



SGN

Your gas. Our network.

Positive impact

Safe and efficient

Shared net zero future

Response to Draft Determination: Section B: Embedding the customer voice

RIIO-GD2 Business Plan

4 September 2020



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Structure of the document

Our response to the draft determination is split over six sections for ease of reference:

Section A: Executive Summary and Introduction.

Section B: Embedding the customer voice. This covers embedding the consumer voice, the CEG, and Ofgem's three consumer facing output categories - meeting the needs of consumers, an environmentally sustainable network, and maintaining a safe and resilient network. This section also covers cross-sector, sector-specific and bespoke outputs, ODIs and the CVP.

Here you will find answers to the following consultation questions;

- Core Questions (Q1 to Q9)
- Gas Distribution Sector Questions (GDQ1 to GDQ25),
- SGN Questions (SGNQ1 to SGNQ7) and
- NARMs Questions (NARMQ1 to NARMQ4).

Section C: Ensuring efficient cost of service. This covers the efficiency expectations approach to cost assessment, normalisation, regressions analysis, technically assessed cost and the business plan incentive. In this section we also provide our views on how COVID should be accounted for in the GD2 plan.

Here you will find answers to the following consultation questions;

- Core Questions (Q10 to Q11) and
- Gas Distribution Sector Questions (GDQ26 to GDQ41).

Section D: Ensuring efficient financing. This covers allowed return to debt, return on equity, the weighted average cost of capital and other finance issues such as tax.

Here you will find answers to all of the Finance consultation questions (FQ1 to Fq38).

Section E: Managing uncertainty and the move to net zero. This covers both cross sector, sector specific and bespoke uncertainty mechanisms, the approach to innovation and the move to net zero.

Here you will find answers to the following consultation questions;

- Core Questions (Q12 to Q33),
- Gas Distribution Sector Questions (GDQ42 to GDQ53) and
- SGN Questions (SGNQ8).

Section F: Totex incentive mechanism, process concerns, interlinkages and appeals.

Here you will find answers to the following consultation questions;

- Core Questions (Q34 to Q43)
- SGN Questions (SGNQ9)

These sections incorporate our responses to the questions set out in the draft determination appendices. Responses are denoted by: 'Q' for questions from the core document; 'GDQ' for questions from the gas distribution annex; 'FQ' for questions from the Finance annex; 'NARMQ' for questions from the NARMs Annex, and 'SGNQ' for questions from the SGN Annex.

For each substantive point we have then applied the following nomenclature;

Type 1. Factual or computational errors.

Type 2. Inconsistencies in stated approach or in the application of a methodology.

Type 3. Disagreement as to how the methodology should be applied.

Type 4. New evidence presented to respond to a point.

Type 5. Evidence that SGN has provided but hasn't been taken into account or given sufficient weight or given sufficient weight (i.e. SQs responses etc).

Type 6. Broad agreement with position put forward in draft determination.

Where substantial new evidence is provided, or there is a high level of confidentiality associated with the information provided, we have included this as an appendix and referenced it.

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Section B: Embedding the customer voice

2 Introduction

In RIIO-GD1 SGN was the leading customer focused network.

SGN is a leading gas distribution network providing warmth to over 14 million people in homes across Scotland and southern England. We manage the networks and distribute gas to some of the most remote parts of Scotland and the most densely populated parts of central London and the South East.

Our relentless focus on safety, reliability of supply and customer service drives a strong culture of care and concern in all our teams for their local communities. Our people view their role as delivering an essential public service, keeping customers safe and warm 24 hours a day, in all weather. We have a long heritage of care and concern for our customers, particularly those in vulnerable circumstances, and we go above and beyond to provide extra help where we can.

As we adapt to society's changing expectations and priorities, we are preparing our organisation and people for a decarbonised future, increasing agility and responsiveness as well as learning new skills necessary to support the right future heat solution for customers, delivering the government's ambition for net zero. The essence of our company - safety, concern for customers, innovation and operational excellence - continues to drive our culture.

We are proud of what we have achieved for our customers and the communities we serve. GD1 has and continues to deliver strong and enduring customer benefits: improved safety and efficiency, improved customer service and lower cost.

We have worked with our stakeholders and customers throughout GD1 to establish their priorities and improve in areas that are important to them. The quality of this ongoing engagement, listening to and acting on feedback, has supported our successful performance - with the highest scoring customer service of all the gas networks. We are grateful to our customers and stakeholders for their significant contributions that have challenged us to continue to improve and excel in all areas.

Our culture is built around our care and concern for all our customers. During GD1 we have provided extra help for customers in vulnerable circumstances, going above and beyond business-as-usual by working with partners to provide additional services. We included our stakeholders and frontline engineers in designing our extra support package, including training our people in awareness of dementia and other types of vulnerability.

Ofgem asked network companies to take on a greater challenge and deliver more fuel poor network connections in 2015. We rose to that challenge and took on more than half of the national increase - we now have 30% of the total target. Today, we have already exceeded our fuel poor connections target in Scotland and strive to deliver our Southern target by the end of GD1.

Highlights from GD1 include;

- We have held the number one position for customer service for the last four years
- We were recognised as the best gas network for stakeholder engagement in 2017/18 and 2018/19.
- We have made the most fuel poor connections of any network
- We are one of the most efficient networks in our totex benchmarking
- We have made a voluntary contribution of £145 million to customers in GD1 demonstrating our strong sense of responsibility and public conscience
- Our use of innovation has already saved over £125 million for customers
- We were one of the first companies in the UK to gain the new asset management standard, ISO55001
- We have continuously delivered high profile streetworks projects within the London boroughs in collaboration with The Greater London Authority and Transport for London

Our RIIO-2 plan was created around our customer priorities

Our plan is rigorous, ambitious and built around customer and stakeholder needs. We understand their priorities and preferences and we are confident we will be delivering extra value for our customers. Customers have recognised the benefits of the activities in our plan, with 92% of customers in Scotland and 86% of customers in Southern finding our plan acceptable in testing²⁹.

In creating our plan we listened extensively to our customers and stakeholders; with 25,000 high quality, individual engagements and more than one million people reached online. Customers told us that they have seven priorities, which we found also resonated with stakeholders³⁰. Our RIIO-GD2 (GD2) plan is built on these priorities, brought to life in three strong customer commitments that run throughout our plan and underpin all our proposals.



We will make a positive impact on society, by supporting vulnerable communities and providing excellent service.

We will deliver a safe and efficient service by acting safely, keeping the gas flowing and keeping costs down.

We will build a shared net zero future by accelerating decarbonised energy solutions and minimising our environmental impact.

As we developed our plan we fully recognised that these commitments could, in some circumstances be conflicting. As a result, we undertook extensive engagement and performed extensive calibration to ensure that we were investing in the areas where our customers were focused on in order to deliver the greatest possible value to.

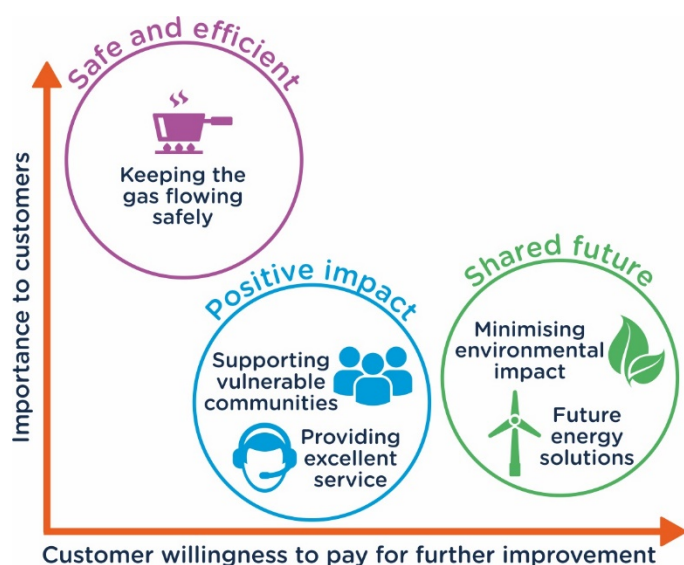
Through extensive engagement and triangulation of different research points³¹ we established our understanding of our customers' priorities were, according to how important an attribute was to them and how much they were willing to pay to invest for further improvement.

²⁹ Percentage of informed domestic customers who found the plan acceptable, Business Plan Acceptability Testing Phase 2 (ref 079) based on SGN's cost of capital assumptions

³⁰ Stage 1: Explorative Qualitative Workshops and Interviews (Exploratory Phase) (ref 002), Stage 2: Max Diff Prioritisation Phase Report (ref 003), Stage 3: Conjoint & WtP Summary report (Valuation Phase) (ref 005, 094), Third Party Connections survey Full Report Jan 2019 (ref 067), SGN Stakeholder Satisfaction Wave 1 (ref 071), Stakeholder Satisfaction Wave 4 (ref 074), Large Gas User survey results 2019 (ref 076), Listening to Local Authorities (ref 086), Stakeholder Satisfaction Changing Priorities 2020 (ref 110) and SGN webinar 'What customers want from a gas network'

³¹ Stage 1: Explorative Qualitative Workshops and Interviews (Exploratory Phase) (ref 002); Stage 2: Max Diff Prioritisation Phase Report (ref 003), Stage 3: Conjoint & WtP summary report (ref 005, 094) Customer qualitative workshops (ref 083, 084, 085), Specialist stakeholder round table events (ref 088, 089, 090), Business Plan Acceptability Testing Phase 1 and 2 (ref 078, 079) Qualitative workshops - Sharing Financial Risk. Innovation Investment (ref 083); and Safe & Efficient round table event – London (ref 089), , Third Party Connections survey Full Report Jan 2019 (ref 067), SGN Stakeholder Satisfaction Wave 1 (ref 071), Stakeholder Satisfaction Wave 4 (ref 074), Large Gas User survey results 2019 (ref 076), Listening to Local Authorities (ref 086), Stakeholder Satisfaction Changing Priorities 2020 (ref 110)

– All reference numbers are set out in Appendix 022 – SGN – Enhanced engagement – Dec19.



Safety and efficiency were the most important factor, but they perceived it already to be at a high level. Whilst they wanted it to be maintained, customers were not necessarily asking us to invest to improve it further.

Shared future however was an area that was less important in comparison to safety, but it was an area where our customers thought that we could do more and have asked us to invest to raise our standards.

With positive impact, the message we clearly received was that standards were already good, but we could do more in a targeted way, to help the most vulnerable in society.

We based our plan on this extensive engagement programme, and we were really pleased to have such high approval rates in the customer acceptability testing we undertook in October and November 2019³².

Customer acceptability remains as high today during COVID as it was when we submitted our plan.

Since we submitted our plan, our personal and working lives have dramatically altered as a result of COVID-19 and disruption introduced to our everyday lives. With this in mind, we considered the challenges our customers were having and recognised that there might be a change to customers' priorities. We therefore wanted to retest our plan, using the same methodology, the same questions, the same number of respondents and the same independent approach as we did prior to our plan's submission, to check whether our plan still remained aligned to our customers' priorities.

We are pleased to say our plan has remained robust with almost the same exceptionally high acceptability testing outcome in July 2020 as we achieved in November 2019.

Wave 1 – Business Plan acceptability

Fieldwork: Oct and Nov 2019

1,842 customers (379 SME & 1,463 domestic)³³

	Southern	Scotland
Without detailed explanation (uninformed acceptability)	85%	88%
After more detailed explanation (informed acceptability)	86%	92%

Wave 2 – Post COVID acceptability

Fieldwork conducted in July 2020

1,838 customers (351 SME & 1,487 domestic)³⁴

	Southern	Scotland
Without detailed explanation (uninformed acceptability)	86% (+1%)	88% (=)
After more detailed explanation (informed acceptability)	87% (+1%)	91% (-1%)

This very positive result gives us confidence that our customers remain strongly supportive of the plans that we have put forward and do not suggest a reason to deviate from that proposal. A summary of this latest round of customer acceptability testing can be found in our supporting annex 'Post Covid Acceptability Testing summary report August2020'.

³² Business Plan Acceptability Testing Phase 2 (ref 079)

³³ SGN Business Plan, Dec 2019, table 4-1, pg 36 and Business Plan Acceptability Testing Phase 1 and 2 (ref 078, 079)

³⁴ Post-COVID19 Business Plan Acceptability Testing (ref 109)

The continued support of our customers is important to us. To maintain this support, we need our customers to trust that we will do the right thing and we will be accountable for the decisions we are taking.

We therefore produced the most transparent plan of any of the networks, providing justification and evidence to support any significant investment decision that was greater than £0.5m, creating 146 engineering justification papers that covered all aspects of the business and making them available to the public on our SGN Futures³⁵ website. This allows us to talk to our customers about our investment plans, but also gives visibility to our supply chain and to innovators that we would like to support us on this journey.

Secondly, we had the most robust assurance process³⁶ with four layers of scrutiny cumulating in independent assurance of the seven key areas of the plan³⁷. The depth and rigour of this assurance process was a challenge, but because of that rigour it gave our board confidence our plan was of high-quality, free from material errors and was in the interest of our customers.

Finally, we proposed active and ongoing engagement through steering groups focused on our customers' and stakeholders' most critical issues; Vulnerability and CO, Environmental Action and Technical Training Steering Group³⁸. These steering groups are focused on areas where key decisions will be required and where we need stakeholders to challenge us to ensure the decisions we make are based on the best available information, are supported by customer evidence and deliver best practice.

2.1 Structure of the document

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- Core Questions (Q12 to Q36),

³⁵ <https://www.sgnfuture.co.uk/>

³⁶ We were the only network to be given a green on business plan assurance/commitment by the RIIO Challenge Group, RIIO-2 Challenge Group Independent Report for Ofgem on RIIO-2 Business Plan, 24th Jan 2020, table 1 pg 16.

³⁷ Independent assurance was provided by PWC for Stakeholder Engagement, Business Plan Data Templates, Financeability, the Environmental Action Plan. Independent assurance was provided by ARUP for Repex, Capex and Operating expenditure, energy futures and innovation, and Gartner provided independent assurance on IT costs and capital investment.

³⁸ SGN Business Plan, Dec 2019 section 6.5.6.; section 9.4.1; and section 8.5

- Gas Distribution Sector Questions (GDQ42 to GDQ53) and
- SGN Questions (SGNQ8).
- Section F: Approach to TIM, CVP Process Concerns, Interlinkages and appeals.

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3 Embedding the consumer voice

We remain fully supportive of the ambition that customers should be at the heart of the price control in RIIO-GD2. Throughout our business plan we have adopted a structured approach to ensure that the consumer voice is embedded within our planning process and that at all stages, our plan has been informed by consumers and stakeholders. We structured our customer and stakeholder engagement programme into four phases in order to:

- Underpin the creation of our draft business plan
- Test and iterate elements of the plan
- Engage on the first full draft of the plan
- Iterate and refine the plan.

This approach has ensured that our plan is aligned to what our customers and stakeholders’ have told us are their priorities and reflects the areas they are willing to invest more in.

The Stakeholder Engagement Incentive has driven significant culture change within SGN to ensure the interests of stakeholders are embedded into our decision-making processes. This has increased our responsiveness to our customers and stakeholders, helping to ensure that their needs are met. We are committed to continuing and growing our stakeholder engagement throughout RIIO-GD2 to meet the evolving needs of customers and stakeholders, placing their interests at the heart of our business. Our stakeholder strategy sets out a series of nine ambitious performance commitments and measures. These focus on learning from and improving stakeholder engagement in our business as usual activities and collaborating to contribute towards solving long-term complex challenges. This directly responds to feedback from our stakeholders, including our Stakeholder Advisory Panel and our Customer Engagement Group (CEG).

Our CEG has played an important role in ensuring we understood and accounted for customers’ perspectives and priorities, resulting in a robustly developed plan with a much stronger proposition for customers. We therefore fully support a continuing role for our CEG in providing independent challenge and assurance to ensure we deliver against the commitments set out in our plan and in spreading valuable learning across the sector to achieve better outcomes for customers and stakeholders.

To enable our CEG to continue to play an effective role, the CEG chair will join meetings of our newly established Board Sub Committee which has been created to provide a greater level of scrutiny and strengthen our governance around stakeholders, customers and delivery of our Environmental Action Plan. Members of our CEG will also participate in our vulnerability and environmental steering groups, to independently assure that these groups deliver meaningful outcomes for customers and stakeholders.

Given the importance which we placed on customer and stakeholder engagement throughout the development of our plan and our continued commitment going forward, we are disappointed that there is no material reflection of the priorities that our customers and stakeholders conveyed to us in Ofgem's draft determination. We believe this is a lost opportunity to place customers at the heart of the GD2 business planning process and results in a draft determination which fails adequately to protect and promote consumers' interests.

Q1. What role should Groups play during the price control period and what type of output should Groups be asked to deliver? Who should be the recipients of these outputs (companies, Ofgem and/or stakeholders)?

The CEG has a valuable oversight role providing independent challenge, objective assessment and highlighting best in class approaches.

The CEGs have played an important role in ensuring companies' GD2 business plans reflect the needs of customers and stakeholders. We believe CEGs should retain an enduring oversight role, providing independent challenge to ensure that companies continue to deliver against their business plan commitments, including their stakeholder engagement commitments, assuring that:

- Sufficient depth of understanding of the views of customers and stakeholders is maintained.
- Business planning and decision-making continues to reflect the needs of customers and stakeholders.
- Companies continue to innovate and improve, sharing and adopting best practice.

We also believe the role of CEGs should be one of constructive ongoing challenge and objective assessment, encouraging companies to excel, share and collaborate. We would therefore welcome continued collaboration between CEGs to share best practice and innovation amongst the networks as this would be a valuable way of promoting cross-sector learning and achieving better outcomes for customers and stakeholders.

In relation to our CEG specifically, we recognise the value in their expertise in undertaking an independent assurance role as part of our vulnerability and environmental steering groups. This will help to ensure that meaningful outcomes are delivered which maximise the benefit to customers and stakeholders.

A valuable output would be an independent customer-focused annual report to both companies, consumer representatives and other key stakeholders assessing the companies' performance against its business plan commitments and the quality of companies' stakeholder engagement.

In addition, we would like to propose that a positive output from ongoing CEG collaboration and best practice sharing could be a short joint annual report or presentation to companies and stakeholders highlighting 'best in class' approaches across the GDNs. This could also be shared with Ofgem if there is an interest in monitoring continual improvement.

Q2. What role should Groups take with respect to scrutinising new investment proposals which are developed through the uncertainty mechanisms?

If the CEG is to have a role in scrutinising investment proposals, then their view needs to be respected by Ofgem and their recommendations carried out, except in clearly explained circumstances. In our plan we suggested a valuable governance role around use-it or lose-it expenditure.

In our business plan, we originally proposed a role for members of our stakeholder advisory panel (SAP) and our CEG with the relevant expertise to join one of the three steering groups we proposed – Steering Group for Vulnerability and CO, Steering Group for Environmental Action and our Technical Training Steering Group.

In these groups we agreed that, where there was a 'use-it or lose-it' mechanism in place then there was a valuable role for these stakeholder groups to ensure the appropriateness of ambition and scrutinise cost-effectiveness. This is the case for the vulnerability and CO allowance, and as we proposed in the business plan for environmental expenditure.

As such, we considered that there are specific instances where stakeholder focused groups with both CEG and SAP representation, coupled with specialist knowledge from external stakeholders, could drive better consumer outcomes.

We believe that this approach is appropriate and can provide a useful layer of external governance and scrutiny where there is a 'use-it or lose-it' mechanism in place.

We would welcome a role for our CEG in ensuring high quality engagement is undertaken where it is appropriate. For reopener uncertainty mechanisms we think the greatest value will be where the reopener is related to a policy change, such as the net-zero reopener. Where the reopener is more cost-based in nature, i.e. the street works reopener, IT or cyber reopener, then we think there is a less formal role for the CEG of being informed and aware and able to comment if they think it is appropriate.

Additionally, given the number of reopeners, there is a risk of duplicating effort unnecessarily and delaying processes unless their views are going to be fully considered by Ofgem. The experience from the draft determination, where several of the proposals strongly supported by our CEG were rejected, demonstrates a significant risk that this will add cost and complexity, whilst not being appropriately considered by Ofgem.

Type 3: Disagreement as to how the methodology should be applied. We think there is risk of additional complexity and reporting burden unless Ofgem fully considers their views and provides evidenced reasoning for choosing to overrule their recommendation.

Q3. What value would there be in asking Groups to publish a customer-centric annual report, reviewing the performance of the company on their business plan commitments?

Publication of a customer-centric annual report would provide an independent assessment of the quality of companies' performance against their business plan commitments, ensuring that business planning and decision-making continues to reflect the needs and issues of customers. We would welcome that a level of flexibility is maintained so that reporting can reflect the aspects which are of most value to customers and stakeholders. We would also welcome that reporting focuses on how companies have successfully worked together to innovate and adopt new ideas and share best practice

Q4. What value would there be in providing for continuity of Groups (albeit with refresh to membership as necessary) in light of Ofgem commencing preparations for RIIO-3 by 2023?

We believe that continuity of CEG members will ensure that valuable learning and experience from GD2 is retained when preparing for GD3. This continuity would mean that knowledge of the regulatory framework and of SGN, its culture and operations is maintained, avoiding the requirement to rebuild the knowledge and capacity to effectively perform their role. This continuity would ensure that the interests of customers and stakeholders remains embedded in the business planning process throughout both price controls.

4 Quality of Service – outputs for RIIO-2

4.1 Setting outputs for RIIO-2

It is important that Ofgem provides a clear explanation why bespoke outputs have been rejected, and the evidence that conclusion was based on, so that we can explain this to our customers who asked for them.

In our response to the sector specific methodology consultation we noted that the output framework was broad enough to encapsulate the outputs that our customer and stakeholder feedback said was important to them³⁹. Whilst we maintained the terminology that we had co-developed with our customer and stakeholder base in the business plan, there is a close enough alignment to allow for an easy cross-referencing.

Similarly, we recognise the need for an overarching design framework and the approach that is proposed. Whilst this makes sense at a high level, we need to ensure that it remains appropriate and clearly defined as outputs are transferred into licence.

³⁹ SGN Sector Specific Methodology Response, 19th March, pg 17

We have set out specific concerns in Section F, section 11.1 regarding the appropriateness of governance documents and guidance documents, change control procedures, the approach to PCDs and the characterisation of endeavours and best practice.

In terms of the approach to bespoke outputs we think that the process of defining and evidencing to Ofgem, the CEG and to our customers has been positive, leading to a higher quality business plan submission. These bespoke outputs were driven by a desire from our customers and stakeholders (including Ofgem) to go further and show greater ambition in our deliverables compared to GD1. The bespoke output structure enabled additional outputs to be defined, costed and tested with our customers and stakeholders, to understand both their willingness to pay for new outputs and to confirm that such outputs were aligned with our customers' objectives.

We are clearly disappointed that many of the bespoke outputs appear to have been rejected, and it is important for both our customers and our CEG to have clarity on why a bespoke output has been rejected given the analysis and engagement that went into their development.

While we recognise that Ofgem has technical expertise in certain areas, for customer/environment/resilience matters consumer feedback should carry significant weight as consumers are best placed to address the trade-off between their bills and other objectives. If their views don't get taken into account in these areas then the value of getting high levels of engagement is questionable from the outset. We strongly urge Ofgem to reconsider this and to set out with greater clarity why, if our representations made here and in other consultation responses are not accepted, a bespoke output has not been taken forward.

4.1.1 Gas Annex

We note from the gas transmission appendix⁴⁰ that there are several incentives to deliver environmental benefits linked to reduced leakage, forecasting, and managing capacity in the gas transmission network, that will have implications for the distribution networks.

As set out in the sector specific methodology decision⁴¹ we encourage Ofgem to consider the outputs from gas transmission and gas distribution alongside each other in order to confirm that they are complimentary - that there is an appropriate balance of risk and reward for each party and that they support the delivery of whole system solutions.

GDQ1. Do you have any views on our common outputs that haven't been covered through any of the specific consultation questions set out elsewhere in this chapter? If so, please set them out, making clear which output you are referring to.

There are a number of common outputs that we would like to raise points on that have not been specifically addressed through existing questions and where the questions only partially cover the points that we would like to raise.

Where a substantive point is not covered by the question raised, we have provided an explanation and substantiation of the point in the text leading to that question.

We would like to draw your attention to the outputs associated with meeting the needs of consumers and network users that do not have specific questions but where we would like to present a substantial point for consideration. These include:

- Consumer Vulnerability and CO Safety use-it or lose-it [[section 4.2.4](#)]
- Fuel poor network extension scheme [[section 4.2.5](#)]
- Customer satisfaction survey [[section 4.2.6](#)]
- Complaints metric [[section 4.2.7](#)]
- Guaranteed standards of performance (GSOP) [[section 4.2.8](#)]
- Unplanned interruptions [[Section 4.2.10](#)]

⁴⁰ RIIO-2 Draft Determination – Gas Transmission annex. 9th July 2020 includes day ahead forecasts (pg 11), Exit and entry constraint management (pg 14), EAP commitments (pg 20) and greenhouse gas emissions reduction (pg 25)

⁴¹ RIIO-2 Sector specific methodology decision – core document, para 8.26, pg 58

Regarding the emergency response [section 4.2.9] and complaints metric [section 4.2.7], whilst there are no questions we agree with the position stated and have nothing further to add.

Outputs relating to ‘delivering an environmentally sustainable network’ are all covered in specific questions [section 4.3.1] to [section 4.3.1]

Areas which we would like to draw your attention to in ‘maintain a safe and resilient network’ include.

- Large project delivery [section 4.4.1]
- Gas holder demolition [section 4.4.4]
- Network Asset Risk metric [section 4.4.5] (which covers the questions in the NARMs annex)
- Cyber Resilience OT [section 4.4.9]
- Cyber Resilience IT [section 4.4.10]
- Other Policy – GDN record keeping [Section 4.5.1]

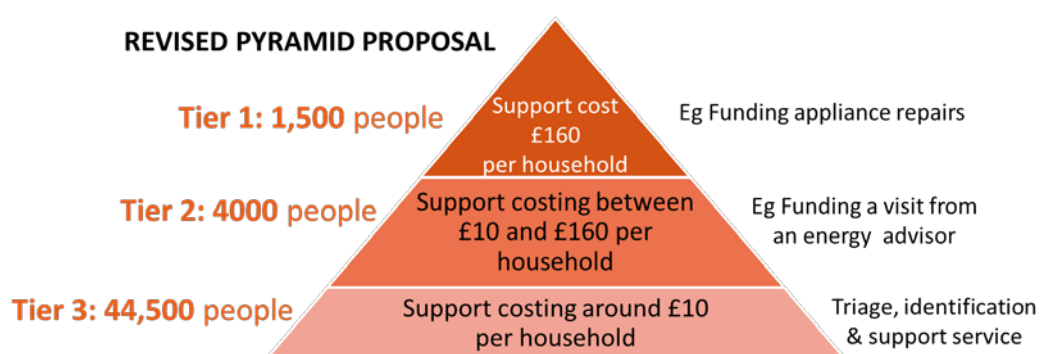
4.2 Meeting the needs of consumers and network users - Positive Impact

There are clear differences of opinion between Ofgem’s proposed approach and the approach we were asked to progress by our customers and expert stakeholders. Our customers asked us to focus on the most vulnerable and to be adaptive to their needs rather than adopt a ‘one-size-fits-all’ strategy.

Customer support should be targeted at the most vulnerable

We have set ourselves clear ambitions in GD2, each aligned with our customers’ priorities and to one of our three commitments. Linked to our commitment to make a positive impact, our stated ambition is to provide excellent service and support vulnerable communities, and we are committed to making a positive impact for our customers and communities more generally.

We engaged with our stakeholders to understand how we could support our vulnerable customers in a way that makes the biggest difference to them. Our options were to either provide a large number of people with a lower level of support, to provide a smaller number of people with a higher degree of support, or to adopt a middle ground approach⁴². A consensus emerged from two stakeholder workshops and from two customer workshops that we should provide higher levels of support for fewer numbers of people,⁴³ and we have adopted this approach in our business plan.



Type 3: Disagreement as to how the methodology should be applied. Our customers asked us to focus on the most vulnerable rather than one-size-fits-all.

⁴² Deliberative workshops - Customer Service & Supporting Vulnerable (ref 085) and Positive Impact round table event - London 19, Positive Impact round table event - Scotland 19 (ref 082)

⁴³ Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084) and SGN Positive Impact round table event - (London combined with Scotland) (ref 088)

Customer satisfaction scores need to be recalibrated

We know that customer expectations continue to increase⁴⁴, influenced by innovation, new technology and experiences from dealing with other sectors. Rather than standing still, we realise that we must continue to invest in order to maintain our leading customer service levels and to provide the experience that our customers want. The customer satisfaction incentive is an essential requirement for us to be able to keep pace with these increasing expectations.

Whilst we welcome Ofgem's decision to continue to incentivise outstanding customer service throughout GD2, we are concerned that the proposal to set such stretching customer satisfaction targets⁴⁵, only awarding upper quartile performance and penalising companies scoring under average GD2 trial performance scores will curtail continuous investment and improvement and encourage a culture of penalty avoidance rather than reinvesting rewards to improve service.

Our business plan challenges us to achieve scores above 9/10 in GD2⁴⁶ for both our networks. This ambition is supported by our stakeholders and customers, whose feedback indicated that we should continue to keep pace with the same levels of service and investment we have demonstrated throughout GD1⁴⁷. Importantly, our customers and stakeholders have also indicated we should not be spending more money to achieve scores of 9.5⁴⁸, which we would have to do if we are to stand any chance of receiving even the lower end of reward for unplanned work⁴⁹.

