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Dear Jonathan,

SGN Response to Ofgem letter

Thank you for the opportunity to respond to the Open Letter on Ofgem's approach to RIIO-2. We are fully supportive of Ofgem maintaining the RIIO framework, recognising the positive platform that this provides whilst looking to build on the lessons learned from RIIO-1 into RIIO-2. We broadly welcome Ofgem's overall approach, and have provided our detailed responses in Appendix 1.

The gas networks were the first sector to move to an output based regulatory regime in RIIO-1 and the regulatory structure has subsequently evolved through its application to the electricity and the water sectors. We look forward to working with Ofgem through RIIO-2 to take this a stage further.

As we work towards the next price control period, we believe there are several important considerations:

- **Robust regulation to build investor confidence:** UK infrastructure has remained an attractive investment opportunity during RIIO-1 with Ofgem's adherence to regulatory principles and recognition of the importance of a long-term regulatory framework. It is important to continue to maintain this robust regulatory regime that investors can have confidence in.
- **Reflecting consumer needs across regions:** We support Ofgem's intention to give consumers a stronger voice in the setting of outputs and incentives. We are looking forward to a price control that therefore demonstrates greater diversity between regions, reflecting regional differences between consumers' needs and the cost of delivering consumer outcomes.
- **Reflecting regional price differences:** In our own experience, the needs of consumers and the cost to deliver outcomes vary significantly between different regions. For example, the cost of labour and the impacts of transport delays from repairs varies significantly between London and Scotland, so it is important that these differences can be brought out in the business plans.
- **Moving towards decarbonisation through innovation:** We see the next price control period as vital for achieving a broader decarbonisation of the gas networks in RIIO-3. It is now widely recognised that the gas networks could have a significant role in achieving the UK climate change targets, specifically around heat, but also transportation. The pace of deployment of available technologies such as biomethane and BioSNG needs to increase in RIIO-2. We would also like to see exploratory technologies such as hydrogen be fully tested and ready for deployment in RIIO-3. In order to deliver the required outcomes in RIIO-3, significant funding will be required to enable these technologies to be applied at scale.
- **Collaboration driving best value for consumers:** The collaboration and sharing of best practice promoted by the RIIO-1 framework has provided benefits for consumers across the UK. This is a strong feature of the innovation stimulus mechanisms (the NIA and NIC) and also extends to customers services and network strategy. Collaboration across networks delivers both short term benefits shared with the customers of the innovating network and subsequent longer term customer benefits across all networks. We need to ensure that this is supported in RIIO-2.

- **The role of gas networks in the energy trilemma:** Gas networks are central to delivering low cost energy to end consumers at least cost, helping to address fuel poverty and creating the opportunity for decarbonisation whilst minimising consumer disruption. The RIIO-2 period is an opportunity to put the gas networks back at the centre of consumer cost, security and decarbonisation policy.

Recognising that this is the start of a process we consider it important that time is allowed for the debate to take place and that we avoid finalising positions on complex topics too early. We welcome the opportunities to continue to engage with colleagues at Ofgem and we look forward to working to progress this thinking over the coming months.

If you have any questions on the points raised please don't hesitate to contact me by email at david.handley@sgn.co.uk.

Yours sincerely

David Handley

Background

We have provided a direct response to the questions that Ofgem have asked in Appendix 1. However, there are some broader over-arching themes to which we would like to draw to Ofgem's attention. We have allocated these into five categories:

1. Future of gas networks
2. Extension of gas networks
3. The role of innovation
4. Allowed returns and financeability
5. Stakeholder and consumer engagement

Our perspective on each of these categories is set out below and form the basis through which we have then answered the specific questions.

Future of Gas Networks

GB benefits from one of the most extensive gas networks in the world which transports the energy to heat almost 85% of UK homes and the vast majority of industrial buildings. The UK and Scottish Governments have committed to targets to reduce carbon emissions by 80% from 1990 levels by 2050, which includes an ambition to almost completely decarbonise heat.

With peak heat demand significantly higher than peak electricity demand, we believe low carbon solutions which utilise our existing gas network infrastructure will allow for the decarbonisation of heat at the lowest cost and least disruption to customers.

In RIIO-1, significant progress has been made on key technologies to demonstrate their technical viability. RIIO-2 will be important to providing a robust platform to roll these technologies out in a commercial manner, building the blend of gases being transported.

Existing technologies are likely to be insufficient to achieve the ambitious decarbonisation targets. For this, RIIO-2 will also need to provide a platform for the gathering of evidence and the execution of the trials to support the deployment of new technologies (such as hydrogen and carbon capture and storage (CCS)) and the design of future energy systems that promote flexibility and smart integration of gas and electricity networks. It is our opinion that the most plausible pathways currently being explored involve a continuing vital role for the gas network.

Gas networks and the RIIO framework are crucial to tackling the three main challenges facing the UK energy sector, known as the three elements of the energy trilemma:

1. Decarbonisation of energy
2. Ensuring security of supply
3. Ensuring affordable energy

The Infrastructure and Projects Authority, when preparing the National Infrastructure Delivery Plan 2016-2021 to the UK Government, makes reference to Ofgem's performance-based framework for setting price controls for network companies, stating that in the current Parliament and beyond, there is an unprecedented investment challenge to maintain a reliable, secure network, and deal with changes in demand and generation that will occur in a low carbon future. The report goes on to state that RIIO is designed to help ensure this is delivered at a fair price for consumers. We need to recognise that delivering the energy trilemma may at times be at odds to what consumers expect to see in terms of affordability.

It is important that we keep all the 2050 decarbonisation options open to ensure that we are able to deliver at least cost to the UK consumer. For the gas networks, specific no-regrets decisions are:

1. To provide a platform for investment and innovation in established technologies such as biomethane. The networks need to be supportive of this and facilitate new sources of gas coming onto the network.
2. To support the path to commercial investment for new technologies such as BioSNG.

