex focused cloud-based solution.</p> <p>Finally, where relevant, we have considered lease or buy / build options such as property.</p>
<p>CBAs and Engineering Justification Papers</p> <p>We require a full set of CBAs and EJP's to be provided in October to give assurance that the projects you have prioritised and the interventions you have chosen, when taken together, constitute</p>	<p>CBA justifications have been provided for all projects that exceed a value of £0.5m; 154 in total. These set out the relevant options and provide assurance that the projects that we have prioritised to form a plan that offers the best potential consumer value.</p>

the best overall value plan for managing network risk. We are looking to understand your degree of certainty that those are the interventions required and, subject to separate justification of efficiency, the costs you expect to incur in RIIO2.

Additional cost proposal: Your totex forecast proposes additional expenditure of around £100m per annum to improving safety and reliability as shown below.

Please provide your justification for this additional expenditure given SGN is already delivering a high standard of safety and reliability.

Why is this not already included in your expenditure plans? Is this double counting?



As shown below, investment in additional customer outputs (compared to RIIO-1) is proposed for a number of areas. Please provide your justification for this expenditure in RIIO-2 as there is no compelling case set out for any of this expenditure, nor the options you have considered. In each case, the consequences in the RIIO-2 period of not making the investment should be identified.

Totex plan sensitivities: Please provide the following downward sensitivities for your totex forecasts together with the assumptions or decisions underlying each.

A forecast for totex expenditure which is no greater than the 'like for like' annual average of RIIO-1 actual to end March 2019 and

In line with the expectations of our customers that we keep our costs down, we have reduced our like for like totex by £28m (5%) for GD2. However, to provide customers with additional value aligned to their priorities, we developed for our July plan potential additional options of up to £152m on top of our like for like services.

Since July we have engaged with our customers and stakeholders building our understanding of the specific service enhancements that they believe should be included in our plan and at a price customers are prepared to pay. We also carried out more detailed cost assessments, technical and cost benefit evaluation.

In this October plan we have acted on this additional insight and reduced the total value of additional options from £152m to £56m. Of these additional options, just £15m relate to additional options to ensure the safety and reliability of our network (see chapter 17).

These outputs are set out in chapters 6, 7 and 9 and each output has additional material supporting the economic and stakeholder rationale for proposing this additional measure.

Each output has an associated CBA and engineering justification to set out the consequences of not investing.

Section 17b covers traces and sensitivities. We have set out the 2% downward sensitivity to Totex detailing what the output / customer value implications are of reducing Totex by an average of £76m per annum compared to our GD2 plan. We have analysed this by individual cost categories (see section 4.3 below).

<p>which includes a real efficiency reduction of 2% per annum.</p>	
<p>A forecast for totex expenditure which is no greater than the 'like for like' annual average of RIIO-1 actual to end March 2019 and which includes a real efficiency reduction of 4% per annum.</p>	<p>Section 17b covers traces and sensitivities. We have set out the 4% downward sensitivity to Totex detailing what the output / customer value implications are of reducing Totex by an average of £107mm per annum compared to our GD2 plan. We have analysed this by individual cost categories (see section 4.3 below).</p>
<p>Delivery plan: We will also be assessing your proposals for plan delivery. Please ensure your description of how you expect to deliver your plan is included and updated as appropriate in your October plan. Please describe your main delivery risks and how you expect to mitigate them.</p>	<p>As set out in section 3.3 the business plan has been built from the outset through a bottom-up process with director responsibility for each of their appendices. Our Operations Directors have been fully engaged in the development of our plan and they in turn have engaged with our supply chain on a non-commercial basis to seek views on deliverability and likely availability of resources from 2021 onwards.</p> <p>We have had extensive discussions with our procurement team (Procurement Strategy in Appendix 010 – SGN - Procurement &amp; Native Competition) who have appropriate mechanisms in place to put the majority of this work out to competitive tender; recognising that an element of uncertainty will remain until a final determination is published and agreed in the latter part of 2020.</p> <p>We are also holding workshops now with our Operations teams in Scotland and southern to ensure workload profiles over the remaining 17 months of GD1 are aligned to anticipated workloads as we transition in to GD2.</p>

## Finance Information

We consider that your July submission fell short of Ofgem's requirements in a number of respects. Your proposals for financeability must clearly demonstrate value to the consumer and that you have constructively engaged with an appropriate range of consumers/stakeholders in relation to financeability, including compliance with the process of interacting with the Group.