Type 3: Disagreement as to how the methodology should be applied. Our customers do not think additional expenditure necessary to increase customer satisfaction scores substantially represents value for money. This is at odds with the calibration of the customer satisfaction incentive.

Timed appointments are not a priority for our customers

Another clear area of difference between Ofgem's draft determination and what customers have told us, is that our customers do not support us investing in timed appointments. Therefore, to support this proposal would be to ignore and go against the clear wishes of customers, which is why we cannot support the proposal for timed appointments.

All GDNs carried out collaborative research to gain customer and stakeholder feedback, finding that only 15% of all customers (and only 13% of customer registered on the PSR) wanted the ability to choose a time slot for their gas to be turned back on the remaining 85% were indifferent.⁵⁰ This line of research was specifically requested by Ofgem. . These findings were also reflected in Ofgem's SSMD, where Ofgem stated that a GSOP was not appropriate. We would also highlight that we did not factor investment into our plan to implement an appointment system as our customers and stakeholders did not support this proposal.

In GD1 we already attend a high percentage of these jobs within four hours. This is reflected in our high customer satisfaction scores and possibly explains why timed appointments are not considered to be a priority by SGN customers. A four-hour time window allows us to accommodate customers' needs while using existing resources and therefore to have limited impact on costs. We should listen to our customers and stakeholders and focus our efforts in order to provide targeted and effective support to the customers with the greatest need.

Type 2: Inconsistencies in stated approach or in the application of a methodology. Spending time and resource setting up timed appointments is not supported by our customers.

⁴⁴ Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable (ref 085) - P12: While customers do not think there is a need to try and improve their levels of satisfaction, they believe SGN's service will need to improve to maintain current levels

⁴⁵ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) P13: P16: Stakeholders agreed that SGN should align with the feedback from customers and focus more on responding to incidents and supporting vulnerable people than attempting to further improve general satisfaction scores.

⁴⁶ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) - P12: There was general support from stakeholders at both workshops that the proposed approach "seems about right". It was felt that a minimum ambition of 9/10 is acceptable, and that it was unrealistic to eradicate complaints altogether. A few stakeholders stated that customers care more about how a company responds when something goes wrong, than the incident itself. There was also agreement that if customer had said that SGN should invest more on vulnerable customers than further improving general customer satisfaction, then that is the direction the company should travel

⁴⁷ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) P13: P16: There was acknowledgement across both workshops that SGN faces a challenge in maintaining current satisfaction scores in the light of increasing customer expectations.

⁴⁸ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) P13: Should we [SGN] be aiming for a score of 9.5? A: No, as customers wanted the money elsewhere e.g. vulnerable customers.

⁴⁹ Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable (ref 085) - P10: Customers explained they would be happy with a score of 8/10, therefore are pleased that SGN have been constantly scoring a 9/10 since 2016/17.

⁵⁰ Customer and Social Working Group 290819 (ref 120)

Unplanned interruptions is an uncontrollable risk, the penalty is disproportionate and should be removed.

We do not believe that the introduction of a new financial penalty on networks to tackle isolated incidents of unplanned interruptions is appropriate or justifiable when it is outside of the networks control. The recent example, at the time of preparing this response, of an erosion incident near the town of Alloa in Scotland demonstrates how we could have been exposed to a large penalty for an uncontrollable event. Extreme weather left almost 80 meters of high-pressure pipeline suspended in mid-air between two sides of a newly created riverbank. A 1km exclusion zone had to be set up around the incident because of the risk associated with an uncontrolled high pressure gas escape. The pipe was at the limits of its technical tolerances and if there had been any sign of the pipe buckling then we would have isolated this section of pipeline resulting in the disconnection of over 20,000 customers.

Alloa Erosion incident 12th Aug 2020



That decision would only be driven by a judgement call on safety grounds and the best available advice at the time. We are extremely concerned that the financial impacts of this penalty could distort decision making during a critical safety incident.

Type 4: New evidence presented to respond to a point. Alloa is an example of the type of uncontrollable incident that this proposal will penalise

4.2.1 Modernising Energy Data

We need to focus on both capital costs and operating costs if the objectives of the energy data taskforce are going to be delivered. The current proposal only funds capital costs and overlooks the cost of the highly skilled people necessary to make it a success.

Delivering the low carbon transition will require a transformational change to the existing energy infrastructure, the types of energy used, and how and when they are used. To enable this transition, energy data needs to be at its core enabling the technologies and infrastructure that are both cost effective and clean as well as stimulating innovation in processes, transactions and consumer offerings in order to realise a whole-system energy infrastructure. It is widely recognised that energy networks need to evolve from being passive to active and this is achieved through adoption of smart technologies (IoT), the exploitation of the data they generate and utilisation of analytical insights, artificial intelligence (AI) and machine learning (ML) solutions to enable whole energy system solutions.

The availability of quality network data will be critical to achieving net zero through the successful decarbonisation of our energy system. Improvements to energy data, combined with greater collaboration between networks and systems that have previously been discreet, will require essential investment to take forward the Energy Data Task Force (EDTF) recommendations⁵¹. Doing this will open the door to shared opportunities and deliver efficiencies not only for customers, but to facilitate the wider whole system environmental, economic and consumer benefits.

We agree that the principles set out in the digitisation strategy⁵² are appropriate aspirations.

However, it is also important to recognise that these aspirations will take both time and investment to deliver. Ofgem's expectations for the digitisation strategy were only set out very late in the business plan development process⁵³ at a point where OFGEM's RIIO Challenge Group had been clear that they did not expect to see substantial changes in business plans⁵⁴ following the October draft submission.

⁵¹ <https://es.catapult.org.uk/news/energy-data-taskforce-report/>

⁵² Copied from the best practice guidelines website with latest update on 9th June, 2020, emphasis as provided on the site <https://modernisingenergydata.atlassian.net/wiki/spaces/MED/pages/69042178/Data+Best+Practice+latest+release+v0.21>

⁵³ RIIO-2 Business Plan Guidance, 9th September 2019, para 2.36

⁵⁴ Letter from Chair of RIIO Challenge Group to SGN CEO, 16th August 2019.

The late guidance meant it was not possible to give full and appropriate consideration in the final business plan. Given this, it is important Ofgem recognises that the portion of our plan relating to digitisation, including investment proposals, was not sufficiently reflected upon and will require a level of flexibility and joint working going forward in order to deliver the best customer outcome in the most efficient manner.

Type 1 - Factual or computational errors. The current proposals overlook the operational costs necessary to deliver the energy digitisation strategy.

Q5. Will the combination of the two proposed Licence Obligations support the delivery of a digitalised energy system and maximise the value of data to consumers?

It is not appropriate to use a licence condition to enforce a poorly defined concept such as ‘best practice’. The lack of definition and the high-risk of substantial change over the 5-year regulatory period substantially increases the regulatory risk associated with the licence condition.

The combination of the two proposed Licence Obligations – the digitisation strategy and action plan, and data best practice licence obligation - will in principle support the outcomes described by the EDTF report. However, we have specific concerns regarding the regulatory implications of a licence obligation that requires us to deliver best practice and it is essential that these licence obligations are appropriately funded.

- **Licence obligation to deliver best practice.** We do not think that a licence obligation to deliver a set of principles set out in the ‘data best practice guidance’⁵⁵ is appropriate given the fluidity of the objectives and the lack of clear definition surrounding how those principles should be applied in practice. A breach of licence is a matter that we take extremely seriously and can result in fines of up to 10% of annual turn-over⁵⁶. Over the RIIO-2 period we expect best practice to change dramatically and independently of any action that the network company takes. A network company could inadvertently find itself not delivering best practice as a result of investment decisions taken in good faith and best available information at the time. It is because of this that we think that a licence obligation to deliver best practice is inappropriate and excessive. Licence conditions are best deployed where a breach would result in serious consumer detriment and there is a measurable or objective standard that networks can be held to. This is not the case in this area. Rather we would recommend that a reputational ODI is put in place to promote best practice in an open and transparent manner. We would envisage this being through the annual report setting out networks have delivered best practice and potentially an independent assessment and comparison of activities across network companies.

Type 2: Inconsistencies in stated approach or in the application of a methodology. A licence obligation to deliver ‘best practice’ coupled with the imposition of penalties in the event of a breach would be inconsistent given the inability to define the output.

- **Appropriate funding.** We are pleased that the IT capital investment plan that underpins investment in data digitisation has been broadly accepted. We further recognise the need for an uncertainty mechanism here given the current unknowns around what is ‘best practice’. This also makes it very important that the related uncertainty mechanisms are appropriately designed to cover all relevant investment activities. The one uncertainty mechanism - ‘Non-operational IT and Telecoms Capex re-opener’⁵⁷ - which is clearly limited to capital expenditure only. This overlooks the importance of highly skilled people and the importance of building that skills base. Delivering best practice principles will require operational expenditure as well as capital expenditure. Given the late guidance relating to digitisation, this has not been fully allowed for, and the lack of appropriate funding risks creating a bias towards capital investments and a relative de-prioritisation of operational costs intensive activity, such as data cleansing, that may not be in customers’ interest. We note that transmission networks⁵⁸ have an operating cost escalator to provide allowed expenditure to implement efficient IT enhancements as part of their totex and we think that this should be considered here as well. Based on the enhanced outputs that we submitted as a part of our business plan we think there should be an adjustment of £0.08m in operating costs for each £1m in capital costs.

⁵⁵ <https://modernisingenergydata.atlassian.net/wiki/spaces/MED/pages/69042178/Data+Best+Practice+latest+release+v0.21>

⁵⁶ Enforcement Guidelines, Ofgem, Oct 2017, Para 6.44, pg 60

⁵⁷ RIIO-2 Draft Determination – Core document, para 7.71, pg 74

⁵⁸ RIIO-2 Draft Determination – Electricity Transmission Annex, July 2020, Para 4.62, pg 79 and RIIO-2 Draft Determination – Gas Transmission Annex, July 2020, Para 4.39, pg 52

Type 2 - Inconsistencies in stated approach or in the application of a methodology. Not providing appropriate funding for operational costs will undermine delivery and distort decision making.

Finally, we note that the first reopener is in April 2021. Given the short timescales and the current uncertainties relating to best practice, we think it is essential that we work together to ensure that there is a clear understanding of the evidence thresholds and expectations before December to enable an appropriate reopener submission in April.

Q6. Do you agree with our proposed frequency for publication of updates to the digitalisation strategy and the digitalisation action plan, respectively?

We are concerned about the reporting burden that could be introduced and question whether this would add value to the consumer. We think the same can be achieved with annual reporting and by exception more frequent reporting.

SGN agrees with the biennial publication for the digitalisation strategies and that this creates a more appropriate balance of reporting requirements compared to an annual strategy.

However, it is important that extending the time between publications of digitisation strategies does not introduce a greater reporting burden to deliver the six-monthly updates. We believe these updates should be limited to only report on the changes to short and medium-term planning expectations and the delivery of projects.

We have a concern regarding the six-monthly publication of the action plan and reporting against it. Six-monthly action plan reporting will create unnecessary and inappropriate regulatory burden, increase the associated cost to customers, and may distract from implementation. At most this should be done on an annual basis and tied to our regulatory reporting timeframe and governance (including DAG arrangements). Our view is that aligning with core regulatory reporting timeframes and governance will be the most effective and efficient for both organisations. It is important to stress that these plans are dependent upon and will be driven by the level of funding ultimately approved and required to develop the capabilities needed to deliver digitalisation.

Furthermore, linked to the above point, a 6-monthly reporting cycle on the action plan, based on the current IT totex funding response, is unlikely to align with material changes in delivery and / or capability growth in this area. As such it would not warrant such a level of frequency of new and updated plans and provide limited value.

We would suggest that six monthly publication and reporting against the action plan should be by exception only and limited to those networks who are not delivering against their strategy or request it in advance of a submission. Otherwise it should be annual reporting in line with the regulatory reporting cycle.

Type 3: Disagreement as to how the methodology should be applied. The use of 6mthly reporting against the action plan, and the resource that could be required to deliver this. This should be changed to annual reporting.

Q7. What kinds of data do you think should comply with the data best practice guidance to maximise benefits to consumers through better use of data?

We believe it is too early to define what kinds of data should comply with data best practice guidance, as there needs to be an appropriate assessment of the benefits of different data to different users and the costs of delivering that data. This will require detailed an ongoing engagement with different potential data users, existing data systems and collaboration across industry to establish the costs of delivery.

Type 3: Disagreement as to how the methodology should be applied. A process needs to be put in place though data requirements should be tested with stakeholders and customers to confirm it adds value.

4.2.2 Stakeholder Engagement Incentive

Q8. Do you agree that the Groups could have an enduring role to work with the companies to monitor progress and ensure they deliver the commitments in their engagement strategies?

We see the CEG having an on-going role overseeing engagement strategy and our mid-point review of complex challenges. As such we would support a CEG specific to each network.

We believe the CEGs should play a continuing role in ensuring our business planning and decision-making reflects the needs of customers and stakeholders. We also consider the role of CEGs should be one of ongoing constructive challenge and objective assessment, encouraging companies to excel, share and collaborate. We would therefore welcome continued collaboration between CEGs to share best practice and innovation amongst the networks as this would be a valuable way of spreading cross sector learning and achieving better outcomes for customers and stakeholders.

Whilst we welcome Ofgem's encouragement for network companies to report to stakeholders on their engagement activities and commitments, there is a lack of clarity or detail on what form the reporting should take. Also, the lack of an appropriate metric makes any direct comparability of performance difficult for a reputational ODI. We suggest that a minimum standard of compliance with the Accountability 1000 Stakeholder Engagement Standard (AA 1000 SES) should be set to compare performance. Without an appropriate metric there is a risk that direct comparability of performance will be challenging.

We would envisage the CEG playing an ongoing role overseeing our engagement strategy and plan, including our six-stage engagement cycle and performance against AA 1000 SES.

The Stakeholder Engagement Incentive has driven significant cultural change in SGN to embed stakeholder input into our decision-making processes. This has increased our responsiveness to our customers and stakeholders, helping to ensure that their needs are met. We would therefore welcome an enduring role for CEGs to monitor progress against the commitments set out in companies' stakeholder engagement strategies as part of an overall role to review progress against companies' business plan commitments, although Ofgem has not proposed this as a bespoke ODI-R.

We would support the CEG overseeing a midpoint review of the complex challenges as set out in our stakeholder engagement strategy, to ensure they remain relevant or are replaced with other areas of focus if appropriate.

Ofgem is also inviting stakeholders' views on whether the one Group per company arrangement is likely to deliver as effectively during the price control period as it did during the Business Plan development stage, or whether a single Group per sector (i.e. transmission, gas distribution) may be more suitable to achieve the right outcomes.

Our view is that one group per company is a more effective model which allows for greater scrutiny, challenge and detailed understanding of a company's performance. It would also enable a greater appreciation of regionally specific customer and stakeholder priorities, leading to the delivery of greater, more appropriate outcomes.

Type 6 – Broad agreement with position put forward in draft determination.

4.2.3 Consumer vulnerability reputational incentive

GDQ2. What are your views on the reporting metrics we have proposed for the consumer vulnerability ODI-R?

We are in general agreement that the three metrics proposed will provide good indications of our performance around consumer vulnerability and can be evidenced annually in our RRP. To ensure we have robust comparison scores, if these results are to be published in Ofgem's annual reports, we would welcome an opportunity to discuss and agree minimum GDN return rates.

We would also highlight that if government heat policy changes around future heat this may put our FPNES target in jeopardy and would require this metric to be excluded.

Type 6 – Broad agreement with position put forward in draft determination

GDQ3. What are your views on the design of the annual showcase events, including whether they should be held at a national or regional level?

We welcome the opportunity to showcase our progress around CO safety and vulnerability initiatives, developed to help customers who need us the most. We propose to embed a number of these annually at our stakeholder events, ensuring we take into account the views of our regional stakeholders across our entire footprint.

We would also propose to showcase the collaborative work we have implemented with the other GDNs in this area, Nationally, on an annual basis commencing 2021/22.

Type 6 – Broad agreement with position put forward in draft determination.

4.2.4 Consumer vulnerability and carbon monoxide (CO) safety use-it or lose-it allowance

The rules around eligibility must be reconsidered if we are going to maintain our support for our most vulnerable customers. Without this change our engineers could be forced to walk away from the most vulnerable.

We welcome the introduction of the new use-it or lose-it allowance, which we hope will facilitate extra levels of help and service beyond business as usual for customers who need us the most, especially at times when their circumstances may render them critically vulnerable. We look forward to working with our new Vulnerable Customer Steering Group, which will help us shape the way we use the allowance and ensure we are innovative and extend our reach to all.

Type 6 – Broad agreement with position put forward in draft determination

We would like to further discuss the eligibility criteria, to allow us to offer the right levels of help as set out in our business plan and demonstrated in our three-tier approach which was discussed and developed with feedback from our stakeholders. As discussed⁵⁹ we have concerns that the eligibility criteria will not be wide enough to take into account the extra help we can give to our most vulnerable and financially struggling customers, and still need clarity on what will be considered eligible for collaborative initiatives.

The eligibility criteria that were presented⁶⁰ will restrict us from helping customers when they have limited access to funds and who simply cannot get help elsewhere. We are also concerned that the draft Vulnerability and Carbon Monoxide Allowance (VCMA)⁶¹ governance document states we may not be able to help customers who are being funded elsewhere including through innovation funding or other government (national, devolved or local) funding.

Working with our partner AgilityEco we have helped many customers in this type of situation, by implementing our winter voucher scheme to help fund the initial GSRE visit to ascertain if a repair can be carried out. We will also supplement the repair if required but at the same time AgilityEco will look to access local or Government funding depending on the scenario. AgilityEco is now offering this as a service to all GDNs to offer more help across all network areas⁶².

We work with many partners to access many areas of additional funding especially in situations where we can improve customers' energy efficiency and their standard of life. We would like more clarity and autonomy to do what is right for our extremely vulnerable customers, especially in situations where our engineers find it hard to walk away.

Type 3: Disagreement as to how the methodology should be applied. We have significant concerns with the proposed eligibility requirements which would prevent us from delivering the outcome our stakeholders have asked us to deliver.

4.2.5 Fuel poor network extension scheme

We are proud to be the only network to have maintained ambitious targets for reducing fuel poverty. It is important that the difference in ambition and the challenge we are taken on is accurately reflected in Ofgem's reporting.

As the only network not to propose a substantial decrease in our annual targets⁶³ we agree with the measures set out. Supporting ambition linked to reducing fuel poverty is important, particularly in the current circumstances, and we are pleased to be the only network pledging to maintain their ambition from GD1.

Networks that have taken on challenging targets should not be disadvantaged when reporting against the reputation ODI relative to less ambition networks. Given the scale of the reduction in ambition from other networks with their reputational ODIs being a half or in some cases as low as 30% of their GD1 ambition^{64,65}, it is very important that the reporting of these reputational ODIs recognises this difference in ambition by being calibrated to acknowledge the scale of the challenge being taken on by SGN compared to other networks.

It is important that reputational assessment should be based on a comparison of total delivery rather than delivery against targets, this is necessary to avoid a network with an relatively easy target getting a reputation benefit. Whilst a

⁵⁹ Ofgem's Customer and Social Working group, 25 Aug 2020

⁶⁰ Ofgem's Customer and Social Working group, 21 May 2020

⁶¹ Draft Gas Network Vulnerability and Carbon Monoxide Use-it or Lose-it allowance guidance document, as circulated to customer and social working group 20th Aug 2020

⁶² AgilityEco's 2018/19 impact report

⁶³ RIIO-2 Draft Determination – gas distribution annex, 9th July 2020, para 2.17

⁶⁴ RIIO-2 Draft determinations – NGN, Table 10, pg 14

⁶⁵ RIIO-2 Draft determinations – Wales and West Utilities, table 10 pg 13 and RIIO-2 Draft determinations – Cadent, table 10, pg 13

network which takes on a challenge and struggles to achieve it has reputational damage for delivering a better customer outcome.

Reputational ODI needs to recognise the impacts of changing Government or regulatory policy on the delivery of targets. Given the uncertainty in Government policy and the impact this may have on our ability to deliver these targets, it is important to consider how the reputational ODI may accommodate changes. Within our business plan under our first engagement commitment⁶⁶ we set out how we would regularly review the appropriateness of these targets with our Steering Group for Vulnerability and CO⁶⁷. It is important that when any change in target does occur, that the licence allows works that have already been accepted to be brought to a full conclusion in order to avoid customer harm.

In our view this ambition, to do the right thing for our most vulnerable customers, should also have been eligible for recognition under the customer value proposition.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. The scale of ambition put forward by SGN relative to the substantial reductions put forward by other networks should be commended and recognised under the CVP.

GDQ4. Do you agree with our position to change the FPNES from a PCD to a capped volume driver?

We agree with the proposal to move the FPNES from a PCD to a capped volume driver and we are pleased to see the targets we proposed in our business plan, following consultation with our stakeholders, have been proposed in the draft determination for GD2.

Type 6 – Broad agreement with position put forward in draft determination

4.2.6 Customer satisfaction survey

The proposed standards for customer satisfaction do not reflect customer evidence that confirms customers do not prioritise investment in this area. No penalties should be levied for any scores above 9-out-of-10, and the deadband needs to be symmetrical given the limited sample size the mechanism is calibrated on

We support Ofgem's decision to continue to incentivise outstanding customer service throughout GD2. We have demonstrated in GD1 this would, if awarded appropriately, allow us to keep pace with ever changing customer expectations and continue to offer outstanding service from the gas industry throughout GD2. When benchmarked for customer satisfaction GDN's have consistently demonstrated that the gas networks outperform other sectors for customer satisfaction.⁶⁸

Whilst we recognise the importance of focusing on customer satisfaction and agree that we need to ensure that sector performance is maintained, our stakeholder and customer engagement did not identify this as a priority for more investment⁶⁹. Our customers told us;

- That they would be happy with a score of 8/10, therefore are pleased we have been constantly scoring a 9/10 since 2016/17⁷⁰.
- When asked whether customers should be aiming for a score of 9.5, the feedback was that it was more important to focus elsewhere – such as vulnerable customers⁷¹
- While customers do not think there is a need to try and improve their levels of satisfaction, they believe SGN's service will need to improve to maintain current levels⁷²

⁶⁶ SGN Business Plan, Dec 2019, section 4.14.1, pg 44

⁶⁷ SGN Business Plan, Dec 2019, section 6.5.6, pg 56

⁶⁸ TTI Global, Benchmark comparison report GDN Q4 2020 (ref 115)

⁶⁹ This was tested and checked in each of the first three stages of our engagement plan, Stage 1: Explorative Qualitative Workshops and Interviews (Explorative Phase) (ref 002), Stage 2: Max Diff Prioritisation Phase (ref 003, 004) and stage 3: Conjoint & WtP summary report (Valuation Phase) (ref 005). The references provided relate to our Insight Inventory as set out in Appendix 022 – SGN – Enhanced Engagement – Dec 19

⁷⁰ Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable (ref 085) pg 10

⁷¹ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) pg 13

⁷² Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable (ref 085) pg 12

- Stakeholders agreed that SGN should align with the feedback from customers and focus more on responding to incidents and supporting vulnerable people than attempting to further improve general satisfaction scores⁷³.

Based on this feedback we have significant concerns around the scale of the increase in standards proposed and that it will drive investment into areas that are not a priority for our customers. The new standards proposed are significantly higher with the minimum target score, below which you start incurring penalties for planned and unplanned work, now set at a level that matches or is higher than the maximum reward score in GD1 followed by connections with only a difference of 0.02 away from what would have been maximum reward in GD1.

We agree with our customers to commit to the challenge of having both our networks scoring above 9/10 in GD2⁷⁴. This level has been supported by our stakeholders and customers, who have also advised we should continue to keep pace with the same levels of service and investment we have demonstrated throughout GD1. Our customers and stakeholders have not shown a strong desire for us to invest to achieve significantly higher standards and we think that this feedback should be reflected in the design proposal.

We would suggest the baselines should be set at max GD1 performance levels and if a deadband is still to be applied this should be symmetrical to balance the risk and allow us to continue to invest in continuous improvement for our customers in GD2.

Type 5: Evidence that SGN has provided but hasn't been taken into account or given sufficient weight. It is very important that relevant customer and stakeholder evidence should be considered appropriately.

The statistical basis⁷⁵ used to set the upper and lower bounds needs to be re-considered, in particular we note that delivering a very high score above 9 out of 10 can still generate a maximum penalty for unplanned work. We think that any average score above 9 out of 10 should be celebrated as a demonstration that those networks are delivering the right level of service for their customers⁷⁶.

Secondly, we note that as scores get closer to 10 then the assumption of a normal distribution no longer holds⁷⁷ as it understates the downside risk and overstates the potential benefits. The distribution needs to be skewed to reflect that scores of 3 out of 10 can and do occur, whilst you can never score higher than 10-out-of-10.

Type 2: Inconsistencies in stated approach or in the application of a methodology. The proposed thresholds do not take into account the diminishing likelihood of a achieving a 10-out-of-10 and the skew in the distribution at high levels.

Furthermore, we disagree with the application of the deadband methodology and the asymmetry that this introduces as it overstates the confidence of a limited trial. The minimum target before which penalties are applied was set as the basis of survey trial which does not allow for any statistical error in the representativeness of that survey sample, which would be expected in any limited survey⁷⁸.

Secondly, given the impact of COVID we cannot be confident that the trial is still representative as our return rates are still low. It may be that there has been either a positive or negative step change in our customers' response patterns. As we start to recover, we have still to understand the real impact on our scores.

Because of these statistical challenges in the underlying data, it is inappropriate for the deadband to be applied so narrowly and for it to be asymmetrically applied to only the reward proportion of the curve.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. The proposed setting of the boundaries overstates the statistical validity of the trial that was undertaken.

⁷³ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) pg 16

⁷⁴ SGN Business Plan, Dec 2019, section 6.10.1 pg 58 and Appendix 022 – SGN – Enhanced Engagement – Dec 19 Positive Impact round table event - (London combined with Scotland) (ref 088) - Shaping the Business Plan Qualitative Workshops - Customer Service & Supporting Vulnerable (085)

⁷⁵ RIIIO-2 Draft determinations – Gas Annex, para 2.31, pg 19 sets out that maximum reward and penalty should be set at 1.75 standard deviations around the target.

⁷⁶ 088 SGN Positive Impact roundtable event (London combined with Scotland) Aug19 Final P13: Should we [SGN] be aiming for a score of 9.5? A: No, as customers wanted the money elsewhere e.g. vulnerable customers.

⁷⁷ SGN Positive Impact round table event - (London combined with Scotland) (ref 088) - P12: There was general support from stakeholders at both workshops that the proposed approach "seems about right". It was felt that a minimum ambition of 9/10 is acceptable, and that it was unrealistic to eradicate complaints altogether. A few stakeholders stated that customers care more about how a company responds when something goes wrong, than the incident itself. There was also agreement that if customer had said that SGN should invest more on vulnerable customers than further improving general customer satisfaction, then that is the direction the company should travel

⁷⁸ Returns sizes were around 500 for connections, 900 for replacement and 1200 for emergency / repair.

As it stands at least half of the networks can expect to incur a penalty as a result of this ODI and few companies, if any, can expect to earn a reward. On this basis, rather than driving improvement, this structure risks focusing attention on penalty avoidance only.

4.2.7 Complaints Metric

Agree but increasingly small sample sizes can start to distort the results

Given the improvement that has been delivered by all GDNs over GD1, and that the complaint index is a penalty-only ODI which can be up to 0.5% of allowed base revenue, we agree with the proposed approach. We would point out however, in cases where a GDN has very low volumes of complaints, performance can be affected if only these low volumes of complaints are available to close within prescribed timescales, meaning excellent service is being provided with minimal complaints but still the possibility of penalty. We have not yet experienced this in GD1 but would ask that it is recognised if required by Ofgem with potential exclusions.

Type 6 – Broad agreement with position put forward in draft determination

4.2.8 GSOPs

We disagree with the approach taken to GSOPs that will increase customer harm by delaying our ability to reconnect the majority of our customers in the shortest possible time.

Payment levels

We note the position taken in the draft determination to double GSOP payments noting “some companies are already doubling payments voluntarily for all GSOPs and propose to do so in RIIO-GD2. Doubling current payments for all companies will ensure that customers do not receive different levels of compensation depending on the GDN that serves them.”⁷⁹ We would like to remind Ofgem that two networks took the decision around the same time that SGN undertook to make a voluntary contribution of £145m back to its customers.

Whilst we accept the decision, we would also like to remind Ofgem that this was not an area of focus for our customers, or our stakeholders. The strong message that we received was that a one size fits all approach is not appropriate and that it was more important to have the right package of services that were determined by need during an incident rather than an enhanced GSOP⁸⁰. As such we would have preferred a more targeted approach to improving GSOPs that are more clearly aligned to customer priorities.

We support the intention to increase GSOP payments in line with inflation CPIH to the nearest £5, if the index moves sufficiently (either up or down).

Type 5: Evidence that SGN has provided but hasn't been taken into account or given sufficient weight. Relevant customer and stakeholder evidence should be considered appropriately.

GSOP 2

We disagree with the conclusions reached on GSOP2, and the proposals to reduce reinstatement timescales for PSR customers from five days to three days as this will significantly increase the cost of completing the reinstatement process and cause resentment.