3. To provide a platform for new technologies, such as hydrogen. To achieve the required trajectory, innovation and infrastructure must be considered in the next price control period, with the continuing investment to ensure our network remains safe, as well as being reliable and flexible.
4. To extend the network blend. One of the key priorities for RIIO-2 must be to build on the outcomes delivered by a number of key projects carried out under the NIC and NIA platforms in RIIO-1, alongside a suite of activity taking place across the industry. These will provide the evidence to open up the blend of low carbon gases in the network. This will allow customers to be supplied with low carbon energy without the need for new appliances or additional gas network investment.
5. To provide a network that enables options. To ensure all the options in terms of future utilisation of our network remain open the continuation of the Iron Mains Risk Reduction Programme (IMRRP) at current levels throughout RIIO-2 will be key. This will result in the majority of the distribution network being made up of plastic polyethylene pipe by 2032 increasing the diversity of gases that can be transported. This will also ensure a safe and reliable network.

The gas network comprises two key contiguous configurations - the distribution system that operates up to 7 bar; and the local transmission system (LTS) designed up to 70 bar. The LTS was constructed in the late 1960s and early 1970s to bring North Sea natural gas to towns and cities. This is an ageing asset group. In RIIO-1 we commenced a major asset health investment programme that will carry on in RIIO-2 and continue to ensure a safe and reliable network while allowing options to re-purpose the system into the future.

Should the evidence base have advanced to demonstrate the viability of 100% hydrogen networks across the supply chain, we would expect enabling decisions from Ofgem and Government to allow the gas distribution networks to include plans to facilitate the conversion of the first cities as we move into RIIO-3. These enabling decisions may require changes to primary legislation.

Extension of Gas Networks

In addition to building a network that is fit for decarbonisation, we believe that there are significant environmental and consumer benefits associated with extending the network and the demands placed on the gas network are likely to change as we progress through RIIO-2, such as we are currently doing with the Gas To The West project, in Northern Ireland.

1. Extending the gas networks to new communities in RIIO-2 allows industry to benefit from a more secure and affordable form of energy. It also reduces carbon emissions from industry that previously relied on higher carbon fuel such as oil or solid fuels. This could help stimulate economic growth, with benefits for employment, inward economic investment and industry expansion.

2. Network extensions into the domestic sector will directly help alleviate fuel poverty by moving consumers onto cheaper more affordable fuels, helping to lift previously off gas grid communities out of fuel poverty.

3. Extending the network to supply the transport sector. Gas could be the fuel of choice for HGVs and buses in the UK, which would support CO2 reduction targets and provide cleaner air in cities. The gas network could form the backbone of a national filling station infrastructure providing a clean, quiet and cheap alternative to diesel. There could also be an important role for hydrogen as a future transport fuel as it produces no harmful emissions.

4. As the electricity sector needs to increase its need to become more responsive to increased renewable generation we are seeing increasing demands for new off-takes from peaking plant. These have a very rapid response rate and will add new challenges to the gas networks in ensuring that the ability to deliver energy in the short-term and highly responsive energy can be maintained.

5. The gas network has an important role to play in supporting the market development of heat networks as gas is likely to be the primary fuel source for these technologies.

Innovation

Through RIIO-1 we believe that the NIA and NIC have delivered significant benefits in terms of pushing the boundary of innovation, promoting cross-industry learning, and deploying actual innovation into the field with real projects.

We have a strong balanced portfolio of projects with various technology readiness levels across the full spectrum of business activities, none of which would have been carried out under business as usual, which are delivering positive outcomes. We specifically look to develop projects that address customer concerns in relation to traffic disruption and supply interruption. These include widening the capability of keyhole technology across our operations, developing more advanced methods to minimise the size of excavations, and reducing disruption to customers. Our progress has helped us achieve the Gas Distribution Network (GDN) record for mains replacement customer satisfaction in Scotland.

The projects we have progressed have enabled a fundamentally different approach to using and managing UK energy networks to be considered, investigated and delivered within our network. Despite the low technology readiness levels and uncertainties of success, the potential benefits of these projects far outweigh the gas customers' investment. For example:

- The Opening up the Gas Market project in Oban has not only evidenced the safe combustion limits for UK and European gas appliances, but has given insight into appliance health on a scale that could not have been achieved otherwise. This data is playing a key role not only in the aspirations of Oban, but also projects such as Hydeploy (Cadent). This also ensured security of supply for 7777 customers.
- We have implemented robotic technologies as alternative methods for large diameter pipeline remediation. These have significantly reduced our streetworks footprint on some of the busiest streets of Britain.
- Core and vac 'keyhole' technology allows us to keep our excavations small and reinstate the same core we remove, significantly reducing the amount of spoil we need to send to landfill. We're innovating to widen the use of this technology across our operations and iCore is one of several projects which aim to deliver an end to end keyhole solution for current operational activities such as flowstopping, mains and service replacement and connection works.

Due to the public and collaborative nature of the Innovation stimulus these projects have benefitted all network companies within the UK and indeed the wider industry, but most of all they have benefitted all customers, not just those in our own footprint. Since the commencement of the NIA, >70% of our project partners have been SMEs or Micro SMEs and the number of project partners has increased from a small niche to over 200. This has necessitated the significant upskilling of employees both in the networks and the supply chain, and created a far better understanding of the challenges faced by the industry now and in the future.

This collaborative nature is very important as it encourages the consumer benefits to be realised by the broadest possible group, and ensures that the innovation process itself is open to valuable scrutiny and challenge. It is important to avoid changes that may reduce the willingness of companies to share best practice by internalisation of innovation into individual business plans.

We remain disappointed with the evidence base that Ofgem drew upon when determining and implementing recent changes to the NIA and NIC funding, essentially based on a review of a funding mechanism that was a predecessor to NIA and NIC and only open to electricity network operators and many positive aspects and outcomes from the gas sector were not captured. Key to this is the dissemination of knowledge. This in our view is the most powerful form of collaboration and is central to all NIA/NIC projects.

Going forward into RIIO-2 it is important to recognise the importance of the innovation stimulus, for promoting the adoption of newly established techniques and technologies into business as usual and secondly for promoting the forward-thinking application of research into the networks that will enable the gas network to deliver at least cost towards the UK's 2050 carbon reduction targets.