The plan which you submit in October will therefore need to comply in full and in detail with Ofgem's Business Plan Guidance. We draw particularly to your attention Sections 3.21, 3.22 and 3.23 and the references in those sections to the need

Chapter 18 details our assessment of financeability and we believe we have fully complied with business plan guidance. Specifically, we have carried out assessments against the Ofgem working assumptions for both the notional and actual company. We also provide an assessment of mitigating factors that are being assessed by our Board to aid financeability against

<p>to provide a financeability assessment on both a notional and an actual basis and to demonstrate, with 'robust supporting evidence and justification' that all applicable measures to aid financeability have been considered. You will be aware that you need to base your plan on Ofgem's Working Assumptions for the allowed return on capital, and set out, with appropriate commentary, the impact on your plan of the set of stress test scenarios proposed by Ofgem (including any mitigating actions). Any proposals to improve the financeability of the notional company need to be at the lowest cost to the consumer and to evidence detailed consumer/stakeholder engagement on the trade-off between different options.</p>	<p>the Ofgem assumptions.</p> <p>We have commissioned two separate pieces of stakeholder engagement, to gain feedback on key financeability issues. And we have detailed our approach and initial findings in chapter 18, section 18.2. This engagement will continue into the autumn and we will have the full results in our December Business Plan.</p>
<p>You say that your plan is not financeable on the basis of Ofgem's Working Assumptions. There is a need to explain, in detail, what measures you have considered to make your plan financeable on a notional basis other than a higher cost of equity allowance. We noted that the return on equity which you proposed was very much higher than Ofgem's working assumptions for baseline allowed returns to equity of 4.3% and also with Ofgem's estimated cost of equity of (4.8), including a 0.5% outperformance allowance. Your proposed cost of debt allowance is also based on a longer trombone than Ofgem is proposing. We shall want your October plan to comply with Ofgem's Working Assumptions in relation to the allowances for the cost of both equity and debt;</p>	<p>Chapter 18 provides assessments against Ofgem's working assumptions together with an assessment of potential mitigations. We have also provided separately, as per Ofgem's instructions, alternative assumptions setting out why we believe a higher WACC is justified including the longer cost of debt trailing average.</p>
<p>Your plan should set out how far you have considered changes to depreciation and capitalisation rates in support of the financeability of the notional company and the extent to which you consider rating agencies will accept such adjustments in determining ratings;</p>	<p>Chapter 18 and the Financeability appendices provides an assessment of capitalization and depreciation rates together with how we believe rating agencies will treat these. We reference specific rating agency publications.</p>
<p>Your assessment of the financeability of your plan on an actual basis should incorporate an analysis of the relative merits, from the perspective of the consumer, of different possibilities for mitigating problems with financeability and the solutions which you propose.</p>	<p>Section 18.6.4 provides an assessment of mitigating factors including the impact on consumers.</p>
<p>Your October plan should include a clear account of your dividend policy. We note that you do not intend to raise any new equity: please confirm the position in relation to new equity and set out your approach to dividend holidays in the context of both your notional and your actual plan;</p>	<p>The assessment of potential mitigating factors to aid financeability in section 18.6 considers, amongst other options, new equity ay the Operating Companies and natural de-gearing through managing dividend levels. Financeability appendix states our</p>

	dividend policy.
You provided a range of sensitivities in your July plan. We shall expect to see the full sensitivity analysis required by Ofgem for both the notional and the actual company in October and that this will include a sensitivity based on an allowed return on equity of 4.3% (without an outperformance allowance), together with details of the actions you need to take to make both the notional and the actual company financeable on this basis. You will also need to include any sensitivities required by the Group in relation to totex.	Section 18.6 considers a sensitivity of 4.3% cost of equity as part of Ofgem's working assumptions.
You do not provide any analysis as to the benefits, from a consumer perspective, of different target ratings for the notional company nor any evidence of consumer engagement on possible trade-offs between different target ratings. Note that, in general, we do not expect to see target ratios in excess of those necessary to retain an investment grade rating.	Section 18.4.1 provides justification of target credit thresholds and this is also being considered in our stakeholder engagement which is summarised in section 18.2.
Note that we do not expect the later availability of the BPDT and the LIMo to give rise to any non-compliance with Ofgem's Business Plan Guidance except to the extent that it is strictly consequent on that later availability. We do not think there is any reason why lack of an agreed Ofgem model should prevent you from performing the required full analysis on your own model.	We believe we have complied with Ofgem's guidelines in full.