Given that approximately 30% of our customers are registered on the PSR as vulnerable customers. The most efficient method to get everyone back on as quickly as possible is to target zones and streets and work through in a clear, systematic manner. We work with the neighbourhood to ensure the maximum numbers of people are present and rapidly work our way through a region as efficiently as possible. We then go back in waves to reconnect customers quickly and

⁷⁹ RIIO-2 Draft determinations – Gas Annex, para 2.54, pg 19 sets out that maximum reward and penalty should be set at 1.75 standard deviations around the target.

⁸⁰ SGN Business Plan, Dec 2019, section 6.3 pg 54 and as referenced in Appendix 022 – SGN – Enhanced Engagement – Dec 19, MFT Workshop November 2018 London and Edinburgh (ref 013, 014), Stage 1: Explorative Qualitative Workshops and interviews (Exploratory Phase) (ref 002) and Stage 3: Conjoint & WtP summary report (Valuation Phase) (ref 005)

rapidly. It was by applying this structured and methodological approach that we were able to reconnect 4,000 customers in Falkirk in three days.

If we are to work though by picking individuals then this substantially increases time required, through increased travelling time, increased repeat visits and the diversion of logistical resources to accommodate the increased complexity. We think it will cause significant customer harm.

At the same time we are concerned that it will build resentment from neighbours and associated complaints due to the apparent inequity of the proposal.

Type 2: Inconsistencies in stated approach or in the application of a methodology. On the basis that this proposal will lead to a worse customer outcome we cannot support it.

GSOP 3

Whilst we support Ofgem's principles to extend GSOP3 to offer access to hot water and food after 48hrs in a major gas incident, we note that an important point of focus has been removed. It was anticipated that this extra level of help would be targeted at the most vulnerable customer registered on the priority services register (PSR). This was defined as those with specific 'needs code 22' - where customers have a chronic or serious illness and may struggle to access a hot meal, and 'needs code 23' where customers are medically dependant on showering/bathing.

Given the breadth of the PSR, it is important to target the intervention to those with the specific need. The risk otherwise is that it is untargeted, and during a large gas cessation, like the one we experienced in Falkirk in 2019 where there were 4,000 customers registered on the PSR, support is poorly targeted. Secondly the logistical challenge of managing the provision of hot water and hot food, alongside the existing heaters and hotplates would carry a significant additional cost in both time and resource, risking the diversion of our engineers from the priority of restoring supplies in the shortest possible time to the provision of hot food and hot water.

In these situations, we work with our resilience partners and Local Authorities to cross-reference our vulnerability data, ensuring our most critically vulnerable customers are always well taken care of by the most appropriate support agencies ensuring they are kept safe and warm.

In Scotland our Local Authorities have a central Persons at Risk Database (PARD), which we are allowed to cross reference in major incidents. PARD contains details of customers with the most critical needs, populated by NHS, Social Services and Home Care agencies. We also work with local authorities in our southern network to access Social Services registers.

We would also like clarity on exemptions for uncontrollable events where the loss of supply was not due to any fault of the GDNs. In relation to GSOP3, this would specifically be for where the costs to supply extra services are not always reclaimable, and for GSOP1 where we are required to pay failure to supply gas payments when a large majority of these can be down to third party damage, such as the recent erosion event which could have resulted in loss of gas supply for 20,000 customers this August.

Type 2: Inconsistencies in stated approach or in the application of a methodology. In the working groups prior to DD the specific needs codes were clearly referenced. They appear to have been dropped.

GDQ5. For GSOP3, is a 48-hour exclusion period for the provision of access to hot water and food in the event of a major incident appropriate? Should this be extended to cover interruptions that are not a major incident?

We support Ofgem's decision to extend GSOP3 to offer access to hot water and food to customers subject to being targeted at those with specific medical requirements/needs after 48hrs in a major gas incident, but it should be limited to major incidents.

We are pleased to be able to demonstrate the high levels of support we already offer in large gas cessations, which are in the main extremely complex due to third party damage. With GSOP 3, we do not feel it is appropriate to extend this to include interruptions that are not major incidents, as the costs involved to offer and manage this type of service are significant, not only for the provisions supplied but also for the resources required for implementation.

To resource systems for timed appointments and provision of hot water and food during all interruptions would require significant investment, which will need to be investigated further and reflected in our allowances.⁸¹

In our Willingness to Pay research^{82 83}, domestic customers gave much lower values for faster restoration of gas supplies after an unplanned interruption. Domestic customers and SME customers also gave much lower values for faster restoration of gas supplies after an unplanned interruption. These results indicate that this is not a priority area for further investment in the eyes of our customers. We will continue our efforts to reduce the number of unplanned interruptions⁸⁴ on our two networks and we welcome the opportunity to engage with Ofgem and the other GDNs to facilitate effective benchmarking, through full consistency of reporting on unplanned interruptions averages between the GDNs in GD2. That said, we are concerned that adding major incidents to the output measure and linking unplanned major incidents to a penalty could see GDNs being penalised for no fault of their own, resulting in average unplanned interruption duration and performance against the output being negatively impacted.

We do not feel it would be appropriate to extend this cover to interruptions that are not major incidents, as the costs involved to offer and manage this type of service are significant, as we have demonstrated in Falkirk, not only for the provisions supplied but also for the resources required to implement this. Ofgem have stated changes to existing GSOPs should not come at a cost to our customers⁸⁵, adding this type of service to all >48hr interruptions would require additional investment and we are concerned our stakeholders or customers would not support this⁸⁶.

Type 2 - Inconsistencies in stated approach or in the application of a methodology: This will add additional cost which is not supported by our customers or previous guidance from Ofgem.

GDQ6. In relation to our proposal to extend quotation GSOPs on entry and exit connections, is it sufficient – in regard to green gas entry enquiries – for these GSOPs to apply to the provision of initial and full capacity studies? Are there other parts of the green gas entry process we need to consider to ensure an improved service provision?

Given the complexity of the connection studies and their diversity we do not think a GSOP is appropriate and may encourage less effective or comprehensive reports to achieve a standard. Rather we would suggest this should be reported as a part of the annual environmental report.

SGN already has in place an internal standard of service for initial enquiries and capacity studies of 15 working days and 30 working days respectively. This standard has consistently been met and we have in place internal reporting structures to ensure compliance. The 15 and 30 working days timescales are required to assemble and produce these reports, which provide a high level of detail and require a significant amount of modelling analysis to achieve the required results. The time it takes to undertake the analysis is highly dependent on the location, the pressure tier requested and the resulting complexity. Detailed capacity studies can take significantly longer, and there is a risk that by shortening the time period the quality of the analysis and the level of engagement with the customer is curtailed to deliver an inappropriate target.

We have discussed these timescales at stakeholder events and feedback suggests the timescales and the level of detail provided meets industry expectations⁸⁷. We also conducted a stakeholder survey covering green gas connections and requested specific feedback on the pre-connection service SGN provide. We asked industry partners their opinion on the quality and timescales associated with initial communications relating to their planned biomethane connection and we

⁸¹ SGN Positive Impact round table event - (London combined with Scotland) (ref 088)

⁸² Customer and Social Working Group 290819 (ref 120) TTI research – jointly commissioned by GDNs to engage PLW customers across the GDNs to test appointment setting for gas restoration and the implementation of a new GSOP.

⁸³ Stage 3: Conjoint & WtP Summary report (Valuation Phase) (ref 005): Domestic customers gave highest values for attributes that minimise environmental impact and much lower values for faster restoration of gas supplies after an unplanned interruption; £5.36 for 80% carbon neutral electricity; £1.29 to restore gas supply within 18hrs and £0.57 to restore gas supply within 21hrs

⁸⁴ Business Plan Acceptability Testing Phase 2 (ref 079) and Post-COVID19 Business Plan Acceptability Testing (ref 109) showed strong support for Enhancing the reliability & safety of gas pipes; Improving reliability in areas that suffer more frequent interruptions

⁸⁵ Consultation RII0-2 Sector Specific Methodology Annex: Gas Distribution Dec 18, Para 3.148, pg 43 “We believe that any changes to existing GSOPs should not come at a cost to consumers. We do not envisage that the GDNs should have to undertake significant investment to achieve the revised standards, where standards have been updated to reflect GDNs’ voluntary behaviour or the existing business as usual. Therefore, we do not expect additional funding to be requested within company Business Plans for existing GSOPs. In our assessment of Business Plans, we will consider the appropriate treatment of GSOP payments and whether these should be included or excluded from cost allowances”

⁸⁶ Guaranteed Standards of Performance – Phase 1 report (ref 097)

⁸⁷ Biomethane and Gas Entry Connections Customer Survey (ref 082), Biomethane and Gas Entry connections round table event (ref 095)

scored 7.9/10. We would therefore not support extending additional GSOPs to green gas enquires both for initial enquiries or capacity studies, however we would support continuing the GDN voluntary standard which can be reported as a part of the Annual Environmental Report.

Type 3 - Disagreement as to how the methodology should be applied: Rather than a GSOP this should be an ODI-R included as a part of the annual environmental report.

It is also important to recognise that all GDNs' initial enquiry and capacity study products will be different, i.e. the level of detail provided will vary. For a workable GSOP standard to be effective and drive forward improved standards a common approach to the content to these products would need to be agreed between GDNs. We would also query whether it would be considered discriminatory to restrict GSOP measures to green gas entry enquiries when SGN receive gas entry enquiries from conventional gas sources as well that would not be subject to the same measures⁸⁸.

Type 2 - Inconsistencies in stated approach or in the application of a methodology: The lack of a common standard and definition of reporting will need to be addressed before this can operate effectively as a GSOP.

4.2.9 Emergency response

We agree with the proposals as set out in draft determination

4.2.10 Unplanned interruptions

We disagree with a financial penalty being imposed on an uncontrollable event. The example of Alloa where a recent and unforeseeable erosion event could have taken 20,000 customers off gas, could have resulted in a significant financial penalty for something that we could not anticipate or control for.

As we set out in our response to the SSMC⁸⁹, we do not believe that the introduction of a new financial penalty on networks is appropriate to tackle worsening performance in a small number of licence areas. We also expressed the concern that a penalty of 0.5% of allowed revenue, given the differences in the way in which unplanned interruptions were measured, is disproportionate due to the uncontrollable aspect of many unplanned interruptions. This concern was corroborated through our customer engagement where improving unplanned interruptions was ranked lowest of seven alternative investment priorities⁹⁰.

In the SSMD it was noted that some companies could consider their performance levels during GD1 were already at levels that were higher than the minimum standards that customers could expect⁹¹ and accepted that standards that are at or more challenging than current performance may not be necessary.

Given this position adopted by Ofgem in the SSMD and the comparatively strong performance of the SGN networks as set out in our business plan⁹², we are very disappointed that the proposals we agreed with our stakeholders and CEG following two in-depth workshops have not been accepted.

Type 5: Evidence that SGN has provided but hasn't been taken into account or given sufficient weight. We think that stakeholder evidence should be considered in setting the target.

By adopting a 1-in-20 performance standard which is applied on an individual network basis, it implies that each network will be expected to fail and to be fined once every twenty years and that one company should expect to be penalised in GD2. This makes no recognition of the point set out in the SSMD that there was variability between companies in their standards of service, and no recognition of the low priority given to this by our stakeholders.

We note that in the values proposed for large events there is a significant variation between networks, with areas such as Southern and some of Cadent's networks being permitted one major incident a year, whilst Scotland, NGN and WWU

⁸⁸ The Gas Act 1986 (Section 9) Part 2 requires SGN to avoid any undue preference or discrimination.

⁸⁹ SGN Sector Specific Methodology Consultation, 14th March 2019, pg 72

⁹⁰ SGN Business Plan, Dec 2019, section 6.13 pg61 and as referenced in Appendix 022 – SGN – Enhanced Engagement – in Stage 3: Conjoint & WtP summary report (Valuation Phase) (ref 005)

⁹¹ Sector Specific Methodology Decision, 24th May 2019, para 2.150

⁹² SGN Business Plan, Dec 2019, section 6.13 pg61. As set out in para 3 SGN Southern has a high proportion of risers which often bring additional complexities and planning consenting requirements.

have been permitted four major events a year without clear rationale for this position. The distribution would suggest that the underlying data sets are not sufficiently robust to calibrate appropriately an effective target. As we set out in our SSMC⁹³, we were concerned around the volatility associated with these events and whilst it is noted that in the draft determination the need to have a discretionary adjustment⁹⁴, we continue to believe that this ‘penalty only’ incentive is disproportionate, out of line with customer and stakeholder requirements, and should be removed entirely.

Type 2: Inconsistencies in stated approach or in the application of a methodology. There are inconsistencies in the methodology and the underlying data that invalidate the proposed thresholds.

As we set out in the summary, we have recently experienced an erosion incident near the town of Alloa where an extreme weather event left a high-pressure pipeline suspended for approximately 80m across a new riverbed. If there had been any sign of the pipe buckling leading to a catastrophic failure, we would have isolated this section of pipeline resulting in the disconnection of over 20,000 customers.

This is a good example of an incident that is completely outside of the network’s control, where did not anticipated there to be a substantial risk of an event, which could have led to a disconnection decision on the grounds of safety but where that decision could have exposed us to a significant penalty under this mechanism.

We fundamentally disagree that it would have been appropriate to have penalised a network on the basis of an unplanned interruption similar to this that might arise.

The decision whether to isolate that section of pipeline and disconnect 20,000 customers would not be an easy decision given the consequences, but it would be decided based on the best available evidence and the safety grounds and the best available advice at the time. We are extremely concerned that the financial impacts of this penalty could distort decision making during a critical safety incident.

Type 4: New evidence presented to respond to a point. Alloa is an example of the type of uncontrollable incident that this proposal will penalise

As we set out in our response to the SSMC, we think that consistency of definitions surrounding unplanned interruptions is important and in particular when it is appropriate to ‘stop the clock’, where it is widely understood that there are different approaches between GDNs. We do not engage in the practice of ‘clock stopping’ and as a result it is notable that our GD2 Draft Determination unplanned interruption averages are higher than other other GDNs. Securing consistency in reporting is important and we agree with the view that a change in definition could result in a material change to the reported average durations⁹⁵ and that provision should be made in the licence to allow for this.

Alloa Erosion incident 12th Aug 2020



4.2.11 Appointments for restoring supply to appliances

GDQ7. What are your views on our consultation position to monitor the provision of and adherence to appointment timeslots for purge and relight activity through an ODI-R? Are our suggested reporting measurements reasonable?

Timed appointments are not a priority for our customers and by creating an ODI-R it risks focusing management attention on a target that our customers do not consider important and could incur a substantial financial cost in booking systems and additional resource capacity.

⁹³ SGN Sector Specific Methodology Consultation, 14th March, pg 79

⁹⁴ RIIO-2 Draft Determination – gas distribution annex, 9th July 2020, para 2.87

⁹⁵ RIIO-2 Draft Determination – gas distribution annex, 9th July 2020, para 2.102

In Ofgem's Customer and Social working Group⁹⁶, GDNs presented feedback from an independent customer survey of over 2000 priority service register customers that concluded:

"Earlier in 2019, the GDNs used TtiGlobal to conduct research into whether there was any appetite from planned work customers for an appointment standard related to restoration of supply.

The results were conclusive that customers did not think that this would improve the end to end service.

*Since then the GDNs have conducted research with vulnerable customers on improvements to existing GSOPs and potential new GSOP. **Again, there is no conclusive evidence that an appointment standard would improve the end to end journey.***

For completeness, the GDNs then revisiting the original planned work research, and asked Tti to provide the results for PSR customers only. This presentation details the results of the additional work.

*These results mirrored the sentiment from the original findings. The majority of customers do not feel any of the options above would have improved the process (77%). An update by text/phone or email (15%) was preferred to the ability to choose a time slot and (13%) and other (10%). **When looking at the data for the vulnerable customers, the majority of customers do not feel anything could have improved the process."** (emphasis added)*

In light of this clear customer feedback, we cannot support the focus to invest in this area. We have real concerns that, as requested by Ofgem, all GDN's carried out collaborative research to ask their customers' and stakeholders' opinions and these were fed back to Ofgem at a previous working group⁹⁷.

- From survey feedback, only 15% of all customers (and only 13% of PSR registered customers) wanted the ability to choose a time slot for their gas to be turned back on.⁹⁸
- Customers advised an apology and explanation was preferred if an appointment time was missed.⁹⁹

These findings were also reflected in Ofgem's SSMD¹⁰⁰, where Ofgem stipulated a GSOP on timed appointment was not appropriate. We have seen no evidence to suggest that a cross sector ODI-R is appropriate either.

We fully support networks reporting on a voluntary basis if it has been an important finding in their customer evidence and is supported by their consumer engagement group. We have not found evidence that it is a priority for our customers, and fear it will be a distraction and impediment to delivering what our customers want.

Type 2: Inconsistencies in stated approach or in the application of a methodology. The proposed approach is inconsistent with the position set out in the sector specific methodology consultation and does not reflect the customer priorities.

We are already offering four-hour parameters and often exceed our customers' expectations in this area, as reflected in our high customer satisfaction scores.

If Ofgem decide to implement independently of the customer evidence, then it is very important that the definition is such that it does not drive additional cost into the business. We currently operate to a 4-hour time slot as standard whenever possible as we consider that to be a level we can absorb without a significant increase in costs to the customer.

However, our assessment shows that there are substantial additional costs incurred when short period (i.e. 2hr) timed appointments need to be provided during winter peaks. As well as concern about costs we also have concerns about the behaviours that it may drive (i.e. a 2hour appointment in off-peak period rather than a connection as soon as possible). As such there is a significant increase in the marginal cost of providing timed appointments according to the level at which it needs to be delivered. If the level, as set out by one GDN, of four and two-hour appointment slots is to be met 90% of the time, this would be a formalisation of our current BAU activities and would incur significant system or resource costs.

An ODI-R along the lines set out in the draft determination¹⁰¹ reflecting this service level is a more appropriate approach at this time. Similarly, we would agree that time to restore supply once entering the home is not an appropriate measure of performance and could incentivise inappropriate behaviours¹⁰²

Type 3: Disagreement as to how the methodology should be applied. Given that this is not a customer priority it is very important that this is implemented in a manner that does not incur substantial costs.

⁹⁶ Customer and Social Working Group 290819 (ref 120)

⁹⁷ Accent Guaranteed Standards of Performance Phase 1 Report; 20th May 2019

⁹⁸ Customer and Social Working Group 290819 (ref 120)

⁹⁹ Customer and Social Working Group 290819 (ref 120)

¹⁰⁰ RIIO-2 Sector specific methodology decision – gas distribution, 24 May 2019 para 2.234 pg 48

¹⁰¹ RIIO-2 Draft Determination – gas distribution annex, 9th July 2020, para 2.70

¹⁰² RIIO-2 Draft Determination – gas distribution annex, 9th July 2020, para 2.72

4.2.12 Collaborative streetworks

GDQ8. Do you agree with our proposed option to provide Cadent and SGN with consumer funding through totex baseline or a financial ODI reward for collaborative streetworks activities?

We are pleased that Ofgem recognises the importance that our customers have placed on reducing disruption associated with streetworks and given the uncertainty around the number of projects and the management change required we consider it appropriate for a financial ODI.

SGN and Cadent have both developed proposals in our respective plans to support collaborative street works projects. There was consistency with strong stakeholder and customer feedback received by both companies^{103,104} and there was consistency in recognising the collaborative framework developed by the GLA¹⁰⁵.

- **Costs and activities.** Having completed the Epsom road Case Study¹⁰⁶ SGN had the benefit of a quantified assessment of both the time saved and the additional costs incurred. This allowed us to give a statistically robust valuation of the social value of reduced disruption¹⁰⁷ of £305k/project using Epsom as a benchmark project in our business plan. We were also able to clearly quantify the saving associated with the project (£50-£100k) and the additional costs (£550k) for the first-of-a-kind project to give a net cost of £400k/ project¹⁰⁸. Including the costs of partners supporting that collaboration we estimate a total cost of £450k is likely to be incurred for each project
- **Average Project.** There have been two collaborative projects completed in the last 10 years. The first was Borough High Street where collaboration between SGN, UKPN, TFL, BT, Thames Water, and British rail reduced overall duration of works by 384 days¹⁰⁹ in 2009. The second was in Croydon where collaboration between SGN and Thames Water reduced the overall duration of works by 85 days¹¹⁰. We have set out a typical scenario based our proposal on the lower 85 day threshold.
- **Stretching targets.** Given that we are currently averaging one project every 10 years, and that Croydon required two years of planning, we think that delivering more than 10 collaborative projects a year by the end of GD2 will be exceptionally stretching.
- **Knowledge shared.** We would propose to produce a report at the end of each project in order to identify it as being eligible for the incentive. This report would set out key project data, key learnings and an estimate of the time saved as a result of the collaboration. We would propose that this should be provided to the GLA or sponsoring local authority, to Ofgem and posted to the Smarter Networks portal.
- **Consumer value.** The consumer value has been clearly established through the innovative application of social valuation techniques. Using an independent consultancy we assessed the material change in quality of life according to the location of roadworks by comparing over 250,000 records, matched to 100,000 respondents to the ONS Annual population survey that measures life satisfaction, to identify a statistically significant change in quality of life which could be directly quantified at £3.6k/day. It does not include the value of reduced congestion or broader social values and as such we believe that the real total value of collaboration is higher.

It is our view that the approach to valuing social impact in this manner has broader application across network operations that should be promoted.

While the costs of collaboration will reduce as we increase our experience and start to transition towards collaboration becoming an established process, there is a significant cost penalty to be incurred in the initial stages. As such, we believe that this will drive a step change in behaviour, based on a measurement of the social value of reducing the total number of roadworks through collaboration between utilities.

¹⁰³ SGN Business Plan, Dec 2019, section 6.13 pg61 and as referenced in Appendix 022 – Stage 1: Explorative Qualitative Workshops and interviews (Explorative Phase) and Shaping the Business Plan Qualitative workshops - Customer Service & Supporting Vulnerable (ref 085)

¹⁰⁴ Cadent Business Plan, Dec 2019, pg 82, with reference to Cadent stakeholder research Stakeholder regional workshops qualitative research n=127 and 4th Customer forum, Business options testing n=55

¹⁰⁵ The Collaboration Handbook, GLA, https://www.londoncouncils.gov.uk/sites/default/files/Collaboration-Manual_0.pdf

¹⁰⁶ The Collaboration Handbook, GLA, https://www.londoncouncils.gov.uk/sites/default/files/Collaboration-Manual_0.pdf, pg 77

¹⁰⁷ Valuation of the impact of works disruptions and supply interruptions using the wellbeing valuation method, Symetrica, Oct 2019.

<https://www.sgnfuture.co.uk/wp-content/uploads/2020/01/SGN-023-Suppinfo-Annex-of-Social-value-regression-analysis.pdf>

¹⁰⁸ SGN Business Plan, Dec 2019, section 6.13 pg 63

¹⁰⁹ http://streetworks.org.uk/wp-content/uploads/2016/11/51_-_Borough_High_Street_Blueprint.pdf ¹¹⁰ Epsom Road - Wrap-Up, GLA

¹¹⁰ Epsom Road - Wrap-Up, GLA

Given the costs involved we believe that a reputational incentive in isolation will not sufficiently support the delivery of an outcome that is strongly supported by our customers and stakeholders at the pace they require. Instead, it could be included in the totex allowance, which on the basis of the cost estimates to complete 36 collaborative projects by the end of GD2, as set out in our business plan, would have a cost of £14m over the GD2 period.

Alternatively, we believe that an incentive would be more appropriate in driving behaviour change by focusing management on creating change and ensuring that information and best practice is made available. We are committed to working in collaboration with Cadent, the GLA and Ofgem to develop the most appropriate solution.

Type 6 – Broad agreement with position put forward in draft determination: We propose to continue working with Cadent and the GLA to define an appropriate structure to progress collaborative projects and build experience in social value methodologies.

4.3 Delivering an environmentally sustainable network – Shared net zero Future

Our customer and stakeholders were clear, and this view became clearer as we progressed, that the environment was important to the them and that they were willing to pay to support a higher level of investment to improve it further. We have reflected this within a very ambitious environmental plan.

Ofgem has set a Licence Obligation for networks to deliver an Annual Environmental Report (AER), where progress on EAP commitments is required to be reported upon. We welcome this approach as our stakeholders, including the CEG, have expressed a desire to follow progress and to hold us accountable to our commitments to reduce our environmental impact. As engagement and research showed¹¹¹ in the development of our plan and EAP, investing in future energy solutions and minimising our environmental impacts are of very high importance to both customers and stakeholders. Delivering an environmentally sustainable network is essential for achieving the UK's target of net zero by 2050. We have set the bar even higher and committed to be net zero by 2045. Recently we carried out further acceptability testing of our plan in light of COVID-19 but the pandemic has not significantly changed customer views of our environmental proposals¹¹² and support remains high.

Timely guidance on the Licence Obligation, the format of the AER and the definitions to be used is necessary to ensure that any changes can be implemented and put into practice in advance of the new price control. This would help to support the accuracy of the first year's AER.

4.3.1 Environmental Action Plan

We accept our EAP commitments to be reported as part of the AER with the additional comments and clarifications as presented below (consultation question Q9) and in section 4.3.3 and 4.3.4 of this document.

Q9. Do you agree with our proposal to accept the proposals for an ODI-R for BCF and the other proposals set out above as EAP commitments and to require progress on them to be reported as part of the AER?

Consistent reporting and target setting including leakage is essential.

We would like to clarify an apparent inconsistency regarding the BCF definition. In the core document the BCF definition would appear to capture shrinkage¹¹³ (and thereby leakage) as part of Ofgem's definition of BCF. However, in GDNs commitments to reduce BCF it would appear not to include leakage¹¹⁴.

Ofgem should promote consistency of definition of targets in the EAP. It is clear from the draft determination¹¹⁵ that networks have chosen different baseline years and different scopes. In our Business Plan and EAP proposal, we used the following definitions which we consider to be in line with the GDN annex:

¹¹¹ Appendix 003 – SGN – Environmental Action Plan, section 4, pages 11-15

¹¹² Post-COVID19 Business Plan Acceptability Testing (ref 109)

¹¹³ RIIO-2 Draft Determinations - Core document, Appendix 3, Glossary, pg 169, A measure of the total greenhouse gas emissions (in tonnes of CO2 equivalent) caused directly and indirectly by the reporting company. Direct and indirect emissions sources are categorised into scope 1, 2 and 3 emissions."

¹¹⁴ RIIO-2 Draft Determinations – Gas Distribution Annex, table 6, page 45

¹¹⁵ RIIO-2 Draft Determinations – Gas Distribution Annex, note to Table 6, pg 45

- BCF (Business Carbon Footprint) includes scope 1,2 and 3 greenhouse gas emissions, but excludes leakage
- Total Carbon Footprint (TCF) is scope 1,2 and 3, including leakage.

We accept ODI-R on BCF (i.e. excluding leakage) on the basis that this ODI-R provides greater focus on emissions that are immediately controllable by SGN once the parameters of the price control have been set. We agree this should be reported in the AER.

We also agree with Ofgem's statement on clear and consistent reporting of progress against BCF reduction targets in the AER¹¹⁶ and we suggest that definitions for BCF and TCF (making clear when leakage is included and not included) and elements of what to measure and report in scope 1, 2 and 3 greenhouse gas emissions should be agreed in the upcoming Ofgem workshops for AER.

We further accept that GDN's should update their science-based targets¹¹⁷. It should be noted however that the latest Science-Based Target initiative (SBTi) criteria 4.1 offers companies two temperature goal options; '1.5 degrees' or 'well below 2 degrees' for scope 1 and 2 emissions reductions. There is a significant difference between the two in terms of the scale of change. We have aligned our approach to 1.5 degrees in the expectation that this best practice will be applied across all networks.

Type 6 – Broad agreement with position put forward in draft determination: We would encourage clarification of definition and consistency in the measurement approach.

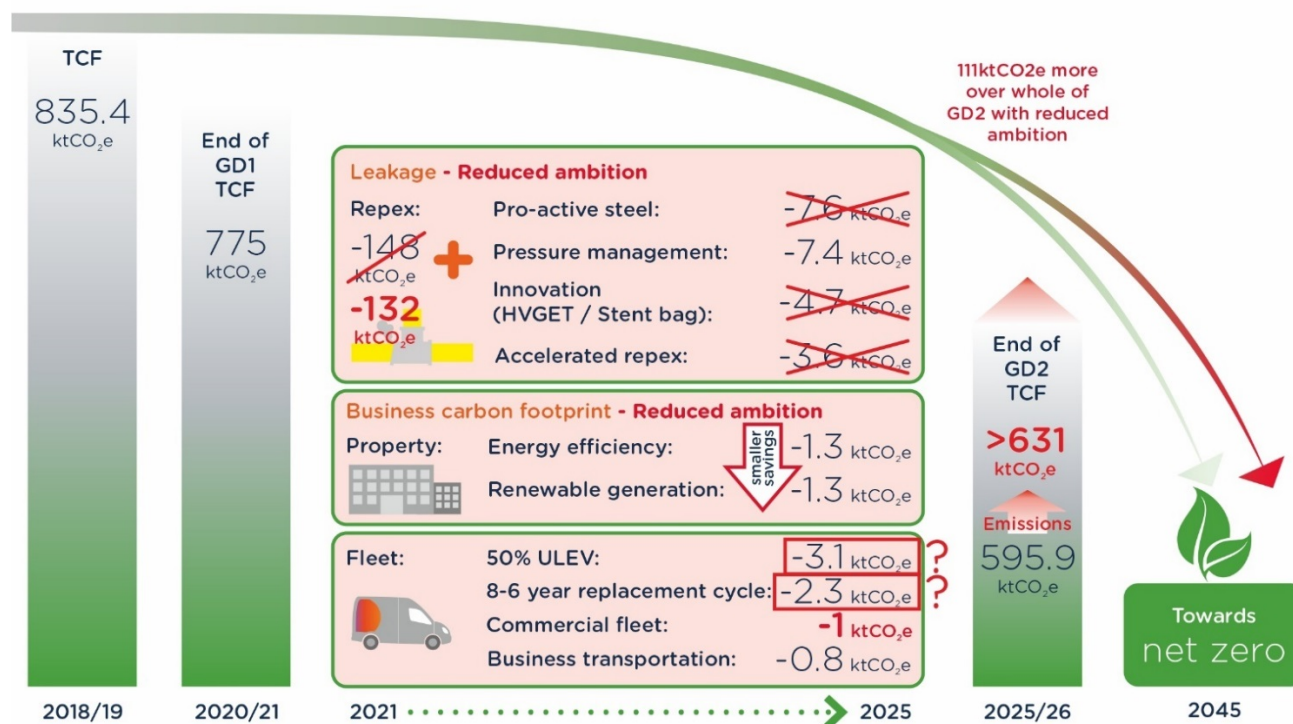
We should note however that leakage is very important, and that customers and stakeholders urged us to undertake measures to minimise it. As a result, we proposed accelerated replacement programmes and innovative ways in which leakage could be reduced.