Heat and transport are the most challenging areas to reduce carbon emissions. Given the volume of energy delivered through the gas network relative to the electricity network consideration needs to be given to the scale of the challenge in terms of energy delivery. Demonstration projects in the gas networks towards decarbonisation will require more significant funding than has been available to this point, for example, researching, developing and constructing hydrogen blending or in the longer-term hydrogen conversion.

Allowed Returns and Financeability

When considering financial aspects of the price control we would urge that Ofgem does not seek to draw conclusions too early in the RIIO-2 price control process. This is so that up-to-date research and ongoing industry submissions can be fully considered as part of Ofgem's decision-making process.

We believe the cost of capital should support longer term investment decisions where investors require a stable regulatory environment and methodology. Consequently, Ofgem should maintain a strong focus on long run returns. Whilst we believe gas is vital in the future energy mix and RIIO-2 should support this, uncertainties and risk need to be factored into returns going forward.

We also believe that when the ten-year trailing average was incorporated into RIIO-GD1, it was not envisaged there would be such a sustained period of low interest rates. It is clear that a ten-year trailing average in RIIO-2 would not appropriately fund efficient embedded debt. Therefore, as precedents have demonstrated in other sectors, this mechanism needs to be adjusted to ensure efficient debt is funded in RIIO-2. The challenge of funding efficient debt is more marked given the refinancing that has been carried out as a broader restructuring by specific network companies. It is important that Ofgem recognise that the refinancing was due to specific corporate circumstances, and therefore the assessment of GDN's debt needs to take into account any costs they had of refinancing existing debt, as well as the yearly interest costs incurred.

Returns need to reward good performance, penalise poor performance, and incentivise the right behaviour. We believe it is important to reward a company which is delivering its outputs and outperforming its benchmarks irrespective of its ranking against its peers. It is vital to maintain a cooperative framework that encourages sharing of best practice rather than a competitive framework that could undermine this incentive, ultimately this framework should create the most beneficial outcome for consumers.

Financeability and credit metrics are crucial to companies and appropriate analysis should be undertaken as part of the RIIO-2 process to ensure the notional capital structures and allowances support these.

Stakeholder and Consumer Engagement

We fully support the fundamental principle that our business plan for RIIO-2 must be underpinned by robust stakeholder engagement to ensure we ultimately deliver outcomes that are valued by our stakeholders and by consumers.

Throughout RIIO-1 our understanding of, and engagement with, stakeholders has significantly developed, and we see RIIO-2 as an opportunity to further enhance our engagement by working collaboratively with stakeholders to produce better outcomes for everyone.

We have begun our stakeholder engagement for RIIO-2 by asking our expert Stakeholder Advisory Panel for their views on how we should engage consumers throughout the process, and the views of our panel are informing the development of our engagement strategy.

Engagement strategy: We will execute a strategy that ensures stakeholders feed into our proposals and shape our decisions, focusing on the issues they see as highest priority and most important. We will work collaboratively with our stakeholders to strengthen their voice in our decision-making and develop partnerships to achieve our shared goals. We recognise the increasing pressure to demonstrate the value for money to consumers that our activities deliver, and to ensure that we provide services that people are willing to pay for.

Diverse engagement reflecting diverse stakeholders: We will ensure we engage with a wide range of our stakeholders, including those who challenge our proposals, to understand and address their needs and concerns. We will ensure that we use a mix of mechanisms and media to engage those who may be harder to reach. We will accurately reflect the views of our stakeholders and consumers in different regions.

Appendix 1

Response to Questions

1. Do you agree with our overarching objective for RIIO-2 and how we propose to achieve it?

Ofgem has established an overarching objective that "RIIO-2 will ensure regulated network companies deliver the value for money services that consumers want and need" and set out five approaches to achieving this 1) consumer voice 2) fair regulatory returns 3) pro-actively responding to consumer need 4) driving innovation and 5) simplifying price controls.

At the highest level, these are positive and progressive objectives that are straight-forward to agree with. However, the way in which they are delivered may be subject to more debate.

In addition to these principles, there is an important sixth principle that should be added; 6) ***Maintaining a robust regulatory regime that investors can have confidence in***. We have seen that the UK infrastructure has remained an attractive place to invest over the course of RIIO-1. This is largely because of the approach that Ofgem has taken, their adherence to regulator principles and their recognition that long-term investments need to be supported by a long-term regulatory framework that investors can have confidence in. We would be keen to see this added as a sixth principle.

When applying this over-arching objective, we encourage Ofgem to recognise that there are fundamental differences between the electricity and the gas networks, and that the application of the principles set out by Ofgem needs to accommodate these differences. We are concerned that the intellectually challenging problems of the electricity sector and electricity networks often draws attention from the potentially more cost-effective options that could be delivered through the gas networks.

An immediate example of this is the focus on flexibility and whole system co-ordination (referred to later under Objective 3). Due to the physical characteristics of the gas network, there is inherent flexibility embedded into the network due to the ability to line pack the network during off-peak periods to cover periods of peak energy demand. This flexibility is already delivered through whole-system co-ordination and enables the existing gas networks to accommodate a rate of change in energy delivered over the course of a day significantly greater than that of the electricity network. The focus for the electricity network is correctly how to improve its flexibility, for the gas networks it should be how to enable that inherent flexibility to cost effectively play a full role in the decarbonised energy mix.

2. How can we strengthen the consumer voice (primarily end-consumers), in the development of business plans and price control decisions?

External guidance: We have consulted our external Stakeholder Advisory Panel members to assist us in developing our engagement strategy for the formulation RIIO-2 business proposals, and their thinking and ideas are informing our plan.

Engagement plan: Initial engagement with key groups of stakeholders will be designed to understand their views about which issues are of most importance to consumers. Stakeholders will be consulted on their preferences about how network companies engage with them, and how they can provide their feedback into the development of business plans. Tailoring of engagement methods to suit the needs of the stakeholder and using multiple channels will maximise opportunities to collaborate and receive input. Network companies and Ofgem should avail themselves of the opportunities provided by digital platforms to enhance engagement, supplementing more traditional methods of consultations, workshops, bilaterals, etc. Consumer engagement should serve to educate end-users on the role gas network companies play, and then delve into consumers' preferences as to how their energy is delivered, the choices on offer, potential future scenarios and the ramifications of decisions taken during RIIO-2 that have the potential to either limit or keep open future options.