### 4.3 2% and 4% sensitivities requested by RII02 Challenge Group

Proposed measures	2% CCG scenario	4% CCG scenario	Customer impact
Cyber Security	-	4	Heightened risk of cyber-attack, associated interruption to customer services and threat to the operation and control of the network
3 to 5 Storey riser surveys	-	4	Unable to adequately quantify the risk presented by this asset group due to the lack of survey data resulting in our inability to prioritise safety interventions that may be required across the whole population of risers to multiple occupancy buildings
Removal of legacy Assets - Responsible Demolition	1	1	Continued deterioration of redundant assets that are no longer carrying gas. These are often over water courses, major road or strategic rail lines where asset failure could lead to severe disruption to transport flows and the safety issues that would arise if a pipe fell on to the associated transport link
Smart meter interventions	2	2	There is a workload risk associated with gas escapes related to smart meter roll out which could impact our 97% licence standard. As the rollout accelerates this risk increases.
Accelerated Tier 1	10	10	We would not realise the benefits of accelerating the programme including environmental benefits of leakage reduction, reduction in asset failures and de-risking of programme delivery.
Proactive Steel mains >2"	5	5	Increased interruptions due to continued regular failure of high maintenance and disruptive mains. Deteriorating relationship with local authorities and local communities associated with continued regularity of interventions. Customers would continue to encounter water ingress problems leading to cessation of their supplies.
Proactive Steel Services	1	1	Less proactive steel works to remove the risk from the network. This would increase the associated costs and environmental impact and reactive repair programme would decrease customer outcomes, and would prevent interventions where emerging hot spots have been identified.
Tier 1 stubs	2	2	These are Tier 1 iron pipes currently regarded by the HSE as mandatory. We are currently negotiating with the HSE the scope of work required and would look to remove it if negotiations allow. We could move it to a reopener which will allow cost recovery if the HSE require this work to be done.
Tier 2b and Tier 3	6	6	Projects with a strong economic justification under CBAs. This will increase risk on the network, reduce operational avoided costs and increase disruption around road closures due to continuation of intensive maintenance programme.
IT Technology readiness	2	2	Unable to maintain common IT standards that customers expect from modern organisations. This would reduce customer satisfaction and create reputational damage.
Open Data/ Whole Systems /Capacity Mapping / DCC	2	2	Unable to meet growing needs of stakeholders and requirements of government to improve data availability and adherence to standards of good data practice for data that is provided.
Environmental Action plan	13	13	Removal of initiatives to reduce carbon footprint and broader environmental impacts, in direct conflict with customer priorities.
Vulnerable customer allowance and other customer initiatives	-	1	No flexible services for vulnerable customers. A significant reduction in investment and services for customers leading to reduced customer satisfaction and GSOPs performance.
<b>Underlying business activities</b>			
Connections Capex	13	13	No new connections to existing housing (DLCA) and all connections costs would be fully rechargeable.
Connections Capex		7	No support for vulnerable customer fuel poor connections and therefore all associated costs would be fully rechargeable.
Reinforcement	4	13	All reinforcement would have to be funded by the customer requesting the new connection. This would require a change to the current Ofgem shallow reinforcement policy applied across all GDNs.
Reduction in Customer/Stakeholder team and customer facing activities	1	3	Overall reduction in customer satisfaction and experience leading to increased complaints and reputational damage.
Training and Apprentices	3	3	Compromising our workforce resilience.
Vehicle replacement	1	1	Replace on failure only, increasing the operational costs and increasing safety related considerations.
Property	1	1	Removal of office refurbishment programme and deterioration in working conditions, with associated reduction in employee morale and increased risk of business continuity management procedures being implemented.
Land Remediation		3	Retention of statutory environmental risk within the business.
LTS Project - Process safety	3	3	As detailed in section 12.2.8, exposure to unknown and unforecastable safety driven asset integrity issues arising in GD2 is currently proposed as a use-it-or-lose-it allowance. This could be moved to a reopener with an appropriate threshold level.
<b>Target delivered</b>	<b>69</b>	<b>101</b>	