We recognise this will be covered through a separate ODI-R on shrinkage and environmental emissions, and that this will also be reported in the AER. Price control parameters should however recognise that reduction in leakage is an important component of delivering net zero and as such investment should be scaled to reduce leakage in line with science based targets (based on total carbon footprint i.e. including leakage). The draft determination has moved us away from the trajectory that delivers net zero and this will place a greater pressure on future consumers.

¹¹⁶ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.128, pg 46

¹¹⁷ RIIO-2 Draft Determinations - Core document, pg 36 footnote 32 "A science based targets should be in line with what the latest climate science says is necessary to meet the goals of the Paris Agreement – to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C."

Reduction in Total Carbon Footprint (TCF) following Draft Determination with reduced ambitions for EAP



Secondly, our customers have asked us to prioritise our own emission reductions over other measures such as reforestation, so where other measures are implemented these should be clearly identified and only include certified 'greenhouse gas emission reduction units'.

Other reporting requirements should be based on the UN sustainable development goals (SDGs)

We agree with the proposals for recycling and reducing waste, embodied carbon, supply chain, biodiversity and natural capital being identified as EAP commitments. Ofgem has set a Licence Obligation for an Annual Environmental Report (AER). So that we can deliver this licence obligation and meet the expectations of our customers and stakeholders it is important that Ofgem publish clear guidance on the Licence Obligation, the format of the AER and the definitions to be used. This is necessary to support the accuracy of the first year's AER.

We therefore welcome Ofgem's upcoming workshops to ensure that reporting is consistent across all networks. In these workshops it will be important to define the metrics used in the report which we believe need to be aligned to the UN Sustainable Development Goals (SDGs). The SDGs are based on stakeholder feedback¹¹⁸ and are widely referenced in most networks' business plans.

Ensuring consistency across definitions is a critical element here. As an example, we note that some companies have proposed to use various types of offsetting and we need to have consistency in the manner in which they are reported to give customers and stakeholders the information they require. In our stakeholder engagement, our customers were only supportive of well thought through offsetting as long as this does not replace work to reduce carbon footprint overall¹¹⁹. While net zero implies carbon offsetting or sequestration may be required, it is important to note that such measures must be within the boundaries of the UK to count towards UK net zero. Taking these steps would make it easier for stakeholders to understand progress across all networks and will give stakeholders confidence in the reporting.

Type 6 – Broad agreement with position put forward in draft determination: We would encourage clarification of definition and consistency in the measurement approach.

¹¹⁸ SGN Stakeholder Review Outputs, 24 March 2020

¹¹⁹ Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084)

The draft determination necessitates a reduction in our carbon reduction commitment.

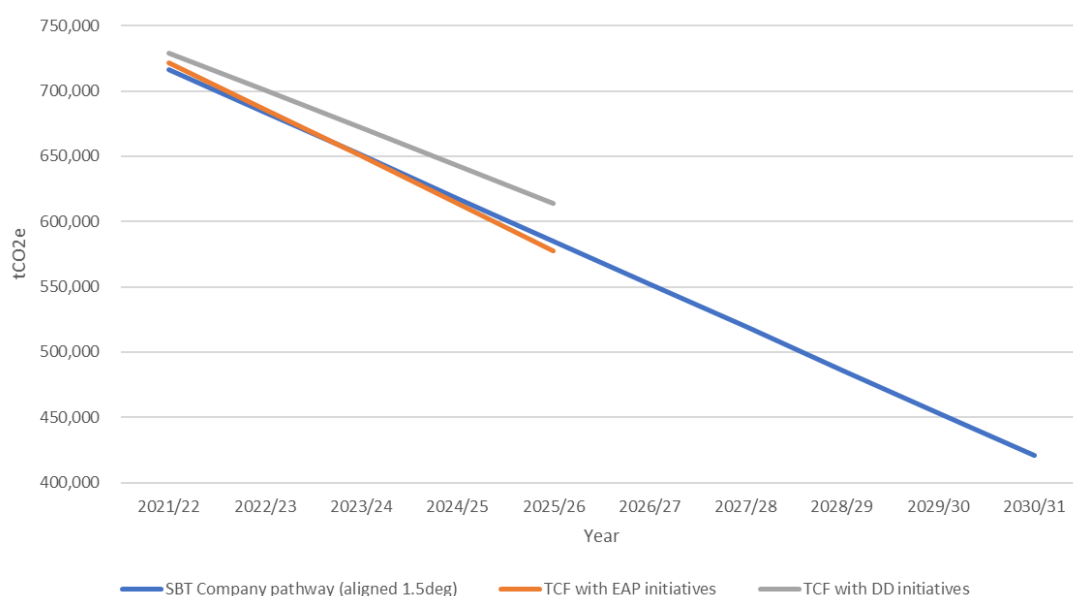
Given the decisions taken to reduce investment in the draft determination, it is not possible to deliver the same level of commitments as we set out in our Business Plan. Based on strong stakeholder evidence¹²⁰ we proposed additional investment to go further than the dynamic linear target for replacing both iron mains and corroded steel mains. The draft determination reduces investment below the minimum level required for both.

Secondly, we proposed to roll-out technology that would help us reduce the amount of methane vented to atmosphere during repair work. This is in line with stakeholder expectations and we have identified ambitious targets in this area. In the draft determination these proposals were not accepted by Ofgem.

Finally, we set out very ambitious targets for reducing emissions and a governance process through which customer interests could be maintained. We hope that this ambition will be provided for at the final determination. If it is not maintained our ambition will be constrained further.

Following extensive customer and stakeholder engagement we set out a plan to reduce our **Total Carbon Footprint (TCF)**, - **including shrinkage** by 28% over GD2 ¹²¹, this can no longer be achieved. Based on the draft determination our new target would be reduced to a revised emission reduction of 24%. This could increase to 25% if our original EAP ambition in vehicles is approved.

Total Carbon Footprint – Including Shrinkage Net zero trajectory and delivery paths

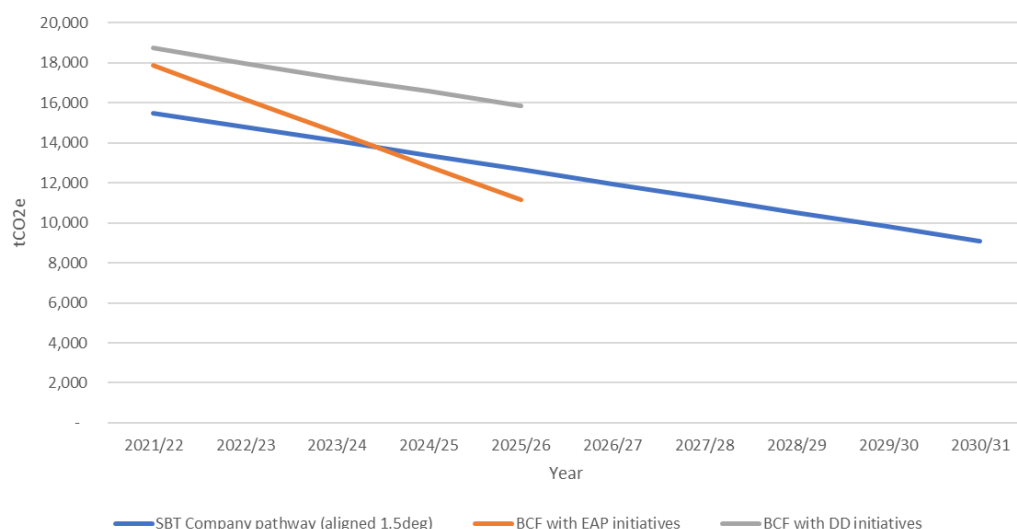


For our customers, the total carbon footprint remains the more important measure, however, based on the draft determination we have now restated our target as **business carbon footprint (BCF) excluding shrinkage**. In our business plan we put forward an investment plan that would allow our BCF emissions to be reduced by 49%. Based on the draft determination we have had to recalculate this and BCF our revised emission reduction would be 28%. This could increase again to 49% if our original EAP ambition in vehicles is approved.

¹²⁰ MFT Workshop January 2019 London (ref 016) , MFT Workshop February 2019 Glasgow (ref 017), Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084), CEG Minutes Sep19; CEG Minutes Oct19; CEG Minutes Dec19

¹²¹ SGN Business plan, Dec 2019, section 9.5 identified as over

Net zero trajectory and delivery paths (BCF scope 1&2)



Type 4 – New evidence presented: The EAP targets will need to be adjusted according to final determination. Emissions under the draft determination do not allow us to meet the stated carbon reduction set out in the draft determination.

Please note that the graph presented in our Business Plan¹²² is not comparable with the above. It showed estimated trajectories for BCF scope 1,2 and 3. These new images are showing trajectories for TCF and BCF scope 1+2, to be comparable with our SBT company pathway¹²³.

4.3.2 Shrinkage and environmental emissions

Emissions from shrinkage will increase during GD2 for reasons outside of our control. As such it is inappropriate to have a significant financial penalty for network companies that have reached the safe physical limits of reducing pressure.

Our business plan¹²⁴ sets out how we have undertaken a large number of measures over the course of GD1 to ensure that we are fully optimising operating pressures, rapidly repairing any identified fractured pipes and setting out innovations that could reduce emissions to atmosphere. As explained in our response to the SSMC¹²⁵ it is important that companies that have done the most to deliver leakage reductions and achieve optimum operating pressures over the course of GD1 are not penalised. Given the increasing cost of delivering further (marginal) reductions, it is important to ensure that companies at the frontier do not face a disproportionate downside risk when designing the incentive.

We consider that during GD1 we have reached an optimal position for pressure management. Moving forward, the combination of continued delivery of mains replacement at current insertion levels, which by its very nature results in a reduction in capacity, combined with the level of new development and connections witnessed in the latter years of GD1, will result in a gradual increase in operating pressures necessary to safely deliver that demand. As a result, we anticipate that by then end of GD2 our leakage rates will be 3ktCO₂e/yr higher¹²⁶.

Given our asymmetric exposure to a penalty of 0.25% of annual base revenues, we have expressed our concerns to Ofgem on several occasions¹²⁷.

¹²² A plan for our shared future, RIIO-GD2 Business Plan, 9 December 2019, figure 9-2 on page 95

¹²³ Methods to calculate Science based targets are designed for addressing scope 1 & 2 emissions and you need very robust understanding of scope 3 to include it in a science based target.

¹²⁴ SGN Business Plan, Dec 2019, section 9.5 pg 93

¹²⁵ SGN Sector Specific Methodology Consultation Response, 14th March 2019, pg 83

¹²⁶ SGN Business Plan, Dec 2019, section 10.2.2 pg 10

¹²⁷ Meeting in SGN's Glasgow Office (11th July 2019), SGN_SQ Shrinkage incentive calculation methodology (17th April 2020), SGN-Ofgem Conference call on (15th May 2020), Shrinkage Incentive Calculation Methodology Response (27th May 2020)

In the sector specific methodology decision document one of the reasons given for focusing specifically on shrinkage and leakage as a financial ODI was that it was considered to be in the networks' control¹²⁸. As we submitted to Ofgem¹²⁹ there are a number of reasons for increasing pressure that are outside of our control;

- New connections – Connections on particularly sensitive parts of the network may require more significant system pressure increases
- Weather – prolonged periods of cold weather will increase demand across the network, increasing pressures
- Insertion techniques - to replace old iron pipes in the optimum, most efficient manner, whilst minimising disruption and general environmental disturbance, we will look where possible to use insertion techniques. These techniques by their very nature reduce the carrying capacity of the individual main and ultimately the network and as a greater level of replacement is completed within each network the cumulative effect will be more pronounced. To counter this effect, we expect to see an increase in operating pressures and consequently increased leakage rates on other parts of the network.

The first two reasons are clearly outside of the networks control. The third is driven by wider economic and social benefits and is something that should be controlled rather than disincentivised (as set out in our answer to GD10). For these reasons we think that it is important that a deadband is applied in which shrinkage emissions are able to vary for uncontrollable reasons.

Type 3: Disagreement as to how the methodology should be applied. We do not think a penalty should be applied to network companies that optimised pressure in GD1 and now face increasing pressures for factors outside of their control, and that a deadband range needs to accommodate this.

GDQ9. How should we set targets for the shrinkage financial incentive?

We have provided a proposed methodology to calculate the basis of the deadband that captures historical variability and reduces the risk that companies are penalised for factors outside of their control.

We do not think that adopting the 3-year average from RIIO-GD1 (2017/18 to 2019/20)¹³⁰ in isolation will cover the variability sufficiently. Whilst it would at least allow a range of weather impacts to be considered and provide a more representative benchmark compared to the alternatives, we do not think that this is statistically robust as a representative period.

By way of example, the variances can be seen in the tables below, highlighting the changes in effective temperature and CWV (Composite Weather Variable) over the past three years. This shows that average effective temperatures have varied by over 1°C in each of the regions during that time, and the composite weather variable by 0.6°C.

Scotland Scotland		Average Effective Temp (°C)	CWV (°C)
	2017/18	9.22	8.33
	2018/19	10.15	8.87
	2019/20	9.66	8.61
Southern SE	2017/18	12.13	10.82
	2018/19	13.27	11.43
	2019/20	12.64	11.14
Southern SO	2017/18	11.71	10.99
	2018/19	12.83	11.45
	2019/20	12.27	11.33

Our exposure to this temperature variability has increased as we have optimised our network. Approximately 80% of SGN's low pressure network is controlled by (fully automated) intelligent, self-learn profiling control units. These have reduced pressures to a minimum, and as such there is less headroom, so that a fluctuation in climate conditions will impact demand and consequently will automatically result in a change in the operating pressure. Whilst this optimisation

¹²⁸ Sector Specific Methodology Decision document, 24th May 2019, para 3.25

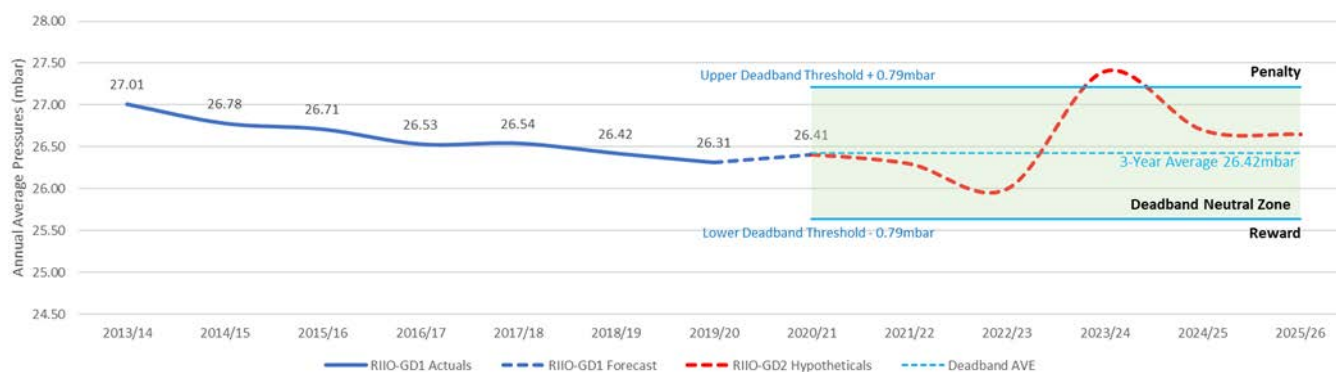
¹²⁹ Shrinkage Incentive Calculation Methodology Response (27th May 2020)

¹³⁰ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.1114, pg 42

reduces overall leakage, the optimised nature of the system leaves us more exposed to a colder winter given the recent set of mild winters and the 3-year baseline.

Recognising the challenge of accommodating this variability we have set out a deadband methodology that is submitted alongside this submission GDQ11- Appendix 1 Deadband Methodology¹³¹. This methodology uses the highest and lowest daily demand profiles over the GD1 period to identify the upper and lower deadband ranges.

Proposed deadband range for using Scotland LDZ as an example.



Type 4 – New evidence presented to respond to a point. We have proposed an alternative methodology alongside this submission GDQ11- Appendix 1 Deadband Methodology from which to set out the deadband range.

GDQ10. Do you have any views on what clarifications are needed to ensure a consistent method of calculating the benchmark shrinkage volumes?

We have presented alternative methodologies to Ofgem to establish more equitable methods for setting the baseline (benchmark) levels and to ensure minimising the risk of distortion due to recent weather events.

SGN interprets the methodology set out in the Draft Determinations as follows:

- In any given year, the Shrinkage and Leakage Model (SLM) would be compiled in the usual manner and the outturn would feed into the reputational ODI and reported in the AER, as proposed by the Authority.
- For the financial ODI, the 2020/21 (benchmark) average LP network pressures and gas conditioning levels would be dropped into this model and the differences in leakage and shrinkage volumes recorded.
- This annual differential in volumes (GWh) would then represent the level of reward or penalty each GDN would accrue each year.

As stated in our response to GDQ 9, we believe there are more equitable methods of setting the baseline (benchmark) volumes than arbitrarily applying the results from 2020/21. We would support setting base target (benchmark) pressures and gas conditioning on a 3-year average from RIIO-GD1 (2017/18 to 2019/20) in conjunction with a dead band.

At the meeting with Ofgem¹³² and in our subsequent letter¹³³, we discussed the potential for the adopted methodology to include a step stripping out PE mains from the evaluation. This method would allow GDN's to neutralise any positive or negative Pressure/Gas Conditioning impacts on PE laid during RIIO-GD2. On that basis it would be helpful to clarify the detail around the process Ofgem is considering.

Our interpretation of one of the options that was discussed at the above meeting is set out below:

- For any given year in RIIO-GD2, compile the Shrinkage and Leakage Model (SLM) as normal for reporting purposes.
- For incentive purposes, save a copy of this model (Year xx/xx) and strip out the PE mains from all networks that form the LP asset base and record leakage volumes. If the network is 'all PE' then you would remove the network.
- Enter the benchmark Average System Pressures (ASP) and Gas Conditioning saturation/treated % into the Year xx/xx model and record the leakage volumes.

¹³¹ GDQ11 Appendix 1 Deadband methodology

¹³² SGN-Ofgem Conference call on (15th May 2020)

¹³³ Shrinkage Incentive Calculation Methodology Response (27th May 2020)

- The difference between the two values will determine whether a GDN is in reward or penalty for any given year.

We would support such an approach and would like to work with Ofgem to support its development.

Type 3 - Disagreement as to how the methodology should be applied. We have presented options that should provide a clearer point of comparison for networks.

GDQ11. Do you think a deadband should apply to the financial incentive? If so, please provide evidence as to how this could be quantified.

A deadband should apply to the financial incentive to allow for background variation whilst accommodating changes, such as increased insertion rates, that have strong customer benefits.

Although a robust methodology on which to base the parameters of any “dead-band” have yet to be determined, the concept remains a valid and reasonable approach to ensuring DN’s are provided with a degree of insulation from factors beyond their control. The Authority states that “factors such as weather can influence pressure levels”. We agree that particularly cold and warm years have historically had a demonstrable impact on network average pressures.

We also believe there is an apparent contradiction between an aspiration to provide the best possible consumer outcomes (minimising cost, disruption and environmental impact), that all parties are striving to achieve through the adoption of an all-encompassing strategy to maximise mains insertion within the replacement programme, and the drive to further optimise system pressures promoted by this incentive.

We have heavily invested in pressure management equipment and techniques, both before and throughout RIIO-GD1, ensuring we have industry-leading, optimal pressures on the largest low-pressure networks. The inevitable reduction in capacity associated with efficient network development exposes a risk that could reasonably result in higher pressures and unwarranted penalty in RIIO-GD2.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. There is an inconsistency between the objective of reducing pressure and driving better customer outcomes by increasing live insertions. There is a second inconsistency in penalising companies that were the strongest performers in GD1.

A mechanism without interventions similar to a deadband, could expose us to financial penalty as a result of the vagaries of weather which we consider inconsistent with the overarching behaviours that the original incentive endeavoured to promote.

Regarding how a deadband might be quantified, one potential scenario is outlined below:

- Accepting the conventional logic that change in pressure loss is directly proportional to the square of the change in flow conditions, it should be possible to define a suitable change in pressure loss that would be expected under a set range of demand conditions.
- As such, by defining representative high, medium and low demand conditions, along with a corresponding pressure differential associated with that medium condition, this should allow an estimation of the likely increase/decrease in pressure differential across an LDZ for that high/low demand condition.
- The attached worked example utilises demand conditions experienced within each of the years within GD1 to define a high, medium and low demand scenario. Utilising the average pressure differential experienced for the average weather condition (demand) as a benchmark, and calculating the likely associated pressure differential, average operating pressures associated with those conditions have been established.
- In this way, the potential impact on average operating pressures due to varying weather conditions, has been estimated to be used as the basis for establishing a deadband around the baseline.

To support this answer we have included a Methodology Statement outlining this process in more detail, along with calculations demonstrating how this may be applied in the case of SGN.

Type 4 – New evidence presented to respond to a point [GDQ11- Appendix 1_Deadband Methodology] and [GDQ11- Appendix 2_Calculation Spreadsheet] set out the process of calculations.

4.3.3 Environmental action plan and annual environmental report

We welcome the increased focus on reducing carbon footprint and other environmental impacts resulting from gas distribution. It is an important factor in achieving the UK net zero target. In preparing our EAP, this was an area where we noticed overall increased engagement from all stakeholders¹³⁴, and in particular from our future customers. The EAP was of great interest to our CEG which wanted to ensure that we submitted a robust plan which delivered tangible outcomes. It is therefore surprising and unclear why our proposed bespoke PCDs and sometimes associated UIOLI have been rejected and placed in baseline allowances, with only reputational incentives associated with delivery. Given the national (and global) commitments to reducing carbon emissions and expectations from our stakeholders, in particular future generations, we consider the impacts of not meeting carbon footprint targets go beyond reputational aspects.

4.3.4 Reducing Business Carbon Footprint

We think further clarification is needed around the definition of Business Carbon Footprint (BCF) as stated above in our response to Q9. This would ensure consistency across the networks.

Reducing leakage

Our customers have asked us to focus on measures that we can undertake to reduce leakage. Stent bags and HVGET are important technologies that are currently rejected and should be rolled out in GD2.

Our proposed bespoke PCD to reduce environmental emissions associated with leakage through the roll-out of HVGET (High volume gas escape toolkit) and Stent bags was rejected in the draft determination¹³⁵.

We have explained to Ofgem¹³⁶ that these products/ techniques, which Ofgem had believed were still in the innovation stage of the project lifecycle, have in fact been developed through NIA from concept through to live field trial and we are now ready to implement into the business as BAU. The projects are focused on the delivery of environmental benefits rather than commercial benefits and they have reached TRL level 8 (proven concept in live field trial).

This next stage seeks to fully integrate the products / techniques to function within an operational environment for a sustained period of time (ruggedize). In conversation Ofgem has confirmed that these costs would not be covered under the NIA in RIIO-2 and there would be an opportunity to have the projects reassessed, subject to us making the business case clear.

This is much welcomed as reducing leakage is something that was particularly important to our stakeholder^{137 138 139} and CEG^{140 141} groups.

We are proposing HVGET and Stent bags are funded to allow us to roll out this proven innovation as BAU. The Business Plan suggested £2m funding for High volume gas escape tool and stent bag roll out, UM – UIOLI, after both the innovations concepts were tested and proven in a live environment via NIA funding in GD1¹⁴².

These are strong innovations that have been proven through field trials and substantial validation in GD1. They also have multiple benefits on improved safety, continuity of supply, reduced disruption to the consumer and reduced leakage and the associated carbon. The operational impact of not pursuing roll out of this innovation is that high volume gas escapes

¹³⁴ Appendix 003 – SGN – Environment Action Plan, section 4, pages 11-15; Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084); Stage 2: Max Diff Prioritisation Phase Report (ref 003); Stage 3: Conjoint & WtP Summary report (Valuation Phase) (ref 005); Stakeholder Satisfaction Wave 4 (ref 074); Business Plan Acceptability Testing Phase 2 (ref 079); Listening to Local Authorities (ref 086); Stage 3: Valuation Phase (Conjoint & WtP) Summary report wave 2 (ref 094)

¹³⁵ RIIO-2 Draft Determinations – SGN, page 24

¹³⁶ Innovation call, 4 August 2020

¹³⁷ Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084)

¹³⁸ Stakeholder insights: Stage 3: Conjoint & WtP Summary report (Valuation Phase) (ref 005) and Stage 3: Valuation Phase (Conjoint & WtP) Summary report wave 2 (ref 094)

¹³⁹ SGN Sustainability Roundtable - London (ref 065) (page 9, point 13) and SGN Sustainability Roundtable - Glasgow (ref 066) (page 7, point 12)

¹⁴⁰ CEG Meeting, 6 November 2019, "The Chair said that it was important GDNs received credit for initiatives that were not covered by the leakage model, even if it was just reputational."

¹⁴¹ CEG Meeting, 13 December 2019, "It was agreed that the CEG report would need to articulate the nuanced message regarding ambition, leakage, innovation and third-party damage. It was noted that when repex was removed from the equation the carbon reduction was quite small. It was clear that customers were concerned about environmental damage and they were happy for bills to go up to reduce it, with leakage being the biggest area that SGN could address."

¹⁴² SGN EAP – 004 HVGE – EJP Dec19 and SGN EAP – 005 StentBag2 – EJP Dec19

lead to increased leakage with little way to safely control and limit the escaped gas and thereby the impact on climate change.

Roll-out of these two initiatives in GD2 would help to reduce leakage by 4.7 ktCO₂e during GD2.

The key business drivers are:

- remove personnel from the hazardous area
- reduce associated leakage, and thereby greenhouse gas emissions, with the gas escape
- reduce time of gas escape
- reduce disruption to customers who are heavily reliant on gas supplies for heating during the winter months (and for whom maintaining a safe supply is accordingly critical).

The proposed improvements in safety, leakage and supply will not be realised if these innovations are not implemented. Section 7.1/2 of the EJP¹⁴³ states a total of 187 high volume gas escapes over the past 5 years with costs ranging from £5k to £250k. With an average of 37 high volume gas escapes a year a conservative value of £20,000 has been considered for each one. Therefore, an estimated total cost of 37 events per year is approximately £740,000 across all pipe sizes. Given the roll out costs of these innovations, annual savings could be around £148,000 per annum.

In addition, the stent bag¹⁴⁴ helps lessen the impact of third-party interference damage incidents and the related loss of supply. Two third-party damage incidents in our network saw a loss of supply to between 3,000 and 4,000 customers. The estimated man hours per gas escape equates to £19,000 without the stent bag but would reduce to around £4,320 using the stent bag.

We have developed a CBA (there was none in the original Business Plan submission) to support our case. This is available in SGN EAP – 004 – HVGET and Stent Bag – CBA Sept20. This demonstrates that there is a payback of 8 years and NPV of £7.5m. On the basis of the CBA and the associated payback period, we ask for the funding identified in our business plan and EJPs¹⁴⁵ to be re-instated.

Type 4: New evidence presented to respond to a point. We have presented new CBA information to support the inclusion of stent bags and HVGET which have a payback of 8 years [SGN EAP – 004 HVGET and Stent Bag CBA Sept20¹⁴⁶]

Science based targets

We have set ourselves the science-based target of achieving a no more than 1.5°C average rise in temperature requiring a 25% reduction in emissions. Our targets are based on a 2019/20 baseline as independent assessment requires it to be set within 2 years of the target being set.

In our business plan, we set a linear pathway to deliver net zero in 2045 whilst the science-based targets were being updated from ‘well below 2 degrees’. As requested in the draft determination¹⁴⁷ we have restated our science-based targets. Our net zero by 2045 company pathway is aligned with a 1.5° trajectory.

This ‘*company pathway (aligned 1.5deg SBT)*’ is calculated using the absolute contraction (AEC) methodology as per the latest SBTi Criteria 4.1, 1.5 degrees for scope 1 and 2 emissions reductions and is shown in the table and graph below for delivering net zero in 2045. The absolute emissions exclude shrinkage/ leakage.