Regional variations: It should be recognised that there will be regional variations in both network characteristics and stakeholder preferences, so engagement methods should be sensitive enough to account for these variances and reflect them accordingly when developing and consulting on business plans.

Accessibility of information: Most consumers will not be industry experts, so information should be conveyed in a fashion that stakeholders can easily understand. Consideration should be given by Ofgem and network companies as to how accessible their proposal documents are, and the ease with which business plans can be read and digested.

Customer challenge forums: The experience of SGN's stakeholder advisory panel members includes participation in consumer challenge forums and in negotiated settlement.

- The use of consumer or customer panels, such as the Customer Forum for Water example provided in Ofgem's open letter, may provide a means of debating more technically complex topics and strengthening the consumer and customer voice in the business planning process. There is broad support among external members of SGN's Stakeholder Advisory Panel for the creation of an SGN customer challenge forum of representatives of customers and consumer groups in order to ensure that customers' views are reflected in our business plan.
- Ofgem's open letter also discusses negotiated settlement as a possible approach. Stakeholder Advisory Panel members highlighted potential difficulties in identifying the parties most suited to negotiate with gas networks, highlighting potential tension between the needs and agendas of different stakeholders, for example supplier interests may not be aligned with consumer interests. Ofgem would need to be clear in advance about the topics for which they would accept the outcome of a negotiated settlement.

Collaboration where appropriate: There is the potential for sufficient overlap between network companies in some areas (either by sector e.g. GDNs, or by geographical region) so that engagement with stakeholders might be most effectively achieved by collaborative means, providing stakeholders with a single point of contact with which to engage on certain topics.

Building upon established stakeholder engagement practices: Engagement on the development of RIIO-2 business plans should not be undertaken in isolation, and will form a component of the wider stakeholder engagement activities that are now well established within network companies, as a result of the RIIO-1 model, meaning decisions will benefit from a large body of consumer and other stakeholder input.

3. **How should we support network companies in maintaining engagement with consumers throughout the price control period?**

Incentivising stakeholder engagement: The introduction of the Stakeholder Engagement Incentive in the RIIO-1 model was instrumental in ensuring network companies recognised the importance of stakeholder engagement, and the shared benefits for companies and stakeholders. Ofgem deserve credit for the significant role this played in orchestrating a change in the culture of network companies brought about by the RIIO regulatory framework.
Given this success, and the recognition that stakeholder engagement is mutually beneficial for both network companies and stakeholders, incentivising strong performance in this area through RIIO-2 should continue. Retention of an incentive to reward those companies who achieve the highest standards of stakeholder engagement will drive the right behaviours by ensuring that consumer input is sought throughout the price control and outcomes are targeted at those areas most important to stakeholders. It also helps GDNs and stakeholders recognise and explore the value to consumers derived from operating a safe and reliable gas network, supporting the case that investment in the gas network brings legitimate benefits.

Sharing best practice and collaboration: We would advocate a regulatory incentive mechanism that encourages sharing of knowledge and best practice, meaning the ethos of partnerships and collaboration should continue to be an important constituent of network companies' approach to stakeholder engagement. Innovative approaches to engagement routes and utilisation of a wide range of engagement methods in accordance with stakeholders and consumers' preferences can also be encouraged through the incentive. It will continue to be important for GDNs to ensure they are supporting all their stakeholders, including vulnerable and difficult to reach members of the community.

Objective reward mechanism: The scope for subjectivity in any future incentive/reward mechanism for stakeholder engagement in RIIO-2 should be minimised. There should be a clear linkage between activities of companies and the outcomes for consumers and other stakeholders. Clear regulatory guidance and a framework against which companies can measure their performance would assist in this endeavour.

Focus on customer service: The focus in RIIO-1 on a broad measure of customer service has been effective in driving a significant culture change demonstrated by increases in customer satisfaction scores. SGN was the top scoring GDN in

2016/17 for its network in Scotland. Building on the good results from RIIO-1, the continued incentivisation of customer service, perhaps with some refinement, will drive further engagement with consumers throughout the price control period.

4. Does this structured approach to defining outputs provide the right level of clarity around delivery?

The concept of outputs within the RIIO framework has been very useful in making delivery transparent and comparable across the GDNs. The majority of RIIO-1 outputs were primarily existing standards and business metrics and were adopted as primary outputs and secondary deliverables.

In the open letter Ofgem make direct reference to Network Output Measures (NOMs) under the outputs frameworks section. Whilst NOMs is a valuable management tool and has the potential to be developed further to guide and justify decision making; it is important to be clear that we do not consider it appropriate to be used in isolation as the sole basis for decision making.

As we move into RIIO-2, it is important that we focus on making outputs smarter, so that they are seen to be driving the right behaviour and are aligned to the delivery of strategic inputs.

5. How can the outputs framework be improved, including the introduction of additional output categories for example around efficient system operation for distribution network companies?

The RIIO outputs framework is an important structure through which network companies are incentivised to deliver against six key objectives – Safety, Reliability, Customer Service, Environment, Social Obligations and Connections. We think that these key objectives in their broadest sense are still relevant as we progress into RIIO-2, the way in which each is output is assessed and defined may need to be reviewed, taking into account stakeholder feedback.

Our preference in principle is for broader outputs as these can be easier to secure consumer buy-in and to build legitimacy. However, this needs to be considered alongside a clear business relationship and network company control. In RIIO-2 it is important to ensure that the outputs are both relevant to the consumer, and are within the direct control of the gas distribution network.

It is important that outputs provide sufficient coverage of the range of services provided, that there is a clearly understood link between the output and the underlying business practices that may deliver it and therefore that the output is under the direct control of the distribution network (rather than for example with a code administration body).

It is also important to clearly understand the driver for the output, and then to clearly define it, i.e. efficient system operations, as discussed in the open letter, could be based upon alarm response times and/or daily gas demand forecasting, etc.