The ‘*CCC pathway (CCC Net Zero Tech.Report)*’ showing what our emissions target would have been had we followed the targets outlined in the Committee on Climate Change Net Zero Technical Report¹⁴⁸ which has a 2050 net zero target.

The ‘*previous company pathway (well below 2deg SBT)*’ shows the pathway aligned to science-based targets (SBT) Sectoral Decarbonization Approach (SDA) for well below 2°C, which were calculated before the business plan submission, but did not deliver the now recommended target of net zero by 2050, nor our company ambition of net zero by 2045.

For the long-term pathway towards our net zero ambition and applying the absolute contraction methodology for 1.5°C, it becomes apparent that we would reach net zero for scope 1 and 2 (excl shrinkage) even earlier than 2045, in fact at

¹⁴³ SGN EAP – 004 HVGE – EJP Dec19

¹⁴⁴ SGN EAP – 005 StentBag2 – EJP Dec19

¹⁴⁵ SGN EAP – 004 HVGE – EJP Dec19 and SGN EAP – 005 StentBag2 – EJP Dec19

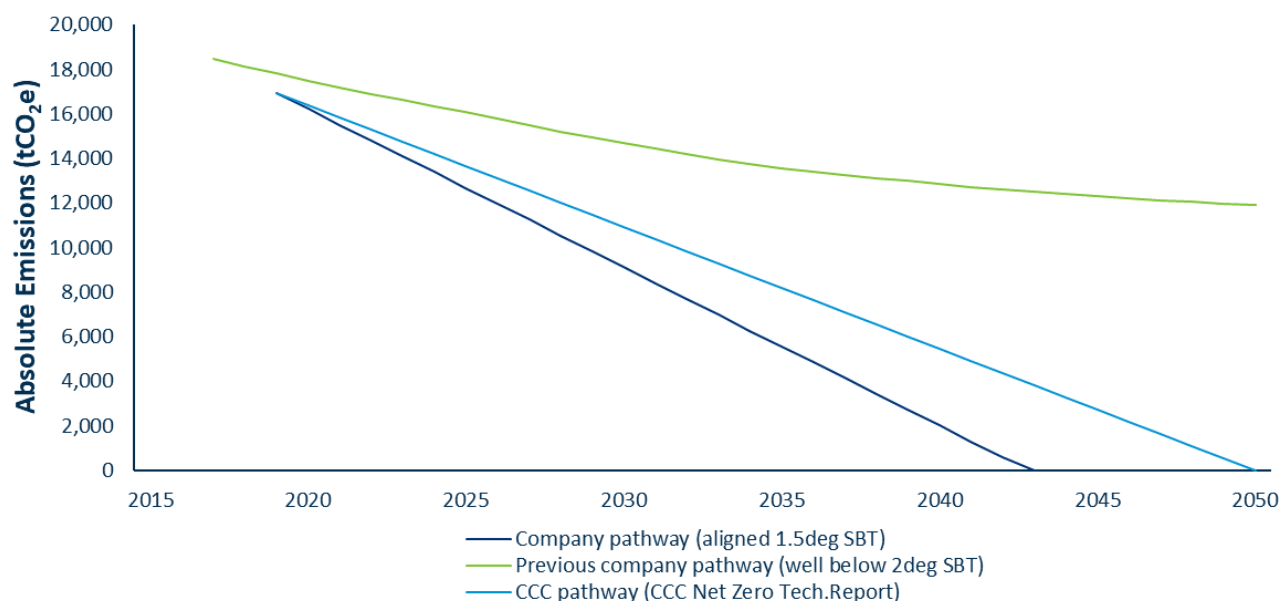
¹⁴⁶ SGN EAP – 004 HVGET and Stent Bag CBA Sept20

¹⁴⁷ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.129

¹⁴⁸ <https://www.theccc.org.uk/publication/net-zero-technical-report/>

around 2043. The graph clearly show that we have raised the bar and are starting a journey on more aggressive carbon reductions.

Long term carbon reduction pathways



Our carbon emissions for scope 1 and 2 in line with a science-based targets are:

	Baseline	RIIO-GD2					
tCO ₂ e per annum	2018/19	2021/22	2022/23	2023/24	2024/25	2025/26	% reduction
Scope 1	17,212	12,361	11,794	11,227	10,660	10,094	41
Scope 2	3,752	3,145	3,001	2,857	2,713	2,568	32
Total	20,964	15,506	14,795	14,084	13,373	12,662	40

Our science-based targets for GD2 are for 4125% reduction in scope 1 emissions (excl. shrinkage/ leakage) and a 32% reduction of scope 2 by the end of RIIO-GD2 (baseline year 2018/19).

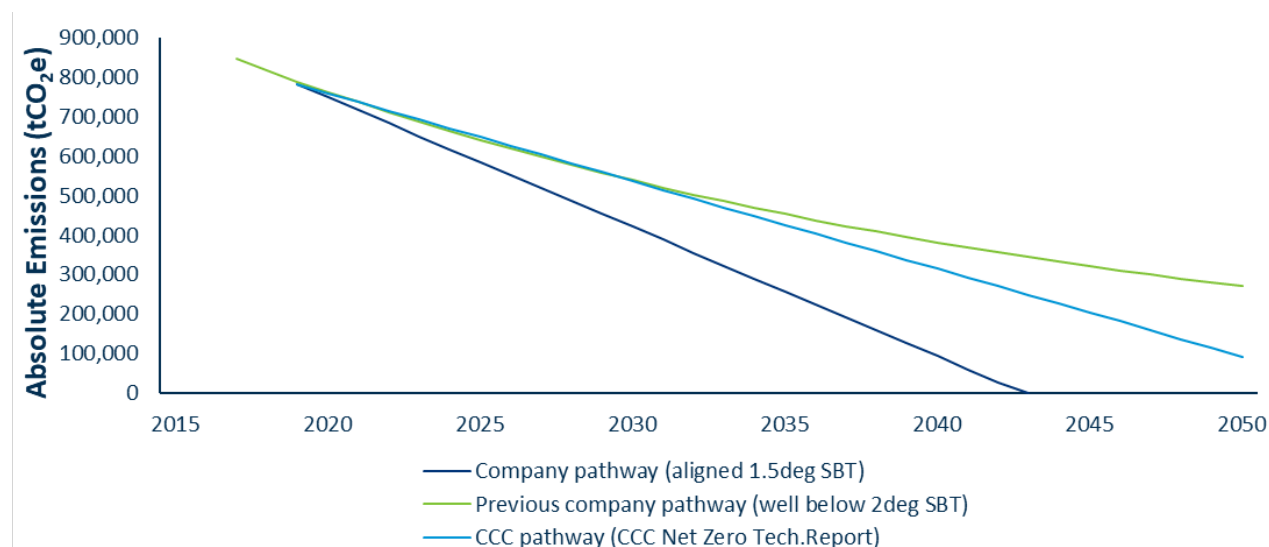
Type 4 – New evidence presented: Independently assessed science-based targets of a 40% emissions reduction of scope 1 and 2 by 2025/26 (baseline 2018/19).

Our CEG¹⁴⁹ and stakeholders¹⁵⁰ have strongly and on several occasions pointed out that we should take action to reduce our leakage environmental emissions as this is the by far biggest impact on our total carbon footprint (TCF). We therefore believe it is essential that all GDNs show science based targets which include leakage. We have calculated our science based targets for our Total Carbon Footprint scope 1 & 2 including leakage, in line with SBTi Criteria 4.1, 1.5 degrees, and this is shown in the graph below.

¹⁴⁹ Minutes from meeting with CEG October 2019, November 2019, December 2019,

¹⁵⁰ 084 Shaping the Business Plan Qualitative workshops – Environmental Action Plan

Total Carbon Footprint – Science based targets



Absolute emissions (tCO ₂ e) in GD2	2021/22	2022/23	2023/24	2024/25	2025/26
Company pathway (aligned 1.5deg SBT)	716,506	683,653	650,800	617,947	585,094
Previous company pathway (well below 2deg SBT)	736,849	711,659	687,344	663,874	641,219
CCC pathway (CCC Net Zero Tech.Report)	737,671	715,401	693,131	670,861	648,590

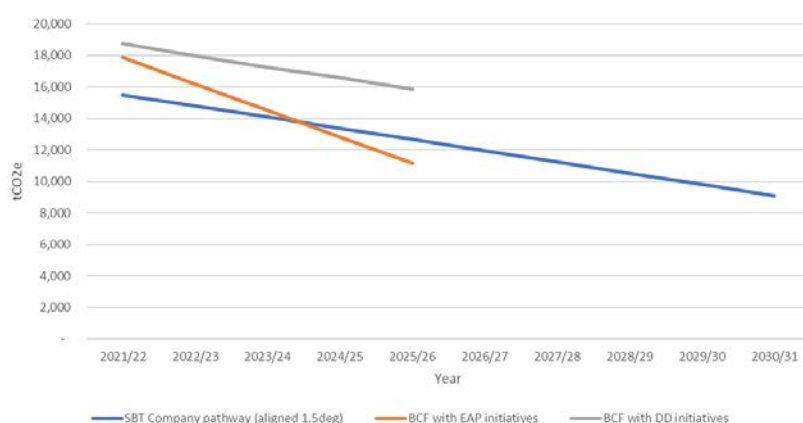
The science based target pathway sets out a gradual decline of emissions over time towards net zero, while in reality it is more likely for leakage emissions to stay relatively high until a new solution for natural gas (like hydrogen) is adapted and from then on, the curve would have a more steep decline.

Delivering Science based targets

Delivering our science-based targets requires an appropriate level of investment. Our ambitious EAP will enable this as long as allowances are appropriately awarded. As set out in the DD they will be missed unless ambitious emission reductions in vehicles are allowed for.

As set out in the draft determination we do not have sufficient allowances awarded to deliver our science-based targets that are set out above. Under the current trajectory we would expect to achieve a reduction of 24%¹⁵¹. We would need to increase our investment in reducing transport and vehicle emissions in order to increase this to 47% to be more aligned with our science-based targets.

Net zero trajectory and delivery paths (BCF scope 1&2)



¹⁵¹ Business Carbon Footprint, scope 1 & 2 excluding leakage

Type 4 – New evidence presented: Updated emissions trajectory for BCF according to investment as set out under the draft determination.

We remain concerned with the way the costs are assessed for delivering our EAP. Following business plan submission we suggested that given the level of ambition that we were putting forward that these costs should be separated out and technically assessed, rather than included in the benchmarking models.

The reason given is that there is a significant step over and above GD1 performance levels, and over and above other networks in GD2. As there is not an appropriate scale variable within the regression model to adequately reflect the ambition, we are concerned that reflecting funding within baseline allowances means that;

- if SGN is setting the efficiency frontier then SGN is funded for its ambitious commitment but other networks are over-rewarded (as they receive the funding without having the ambition), or
- if SGN is not setting the efficiency frontier then it is underfunded as it has the ambitious commitment, but other networks are setting the benchmark and the ambition is not reflected in the funding allowance.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. With these costs being captured under benchmarking approaches there is an inconsistency between ambition presented and allowances awarded to achieve it.

GDQ12. What are your views on our consultation position for the four GDNs' EAP proposals in RIIO-2 as set out in this document?

We are concerned that there is a lack of comparability between different GDN plans. This makes it challenging to identify where networks are being truly ambitious. In our business plan we set out clearly what we would invest in and the outputs we would deliver by the end of GD2. We think this clarity is important and should be encouraged.

Our response to this question has been split up to the different EAP proposals to help clarity and understanding.

Reducing emissions from building energy use

We are pleased to note that our ambitious EAP commitments for installing solar PV panels and energy efficiency measures have been accepted. Whilst we note the EAP commitment has been accepted¹⁵², the funding is identified as 'generally immaterial' and included in the company baseline allowances.

We disagree with this approach. In our business plan we set ambitious, measurable and fully costed outputs for renewable energy and delivering energy efficiency measures, with a funding requirement identified as £1.33m/yr¹⁵³. If we do not have the appropriate funding to support the ambition to match our customers expectations, then we cannot deliver on this commitment.

Our suggested bespoke PCDs to install solar PV panels on occupied building sites, install energy efficiency measures at 14 sites, and installation of solar PV panels on suitable governor sites (the latter which would importantly also reduce hazardous waste) have been rejected as bespoke PCDs. Instead Ofgem has allowed the proposed funding in our baseline allowance.

- **Solar PV on occupied building sites and energy efficiency measures.** The removal of a bespoke PCD is acceptable, however we would welcome the value as included in the baseline being clearly specified in the determination documentation, as for example was the case for NGGT in the Gas Transmission Annex¹⁵⁴.
- **Solar PV installation on governor sites.** The relevant EJPs¹⁵⁵ have been reviewed by QEM¹⁵⁶ and accepted without modifications to volumes, QEM stating that the proposals are justified, and the solution is the most cost-effective method in terms of reducing risk and delivering compliance.

¹⁵² RIIO-2 Draft Determinations – Gas Distribution Annex, table 7, para 2.132 pg 47

¹⁵³ Appendix 003 – SGN – Environmental Action Plan – Dec19; Solar PV panels on occupied sites at total £1.7m, Utility management/ energy efficiency at £1.6m in total (page 31) and Solar PV on Governor sites at £3.35m in total over GD2 (page 39)

¹⁵⁴ draft_determination_-_gt_sector.pdf, para 2.44, page 21

¹⁵⁵ SGN DINT – 019 SolPVSc – EJP DEC19; SGN DINT – 009 SolPVSo – EJP Dec19

¹⁵⁶ GD2 EJP Final Report Rev 00 – Appendix 1 – SGN, page 62 and page 67

The approach is a step change in relation to GD1 as we only have very few solar PV installed as trials on governor sites¹⁵⁷, as explained in the original EJPs. In addition, it is an initiative which has not been proposed by any other GDN.¹⁵⁸

We are concerned that this ambition and the associated costs will be lost if regression benchmarks are determined by a less ambitious network. It is because of this that we have advocated separate assessment of ambitious targets through a true like for like comparison of ambition across all networks¹⁵⁹. We think that this remains an important principle. Given the above we suggest the original PCD, with an uncertainty mechanism UIOLI of £3.35m as per the submitted EJPs¹⁶⁰ and the EAP¹⁶¹ for Solar PV on Governor sites should be re-instated.

Type 3: Disagreement as to how the methodology should be applied. We consider PV installations are a clear example of additional ambition compared to other networks and should be technically assessed.

Business Travel

We agree and welcome the EAP commitments and reporting requirements on reducing carbon footprint associated with business mileage.

Reducing emission from commercial transport fleet

We agree with and welcome the opportunity to resubmit fleet templates and provide greater clarity and consistency. A key example is the definition of ultra-low emissions vehicles (ULEV). In our business plan we proposed a more challenging target of fully electric or hydrogen vehicles resulting in zero emissions, as compared to Ofgem's definition which targeted a significantly less challenging 75g/CO₂¹⁶².

Our business plan included a bespoke PCD for transitioning to 50% ultra-low emissions vehicle (ULEV) / zero carbon commercial fleet, associated installation of required infrastructure and an accelerated replacement programme exchanging commercial vehicles every 6 instead of 8 years¹⁶³.

The proposal had two main drivers; firstly, to operate a cost-effective reliable fleet that meets our commitment to our customers for service delivery and safety, secondly, to respond to stakeholder engagement and feedback to have an ambitious plan to reduce the environmental impact of the necessary operation of a large commercial fleet. Our proposal would have delivered a reduction of 5.4 ktCO₂e over GD2 at a total cost of £21.5m¹⁶⁴.

Business plan proposal. This bespoke PCD for commercial fleet has been rejected¹⁶⁵. Based on clarified and new evidence we believe that our proposal to transition to a 50% ULEV fleet, to provide associated infrastructure and to accelerate the replacement of vehicles from 8 to 6 years will deliver the greatest environmental benefits and our customers have shown that they are willing to pay for investment in this area¹⁶⁶.

Our suggested 'use-it or lose-it' uncertainty mechanism allows us to present this higher level of ambition. Technology in the ULEV sector is moving rapidly and this would allow us to be flexible and adapt to such changes during RIIO-GD2. It results in a higher reduction of environmental emissions and a continuous safe and efficient fleet, a proposal which meets our stakeholder requirements¹⁶⁷. This use-it or lose-it mechanism would be appropriately governed by a consumer led environmental steering group.

In our Fleet EJP and associated CBA¹⁶⁸ we demonstrated that given the value of reduced pollution, (CO₂, NO_x and particulates) replacing 100% of the fleet would be the preferred option with a payback of 3 to 4 years. We felt that the operational disruption associated with such a change would however be significant. Therefore, we limited this to our ambition, technology permitting, of 50% replacement of EV.

¹⁵⁷ SGN DINT – 009 SolPV So – EJP Dec19 para 3 page 4 and SGN DINT SolPV Sc – EJP Dec para 3 page 4

¹⁵⁸ RIIO-2 Draft Determination – Gas Distribution Annex, table 7 page 47

¹⁵⁹ Supplementary question response SGN_SQ_CA9b and Consolidated Bespoke Template – Final020420.xlso

¹⁶⁰ SGN DINT – 009 SolPV So – EJP Dec19 and SGN DINT SolPV Sc – EJP Dec

¹⁶¹ Appendix 003 – SGN – Environmental Action Plan – Dec19, pages 38-39

¹⁶² ULEV is defined as having less than 75 grams of CO₂ per kilometre (g/km) from the tail pipe. We accept that this is the appropriate definition and were being more ambitious in our plan and looking to progress to electric or hydrogen vehicles where ever possible

¹⁶³ Appendix 003 – SGN – Environmental Action Plan – Dec19, pages 26-29

¹⁶⁴ SGN_SQ_CA_9b_Response, page 11

¹⁶⁵ Draft_determination_-_sgn_annex.pdf, page 21

¹⁶⁶ Stage 3: Valuation Phase (Conjoint & WtP) Summary report wave 2 (Nov19) (ref 094)

¹⁶⁷ Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084)

¹⁶⁸ Appendix 025 – SGN – Fleet – 002 EAP EJP – DEC 19 and Appendix 025 – SGN – Fleet – 002 EAP CBA – DEC 19

In addition, transitioning our commercial vehicle fleet to ULEVs at a quicker rate would help to meet the increasing requirements from local governments on Ultra Low Emission Zones which are becoming increasingly common in several city regions where we operate.

In our supporting commercial fleet appendix¹⁶⁹ we have presented clarified evidence and are disclosing new evidence (previously not shared in full with Ofgem) that our stakeholders and customers are supportive of our proposals. We are also clearly showing that our proposal is a step change in comparison to GD1 and that we have suggested more ambitious plans compared to the other GDNs. While the submitted EJP¹⁷⁰ and CBA¹⁷¹ stand we are hoping the Appendix provides clarification.

Draft Determination Alternative. We were able to be more ambitious in our business plan because of the use-it or lose-it proposal and associated governance structure, which allows us to be bolder regarding the scale and pace of technical change. Without such a structure, we are limited to evidence that we have today, and this presents a significantly less ambitious alternative. Where only known technology is deployed, it is therefore not possible to be as ambitious and the customer benefits are therefore lower as a result.

The table below summarises the baseline scenario with no change in GD1 purchasing priorities and no EVs to be added in GD2; the EAP proposal with re-instated bespoke PCD and UM to allow us to capitalise on technology changes during the price control period, and the draft determination alternative based on Ofgem's request for additional information and with the limitation of fewer EVs being brought on board due to current availability of technology in RIIO-GD2.

Options	# Vans Replaced	# of EVs in fleet	Total Capex (£k)	Operational Cost/Fuel (£k)	CO2e Saving (tCO2e)	Cost of carbon (£k)	NPV (£m)
Baseline: 8-year replacement programme, no change in GD1 purchasing priorities	1,148	0	£36,310	£42,775	73,244	5,291	32.4
Business plan (EAP) Proposal: 6-year replacement program + 50% replacement EV	1,526	763	£57,808	£33,101	55,447	4,232	21.6
DD Alternative: 8-year replacement program + some EV replacements	1,148	298	£39,110	£41,775	69,516	5,306	TBC

Based on the presented evidence and clarifications we suggest that our original proposal of bespoke PCD including UIOLI¹⁷² is re-instated. We are of the opinion that we had submitted a strong business case for reduction of emissions from our commercial fleet strongly supported by our stakeholders¹⁷³.

If the original bespoke PCD is not re-instated and we are left with no funding for this initiative, we re-emphasise that we will not be able to maintain the suggested EAP commitments with regards to commercial fleet. In such circumstances, we would have to continue to replace vehicles on an 8-year cycle, and it would only be with the most cost-efficient diesel alternative, resulting in much higher environmental emissions including air pollution. **There would also be a higher opex cost required to support the ongoing maintenance and repair required of ageing fleet of £9.7m.**

Ofgem has requested all GDNs submit additional information as part of their response to the Draft Determinations¹⁷⁴. This data will be presented in the template as provided and by 12 September.

Type 3: Disagreement as to how the methodology should be applied. There is a clear NPV benefit associated with maximising deployment of EV vehicles subject to operational constraints. We think a use-it or lose-it mechanism with a stakeholder lead governance group is most appropriate.

Type 4 – New evidence presented: Updated costs and scenarios. This will be converted to the Ofgem template and circulated for the 12th.

¹⁶⁹ Appendix SGN Commercial Fleet PCD Evidence Sept20

¹⁷⁰ Appendix 025 – SGN – Fleet – 002 EAP EJP – Dec19

¹⁷¹ Appendix 025 – SGN – Fleet – 002 EAP CBA – Dec19

¹⁷² SGN_SQ_CA_9b_Response, page 11

¹⁷³ Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084)

¹⁷⁴ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.141. This will be provided by the 12th Sept on the updated template provided by Ofgem in an email dated 27 August

Reducing embodied (embedded) carbon

We agree that it is imperative that the whole life carbon of infrastructure assets is significantly reduced for the UK to achieve its net zero by 2050 target.

As requested by Ofgem¹⁷⁵ we are strengthening our ambitions in this area by committing to establishing a baseline for embodied carbon by the end of the first year of RIIO-GD2, i.e. by 2021/22, and to set a target for reducing the amount of carbon embedded in new infrastructure for the end of GD2 (2025/26).

It has been proposed NGET should be allowed a UIOLI allowance (£2.5m) for offsetting capital carbon emissions¹⁷⁶. We support this proposal and question the lack of similar allowances for other network operators. While the GD sector have made commitments to measure and target reductions in embedded carbon, the capital carbon¹⁷⁷ is of equal if not more importance to understand the lifecycle of carbon associated with gas network assets. It seems apparent that NGET is further ahead on their journey in tackling embodied and capital carbon, this does not justify a difference in funding allowances.

We therefore accept the draft determination making it an EAP commitment to measure and target reductions in embodied carbon and ask Ofgem to acknowledge that associated costs are not negligible and that some allowances are made to network operators to support reducing embodied carbon.

Type 6: Broad agreement with position put forward in draft determination

Type 2 - Inconsistencies in stated approach or in the application of a methodology. There appears to be an inconsistency between NGET and the GDNs with regards to funding allowance which is unjustified and therefore should be resolved.

Sustainable resource use, recycling and waste

As requested by Ofgem¹⁷⁸ we hereby confirm that we commit to maintain our ISO14001 accreditation in RIIO-GD2.

Ofgem also asked us¹⁷⁹ to set a stretching target for our aggregate use in GD2. We propose to set different targets for the two license areas as they operate in two different regions with very different circumstances. Scotland have one of the lowest numbers of recycle centres of all gas distribution areas, alongside Wales, due to the geography and sparsely populated areas. This means that WWU and SGN Scotland have less access to recycled material than all the other networks. During 2019/20 use of virgin aggregate usage was a monthly average for southern of 0.13% and for Scotland 34.9%.

We therefore propose the following targets for GD2;

- Southern: maintaining the low use of virgin aggregate, to be no greater than 0.1% per year by 2026
- Scotland: use of virgin aggregate to be no greater than 20% per year by 2026.

Our target for Scotland is reliant on the Scottish Government support of recycled materials. Currently only 18 out of 32 local authorities in Scotland support the use of recycled materials (HBM¹⁸⁰ and SMR¹⁸¹), hence Government support is required.

Type 4 – New evidence presented. Confirmation of ongoing accreditation and stretching targets for use of virgin aggregates.

¹⁷⁵ draft_determination_-_gt_sector.pdf, para 2.144, page 51

¹⁷⁶ draft_determinations_-_nget_annex.pdf, pages 85-86, sections 4.29-4.34

¹⁷⁷ Capital carbon, or 'CapCarb', as per the Infrastructure Carbon Review, HM Treasury (2013) refers to emissions associated with the creation of an asset. Capital carbon is being adopted within the infrastructure sector because it accords with the concept of capital cost. The related term "embodied or embedded carbon" is used at a product-level, whereas capital carbon will have greater relevance at an asset-level.

¹⁷⁸ draft_determination_-_gt_sector.pdf, para 2.148, page 53

¹⁷⁹ draft_determination_-_gt_sector.pdf, para 2.150, page 54

¹⁸⁰ Hydraulically Bound Materials (HBMs) are soils or aggregates that have a binder such as cement, lime-based binders, gypsum or fly ash added, which then hardens by a chemical / hydraulic reaction with water.

¹⁸¹ SMR : structural material for reinstatement which, when mixed with excavated spoil removes excessive moisture, forming a stable and compactable sub-base material. The result is a high quality recycled product which can be mixed in minutes, will outperform many traditional sub-base materials, will adhere to the trench wall, but more importantly diverts excavated spoil from landfill, creating a cost saving technical backfill.

Enhancing biodiversity and natural capital

We accept the proposal to allow funding to perform biodiversity surveys and carry out tailored enhancement measures is included in our baseline allowance¹⁸². We note however that having reviewed the other plans our commitment to no net biodiversity loss by the end of GD2 and to target a net gain is significantly beyond those put forward by other networks' proposals to adopt a tool and methodology in GD2. As a result, there is a risk that we are not funded for this ambition given that there is not an appropriate scale variable within the regression model to appropriately reflect it.

Type 6: Broad agreement with position put forward in draft determination subject to risk of underfunding.

Other: decarbonisation of heat – biomethane and hydrogen

We are disappointed with the rejection and disallowance¹⁸³ of the biomethane proposals (SIU biomethane and Biomethane improved access trials) which were proposed in our EAP¹⁸⁴. It is disappointing that the proposed SIU feasibility studies were rejected as this was one of the areas that our CEG was pressing hard for us to find more creative solutions to reduce the carbon footprint for these stand-alone networks. We will explore other means of funding these as we believe it will benefit our stakeholders.

Ofgem also rejected the proposed allowance re-opener to fund the capital costs associated with the installation of CO2 capture assets at suitable biomethane plants across the GD2 price control period¹⁸⁵ (CCS for Biomethane). This is very disappointing as this would allow us to further explore and provide justification for an initiative which could save an additional 14.7 ktCO2e by stopping venting of biomethane to the atmosphere¹⁸⁶. The suggested re-opener is not an innovation, it has a focus on reducing greenhouse gas emissions in the immediate term and would support overcoming economic constraints for the biomethane producer. Hence, we do not think that Ofgem's referral to the net zero and innovation investment mechanisms is suitable.

Our response to bespoke biomethane technology rollout PCD is discussed in SGNQ3.

Type 3: Disagreement as to how the methodology should be applied. The reflection of SIUs was a topic to which our CEG was very keen that we should demonstrate that we are paying appropriate attention and their role in the decarbonisation pathway.

GDQ13. Do you agree with our consultation position to include progress on biomethane in GDN's AERs, alongside standard connections data?

We take on board Ofgem's point on it being inappropriate to include biomethane targets within RIIO-GD2 as much of what determines the number and capacity of biomethane connections lies beyond GDNs' control¹⁸⁷. It was for this reason that we presented it as a company ambition rather than a target.

Our ambition in this area remains and we support the proposal to continue to report on biomethane connections data in the Annual Environment Report (AER). This was supported by our stakeholders during engagement activities conducted prior to our plan's submission¹⁸⁸. Reporting through the AER should be made consistent across networks with the use of common metrics which can be aligned to targets for the Sustainable Development Goals (SDGs).

Type 6: Broad agreement with position put forward in draft determination

¹⁸² Draft_determination_-_sgn_annex.pdf, page 22

¹⁸³ RIIO-s Draft Determinations SGN, pages 21-22

¹⁸⁴ Appendix 003 – SGN – Environmental Action Plan Dec19, pages 43-45

¹⁸⁵ RIIO-2 Draft Determinations SGN, page 63

¹⁸⁶ Appendix 003 – SGN – Environmental Action Plan Dec19, pages 45-47

¹⁸⁷ RIIO-2 Draft Determinations – SGN, page 20

¹⁸⁸ Business plan appendix 006, section 4, page 23

GDQ14. Do you have any other comments in relation to this section?

Climate change adaptation and appropriate funding for resilience measures appears to be an oversight and should be reconsidered.

We welcome the recognition that climate change adaptation surveys should be included within baseline allowances and agree that the results of such studies should be reported in the AER to stakeholders and we will take a view on the identification of any remedial actions as a result of the studies.

We disagree that Ofgem has suggested that climate change adaptation should be considered a part of BAU¹⁸⁹ activity. There is a clear link between climate change adaptation and climate change mitigation and, if as a result of the surveys we identify urgent action that should be undertaken in order to mitigate a climatic risk then it is correct that it should be funded appropriately. We think that this is in line with the NIC's recommendation that by 2023 regulators should introduce obligations on infrastructure operators to ensure that they "develop and implement plans to address vulnerabilities identified by stress tests"¹⁹⁰.

We addressed the uncertainty relating to expenditure that may be required through proposing a use-it or lose-it mechanism and governance structure to ensure the consumer was protected and any unused allowances returned to customers. Under the proposals set out in the draft determination, any major mitigating work will need to be postponed until RIIO-GD3 as the current constraints imposed through NARMS and the PCD structure will not allow us to reprioritise mitigating actions during GD2.

There is a notable discrepancy with the electricity distribution sector, where climate change resilience is proposed as the focus of a task force, and recognition of the importance of its impact on longer term investment strategies¹⁹¹ with specific reference to the National Infrastructure Commission's report on resilient infrastructure systems¹⁹².

All mitigation measures and progress are suggested to be part of the AER and we believe that reporting on progress with climate change adaptation should also be included in the AER. This is something our stakeholders, and in particular the CEG¹⁹³, would welcome.

Type 4: New evidence presented. National Infrastructure Commission recommendations.

Type 2: Inconsistencies in stated approach or in the application of a methodology, noting the difference between the draft determination and the proposals put forward in the electricity distribution SSMC.

4.4 Maintain a Safe and Resilient Network – Safe and Resilient

We are concerned by the approach proposed by Ofgem as regards maintaining a safe and resilient network, which appears to be focused primarily on minimising short term costs to the consumer with insufficient consideration of the long-term impact on cost to consumers or the environment. Moreover, we have real concerns as to the impact that Ofgem's proposals may have on safety and resilience generally in the immediate term.

Ofgem's approach risks adversely impacting our ability to comply with our approved safety case

We are concerned that the package proposed by Ofgem in the draft determination would, if implemented, have a potentially significant adverse impact on our ability to comply with our safety case, as approved by the HSE. Ensuring the safety and resilience of our network is crucial and is one of our primary functions as a company, so this development especially troubles us.

This potential threat arises as a consequence of Ofgem's decision to disallow various projects designed to mitigate safety risk, including local transmission system projects, E&I projects and Repex works. It is then exacerbated by (i) Ofgem's rejection of our proposed uncertainty mechanisms relating to project safety and external/environmental threats, (ii) our inability to risk trade approved projects with emerging (new) risks for which no allowance has been granted, and (iii) the

¹⁸⁹ RIIO-2 Draft Determinations – SGN, table 21, row 5, page 22

¹⁹⁰ Anticipate, React, Recover, Resilient Infrastructure systems, NIC, May 2020, pg 9

¹⁹¹ RIIO-ED2 Sector Methodology Consultation: Annex 1 – Delivering value for money services for consumers - Para 8.107 - 8.111 pg 129

¹⁹² Anticipate, React, Recover, Resilient Infrastructure systems, NIC, May 2020, <https://www.nic.org.uk/wp-content/uploads/Anticipate-React-Recover-28-May-2020.pdf>

¹⁹³ CEG Meeting, 13 September 2019: The Chair said that although climate change adaptation was not an area Ofgem had mandated for inclusion in the EAP, the CEG would support SGN in including it.

fact that safety requirements are only likely to become more challenging over the course of the price control period (for instance, as discussed at paragraphs 7.2.5 and 7.3.3, it is anticipated that additional changes may need to be introduced to limit fatigue in safety critical roles) but the DD fails to provide funding for adjustments to working practices. With the disallowance of these projects and associated challenges, our modelling indicates that we could realistically be left with insufficient resources to mitigate reasonably anticipated risk.

We consider it essential that Ofgem engages with the HSE without delay in order to ensure that safety critical work is properly funded and that either we are put in a position where we are able to comply with our approved safety case in full or the HSE grants us a formal derogation from our safety case such that we are not forced into a position of non-compliance by the terms of the price control settlement.

We note more generally that any pressure on the resources available to ensure safety and resilience will in turn place pressure on our ability to undertake other work. This is owing to the increased possibility that we might, at any given time, need to divert engineers and other resources to focus on performing safety critical tasks. Such a diversion of resources could potentially have significant negative consequences for consumers.

Our customers support higher volumes of repex

The removal of dynamic growth from the tier 1 mains and associated services¹⁹⁴ means that we will no longer be on a trajectory to deliver the HSE Iron Mains Replacement Programme by March 2032¹⁹⁵ and that workload will need to increase in GD3 in order to deliver the mandatory target.

Our experience in Southern is that it is very challenging to increase workload activity due to constraints in the labour market for skilled gas engineers. This skill shortage will be exacerbated if workloads are reduced in the short term and trained engineers move out of the sector, to then have to be attracted back into the market for GD3.

Secondly delaying work to a point closer to the March 2032 HSE deadline, will increase demand across GDNs to finalise the work at a time when contractors may be less willing to train new teams for a relatively short period of time. Increasing demand at this point will further increase contractor prices.

Finally, by postponing the work out of GD2, you are choosing to maintain higher environmental emissions with leakage from tier 1 iron of approximately 90tCO₂e/km for each year if it is not replaced by polyethylene, and higher operational costs associated with increased emergency call outs and pipe repairs.

Our customers recognised this and supported our proposal strongly through many stakeholder groups. As a result our CEG also supported it strongly and asked us to do more, which we did through our proposed accelerated Tier 1 programme¹⁹⁶.

Type 5 - Evidence that SGN has provided but hasn't been taken into account or given sufficient weight or given sufficient weight. The judgement to cut back repex workload does not appear to take into account the strong customer support for doing higher volumes.

Reducing tier 1 workload today exposes consumers to higher costs in GD3.

The HSE have made it very clear when enforcing this policy, that the availability of resources is considered a matter within the network's control¹⁹⁷. Postponing dynamic growth to GD3 and trying to catch up with COVID will require us to increase in workload by 913km a year in GD3. We are concerned that reducing workload to below the minimum levels required to deliver the IMRRP that Ofgem is proposing will cost consumers more in the longer term and consider that the trade-offs should be considered in detail in the impact assessment¹⁹⁸

¹⁹⁴ RIIO-2 Draft Determinations – Gas Distribution Annex, Table 24, pg 104

¹⁹⁵ Please note the replacement deadline is March 2032 and is incorrectly reported by CEPA
<https://www.hse.gov.uk/gas/supply/mainsreplacement/irongasmain.htm>

¹⁹⁶ MFT Workshop January 2019 London (ref 016), MFT Workshop February 2019 Glasgow (ref 017), Shaping the Business Plan Qualitative workshops - Environmental Action Plan (ref 084)

¹⁹⁷ Pipeline safety regulations, Reg 13A(15) <https://www.hse.gov.uk/gas/supply/13a.pdf>

¹⁹⁸ The current impact assessment as of the 31st of July only appears to refer to Repex twice both regarding efficiency. RIIO-2 Network Price Controls Draft Determinations Impact Assessment. 31st July 2020

More recently governments have been asking what measures we can take to increase workload in order to support the economic recovery post COVID¹⁹⁹. Given the stakeholder support, environmental benefits, reduced operational costs, macro-economic benefits and the low interest rates currently available for funding the investment, the proposal to reduce workload below the minimum quantity to deliver the mandatory HSE target looks peculiar in this context.

Type 2: Inconsistencies in stated approach or in the application of a methodology: The minimisation of workload in GD2 is likely to increase costs to consumers in GD3

16-year payback requirement is sub-optimal and has not assessed the relevant evidence

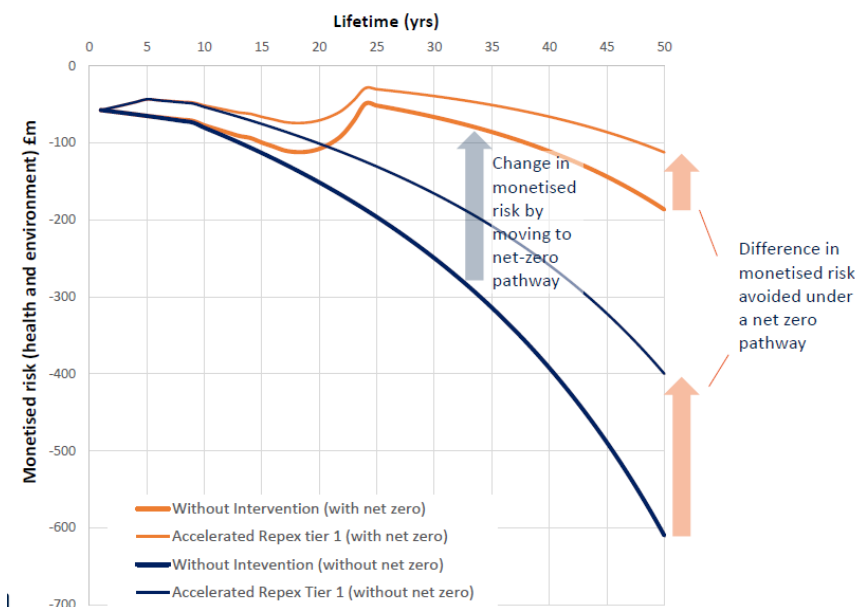
Ofgem's draft determination proposes to maintain the cut-off point for low pressure mains assets as 16 years as it was set out in GD1, in order to reflect the uncertainty over the future of gas and the risk of asset stranding²⁰⁰. We are concerned that this assumption was made without appropriately assessing the risk of asset stranding materialising.

Type 5: Evidence that SGN has provided but has not been taken into account. We do not think that there has been a proper assessment of the evidence that we presented in our Business Plan, which had identified a very low value at risk associated with a 25 or 35-year payback period.

In our business plan, we demonstrated that the risk associated with asset stranding was very low. On a trajectory to 2045 Net Zero, where there is a 50% probability of the gas network no longer being required, there is between 1% and 3% value at risk of asset stranding under a 25-year CBA²⁰¹. This approach was also discussed with our CEG²⁰², who were appreciative of the structure that was proposed.

Secondly, as far as we are aware, we are the only network that reflected their decarbonisation pathway to Net Zero within the CBA assessment to ensure consistency between the investment plan and the most likely environmental pathway. Therefore, we consider our CBAs to be less exposed to the risk of asset stranding compared to other networks' who may not have taken such a robust approach.

Reflecting net zero in CBA assessment²⁰³



¹⁹⁹ Discussion with Scottish Government 13th July 2020 and Greater London Authority 27th July 2020

²⁰⁰ RIIO-2 Draft Determinations – Gas Distribution Annex, para 3.86 pg 102

²⁰¹ SGN Business plan, section 15.6.2, pg 148 and presented to the Engineering and cost assessment teams at a bilateral on 13th February 2020

²⁰² CEG minutes, Meeting 15th Aug 2019

²⁰³ As presented to the Engineering and cost assessment teams at a bilateral on 13th February 2020

4.4.1 Large Project delivery

Large project delivery – standard delay and variations need to be tolerated when setting parameters. This should also apply to smaller capital project PCDs

The large project delivery proposals²⁰⁴ set out mechanisms through which allowances should be either reprofiled, or subject to either milestone delivery or delay charges in the event of a delay to a large project. Whilst this is not expected to have an immediate impact on projects completed in GD2, we anticipate that the principles will be applied more broadly to other investment types.

There is a significant risk that such penalty mechanisms increase the risk associated with variation and delay which would result in worse outcomes for consumers thanks to increased costs associated with greater project delivery risk, administrative costs and regulatory complexity.

While it is not appropriate for networks to be funded for projects which aren't delivered, there is a significant difference between 'not delivered and never started' and 'not-delivered but running late' due to optimism bias at the project planning stage. There is a risk that trying to penalise or recover funds as a result of the second, could lead to greater consumer detriment as network companies look to contract out delivery risk leading to higher contract prices.

It is our view that given the risk of an adverse customer outcome, such mechanisms should only be applied in unique circumstances and specifically where the project value itself is substantial and that they are only applied where consumer harm from non-delivery can be clearly demonstrated. Without such thresholds being clearly defined and consulted upon there is a risk that they could end up being applied to a much broader range of projects.

4.4.2 Tier 1 mains replacement

We are concerned that late changes in the policy, reliance on data that has accuracy limitations, and a lack of transparency in the process creates a high risk of errors going unidentified.

Tier 1 mains replacement is the largest element of our pipe replacement programme and accounts for approximately one third of our annual expenditure. As such it is very important that the allowances are based on robust principles that are clearly understood and debated as an industry group, and that there is common understanding between the networks and Ofgem.

During the lead up to draft determination we have tried to support this by engaging positively in the debate and presenting proposals to promote efficient decision making. After Ofgem presented its proposal for a lay-based diameter band adjustment model (DBAM) to the networks²⁰⁵ we engaged and proposed developments that maintained the mix and volume integrity that Ofgem were looking to achieve and reintroduced desirable incentive properties²⁰⁶ that were missing in the original Ofgem proposal²⁰⁷ being discussed until May²⁰⁸. As part of this process we also identified data anomalies in the unit cost to diameter characteristics in the data reported by some networks that we thought should be resolved prior to draft determination²⁰⁹.

Type 5: Evidence that SGN has provided but hasn't been taken into account or given sufficient weight. We request an explanation and evaluation as to why the DBAM and proposed variations were discarded. Given their materiality we think that this should be included as a part of the impact assessment.

²⁰⁴ RIIO-2 Draft Determinations – Electricity Transmission Annex, Section 2.61, pg 25

²⁰⁵ Repex working Group, 11th March 2020

²⁰⁶ The proposal look to maintain an incentive to deliver efficiency benefits from inserting smaller pipes where possible, rather than replacing with larger more expensive pipe.

²⁰⁷ Email AMusgrave to CMayfield 9th April 2020 SGN CA SQs 21 to 25: DBAM Model (model, cover note and proposed rules), Email AMusgrave to CMayfield 15th April 2020 with further analysis and commentary on the complexity of building lay to abandonment ratios into the dbam model proposed rules

²⁰⁸ SGN_SQ_DBAM returned to Ofgem 7th May 2020.

²⁰⁹ Email AMusgrave to CMayfield 27th May 2020 'DBAM and Repex: Some further analysis'

Moving from lay to abandonment has happened very late in the process

The first we learned of a move to abandonment was in mid-June²¹⁰ with the understanding that a request for information (RFI) would shortly be issued. There was a call with the GDNs confirming the requirements of the RFI and setting out concerns from all GDNs regarding data quality²¹¹ of unit prices for abandonment, these concerns were then set out in more detail in our response on the 8th of July. Costs in core GDN systems are held against pipe installed (polyethylene) and not pipe decommissioned (iron). Adjusting for the lay to abandonment ratio and the disparate diameter mix for new and decommissioned pipes required high level and potentially unreliable assumptions in all networks.

Given these concerns and the limited opportunity to discuss them we are very surprised to see only the abandonment option considered in the draft determination and no consultation questions regarding the relative benefits of the different approach or the quality of supporting data.

To all intents and purposes, the DBAM approach has been discarded by Ofgem without consultation externally or with the GDNs.

Type 2: Inconsistencies in stated approach or in the application of a methodology: There has been a lack of consultation around the decision to move to abandonment.

There appears to be an incorrect portrayal of the accuracy of unit cost abandonment data

In our response to the RFI we set out the steps that we went through in order to attribute costs to different abandonment diameter bands and the assumptions that we had to make along the way. We are therefore surprised that there appears to be no assessment of the accuracy of data and the risk that inaccurate data will have on the conclusions reached particularly as different assumptions were made by GDNs on how to allocate polyethylene pipe installation costs to the various iron pipe decommissioning diameter bands.

A second concern is that prior to the change to abandonment we were able to follow through calculations and to identify data anomalies where resulting changes need to be made. We think that this provided a very valuable assurance process which should give all stakeholders comfort that the most appropriate customer outcome can be achieved.

Finally, it has become clear during working groups held after the publication of the draft determination²¹², that key points of policy lack clarity, such as the calibration of diameter bands for allowances and whether this should be based upon 12, 8, or 4 bands, and if it should incorporate distinctions between pipe material and installation method.

While there remains a lack of clarity on these issues it is not possible to adequately test the accuracy and robustness of the proposed approach and this increase.

Type 2: Inconsistencies in stated approach or in the application of a methodology: Uncertainties and a lack of clarity over the proposed approach prevents a clear and reasonable evaluation of the policy proposed.

There is a very high risk of errors going unnoticed.

As it stands, we are unable to clearly trace through from the data that we have provided you with to the allowances that are proposed in the draft determination. We are acutely aware of the complexity involved and the ease with which material errors can go unnoticed. It is therefore very important that this is managed in a transparent manner to ensure that any risk of error is minimised. We have not yet been able to establish whether the top down assessment of Tier 1 costs will match the bottom up approach proposed which sets an average industry unit cost to which regional factors will be applied. Essentially, we have two proposed approaches to setting the Tier 1 allowance with no indication of whether or how they would be reconciled.

As we have demonstrated prior to draft determination, we remain committed to getting the most robust methodology. If Ofgem's view is that decommissioning is more appropriate than lay, then we will fully support that process, but we would like to note our concerns that introducing this change at this stage in the process increases the risk of errors that will be embedded into the next price control period.

²¹⁰ GRG 16th June we were notified, with a data request issued on the 17th of June for completion and submission on the 8th July.

²¹¹ 25th June – It was explained that contractor rates are based on lay, and whilst we have good asset records for both lay and abandonment, converting from the financial systems which are based on lay rates to abandonment asset records would require a large number of assumptions and best estimates.

²¹² Repex working groups 30 July and 20 August 2020

The answers to the questions below are given to help support a better outcome, on a methodology that we consider may be inferior to previously discussed alternatives.

Type 2: Inconsistencies in stated approach or in the application of a methodology: We are concerned by the high risk of errors as a result of late changes and decisions being undertaken.

Given the uncertainties in the method, the late collation of data that was necessary to inform the modelling and the lack of clarity about how allowances are going to be determined it is very important that the repex proposals are set out in near final form in an updated draft determination to allow for appropriate consultation and comments.

GDQ15. What are your views on the proposed set of Workload Activities for the Tier 1 mains replacement PCD?

Whilst we agree with the bands sizes, we have concerns with ‘decommissioned and not replaced’ and the accuracy of the associated cost data.

We agree with the four mains decommissioning diameter band sizes proposed for the assessment of the Tier 1 mains replacement PCD²¹³. These are in line with the bands currently in place to record our T1 iron decommissioning delivery in GD1 within the annual RRP's.

However, we have concerns with the ‘decommissioned and not replaced’ workload activity that Ofgem have proposed as part of the three types of workload activities, and hence 12 diameter bands, that have been proposed in the DD being used to assess our GD2 Tier 1 mains delivery²¹⁴. We believe the use of this workload activity is not appropriate as the industry unit costs being used to assess this type of work are not based on solid data and are heavily reliant on assumptions.

As we have set out in the response to our RFI on decommissioning workloads²¹⁵ there are a number of challenges created as a result of there being no direct link between the mains commissioned and decommissioned in our asset repository and our financial ledger as contract rates are based on work completed (lay) rather than work decommissioned. This has required a number of assumptions to be made to produce reasonable estimates of unit rates. For the ‘decommissioned and not replaced’ workload activity, the risk of poor-quality data is exacerbated by the small volumes of workload.

Our principal two options for Tier 1 are to replace a main by open cut or insertion, however, we will always look for an opportunity to design the project holistically. Where we find an opportunity to achieve the same pipe abandonment outcome more efficiently without laying a new pipe, but with additional service costs or capital investment, we will select that option. The benefits realised through that holistic design and more efficient approach should be shared with customers through the TIM sharing mechanism.

We also believe that the distinction between different iron materials, cast iron/spun iron and ductile iron, also creates forecast cost uncertainty due to the high level assumptions that are required and also adds additional complexity. On this basis we would also argue for this separation to be removed.

This would leave four decommissioning diameter bands for ‘mains decommissioned’

We note that the three workload activities proposed in the draft determination²¹⁶ differ from the three activities that were used within the July 20 Ofgem RFI request, as set out below. It is of great concern that data provided in the RFI which was already subject to a significant number of assumptions and manual adjustments has been further manipulated to derive the new categories in the draft determination creating an even greater level of uncertainty around the accuracy of the unit costs of decommissioning that were subsequently shared at the Repex working groups on the 30th July 20 and 20th August 20.

²¹³ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.175 pg 61

²¹⁴ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.174 pg 61

²¹⁵ OFGEM Repex RFI – SGN Response (July 2020), 8th July 2020

²¹⁶ RIIO-2 Draft Determinations – Gas Distribution Annex, para 2.174 pg 61

Workload activities in RFI and DD

OFGEM RFI Request categories	OFGEM Draft Determination Categories.
Iron mains decommissioned and not replaced	Iron mains decommissioned and not replaced
Iron mains decommissioned and replaced with PE pipe via insertion	CI/SI Mains decommissioned and replaced with PE pipe
Iron mains decommissioned and replaced with PE pipe via open cut.	DI Mains decommissioned and replaced with PE pipe

This inconsistency is resolved by limiting the mechanism to the four diameter bands described above.

We are very concerned about the data that the draft determination has been based on and whether it is robust or not. We think that it is very important that Ofgem provides a transparent account for how they have calculated their industry unit cost allowances and how these correspond to the data provided in the RFI request.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. We do not consider the underlying data to be sufficiently robust and there is a significant risk that it undermines the quality and outcomes of this approach.

Type 5 - Evidence that SGN has provided but hasn't been taken into account or given sufficient weight. We are concerned that the information provided in the RFI has not been fully considered and accounted for in the DD.

GDQ16. What are your views on our proposal to adjust allowances for the Tier 1 mains replacement PCD on the basis of mains decommissioned?

We are concerned about the process that led to the decision for such a dramatic change. We will continue to support the development of a robust approach but given the complexity we think it is important that a full set of proposals are republished before final determination.

As set out above, this approach was not discussed at all with the GDN's prior to the draft determination being issued and was partly based on a request for information (RFI) that was issued to the GDN's at very short notice. It is very late in the process to introduce a new methodology that has not been discussed or consulted on appropriately, and whilst we will fully support the ongoing discussions to find a workable and sensible solution, it is important to recognise the necessity to allow sufficient time in our ongoing discussions with Ofgem around this allowance adjustment mechanism.

We would like to highlight that within the responses to the RFI request, issued very close to draft determination, the networks consistently said that the request for mains replacement costs at a decommissioning level would not be based on actual costs as the GDN's don't hold costs in their core systems for decommissioning. The networks confirmed that mains replacement costs are only held at a mains commissioned level by diameter band²¹⁷.

On that basis, we believe that use of unit costs at a mains decommissioning level to set allowances for the Tier 1 mains replacement is problematic as there are a significant number of assumptions that have had to be made by the networks to derive unit costs for mains decommissioning.

There is still significant work to be undertaken between Ofgem and the GDN's between now and final determination to ensure that any adjustment mechanism is significantly more robust and reliable than the current position which we believe is flawed and leads to potentially perverse and unintended adverse adjustments to allowances. Notwithstanding the above, we provided significant evidence to Ofgem around suggested adjustments to the originally proposed DBAM mechanism that would have achieved the same outcome with appropriate incentives to drive efficiency. We will continue to work collaboratively to ensure that the right mechanism is delivered on this crucial safety related programme.

Type 2: Inconsistencies in stated approach or in the application of a methodology. There is an inconsistency between how costs are charged by contractors and the allowances are awarded. The reliance on assumptions to bridge this gap is inadequate and creates a risk of errors

²¹⁷ OFGEM Repex RFI – SGN Response (July 2020), 8th July 2020: "This data request introduces a number of challenges to SGN as there is no direct link between mains commissioned and decommissioned in our asset repository (Maximo), or to our Financial Ledger (BORIS) which only records financial data against the mains commissioned bands. Our financial ledger also does not distinguish between costs associated with Open Cut & Insertion or by material and pressure tier."

GDQ17. What are your views on our proposed approach to setting unit costs for the Tier 1 mains replacement PCD?

We are unable to take an informed approach to this question as we do not have visibility of SGNs network specific costs and how they were derived. This is a significant concern to us at this stage in the process. It is important that any unit costs arising that are being calculated are tested against market prices wherever market prices are observable.

In the draft determination²¹⁸ Ofgem confirms that *"We propose to set unit costs for each distribution network across the 12 Workload Activities, expressed in £/km mains decommissioned. Our preferred approach is to calculate the industry average unit costs for each activity, and adjust for regional factors, to derive distribution network-specific unit costs. We think that using industry average unit costs (plus regional factors) is appropriate, as Tier 1 mains replacement is a high volume, repeatable activity that is common across all GDNs."*

Without visibility of SGN's network-specific unit costs referred to in this paragraph, we are unable to undertake a full assessment of the impact of these unit costs at this stage. As we set out above, it is very important that this visibility is provided to networks and to ensure that it is error free and that the average unit costs and regional factor adjustments are taken into account appropriately. At the Repex working group²¹⁹ we enquired whether we would have visibility of proposed unit costs by network before final determination. We remain unclear on this point.

It is very important that this information is provided with an appropriate amount of time to allow networks to complete a robust and complete evaluation prior to the final determination as we cannot currently respond with confidence to this question.

We are also concerned about the workload activity costs that are feeding into the industry average unit costs as there are other cost drivers included within these that effect GDNs to different extents. Examples of such cost drivers are as follows:

- Overhead allocation - GDN's have different totex overhead allocation models that will impact on repex unit costs
- Changing market factors e.g. contract labour costs pressures
- Other regional factors that impact costs inside and outside of the M25
- Differences between RPEs and contract price changes

Redacted

Redacted

²¹⁸ RIIO-2 Draft Determinations - Gas Distribution Annex (page 62)

²¹⁹ Repex Working Group - 20 August

Redacted

Redacted

Type 4: New evidence presented to respond to a point. New market price information.

Type 4: New evidence presented to respond to a point: Supporting document [Southern Tier 1 Mains Replacement Tender Overview] and in the independent Hargreaves Jones report 'Development of Procurement Strategy'

GDQ18. What are your views on our proposed Allowance Adjustment Mechanism and Allowance Adjustment Restrictions for the Tier 1 mains replacement PCD?

Whilst we support the principles the current proposals need to be reconsidered. Given the uncertainties we believe that the deadband should be widened to at least +/- 3%.

We broadly support the principles of how this mechanism is intended to work but current proposals shared through the repex working group do not work and have the potential to deliver perverse outcomes. We believe that this has been acknowledged by Ofgem and is currently being considered in advance of the next workshop. We think that aspects of the proposed mechanisms must be recalibrated – in particular the rules around the PCD normalisation to the baseline and the subsequent application of the allowance adjustment mechanism.

Given the scale of the tier 1 repex programme it can be difficult to control with sufficient precision to land exactly on target at the end of the period with the desired diameter mix. On this basis we believe that the proposed cap of +/-2% is too tight and would ask that it be increased to +/- 3% to provide additional flexibility.

We remain committed to actively participating in additional repex working groups to improve our understanding of the proposed mechanism and support its development. We note there appears to be a disconnect between the different policy areas (top down regression and bottom up unit cost development) and are fully committed through the various working groups to reconciling these differences. Our starting point remains at +/-3% while these discussions are taking place.

It is important to recognise that when the Draft Determination was published there was no visibility of the base line unit cost allowances by GDN and this remains the case. We remain uncomfortable with the initial data that was provided by GDNs as part of the SQ 40²²¹ and 41²²² which helped to calculate the average Industry unit costs.

Type 3: Disagreement as to how the methodology should be applied. The 2% deadband range is too tight given the uncertainties that currently exist and the lack of a robust model linking workloads and allowances.

²²⁰ Repex Unit Cost model, 20th August 'Repex_Synthetic_Unit_Cost_Model_Aug20'

²²¹ SGN_BP_SQ_40

²²² SGN_BP_SQ_41

4.4.3 Tier 1 services

GDQ19. What are your views on our proposed Workload Activities for the Tier 1 services PCD?

We agree with the four service workload activities proposed for the assessment of the Tier 1 services PCD. These are in line with the categories that are currently in place to record our T1 iron service workload delivery in GD1 within the annual RRP's.

We have also built up our GD2 service workload forecasts using the service workload activities proposed by Ofgem and therefore believe that it is entirely appropriate that these are used for assessment of the Tier 1 services PCD.

Type 6: Broad agreement with position put forward in draft determination.

GDQ20. What are your views on our proposed approach to setting unit costs for the Tier 1 services PCD?

As with GD17, we are unable to take an informed approach to this question as we do not have visibility of SGNs network specific costs and how they were derived. This is a significant concern to us at this stage in the process.

As we set out in our answer to GDQ17 in the draft determination²²³ Ofgem confirms that;

"We propose to set unit costs for each distribution network across the 12 Workload Activities, expressed in £/km mains decommissioned. Our preferred approach is to calculate the industry average unit costs for each activity, and adjust for regional factors, to derive distribution network-specific unit costs. We think that using industry average unit costs (plus regional factors) is appropriate, as Tier 1 mains replacement is a high volume, repeatable activity that is common across all GDNs."

"We also propose to use the same methodology to calculate unit costs for Tier 1 services as we use for Tier 1 mains."

Without visibility of SGN's network-specific unit costs referred to in this paragraph, we are unable to undertake a full assessment of the impact of these unit costs at this stage. As we set out above it is very important that this visibility is provided to networks and to ensure that it is error free and that the average unit costs and regional factor adjustments are taken into account appropriately. At the repex working group²²⁴ we enquired whether we would have visibility of proposed unit costs by network before final determination. We remain unclear on this point.

It is very important that this information is provided with an appropriate amount of time to allow networks to complete a robust and full evaluation prior to the final determination as we cannot currently respond with confidence to this question.