It should be noted that any benchmarking undertaken needs to align with output delivery – recognising that output delivery may have regional variations across GDNs.

6. Did the outputs target the right behaviours?

The open letter refers to the mid point review decision to focus on outcomes, and to treat outputs as delivered. We welcomed this decision and agree that the outcome should take precedence to the output. Going into RIIO-2 it is important to clarify the process through which outputs can be considered replaced through the delivery of outcomes

The RIIO-1 output framework has provided a clear line of sight for delivery throughout our company. Ensuring they are transparent externally has provided an appropriate incentive to drive the right behaviours that are clearly focused upon delivery.

As we progress into RIIO-2 It is important that we have a balanced basket of outputs that continue to incentivise the right behaviours and that these are guided by consumer preferences, safety and longer-term strategic network objectives.

7. **How can we address areas of expenditure for which a clear output is difficult to define?**

The management of our GDN is about understanding the risk profile across the range of assets and undertaking work to manage and mitigate these risks. Risk does not always equate to a financial measure and so with some activities, where it is difficult to allocate directly across to a financial allowance, i.e. repair residual risk, we need to understand what outcome is needed.

8. **Were the output targets and associated financial incentives set for RIIO-1 appropriate, reflecting what consumers value and are willing to pay for?**

We believe that the targets and incentives set for the RIIO-1 period were appropriate at the time they were set. Some of these will remain appropriate on an ongoing basis. However, in developing our business plan for the next price control period we will be engaging with all of our stakeholders to understand what they value and will be asking us to deliver.

9. **What changes in the RIIO framework would facilitate returns that are demonstrably good value for consumers?**

Rather than fundamental changes in the RIIO framework to improve 'value', there is a greater focus in the light of recent commentary for networks to explain what are the services that we provide, why this is valuable. This commentary needs to focus on the delivery component of what we do, and also the social, the safety and the environmental aspects of what we do. Ultimately, the gas network companies are the backstop provider of a secure and safe network, a role that is valuable to consumers, who may only appreciate its value in times of emergency. With this in mind it is important that the introduction of competition in new services such as smart metering does not jeopardise the need to have a fully funded emergency service.

Within the open letter, Ofgem make the point that "an effective price control should also create a natural dispersion of returns corresponding to the dispersion of company performance on measures that matter to consumers". Whilst dispersion of companies may be considered desirable on some measure, we should also recognise that on others it is a sign of failure, failure to share ideas, best practice and to collaborate on the application of innovation and can be detrimental to consumer interests. Artificially trying to create worst performers can be very detrimental to these broader consumer benefits. The focus needs to be on having a regime where an efficient network delivers against its agreed outputs and outcomes that consumers value, it should earn its cost of capital. A network that is under or out performing relative to this benchmark facilitates returns below or above the cost of capital.

10. **How can we minimise the scope for forecasting errors?**

In order to minimise forecasting errors, we believe a well justified and evidence based business plan provides the most appropriate starting point. The plans should be benchmarked through a cost efficiency toolkit that covers a variety of approaches which should incorporate a strong link to outputs and value for money. Finally, where uncertainties are identified decisions should be made on a case by case basis whether the principles of ex-ante regulation should apply where consumers / companies take the risk / reward or specific uncertainty mechanisms are put in place. These decisions should be made following full consultation.

11. **What constitutes a fair return for a regulated monopoly network company, and how can we ensure that returns remain legitimate in the eyes of stakeholders?**

A 'fair' return is where an efficient network is able to earn its cost of capital, and which rewards and incentivises out-performance whilst penalising under-performance relative to price control targets for costs (TOTEX) and outcomes.

Returns are legitimate when under-performance and outperformance relate to performance being more or less efficient than the baseline target. Therefore, the achievement of returns higher than the cost of capital in the RIIO-1 period to date, whilst meeting output or beating targets, is consistent with the legitimate functioning of the regulatory regime.

It has been suggested that all networks earning returns higher than the cost of capital undermines the legitimacy of these returns. The implication appears to be that some networks earning returns lower than the cost of capital is necessary for the regulatory regime to have legitimacy.

This would imply that even if all companies are improving their efficiency, whilst achieving their targets, they would also have to out-perform relative to other companies to generate returns that would be considered legitimate. Such a regime would impose penalties and drive returns below the cost of capital even for networks that out-perform price control targets, so long as there are other networks that deliver even greater out-performance. This would be fundamentally inconsistent with a regulatory regime that enables an efficient network delivering against agreed outputs and outcomes that consumers value, to earn its cost of capital.

Incentivising networks to continually drive efficiencies to bring down costs, whilst achieving output targets, is a crucial outcome of comparative regulation. Through periodic price reviews, the regulator is able to update the standards against which cost efficiency and outcome delivery are assessed, and thereby deliver benefits to customers.

By redefining and incentivising outperformance within price controls in relative terms (i.e. compared to other networks) rather than in absolute terms, there may also be a counter-productive effect on outcomes for consumers. This is because an increased focus on relative performance may induce networks to avoid collaborating and sharing industry best practice, and also duplicating efforts, thus restricting the overall efficiency gains made by the networks.

Additionally, the prospect of networks earning returns lower than the cost of capital, even when they are meeting or exceeding their price control targets, leads to an increased cost of equity due to the increased risk of an efficient company not achieving its cost of capital.

It is worth noting that through the RIIO framework customers not only gain from the efficiencies in the benchmarking of TOTEX costs at successive price controls, they also gain from the sharing of outperformance within price controls.

12. What factors do you think are relevant for assessing and setting the cost of capital so it properly reflects the risks faced by companies?

As stated in Ofgem's open letter, there is wide uncertainty about the direction and pace of change in the energy system, and thus the future of gas. The RIIO-2 framework will need to be both adaptable to changing circumstances as well as provide conditions that support long-term investment decisions. In some cases, the use of uncertainty mechanisms to balance risk efficiently between the company and its customers will be appropriate. In other cases, network companies are best placed to manage the risk. Risks that remain with GDNs will need to be remunerated.

Placing undue emphasis on the impact of prevailing market conditions on the cost of capital forecast risks creating a divergence with the time horizon over which investors calculate expected returns. The economy remains characterised by high levels of debt and atypical monetary policy (e.g. Quantitative Easing). Investors will have to consider scenarios where macroeconomic and capital market indicators revert towards longer-term average levels when assessing opportunities to invest in long-lived assets.

Undue emphasis on prevailing market conditions would be a break from Ofgem's well-established track-record on setting the cost of capital, and risks undermining investor confidence in the sector. Also, it may open up regulatory assessments to more volatility and greater uncertainty, as market conditions are assessed at each price control. This may increase the regulatory risk in the eyes of investors, and thus increase the cost of capital.

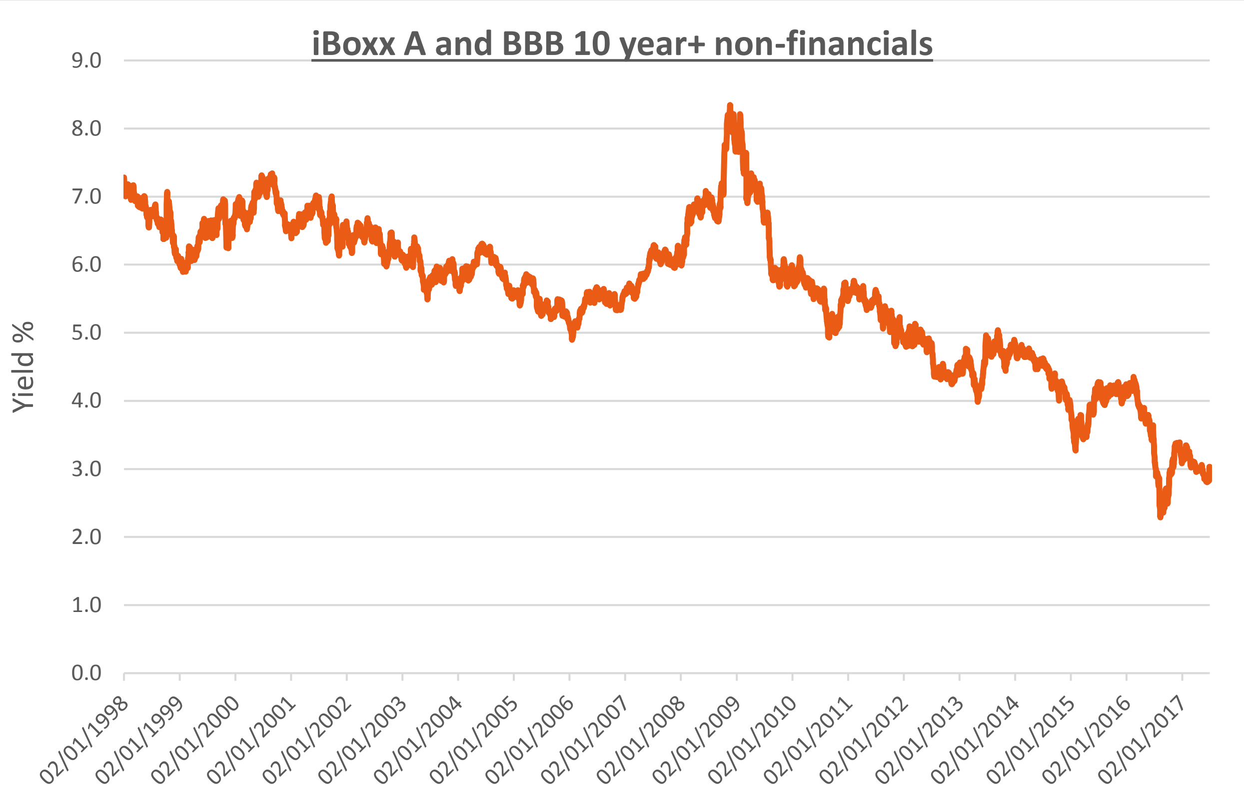
Finally, it should be noted that investors earn a steady return of capital, via depreciation, over the regulatory asset life. It would therefore be inconsistent to have considerable volatility in the allowed return on capital – a strong focus on long run returns would better promote incentives to invest.

13. Can we improve our methods for the indexation of the costs of debt and equity?

Cost of Debt Indexation

The current ten-year trailing average of market spot rates will not be feasible in RIIO-2 as bonds issued before 2010 will fall out of the averaging period for the index. The chart below shows the decline in the benchmark iBoxx A and BBB indices used by Ofgem since 2009-10;

Figure 1 Evolution of iBoxx nominal yields



As well as high embedded costs, other drivers of the debt index potentially not meeting the efficient costs of financing in RIIO-2 that need to be take into account, are:

- increases in refinancing costs as interest rates are expected to rise in the RIIO-2 period;
- the lack of an explicit allowance for transaction costs.

A flexible approach to indexation, for example increasing the trailing average period or a separate allowance for embedded debt, should be considered to recover the efficient cost of embedded and new debt. The assessment of GDNs' debt costs also needs to take into account any costs they had of refinancing existing debt, as well as the yearly interest costs incurred.

Cost of Equity Indexation

As a means of implementing indexation of the cost of equity, Citizens Advice suggests that the risk-free rate within the allowed cost of equity should be indexed to 'real market rates'. Placing undue emphasis on prevailing market conditions would be a break from Ofgem's well-established track-record of setting the cost of capital, and risks undermining investor confidence in the sector. Notwithstanding this, in any attempt to index the cost of equity, a decision would need to be taken about whether (and how) to index one, or several, of the cost of equity parameters. Given the interdependencies of some of the elements of the Capital Asset Pricing Model (CAPM), extreme care would need to be taken not to disconnect these elements.

14. Are there specific amendments to any core aspects of financeability that we should be considering in light of performance during RIIO-1 and the change in the financial environment?

Financial testing needs to be undertaken such that the notional capital structure allows efficient networks to meet the thresholds of the credit metrics derived and used by credit rating agencies in a downside scenario. These thresholds should imply a floor on the level of allowed returns.