We are also concerned about the workload activity costs that are feeding into the industry average unit costs as there are other cost drivers included within these that effect GDNs to different extents. Examples of such cost drivers are as follows:

- Overhead allocation - GDN's have different totex overhead allocation models that will impact on repex unit costs
- Changing market factors e.g. contract labour costs pressures
- Other regional factors

Type 1: Factual or computational errors. We have insufficient information on which to draw a robust conclusion.

GDQ21. What are your views on our proposed Allowance Adjustment Mechanism and Allowance Adjustment Restrictions for the Tier 1 services PCD?

We believe that it is appropriate to adjust for volume and mix given the historical differences we have seen year on year during GD1 as our Tier 1 mains projects have moved around within the Scotland and Southern geographical footprints. For example, we know that a shift in work between Edinburgh and Glasgow will impact the volume of services completed and the mix of service relays and transfers. We expect to see similar variations where work moves in and out of the London area. Based upon our historical analysis we agree that a +/-10% tolerance band is appropriate.

²²³ RIIO-2 Draft Determinations - Gas Distribution Annex para 2.178 and 2.179, pg 62

²²⁴ Repex Working Group - 20 August

Type 6 – Broad agreement with position put forward in draft determination

4.4.4 Gas holder demolition

There has been a misrepresentation of our approach to gas holders. Our dismantling programme will take place over the full 16 years provided under the programme and will not be finished at the end of GD1.

There has been a misinterpretation of our approach to gas holders. Currently the draft determination sets out “In their Gas Holder Strategies, SGN, NGN and WWU stated their aim to have no gas holders on their networks. SGN aims to complete this during RIIO-GD1 while NGN and WWU will complete this by the end of RIIO-GD2.”²²⁵. We would like to clarify that this is not a correct reading of our business plan.

In our business plan we are clear that we will have completed 50% of a phased dismantling programme by the end of GD1. For the remaining sites we completed an assessment of the operational requirements of the site and where a site was not operationally important it was transferred to an unregulated company at independent market value. This unregulated company had a legal obligation to dismantle the remaining gas holders²²⁶.

There are six gas holders retained within the regulated business, of these 5 will be dismantled in GD1, and the 6th, Provan, is a listed structure. We have not requested funds for gas holders in GD2, other than Provan, as it was agreed with the unregulated company that the asset transfer value would reflect the cost of dismantling and associated ground remediation costs²²⁷.

A second point to note is that the gas distribution annex refers to dismantlement by the end of GD2. This is not our understanding of the original timeline, rather at the start of the programme a regulatory period was taken as eight years²²⁸ rather than five. As such we have the programme planned over a 16-year period rather than a 13-year period. Accelerating the programme is likely to incur associated costs unnecessarily.

Type 1: Factual or computational errors. In the timing of the programme and the completion date for SGN to remove their gas holders.

4.4.5 Network asset risk metric

NARMS has become overly complex for the scale of benefits that it delivers. It now represents a significant risk of manual handling of data, concentration of expertise in a small number of people and prohibits an appropriate level of assurance for a regulatory submission.

We are extremely concerned with the direction of travel for the assessment of monetised risk, the increasing complexity that surrounds the methodology and the significant amount of data and manual data manipulation required. The NOMs methodology used during RIIO-GD1 added significant value as a decision support tool. In the SSMD, Ofgem proposed to develop the monetised risk concept from NOMs (which was developed in GD1) to NARMS. The method applied to calculate the network risk and the intervention benefit is identical. The difference is that NARMS was to measure long-term risk benefit. However, Ofgem’s review of GDNs’ business plans proved that the long-term benefit was impracticable for GDNs due to unknown asset life which resulted in the reversion to single-year reporting²²⁹ and highlighted the risk that networks deliver the network risk targets by swapping out expensive activities with less expensive activities with a higher risk benefit. The draft determination also introduced without prior consultation or discussion a new measure of £m invested per £m equivalent value of the risk managed (UCR) with an associated asymmetrical incentive that our analysis shows to be predominantly penal.

The intention of NOMs was to ensure that network risk is managed and that customers get what they paid for. Our fear is that the greater complexity introduced by the proposed approach to NARMS puts this out of reach for GDNs, customers and potentially the regulator due to the very small number of people who come close to understanding it.

²²⁵ RIIO-2 Draft Determinations - Gas Distribution Annex, para 2.208 pg 70

²²⁶ SGN Business plan, Dec 2019, pg 24 and section 7.4.6 pg 70.

²²⁷ Appendix 002a – SGN – Gas Holder Strategy – Dec 19. Table 1 and split by network in table 2 and 3, pg 6

²²⁸ RIIO-GD1: Final Proposals - Supporting Document – Outputs, incentives and innovation, section 7.26, pg 50 “We confirm our proposal at IP to fund GDNs for the phased demolition of gas holders over a 16 year period which we propose to set as a secondary deliverable”

²²⁹ Email from Ofgem on 6th of April 2020

One possible approach might be to revert to something closer to the NOMs methodology used in GD1 around which our new systems have been developed, but with additional measures in place to ensure against unintentional windfall gains.

Type 3: Disagreement as to how the methodology should be applied. At this stage we should revert back to NOMs and improve the quality and consistency of the approach rather than adding further complexity.

NARMs has become overly complex

Whilst we understand the principles and the reasoning behind the funding adjustment mechanism, the requirement to introduce such an adjustment in our view opens out broader questions regarding the appropriateness of recent decisions and the overall objective of NARMs as a methodological construct.

From the outset we have been clear that monetised risk is a valuable addition to the way we approach and prioritise work and that it applies a level of rigour and consistency to the process. It is an effective management support tool that will aid the decision-making process for our asset engineering teams but it is not a decision-making tool that overrides engineering competence²³⁰.

This emphasises the importance of high-quality data as an input²³¹ and our concerns about moving to the more complex NARMs methodology²³². As we generated our CBAs using the NARMs methodology we spent a large amount of time trying to check the results prior to a meeting with Ofgem²³³ to explain them. We dedicated half a page in our business plan as we thought it was important to explain to our stakeholders the reason behind the results that we were generating²³⁴.

In our view the introduction of the NARMs methodology has brought with it a considerable shift in the level of complexity that is not supported by the underlying data. We have expressed concerns regarding the challenge of pulling together data²³⁵, and we welcome the decision by Ofgem to move back to a one-year time period as a necessary simplification.

We therefore see the proposed adjustment mechanism as symptomatic that the complexity of NARMs has become almost unmanageable. It starts to introduce a series of regulatory risks as a result of increasing the level of complexity too early in its development and having only an effective understanding of NARMs concentrated on too few specialists that may not have the broader knowledge to identify issues in advance of them materialising.

We would encourage Ofgem to undertake an effective impact assessment to determine whether the increased complexity and reporting burden are going to generate any useful benefits that are in the customers' best interest. Our assessment is that the substantial increase in reporting burden does not bring about improved decision making and given the complexity of the data, we do not believe that it will bring about improved regulatory oversight.

We continue to encourage Ofgem to maintain the substantial gains that have been made in the quality of reporting and assessing monetised risk through-out GD1, and to build on that rather than trying to develop the approach too quickly and risk undermining its value.

We are concerned that NARMs has moved away from a management support tool to become its own deliverable, most notable the late introduction of the UCR concept. We urgently request that Ofgem undertakes an assessment to evaluate whether the insights being delivered and the value for money being generated for the consumer have a positive value compared to the costs incurred.

Over the course of GD1 NOMs has moved from excel spreadsheets to a bespoke model which cost several hundred thousand pounds to establish and populate. This investment was to support automation and reduce the risk of manual data errors. The additional complexity required to support NARMs in GD2 leads us back to significant amounts of manual data manipulation and the increased potential for material errors that could result.

Type 1: Factual or computational errors. The complexity of the modelling and manual data processes has now reached a level that we can't have confidence that it is factual accurate or free from errors.

²³⁰ Bilateral meeting SGN- Ofgem In 22nd May 2018 and.

²³¹ SGN Sector Specific Methodology Consultation, 14th Mar 2020, CSQ 19 pg 28 and SGN RIIO-2 Framework consultation response, 2nd May 2018, pg 7

²³² Bilateral meeting SGN – Ofgem 12th Feb 2019

²³³ Bilateral meeting SGN – Ofgem 18th Nov 2019

²³⁴ SGN Business Plan, Dec 2019, pg 76

²³⁵ Network – Ofgem Meeting 18th Nov 2019, N1.3 long term benefit – Note submitted to Ofgem 21st Feb 2020 as a couple of examples.

NARMQ1. Do you agree with our proposals on the scope of work within each of the NARM Funding Categories and on the associated funding arrangements?

We are concerned with the implications of NARMs funding categories and the ability to accommodate unanticipated changes. With the majority of projects in 'A3', and without appropriate uncertainty mechanisms in place, we are exposed to new events that will arise in GD2.

In general, SGN agrees with the scope of work defined under each of the NARM Funding Categories. However, we were surprised that all named capex projects are excluded from 'A1 category – NARM funding adjustment and penalty mechanism' and thus from risk trading and included in the 'A3 category – ring fenced project/activity'.

In our business plan, we have listed specific named LTS projects based on our current knowledge of our assets and projects needing to be undertaken. We accept these projects are of significant scale and therefore appropriate to have an output target that was directly related to their delivery.

Currently this A3 category captures all the proposed LTS investment, and as such, when a new and currently unknown technical issue comes to light in GD2 – which we know will happen – that requires an intervention, we have no allowances through which to resolve the issue and no opportunity to risk-trade between projects.

Recognising this, and the unknown aspects of the interventions that will occur²³⁶, we proposed a process safety use-it or lose-it uncertainty mechanism²³⁷ to cover the costs of unavoidable, unforeseeable and necessary investments, ensuring that the customer was protected should fewer events materialise than was the case in GD1.

This uncertainty mechanism has been rejected²³⁸ and in doing so we have limited opportunities through which to deliver issues that will arise during GD2. Given that the proposed structure prevents us from trading risk between projects (i.e. not completing one of our named projects to resolve an emerging issue elsewhere), we think it is very important the allowance, £3m/yr, under the 'process safety use-it or lose-it' mechanism is allowed back into baseline funding²³⁹.

If the decision is taken not to allow 'process safety use-it or lose-it' funding amounts back into baseline allowances, then we have an unfunded exposure to the costs of events that will arise in GD2 but have not been forecast, as we will be unable to move delivery away from the 'A3 category – ring fenced project/activity' without returning the associated allowances.

In this eventuality we will need to ensure that the projects currently proposed and included under 'A3 category – ring fenced project/activity' are moved to 'A1 category – NARM funding adjustment and penalty mechanism' so that the risk can be managed in an appropriate manner. Failing that, additional funding will be required in our baseline allowance, akin to the value of the uncertainty proposed.

Type 2: Inconsistencies in stated approach or in the application of a methodology. There is not an equivalent ability to manage risk between the different categories. A network that has identified more projects is exposed to more risk by having those projects ringfenced than a network that asked for the same sum but did not identify projects.

NARMQ2. Do you agree the funding adjustment principles and our proposals for applying funding adjustments?

Whilst we understand the principles and do not have an issue with the objective of the proposal presented, its application is close to unworkable and adds another layer of complexity.

The current version of NARMs BPDT requires a significant amount of manual data manipulation in order to populate the various workbooks. This data manipulation is currently handled outside of our monetised risk model and is highly susceptible to errors. On top of this the proposed NARMs funding mechanism now requires the risk delta to be aligned with the associated allowance, which adds a new layer of complexity to an already complicated process. Regrettably, our

²³⁶ Appendix 021 – SGN Transmission Integrity Compliance – Dec 19, section 6.8.2 pg 41. Gave examples of: high pressure filters, condensing boiler systems, unexpectedly rapid deterioration of pressure systems. Overall requiring an average of £5m a year to be directed to these 'unforeseeable' interventions.

²³⁷ SGN Business plan, Dec 19, section 12.2.8, pg 121

²³⁸ RIIO-2 Draft Determinations – SGN Annex, pg 63 "We consider the work is BAU activities and SGN associated costs within its totex baseline."

²³⁹ It is our understanding that the uncertainty mechanism has been removed and the funding has not been added back into baseline allowances to go through the benchmarking process.

observation is that the work undertaken to further develop NARMS has created an inconsistency with the data collected/reported/used by the Ofgem cost assessment team and set out in the capex and repex BPDs.

Ofgem has attempted to align cost and risk delta by creating a new 'NARM output setting model'. However, the model applies a high level of assumptions²⁴⁰ and fails to accurately derive this alignment. Recognising this, Ofgem has proposed a new data template to resolve the misalignment issue. This would be a mammoth task not just due to the number of data points but also because additional work is required to split risk delta. This issue has been highlighted in our previous discussion with Ofgem²⁴¹.

Furthermore, Ofgem has proposed a Delivery Adjustment Factor (DAF) aimed at reducing windfall gains. Currently by default, any underspend that decreases the final Unit Cost Risk (UCR) is subject to DAF unless network companies can demonstrate the savings are due to genuine efficiencies. This would require network companies to monitor both cost and associated evidence over the course of the GD2 period. With the inclusion of DAF, the mechanism removes any incentive to risk trade and optimise investment.

In the NARM annex²⁴², Ofgem's assessment focus has concentrated on the electricity transmission operators. There is no evidence presented to suggest that GDNs have or could benefit from windfall gains. Secondly the opportunity for risk trading is limited due to the obligations set out in Pipeline Safety Regulation. We ask therefore that Ofgem demonstrate that there is a material risk of consumer harm in order to justify the investment.

On this basis we ask that the decision to make this extension to NARMS is carefully re-evaluated as we are concerned that the value of a monetised risk approach and the insights it provides (along with the time and resource invested to date), could become redundant due to overcomplexity.

Type 1: Factual or computational errors. Errors in aligning cost and risk delta the associated complexity of resolving.

NARMQ3. Do you agree with our proposed approaches to calculating funding adjustments and to application of penalties?

In our response to NARMQ2, we set out why we had a low level of confidence in how the NARMS methodology has developed since the start of the RIIO-2 planning process and the high risk of unintended regulatory consequences.

Following our review of the NARMS workbook our assessment has highlighted:

- The new NARMS funding mechanism introduces the concept of the 'unit cost per risk benefit' which aligns the risk delta with the associated cost. The final UCR would then determine our final allowance at the end of GD2 which would be based on the cost incurred and monetised risk delivered. The current version of the NARMS Funding adjustment penalises companies for an increased outturn cost even if the increase could be justified. Such scenario could arise when an unforeseen technical issue comes to light in GD2 where the cost of delivery results in higher UCR and intervention is mandatory in order to comply with legislation. Penalising in like cases seems unreasonable; we believe justified increases of UCR are acceptable and thus should be funded through the NARMS funding mechanism.
- Currently, the Delivery Adjustment Factor is applied to the final UCR such that any reduction in outturn cost compared to baseline is by default treated as windfall gains. In order to demonstrate efficient delivery, companies will be required to provide evidence which involves tracking both cost and technical justification at project/scheme level. However, the NARM annex provides no guidelines on the definition or process to justify efficient delivery.
- In the Draft Determination, it is clear that UCR is effectively the new network target and plays a significant role in determining our final network allowance. Thus, to fully understand the impact of different scenarios cost data is necessary. And without this alignment currently unavailable we are unable to assess the impact this mechanism would have on SGN's funding.

Type 2: Inconsistencies in stated approach or in the application of a methodology. Appear to be a default assumption of penalties with lack of guidance as to how a change may be considered justifiable or not.

NARMQ4. Do you agree with our proposals in regards to requirements for justification cases?

²⁴⁰ RIIO-2 Draft Determinations – NARM Annex, para 2.10, pg 9

²⁴¹ Discussed in GDN specific working group highlighting our concern around level of assumption made to populate N1.3tab.

²⁴² RIIO-2 Draft Determination – NARM Annex, appendix 7

It is important, given the uncertainties and the error margin in the model, that a deadband is applied before any penalties are incurred.

SGN supports the current requirement for justification in cases of under and over-delivery of NARMs target. However, without a full outline of what the justification should include and how it should be presented, we are limited to simply agreeing that cases need to be put forward for the above circumstances.

We suggest a dead band is included as part of NARMs, especially when assumptions are applied at target setting stage. Our risk output would most likely be above or below the target and since we have no dead band, hence a justification case will always be required.

Type 2: Inconsistencies in stated approach or in the application of a methodology. Needs to be clarity on what would constitute an appropriate justification for over or under-delivery.

4.4.6 Capital projects

We have significant concerns set out below regarding how the PCDs will operate in practice. As they are set out in the draft determination the requirement to return allowances for late or different delivery places an excessive level of delivery risk on the network company.

Under the currently proposed structure, PCDs place an impracticable level of delivery risk on network companies. A network company would be faced with the prospect of having to return allowances even if the project was largely complete, or if there was a well-justified reason for departure from the design set out in the EJP.

Such penalties put a high-risk premium on projects due for delivery at the end of the price control period and undermines any incentive to deliver a project more efficiently if a design improvement opportunity materialises. The design of the PCD has to be proportionate and accommodate normal design and delivery tolerances without threatening a network's entitlement to allowances.

We considered it was appropriate (in our Business Plan) and transparent to submit them as PCDs as if we don't deliver the project then those allowances should be returned to customers. However, we assumed an element of pragmatism would be applied to in-flight projects. The position set out in the draft determination does not appear to allow for this.

We encourage Ofgem to reconsider this approach and confirm that it is delivering the desired customer outcomes.

Type 3: Disagreement as to how the methodology should be applied. Specifically, regarding the treatment of inflight PCDs at the end of the price control and variations in the project deliverables.

GDQ22. What are your views on our proposal for a common PCD for capital investments?

We agree in principle with the use of a common PCD for capital investments, subject to appropriate definition and clarification of terms, although we have specific concerns regarding design that are set out in our response to GDQ23.

Regarding the proposal for a common PCD we would request a clear definition is given for a capital projects PCD and a common PCD. We need to clearly understand the differences between a PCD (i.e. as applied to the Redacted Project) and a capital projects PCD. If there is a co-dependency or cross-collateralisation between projects in a capital project PCD (i.e. that not delivering one project invalidates the delivery of all projects) then this would clearly be a major area of concern that could significantly change the risk definition of the projects.

Type 6 – Broad agreement with position put forward in draft determination

GDQ23. What are your views on our proposals for delivery, clawback and deliverables for the capital projects PCD?

The approach to recovering allowances for projects that are underway or have deviated in part from their original EJP, places unacceptable levels of risk on the network company that has to deliver them and needs to be reconsidered.

We have strong concerns that the proposed design principles will render the delivery of a large number of projects unaffordable and undeliverable. Whilst we fully agree with the use of PCDs to capture directly funded outputs in order to deliver customer value, it is important that PCDs are appropriately designed and that they give an appropriate reflection of risk involved.

As it is currently proposed, specific design issues include;

- **Alignment with agreed specifications**²⁴³. During the PCD workshop²⁴⁴ the impression was given that the EJP would only become a point of reference in the event of a significant change in output (i.e. as a result of an innovation or to reflect changing needs) and then it was to be a point of reference to protect against consumer detriment. This contrasts with the draft determination which specifies *“Failure to deliver an investment in line with these agreed specifications will result in the full cost of the investment being recovered”*. This is a substantial and unwarranted departure from output-based regulation to input based regulation, and there are significant implications of such a move that need to be considered very carefully in an impact assessment and consulted upon fully. Immediate concerns would include;
 - the customer costs of increased stranded asset risk associated with progressing with a project that is no longer appropriate due to the changing needs case;
 - reduced incentive to promote efficiencies or innovation if there is a risk that it may then stray from EJP and risk the funding of the PCD.
 - Exposure to a higher cost base associated with limited supply and contractor options. For example, land may not be fully secure, so each land parcel becomes a ransom strip which could risk funding through the PCD.
- **Timing of delivery**²⁴⁵. Whilst we fully recognise the importance of delivering outputs that are funded and committed to, it is necessary to retain a level of pragmatism enabled within the licence. Large capital projects take time to develop, often experience unexpected delays and involve a balance of risk between the contractor and the employer. By introducing an absolute requirement for 100% delivery and a penalty of loss of funds for non-delivery the risk profile of the project is substantially changed. For the projects scheduled for completion in that final year of the price control the cost of securing the necessary contractual delivery obligations and liquidated damages will significantly increase the cost of delivery in a way that has not been priced into the allowances. Rather than take the risk, the likely outcome is to have risk averse go / no-go decision at an early stage of the project and only progress projects which are certain of delivering in the price control window and returning the allowances for projects that aren't absolutely certain. The alternative is to risk spending the money and having to return the allowances if the project is even partially delayed. This means important projects may not progress and the risk to the consumer associated with equipment failure increases. Clearly this is not in the best interests of our customers.
- **Disproportionate risk exposure**. With the above issues both requiring a return of allowances there is a disproportionate risk exposure placed on network companies surrounding the delivery of a PCD which is out of kilter with any consumer harm created by a delay or variation in the delivery. This adds a significant risk premium to the project that has not been factored into the allowances requested.

To have a workable PCD, it is important that a network is able to provide a justification as to why a project is delayed, and to have the confidence that if a project is clearly well progressed in construction and with a clear programme finalising outstanding work in the near future that it will not be expected to return all allowances.

Similarly, to have a workable PCD, it is important that deviations from the EJP should be assumed to be appropriate and reasonable as long as the output set out within the EJP is delivered.

It is concerning that such fundamental principles have not been clearly set out and discussed prior to publication of the DD. If the level of risk proposed had been fully appreciated at the time of our business plan submission then the risk premia associated with such projects could have been included in scope when we approached third parties for their cost estimates. This risk premia would have been included within our sensitivity analysis and potentially our baseline costs as an imposed inefficiency. At this point we would estimate that a risk premia of an additional 20% would need to be added to any project due to be completed in the latter years of GD2.

²⁴³ RIIO-2 Draft Determinations – gas distribution annex, para 2.221, pg 73 *“Delivery: We expect these investments to be delivered in full, prior to the end of RIIO-GD2, as per each investment’s Engineering Justification Paper (EJP) in order to retain the allowed funding. Failure to deliver an investment in line with these agreed specifications will result in the full cost of the investment being recovered, as will partial or late delivery unless we receive compelling justification.”*

²⁴⁴ Cross-Sector PCD Workshop, 18th August 2020.

²⁴⁵ RIIO-2 Draft Determinations – gas distribution annex, para 2.221, pg 73 *“Expected timing of delivery: We consider that each investment must be delivered in-full by the end of RIIO-GD2 as proposed by the GDNs.”*

Type 3: Disagreement as to how the methodology should be applied. There is a significant difference between what is operationally achievable in setting out these projects, and it seems impractical to constraint a project to an EJP that could have been written up to 5 years previously²⁴⁶.

4.4.7 Other policy – Physical Security

GDQ24. Do you agree with our approach for funding physical security for the GD sector? And do you agree that in light of the proposed baseline totex that the physical security PCD is no longer required for the GD sector?

We agree that a bespoke PCD is not appropriate given the nature of the work that is being proposed.

Type 6 – Broad agreement with position put forward in draft determination

4.4.8 Other policy – NTS exit capacity

GDQ25. Do you consider that the enhanced obligations framework for exit capacity and the additional information being sought are appropriate?

We support the enhanced obligations framework. The exit capacity incentive worked well to bring about a step change in performance in GD1. For GD2 we believe it is no longer necessary.

SGN recognises and supports the intention of the enhanced obligations framework to ensure a transparent and efficient process for booking exit capacity which accurately reflects our 1:20 Peak Day Demand Forecast. In GD-1 we believe the National Transmission System (NTS) exit capacity incentive was appropriately targeted at driving the right behaviour to ensure efficient booking of capacity on the NTS, which is now embedded as business as usual. However, looking forwards, there are wider limitations in the current exit capacity regime which will restrict GDNs' ability to accurately reflect our 1:20 Peak Day Demand Forecast in future.

For example, the existing exit capacity regime does not, in all instances, allow GDNs to accurately reflect peak day forecasts due to the application of an associated user commitment²⁴⁷, which requires GDNs to hold the capacity for a minimum of 3 years from the point the capacity is taken²⁴⁸. In GD2, in the context of reducing demand as a result of energy efficiency measures, the duration of a user commitment is likely to result in GDNs being required to retain capacity bookings in excess of Peak Day demand and therefore not satisfying the enhanced obligations.

To mitigate the risk associated with user commitment, a GDN may opt to utilise short-term (annual) capacity, in which case they may be in a position to release capacity back to NGGT in the event of reduced demand. However, should the capacity be surrendered, there is the risk that this capacity may be substituted away from an offtake (exit substitution donor point), leaving no guarantee that capacity could be made available should demand increase again at the relevant NTS offtake. This may drive GDNs towards enduring capacity despite the associated commitment required.

SGN is already engaging with NGGT and participating in industry workgroups to discuss the above limitations and opportunities for further efficiencies. In order to support this development work, we encourage Ofgem to put in place specific obligations on NGGT to ensure that the relevant methodology statements for both exit capacity release and exit substitution are updated to align with the required efficient capacity booking processes described in the enhanced obligations. It should be noted that changes to licence, UNC and NTS capacity methodology statements will be required to support the enhanced obligations in GD-2.

Type 6 – Broad agreement with position put forward in draft determination

²⁴⁶ Our project EJPs were largely drafted by the July 2019 submission, so projects scheduled for completion in the 2025 summer construction window will have been drafted six years earlier

²⁴⁷ The current NGGT Exit Capacity Release Methodology places a user commitment on any enduring booking made by GDNs, whether NTS investment is triggered or not.

²⁴⁸ User commitment requires a GDN to hold capacity for 3 years from the point at which the capacity is taken, however in practice this can lead to a far longer commitment. For example, capacity booked in year 1 in relation to year 4 would require a 3 year commitment from year 4, which would therefore result in a 7 year commitment.

4.4.9 Cyber resilience

Redacted

Redacted

Cyber resilience operational technology

Redacted

Redacted

Cyber resilience informational technology

Redacted

Redacted

Redacted

Redacted

Redacted

Redacted

Redacted

Redacted

Redacted

Redacted

Cyber Initiative	Criticality	Minimum Investment to maintain a safe & reliable network

Redacted

Redacted

4.4.10 Other policy – GDN record keeping

Effective record keeping is an important issue and one that we take very seriously. We have been able to provide a robust and detailed plan because it is underpinned by a strong asset record.

We have concerns over two aspects of the proposals put forward, the first is the proposal to introduce a licence condition on record keeping part way through the price control, which we consider to be inappropriate. The second is the decision to reject the bespoke outputs for multioccupancy buildings that appears to be inconsistent with other statements. **Cross sector approach to record keeping**

We are concerned by the apparent proposal to introduce a licence obligation part way through a price control period with consequences for non-delivery²⁶⁸ particularly given that we recognised the issue and presented a proposal as a PCD that was rejected²⁶⁹.

We are strongly of the opinion that Ofgem, given the volume of information that they have received over the last two years, should have a good understanding of any deficiencies to consult on and ensure that any licence obligation is appropriately funded now rather than postponing until part way through a price control.

Reflecting on the recent experience in the development of NARMS reporting, as set out in [\[section 4.4.5\]](#), we are concerned that this could create a disproportionate reporting burden with no or at best limited value adding benefits for consumers.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. If a licence obligation is anticipated, it should be introduced at the start of the price control when it can be calibrated with allowances necessary to deliver.

MOB record keeping.

We fully agree with the position stated that “it is essential for GDNs to have accurate records of relevant assets as part of developing and maintaining an economical and efficient network.”²⁷⁰ We are therefore confused by the decision to reject our bespoke PCDs for ‘riser survey for building < 6 storeys’ and ‘riser isolation valves >6 storeys’. As set out in [\[section 4.6\]](#). We ask that you reconsider these PCDs in the light of this statement.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. Inconsistency between emphasis placed on the importance of accurate records and the rejection of bespoke outputs to improve records.

4.4.11 Sub-deducts off risk

All identifiable sub-deduct arrangements within SGN will have been complete during GD1 and we are not aware of any outstanding work that needs to carry over to GD2.

4.5 Bespoke output delivery incentives

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

We broadly agree with the position taken on bespoke ODIs. The social value collaboration incentive has pushed the boundary forward in terms of techniques for valuing our operational impacts (both negative and positive) and has the potential to be developed further as robust and consistent measurement methodology. We would support the development of a consistent methodology along these lines, being worked on by all networks.

- **'Bespoke social value collaboration incentive'** is an important ODI that stretches networks to go beyond business as usual in a manner that requires significant management focus in order to deliver consumer benefit that is strongly supported by our customers and stakeholders. This is discussed in more detail in [\[section 4.2.12\]](#)

²⁶⁸ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.253, pg 80 “We are currently reviewing how best to take this work forward to deliver value for consumers. At some point during the RIIO-GD2 period, we will engage with stakeholders on the possible approaches, including whether introducing a licence obligation is required to ensure companies fully comply with our minimum expectations and understand that there could be consequences of non-delivery.”

²⁶⁹ RIIO-2 draft determinations – SGN, pg 25 – rejected due to a lack of sufficient evidence.

²⁷⁰ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.254, pg 80

- **‘Theft and own-use of gas’** is an important area of focus and agree with it being brought into a broader set of measures based around the environmental action plan.
- **‘Biomethane capacity ambitions’** remains an important marker that our customers and stakeholders look to us to continue to achieve. We agree that we cannot directly control the investment in new biomethane capacity, however, there are measures that we can take to support related investment by providing useful information in a timely manner and enabling higher injection rates. Our stakeholders told us that this was important²⁷¹ and we will continue to monitor our progress against this ambition as a part of our EAP.
- **‘12-hour standard’** the 12 hours gas escape repair standard is a legislative requirement under Gas Safety Management regulations 1996, and we have delivered a consistently high performance through GD1. It remains an important indicator to demonstrate that we are delivering repairs quickly and efficiently. We agree with the view set out in the draft determination²⁷² that these high standards of delivery are now business as usual and it should be noted that we consistently operate to a higher standard of business as usual than any other network²⁷³. Given this was business as usual, we did not think that that it was eligible as a CVP. We note that other networks have successfully claimed this as CVP and we are looking for Ofgem to apply a consistent approach across all GDNs recognising our frontier performance in this area.