Furthermore, the qualitative assessment of the regulatory regime, as well as quantitative analysis of credit metrics, comprises a significant weight within a ratings assessment. Therefore, reasonable and consistent regulatory decisions on the cost of capital, and the stability of the regulatory regime, underpin an analysis of high credit quality. These are crucial factors in utility networks' ratings. It is also important when considering networks' ratings that under-performance and outperformance relate to performance being more or less efficient than the baseline target. The prospect of networks earning returns lower than cost of capital, even when they are meeting or exceeding their price control targets, leads to an increased cost of equity due to the consequent increased financeability risks.

Additionally, any move to give more weight to contemporary market evidence will lead to more volatility in the cashflow based credit metrics from price control to price control, and potentially lower credit ratings.

15. Should we consider moving to CPIH (or another inflation index) and how should we put into effect any change to ensure it is present value neutral for investors?

A move to CPIH (or another inflation index) would be a significant change in regulatory policy. An important consideration is that historic investment, prior to RIIO-2, will have been made on the firm basis of RPI indexation. This fundamental principle would need to be maintained, including RPI indexation of the consequent returns and depreciation of historic investment. Investors value certainty and there are significant concerns as to whether the value of their investment and returns remain value neutral, or erodes under CPI indexation, and the general regulatory uncertainty such a change could cause. An assessment of how any such change would be present value neutral needs to be made once all the relevant factors have been assessed.

The concern relating to returns would be that to maintain the same nominal cost of capital rate, under CPI indexation, an increase in the real cost of capital would be required equating to the RPI-CPI differential. Additionally, there would need to be a stable, liquid and significant CPI linked debt market before the introduction of CPI indexation could realistically expect to be considered. This is because the less mature the market - the higher the extra costs of re-financing, or issuing new debt, on a CPI basis – and this extra cost would need to be borne by customers. It would not be acceptable for GDNs to incur these extra costs of linking debt to CPI, when they are due to a change in regulatory policy and not inefficient financing by GDNs.

16. Do you think there are sufficient benefits in aligning the electricity price controls to off-set the disadvantages we have outlined?

We have a general concern that the examples cited in this section and many of the reasons for putting this section forward are dominated by the experience of the electricity sector and not the experience of the gas networks sector. Whilst these issues exist, the scale of the issue and the associated risk is substantially different. We have a broad concern that Ofgem may look to impose a response required for the electricity sector onto the gas networks, when it is not required.

Our perspective is that Ofgem should not look to align price controls across both gas and electricity and to do so would be detrimental. There may be more of a case to align electricity transmission and electricity distribution, however our firm belief is that gas distribution and gas transmission should be retained on a separate price control basis. The reasons for this are:

- Maximising learnings. We have seen significant developments between the original gas price control and the subsequent electricity price control, and it is certain that gas will carry that mantle a stage further for RIIO-2. This evolution is beneficial to the industry, investors and consumers and should be maintained.
- Recognising differences. We have referred to the challenges of ensuring that gas networks regulation gains sufficient traction within Ofgem, under a combined price control this could become particularly problematic.
- Synergies between transmission and distribution. There are direct links between gas distribution and gas transmission that need to be discussed and reflected in the way that business plans are formulated.
- Resource and time requirements. Ofgem are correctly identifying that the consumer needs to be at the heart of the business plans as we formulate them. Enabling scrutiny is important, but it also requires time. Delivering Ofgems first objective of increasing the consumer voice may be more challenging under a scenario where regulatory reviews are aligned.

17. Are there any other realignment options we should consider?

None

18. What amendments to the RIIO framework, if any, should we consider in supporting companies to make full use of smart alternatives to traditional network investment?

We expect that energy delivery in the UK and specifically domestic heat consumption will continue to transform in response to the challenge of decarbonisation. The next price control period will provide a platform for the gathering of evidence to support the design of future energy systems that promote flexibility and smart integration of gas and electricity networks. Many of the pathways currently being explored involve a continuing and potentially vital role for the gas network.

On this basis, we believe that continuing investment to ensure our network remains safe as well as being reliable and flexible is appropriate during the next price control period. This approach will be complemented by the wide-ranging energy innovation projects currently being undertaken by the gas industry.

19. Given the uncertainty around demand for network services, how much of an issue might asset stranding be and how should this risk be dealt with?

The future utilisation of the gas network for multi-source, ie hydrogen, hydrogen blending and green gases will support climate change targets, specifically around heat. There is also the potential for multi-use of the network for CNG for vehicle fuel. We do not foresee asset stranding to be an issue due to the configuration of the gas network. There could be very localised issues, such as multi-occupancy dwellings converting to electric or heat networks, however this is a process that we already manage.

The more substantial issue for the cost of equity, is that government policy in the broader sense could create stranded network assets by pursuing electrification of heat. This would increase the cost of equity associated with the further investment in the gas networks.

20. How do we need to adapt the RIIO framework, and the uncertainty mechanisms in particular, to deal with this uncertainty?

Firstly, it is not possible to come to a conclusion with regards the desirable level of flexibility and flexible mechanisms without considering it alongside risk and the level of risk that is being considered within the allowed rate of return. As per our response to question 12, in some cases, the use of uncertainty mechanisms to balance risk efficiently between the company and its customers will be appropriate. In other cases, network companies are best placed to manage the risk. Risks that remain with GDNs will need to be remunerated.

Secondly, the symmetry of any flexibility needs to be considered. If flexibility is introduced to allow for variations in the rate of inflation or interest rates, then it is important that this is symmetrical and does not present the regulated company with only downside risk.

Finally, any flexibility mechanisms need to be considered alongside the length of the price control and the scope of any mid period review.

One of the strengths of the current regulatory structure is that it provides certainty and confidence to investors. This is important and the correct balance has to be struck between protecting the interests of the investor and the consumer at times when unanticipated events materialise.

Of the specific mechanism that have been identified:

- Triggers. We would advise against the use of triggers specifically. Unless these are defined very carefully they can give rise to behaviours primarily designed to avoid the implementation of a trigger.
- Volume drivers. Volume drivers can be appropriate where there is a specific question mark around the efficacy of a given policy (such as smart meter role out) or economic driver (such a new build housing) and where the volume related component of the cost incurred is very high.