Type 6 – Broad agreement with position put forward in draft determination

4.6 Bespoke PCDs

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

We are pleased that bespoke PCDs were accepted for key projects and improving biomethane deployment. We are concerned that important bespoke PCDs were rejected, these include PCDs targeting multi-occupancy building record keeping and demolition of legacy assets.

We considered the use of PCDs as an important structure to help us communicate with our customers and stakeholders in a clear and transparent manner the outputs that we would be delivering in GD2 that were additional to those that we delivered in GD1. For each bespoke output we could clearly set out both the deliverable and the cost to deliver it and we could test this with our customers. We recognise that the regulatory structure that supports them may differ due to practical constraints.

There are some specific bespoke PCDs where we disagree with the way they have been assessed. The majority, where we have concerns, they have been addressed elsewhere and reference. The PCDs where we have specific concerns which are not addressed elsewhere are Riser isolation valves survey >6 storey; Riser Risk Inspections Surveys <6 storey buildings; Responsible Demolition And Redacted set out below.

Bespoke ‘Riser isolation valves survey >6 storey’

Riser isolation valve surveys for high rise buildings are an important part of the ensuring ongoing safety, given the frequency with which they are built over or otherwise obstructed. We proposed to halve the current inspection interval from ten to five years.

We disagree with ‘Riser isolation valves survey >6 storey’ being removed as an output and suggest that it should be reinstated given the expectation of *“related to MOBs, it is essential for GDNs to have accurate records of relevant assets as part of developing and maintaining an economical and efficient network.”*²⁷⁴

As set out in our business plan²⁷⁵ following the Building Regulations and Fire Safety review undertaken by Dame Judith Hackitt²⁷⁶ we proposed to introduce a programme of fixed interval inspection of external safety isolation valves to multi-

²⁷¹ Biomethane and Gas Entry Connections Customer Survey (ref 082) and Biomethane and Gas Entry connections round table event (ref 095)

²⁷² RIIO-2 draft determinations – SGN, table 20 row 4, pg 20

²⁷³ Appendix 014 – SGN – Repair Services – Dec2019, figure 5, pg 10

²⁷⁴ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.254, pg 80

²⁷⁵ Difference set out in SGN Business Plan – Dec 2019, section 7.5.9 and Appendix 019 – SGN – repex – Dec 19, pg 39 and Appendix 016 – SGN – Asset Maintenance pg 33

²⁷⁶ <https://www.gov.uk/government/collections/independent-review-of-building-regulations-and-fire-safety-hackitt-review>

occupancy building risers above six storeys. Often, we find that access to isolation valves becomes obstructed over time and marker plates and posts removed which can directly impact the ability to respond in a timely manner to find and operate the valve in the event of an emergency, such as a fire in the building. Our current procedure is to reactively respond when we identify an issue with an isolation valve. In our plan we proposed to engage in an active process of regularly survey and respond to accessibility issues for risers supplying MOB's with more than six stories.

The bespoke output for riser inspections proposed in our plan was rejected on the basis that Ofgem have indicated that it is a baseline allowance²⁷⁷. However, this appears to be a misunderstanding as to the bespoke nature of our proposal. It appears that while the costs of the valve inspections have been normalised out for the purposes of regression analysis as part of the MOB's totex, they have not subsequently been re-included.

This work was over-and-above that undertaken in GD1. Given the risk that valves become obstructed, there is an emerging requirement to inspect on a more frequent basis in order to proactively remediate any issues. We proposed an inspection cycle of five years, rather than the standard ten. This bespoke PCD is in line with the observation in the draft determination that it is essential for GDNs to have accurate records²⁷⁸.

Type 2 - Inconsistencies in stated approach or in the application of a methodology. Inconsistency between emphasis placed on the importance of accurate records and the rejection of bespoke outputs to improve records.

Bespoke 'Riser Risk Inspections Surveys <6 storey buildings'

Riser inspection surveys for buildings less than six stories are important for us to have the asset data that will enable us to appropriately assess risk and move from reactive to proactive repair improving safety for our customers.

We disagree with 'Riser inspection surveys <6 storey buildings' being removed as an output and suggest that it should be reinstated given the expectation of *"related to MOB's, it is essential for GDNs to have accurate records of relevant assets as part of developing and maintaining an economical and efficient network."*²⁷⁹

Within the business plan we also proposed to significantly expand the current practice of surveying only buildings that are greater than six storey multi-occupancy buildings to include the surveying of buildings which are less than six storeys²⁸⁰.

Our plan explained how this work is over-and-above that undertaken in GD1, as riser work has previously been focussed on high-rise buildings, i.e. those in excess of six storeys. Multiple events have occurred since this GD1 workplan was set – including the Grenfell fire, subsequent Hackitt review and multiple interventions from HSE – and therefore the additional requirement to complete a more wide-ranging programme, including extending the focus to medium-rise buildings, has been identified as a step-change in approach for GD2.

In our plan the bespoke output for riser inspections was rejected on the basis that Ofgem have indicated that a baseline allowance²⁸¹ would be included. However, as with the isolation valve repairs, it appears that while the costs of the inspections have been normalised out for the purposes of regression analysis as part of the MOB's totex, they have not been subsequently re-included. As such, the modelled MOB's totex allowance is based on the outputs of these surveys but does not cover the surveys themselves. As a result, by increasing the number of surveys the associated volume driver is not included in the regression model and the associated costs will as a result be regressed away. Given the number of surveys that we are proposing to carry out in GD2, 127,500 surveys²⁸², the lack of an appropriate volume driver in MEAV and the associated costs implies the work is unfunded.

By not completing this survey work we will not improve our understanding of the health of an important asset category. Rather than proactively inspecting and developing effective risk models, we will be limited to reactive response undertaking work on a building-by-building basis as issues arise. We do not believe that this approach is consistent with

²⁷⁷ RIIO-2 draft determinations – SGN, pg 25 *"We provide SGN with a cost allowance through our common approach for modelled MOB's totex. We do not consider there to be sufficient evidence to justify a bespoke PCD."*

²⁷⁸ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.254, pg 80

²⁷⁹ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.254, pg 80

²⁸⁰ Difference set out in SGN Business Plan – Dec 2019, section 7.5.8 & 7.5.7, pg 72 and Appendix 016 – SGN – Asset Maintenance – Dec 19, pg 33 & 34

²⁸¹ RIIO-2 draft determinations – SGN, pg 25 *"We provide SGN with a cost allowance through our common approach for modelled MOB's totex. We do not consider there to be sufficient evidence to justify a bespoke PCD."*

²⁸² Difference set out in SGN Business Plan – Dec 2019, table 7-2, pg 72 and Appendix 016 – SGN – Asset Maintenance – Dec 19, pg 36

the current pipeline safety regulations which give a legal duty to maintain and inspect all assets²⁸³, or consistent with the observations set out in the HSE's inspection report of GDN riser management procedures²⁸⁴ and their expectations that the findings of the Hackitt report be applied by GDNs²⁸⁵. In their assessment of SGN, the HSE noted *"that the system only applied to buildings over 5 stories at present but would be extended to all multioccupancy buildings in due course."* In addition to engaging with and responding to the observations of the HSE we also directly engage with our customers on this²⁸⁶ and tested its acceptability directly with our customer base²⁸⁷. (type 4 – New evidence being presented)

This bespoke PCD is in line with the observation in the draft determination *"related to MOBs, it is essential for GDNs to have accurate records of relevant assets as part of developing and maintaining an economical and efficient network."*²⁸⁸

Type 2 - Inconsistencies in stated approach or in the application of a methodology. Inconsistency between emphasis placed on the importance of accurate records and the rejection of bespoke outputs to improve records.

Responsible Demolition

We have inherited a series of legacy assets that date back to time of our divestment from National Grid Transco. Today, these assets are redundant, present a risk to members of the public and have an ongoing operating cost associated with them.

Our responsible demolition programme²⁸⁹ is a work category we proposed to remove legacy assets that cross road, river or rail, due to the heightened risk associated with their location and the ongoing financial investment into a non-live asset which their retention requires. These assets pre-date SGN being incorporated.

On reflection our proposal in the plan could have set out more clearly why this was an issue now. Abandoned pipe work that is exposed to the air and public (i.e. crossing a river, road, or rail line) was identified as a specific risk in 2014, followed by an HSE intervention²⁹⁰ requiring specific remediation action by the specified deadline of December 2019. As a result, SGN installed access prevention measures to exposed assets and is now fully compliant with the HSE's requirements. Despite not carrying a live gas supply, SGN has a legal requirement²⁹¹ to maintain these assets, which attracts opex expenditure to maintain the pipes, the brackets and the access prevention measures. They also pose a risk of disruption, for example if an asset were to fall into the road or railway beneath. In order to identify opportunities to remove this ongoing financial investment and to fully remove any potential safety risk despite the prevention measures in place. In July 2019 we proactively surveyed our full population of 82 assets²⁹² with each crossing resulting in a prioritised list of 32 assets recommended for removal.

²⁸³ Pipeline Safety Regulations 1996, Schedule 3, 1(a): *An emergency shut-down valve shall be incorporated into the riser of a pipeline in a position in which it can be safely inspected, maintained and tested*, and Part II, 13 *The operator shall ensure that a pipeline is maintained in an efficient state, in efficient working order and in good repair.*

²⁸⁴ HSE Network Operators Inspection Report, Sept 2019, pg3, 2.5: *"A lack of quality records in relation to the design, installation, inspection and maintenance of gas networks supplying high rise dwellings is a common observation and restricts the operator's ability to provide a robust demonstration of network integrity."*

²⁸⁵ HSE Network Operators Inspection Report, Sept 2019, pg13, 7: *"The Hackitt Report and recommendations should be used as a benchmark."*, *"the development and implementation of suitable audit processes is required to validate risk-based inspection maintenance and replacement decisions"*.

²⁸⁶ Moving forward together reference *"Stakeholders viewed the option to increase our survey programme so that it includes medium-rise buildings as something we should be doing."* MFT Workshop November 2018 London (ref 013) and MFT Workshop November 2018 Edinburgh (ref 014)

²⁸⁷ Acceptability testing – *"Customers exhibited high levels of acceptability for our proposals to enhance the reliability & safety of gas pipes, for example by...doing more inspections of medium-rise block of flats. This additional element attracted the highest acceptability levels of all the options tested in this phase of research, scoring 85% in total for southern customers and 89% in total for customers in Scotland."* Business Plan Acceptability Testing Phase 2 (ref 079)

²⁸⁸ RIIO-2 Draft Determination – gas distribution annex, 9th July, para 2.254, pg 80

²⁸⁹ SGN Business Plan, Dec 19, section 7.5.6 pg 71; Appendix 016 – SGN – Asset Management – Dec 19, section 6, pg 32 and EJPs: 'SGN Aman - 001 AbanCross So EJP Dec19' and 'SGN Aman - 001 AbanCross Sc EJP Dec 19'

²⁹⁰ An incident occurred in 2014 in Cadent's network, following which a Coroner's letter was issued to all GDNs, with the recommendation that access prevention measures be put in place on exposed pipelines. In 2018 the HSE highlighted to SGN that permanent protection measures were required by the end of 2019, specifically requiring this work to be completed in advance of the end of the price control. Full SGN compliance has now been confirmed by the HSE.

²⁹¹ Guidance to Pipeline Safety Regulations 1996, pg21, Regulation 13, 62 and 63: *"It is important to recognise that a pipeline includes associated equipment such as valves, bridles and other primary attachments."*, *"A pipeline which is out of service should also be maintained in a safe condition"*

²⁹² Total of 82 assets, covering 1,352km were surveyed, of which 32 assets, covering 596km have been identified as a priority for removal.

The QEM report confirmed that the volumes appeared to be sensible and agreed with the legitimacy of the proposed solution from a technical perspective²⁹³. The draft determination however suggested that this should be managed as a part of BAU activities²⁹⁴.

As these assets are a legacy issue, pre-SGN incorporation, and are the direct result of an HSE intervention, these sites have only recently been assessed in terms of identifying a permanent solution to their risk exposure. As such they are akin to the gas holder demolition programme and in a similar manner it is appropriate that this work should be considered as over-and-above business as usual. In GD1 there was not an active programme through which to manage and mitigate the risks associated with these assets, beyond the installation of access prevention measures and ongoing maintenance. Similarly, we are not aware of any other network that has gone out to proactively identify and develop a programme to prioritise and address these legacy assets and we consider this to be unique to SGN.

If responsible demolition is not permitted, then we need to recognise that there will be a corresponding increase in operating costs associated with annual inspections, safe access to 3rd party assets (where it is a rail crossing) and remediation work, where these costs could otherwise be avoided through removal of the asset. **We estimate an annual cost of £158k/yr in Scotland and £105k/yr in Southern**²⁹⁵.

Type 4: New evidence being presented – improved clarity on the regulations that have brought this forward as an issue to be addressed in RIIO-GD2.

Is an immediate and direct concern as we do not know the condition of the pipeline and are unable to access it make asset specific assessment. This lack of visibility and unknown risk is the main driver for completing the work.

Redacted

The immediate and direct concern to us is the unknown status of the pipeline and our legacy design issues removing our ability to carry out an effective condition assessment from which we can estimate the corresponding risk.

We believe that the recent nearby pipe failure and the erosion event on the riverbank, both described in the engineering justification paper satisfy the ‘needs case’ for this project to progress during GD2 as proposed in our business plan.

In the DD, it appears to be suggested that this could be progressed using funds provided for >2” steel mains. However, this investment has currently been rejected in full and our resubmission for >2” steel reflects our requirement to manage the risk posed by small diameter low pressure steel, not large diameter steel operating at intermediate pressure which is widely known to be more expensive, particularly as our proposed solution requires a directional drill under the existing river. This is the reason for setting this project out as a bespoke output.

Bespoke PCDs covered in other sections

Where a bespoke PCD has been covered in an alternative section of the DD response we briefly reference it here for completeness and reference when it is discussed more thoroughly. These include;

- **“Increased fleet replacement’ and ‘low emission vehicles’**. We agree with the general approach to request further information and will provide this in the template provided by Ofgem in email dated 27 August. This information is due 12 September. The explanation provided in the draft determination refers back to “poor justification of costs assumptions”²⁹⁶. We recognised the uncertainty in costs and the pace of technological change over the five year GD2 period and we proposed a use-it or lose-it mechanism governed by a stakeholder lead environmental steering group to ensure value for money. We consider this an appropriate structure to manage that uncertainty. The alternative, of which there is a brief overview in [\[GDQ12\]](#) is that we provide a well evidenced but static view of the market today, and work within that according to the most economically viable technology. We will continue to work with Ofgem to get to the best position on this.

²⁹³ GD2 Engineering Justification Paper Reviews, QEM, QEM-1910-RPT-002 - Scotland: QEM Report -QEM 1910 - page 59 row 3 and Southern QEM Report -QEM 1910 - page 66 row 4

²⁹⁴ RIIO-2 Draft determinations – SGN, pg 25 “We do not consider this warrants a bespoke output. GDNs should manage their redundant assets responsibly as part of their BAU activities.”

²⁹⁵ This is based on a maintenance inspection cost of £250 per inspection, access and supervision costs of £25k for sensitive sites and a 20 year programme of bracket replacement at £5k per each

²⁹⁶ RIIO-2 draft determinations – SGN, table 21 row 4, pg 21.

- **‘SIU Biomethane’** and **‘Biomethane improved access trials’** have both been proposed to come under NIA funding which we accept and discuss in more detail in [\[GDQ12\]](#).
- **‘Climate change Adaptation’**. We are concerned with these costs being moved into baseline funding as we consider them a significant step forward on anything that has been completed in GD1. Our concern with the approach that has been taken is that this allows us to carry out the very important baseline studies, but the funding does not accommodate a change or opportunity to respond in a significant way to the outcomes of that study. Clearly there will be multiple low cost and marginal improvements that we can undertake, but the opportunity for a substantial step change that requires significant investment will need to wait until the next price control period. This is discussed in more detail in [GDQ14](#).
- **‘Installation of PV - occupied sites’, ‘Installation of PV – governor sites’, Utility management and Biodiversity improvements**. We are concerned with the proposal to move these costs into baseline funding as we believe the activity is a significant step forward on anything that has been completed in GD1. As responded to in [GDQ12](#) it is important that their funding does not get regressed away due to the lack an appropriate volume driver and lack of ambition in the frontier setting company.
- **Innovation roll out – StentBags / HVGET**. These are important innovations that will deliver a reduction in emissions related to repair and replacement work. Its justification is based solely on environmental and safety benefits, rather than commercial benefits, so we have re-assessed the CBA, in light of comments received and, as set out in [section 4.3.4](#), have resubmitted²⁹⁷.
- **‘Land remediation’**. We agree with the approach proposed.
- **‘Cyber resilience’**. We agree that this should be covered by a common cross-sector use-it or lose-it mechanism. As we set out in [\[section 4.4.9\]](#) we think that an appropriate level of seed funding should be provided for both IT and OT cyber to enable projects to be maintained during the period of the reopener assessment. We have also emphasised the need for clear assessment criteria to be provided.
- **‘IT technology readiness’** and **‘Open data sharing’**. We agree that these should be covered by the technical assessment and the modernising energy data reopener as set out in section 4.2.1]. We are concerned that the focus on capital expenditure will overlook an important element of operating costs and the importance of having a highly trained and skilled workforce. As a result we have proposed an operating cost scalar, similar to those that have been implemented in the transmission sector.
- **‘Accelerated repex’** and **‘Proactive Steel’**. As we set out in our response to the environmental action plan we believe that these measures are strongly supported by our customers as well as driving environmental benefits and reducing safety. As we set out in [section 4.3.4](#), given the level of customer support and the environmental impacts we believe that bespoke PCD should be permitted.
- **‘Iron stubs’**. We agree that iron stubs should be managed in a consistent manner across all networks and therefore is not appropriate as a bespoke PCD. In [section 7.3.4](#) we have set out some of our concerns with the structure of the proposed uncertainty mechanism that we would like to consider in more detail.

4.6.1 Biomethane improved access rollout

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

We support the proposal for a bespoke biomethane technology rollout PCD and agree to the dissemination of learnings through the NIA knowledge portals.

Following engagement with stakeholders regarding SGN’s existing biomethane connections at two industry events in September 2019²⁹⁸, ²⁹⁹ we identified the ability to access entry capacity on a reliable and stable basis is a substantial risk, not only for the ongoing financial success of existing plants but also to the progress of new developing projects. SGN’s distribution entry connections stakeholder workshop³ provided us with industry opinion on the 3 areas we intended to include in our business plan. Continuing access to entry capacity and reduction in propane usage were highlighted by stakeholders as key areas for focus in RIIO GD2. In our Future of Heat Specialist panel event³, held on the 26 August 2020,

²⁹⁷ SGN EAP – 004 – HVGET and StentBag – CBA Sept20

²⁹⁸ Distribution Entry Connections Stakeholder Workshops and Report – 10 September London and 12 September Edinburgh

²⁹⁹ Biomethane and Gas Entry Connections Customer Survey (ref 082) and Biomethane and Gas Entry connections round table event (ref 095)

stakeholders strongly agreed investing in green technology is now even more important to help stimulate the economic recovery post COVID-19.

The in-grid compression project and smarter network control both offer the opportunity to improve entry capacity certainty for existing projects and provide a route to allow new emerging projects the chance to connect to locations on SGN's network which may previously have been unsuitable.

We proposed to trial three biomethane projects³⁰⁰ in our business plan; in-grid compression, smart network pressure control and propane management, which were specific to three locations and identified as being suitable projects to maximise these network capacity access improvements. We also identified further funding under a bespoke PCD to roll out these technologies to other sites with an associated PCD allowance of £10M.

We welcome the acceptance of the bespoke PCD funding allowance to roll out these technologies and consider that although the trial development funding of those technologies has been rejected, they can be financed by a combination of the Network Innovation Allowance (NIA) framework and BAU in the early years of RIIO GD2.

These initial trial projects are important as they will help finalise the parameters that will determine suitability of specific sites to be included within the PCD roll out.

Prior to roll out we agree that it is essential that the functionality to ensure accurate charging zone billing is in place. This will utilise intelligence stemming from two NIC projects, Real Time Networks (RTN)³⁰¹ and Future Billing Methodology (FBM)³⁰². These two projects have tested and proven the technologies associated with the measurement and calculation of energy at specific points in the network, along with the relevant associated modelling. The results are available to the wider industry and will feed into the development of propane reduction projects.

Currently there are three approaches to the utilisation of FBM technology around 'pragmatic', 'composite' and 'ideal' billing solutions that will need to be agreed at an industry level prior to any modification to billing systems to facilitate propane reduction. It is unlikely that 'ideal' billing solutions in the form of customer CV determination devices will be an economic solution and therefore the 'pragmatic' or 'composite' solutions are more likely.

The system changes required to facilitate such charging zone changes will be substantial and will require cross industry cooperation requiring not only changes to transporter central systems but also gas shipper and supplier billing systems. We have already commenced discussions with Xoserve in conjunction with the other GDNs around this subject which may also require key changes to legislative regulations, primarily to the Gas (Calculation of Thermal Energy) Regulations.

We have identified several locations which would be suitable for roll out of these technologies and would benefit from material increases in the total volumes of green gas injected into the network across varying seasonal demand patterns. As and when new green gas projects emerge in GD2 there may be a number of further projects which would benefit from the implementation of capacity access interventions.

Whilst we have detailed named projects within our business plan appendix³⁰³ it will be important to maintain a level of flexibility as to where and when during GD2 the investment is made to deliver these projects. Greater interaction between new and emerging green gas projects and these entry capacity access interventions will be important to ensure new locations benefit from the PCD roll out. SGN will develop the green gas connection process to ensure opportunities to develop sites, reduce connections' costs and increase financial certainty around injection rates are provided.

In relation to the propane management trial technology and the planned PCD roll out, SGN has participated in wider industry discussions and are currently involved in the development of various propane management/reduction projects. The drive to reduce and ultimately eliminate propane from green gas injection volumes is important as it reduces fossil fuel emissions, reduce costs of production and could support increased volumes of green gas injected into the network.

We also recognise that with both the in-grid compression project and the smarter network pressure control there are wider questions to be developed and addressed at an industry level, relating to asset ownership, ongoing operational costs and contractual ring-fencing of entry capacity derived from the implementation of these projects to specific sites.

³⁰⁰ SGN RIIO-GD2 Business Plan Section 9.13, pages 102-104) and Appendix 006 – SGN – Energy Futures -Energy System Transition – December 2019 – Page 23, section 4 (Biomethane and Embedded Entry)

¹ Appendix 006 – SGN – Energy Futures -Energy System Transition – December 2019 – Page 25, section 4 (Biomethane and Embedded Entry)

³⁰¹ SGN, Real Time Networks (<https://www.smarternetworks.org/project/sngn03>)

³⁰² National Grid Gas Distribution, Future Billing Methodology (<https://www.smarternetworks.org/project/ngdglgn04>)

³⁰³ Reference Appendix 6 table 4 page 25

We agree that any learning from the roll out of these capacity improvement projects would be shared with the other GDNs in the spirit of an NIA project, with suitable caveats applied to commercially sensitive information (relating primarily the biomethane operators).

Licensee	Site	Output	Delivery Date	Allowance					Total Allowance (All years)
				21/22	22/23	23/24	24/25	25/26	
Scotland		Roll out of project 1 – propane management	31 March 2026	0	0	0	0	0	0
Southern		Roll out of project 2 – propane management	31 March 2026	0	0	0	0	0	0
Scotland		Roll out of project 3 – in grid compression optimised capacity	31 March 2026	0	0	0	0	0	2
Southern		Roll out of project 4 - smart control of biomethane in the network	31 March 2026	0	0	0	0	0	0
Scotland		Roll out of project 5 - smart control of biomethane in the network	31 March 2026	0	0	0	0	0	0

4.6.2 **Redacted**

SGNQ4. Should we include **Redacted within the Capital Projects PCD, rather than setting a separate PCD?**

Redacted In order to understand where it should sit, we need to understand the implications of each option. For all PCDs, it is important that there is a level of pragmatism in the tolerance levels of delivery and meeting the EJP, otherwise it substantially increases the associated delivery risk.

We would like an opportunity to discuss whether it should be included in the capital projects PCD or as a separate PCD prior to making a final recommendation as we do not at this stage have clarity on the implications of selecting either option.

In the draft determination³⁰⁴ Ofgem sets out a requirement to report on the delivery of the project according to the specification as set out in the EJP and the opportunity to recover the allowance in the event of non-delivery. As we set out in GDQ23 [Section 4.4.6](#), we have several concerns regarding the implications of the timing of the delivery of the asset, the alignment with the EJP and implications and increase in the risk profile associated with non-delivery or variation from the EJP.

It is our view that if interpreted strictly (which is the one that we would have to apply) then the inability to guarantee delivery in the price control period may effectively sterilise major project work for the last year of the price control due to the risk that the allowance may be recovered if it is delay.

4.6.3 Intermediate pressure reconfigurations

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

We agree with the principle of the proposal for the IP services reconfigurations to be a bespoke PCD given the unique characteristics of the project, however the scope of work and the associated allowances of the PCD is incorrect

In our business plan³⁰⁵ submission for this category of work, the proposal was to complete reconfiguration of these IP network installations by installing 85 small PRI's with 9.32km of PE low pressure outlet mains and to replace 515 intermediate pressure services and service governors at a total cost of £3.7m over the GD2 period. In the draft determination Ofgem have proposed to allow the costs submitted for commissioning the small PRI's and service

³⁰⁴ RIIO-2 Draft determinations – SGN, para 2.20 pg 28

³⁰⁵ SGN Business Plan, Dec 2019 section 7.5.4, pg 71

governors at a cost of £2.3m. The reduced amount is due to the disallowing of the cost for replacement of mains and services on the basis that those are already funded under the Tier 1 mains PCD and Tier 1 services PCD.

This is incorrect as the mains and services requiring replacement are steel and not iron pipes.

Separately in the QEM outcome³⁰⁶ of the review of the EJP³⁰⁷ for this programme of work, it states that it should be considered to disallow the costs of the mains and services as the network could fund this under the Iron pipes >30m and steel pipes including associated services EJP.

This is also incorrect as the proposed workload for steel pipes and >30m has not been granted at the time of the draft determination. It is also incorrect as it is not possible to move funding across workloads but still deliver both sets of outputs.

Finally, neither the option suggested by QEM or by Ofgem would be appropriate due to the substantial difference in unit costs. For us to conform to the PSR 1996 regulations and cathodic protection requirements the unit costs for Intermediate pressure are exceptionally high. The additional safety of the working environment needed to work on an intermediate pressure system is significantly more onerous than dealing with low pressure services.

Type 1: Factual or computational errors. Errors in aligning cost and risk delta the associated complexity of resolving.

To enable this PCD to progress it is important that the decision not to fund the mains and services for this programme of work is reconsidered and that allowances cover the full cost of services, mains, small governs and small PRIs.

If we do not have the full allowances as initially requested, we will not be able to deliver the workloads in full – we would be unable to remove all the safety concerns, be non-compliant with current industry standards and it would mean there is a greater risk of failure as the assets continue to deteriorate.

4.6.4 Remote pressure management

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

We support the proposal for a bespoke remote pressure management PCD and agree with the proposed approach of annual reporting and shared learnings.

We agree with the proposed approach to remote pressure management. We are looking to install actuator and pressure loggers³⁰⁸ at 702 district governors across the southern licence area at a cost of £3.5k per actuator and £1.389k per pressure data logger.

Under the PCD proposal we acknowledge and agree that these prices will be for the basis of the PCD, where the allowances will be returned to the customer at this rate for any units not delivered.

We also note and agree with the expectation to share the learnings from this project and the anticipation that this could take a similar form to the knowledge transfer and intellectual property rights for NIA projects.

Further to the above, Ofgem states that approval of these funds is conditional on SGN providing further evidence as to why this investment would not go ahead on the basis of gains from the Shrinkage and Environmental Emissions Incentive ODI-F³⁰⁹. Whilst discussions are still ongoing to finalise the Shrinkage and Environmental Emissions Incentive the value of reduced allowances was considered as a part of the CBA in the assessment of options and these projects still had paybacks of six and five years for London and Southern respectively³¹⁰. On this basis the value of the shrinkage and environmental emissions incentive is insufficient in itself

³⁰⁶ Draft Determinations - RIIO-GD2 Engineering Justification Paper Reviews Annex (QEM)

³⁰⁷ SGN Repex - 013 IP ServiceSc - EJP Dec 19

³⁰⁸ SGN business plan, Dec 19 – section 10.4.1 pg 103 and EJPs: SGN DINT – 010 RemMonLon So- EJP & SGN DINT – 010 RemMonSouth So- EJP

³⁰⁹ RIIO-2 Draft determinations – SGN, para 2.27 pg 31

³¹⁰ SGN business plan, Dec 19 – section 17.3.3 pg 172 and CBAs: SGN Dint - 010 RemMonLon CBA Dec19 & SGN Dint - 010 RemMonSouth CBA Dec19