- Reopeners. Reopeners have worked effectively in RIIO-1 where there is defined issue with a high level of uncertainty surrounding the cost or the extent of a change.
- Pass through. Cost pass through is important for costs where the networks have either limited or no control, such as the costs incurred through code bodies.
- Reviews. Reviews can work but it is important that their scope is set out in advance with a clear understanding of what will be reviewed and what will not be reviewed.

21. Is an eight-year price control period with built-in uncertainty mechanisms still appropriate given the greater range of plausible future scenarios?

An eight-year price control has pros and cons. Firstly, an eight-year price control allows companies to put in place longer term plans and strategies to deliver outputs and efficiencies that a shorter control may restrict. However, an eight-year price control, with lots of uncertainty mechanisms built in, could introduce mini price controls that put companies or consumers under a disproportionate level of risk.

We believe it is too early in the RIIO-2 process to form a conclusion on this and more work is needed to understand the challenges and framework for RIIO-2 before the length of control is determined.

22. What improvements should be made to the assessment of business plans?

It is important that the assessment of business plans remains focused on the key deliverables. Accepting this, then the key challenge in assessing business plans is the extent to which Ofgem would like their first objective of giving customers a stronger voice to be represented in networks' business plans.

With customers having a stronger voice then it is anticipated that business plans will show much greater variations and diversity than would otherwise be the case, and this will make it significantly harder to find points of comparison that are consistent across organisations.

Our concern is that Ofgem may not feel comfortable without points of comparison and may end up undermining its first objective by trying to establish points of comparison towards the end of the process, a situation that could undermine consumer legitimacy.

We think that it is therefore important that Ofgem looks to identify early where it would like consistency and comparability rather than trying to enforce it later.

23. Should we give further consideration to companies' historic performance against their business plans?

In principle, historic performance should help to inform future benchmarking. However, the limitations of historic performance needs to be recognised where new challenges and different outputs exist going forward.

24. Should we determine the revenues an "efficient" network company requires before seeking information from the companies themselves?

We do not think that an efficient network company is a useful concept under these circumstances. There are very significant local elements that define the cost of delivering a secure network and there have been a large variety of different investment strategies that have been deployed across different regions.

RIIO is a consultative process which we believe is most suited to determining the needs of consumers, quantifying outputs and undertaking benchmarking and cost of capital reviews before revenues are set. The starting point of this should be a well justified business plan from each company.

25. What has an eight-year price control period allowed network companies to accomplish or plan for that would not have occurred under a shorter price control period?

We believe that the eight-year period for RIIO-1 was appropriate as it was the first price control of this nature and allowed us to put appropriate plans and processes in place. However, per our response to Q21, we need to consult our stakeholders to determine if this would still be appropriate for RIIO-2.

26. How well has the IQI and efficiency incentive worked in revealing efficient costs through the business plan process and encouraging efficiency throughout the price control period?

We believe one of the core principles of RIIO that should be maintained are incentives that drive efficiency and correct behaviour, such as IQI and efficiency incentives. This will drive short term benefits to consumers through incentivising realistic business plan forecasts and sharing of under/ outperformances with customers, and longer term benefits through future benchmarking.

27. What alternative approaches could we consider to encourage companies to give us high quality information that minimises the damage from their information advantage?

We remain supportive of delivering a well justified business plan and lessons learnt from RIIO-1 should carry forward into RIIO-2 that means companies will put together well justified business plans for RIIO-2.

28. What impact has the innovation stimulus had on driving innovation and changing the innovation culture?

It is our opinion that the NIA and the NIC have been an important success story within the RIIO framework, driving innovation and promoting strategic collaboration across networks to deliver customer savings. We are keen to ensure that these positive attributes are maintained. Furthermore, given the importance of decarbonising heat in delivering the targets set out in the Climate Change Act, we would recommend that funding of innovation is increased to target cross energy solutions for decarbonisation.

29. Have the incentives inherent in the RIIO model encouraged network companies to be more innovative and what should we consider further?

There are a number of ways in which RIIO has encouraged innovation. The incentives inherent within the RIIO model have encouraged management innovation – not just in the ways that projects are designed and delivered, but in the structures that support it. This innovation extends to the deployment of technologies which whilst established, may not be deployed as a matter of routine.

This level of innovation is very important, however, is very different to the innovation bought about through the innovation stimulus package. The stimulus package is very targeted at either early stage innovation or broader industry innovation. For both of these, the returns to the company involved are not sufficient - either they are not directly attributable to the company, or the risk and time associated with realising those returns are too high. In these instances, the innovation potential needs to be ring-fenced and directly stimulated.

30. Do you agree that the scope of competition should be expanded in RIIO-2? What further role can competition play?

We broadly agree that in principle competition is a good thing that creates opportunities, and brings forward innovation. We need to recognise though that that there are limitations on where and how competition should be applied and the form that competition should take.

In particular, we need to ensure that it is not detrimental to consumer interests either by undermining an existing service (such as the 24hr emergency response) or by potentially working against consumer interests by taking natural monopolies out of the regulated environment (such as with heat networks).

We also need to recognise that competition does not always deliver the full solution as competitive companies will, naturally, seek to cherry-pick the components of the job where there is the highest possible margin and this may compromise broader policy objectives.

It is important to recognise that as competition is introduced that there is an important and costly role therefore of network companies being a backstop provider and picking up either where competitive companies either choose not to provide the service, or do so, but then withdraw.

31. Which elements add the most complexity and how do you think that these and the broader RIIO framework could be simplified?

We need to recognise that by moving to greater consumer focus we are likely to move to greater diversity in business plans being produced. As a result, we should appreciate that the tendency will be towards greater complexity rather than simplification. Given this, it is important to identify early where are the core components of the business plan that Ofgem would like to have comparability on, so that this can be defined early and built in. Similarly, early identification of the outputs is important.

32. What improvements could be made to the format and presentation of the business plans?

Since the RIIO-1 business plans there has been substantial progress to make business plans more accessible to customers and stakeholder and to make them more of a living document. This is something that should be encouraged as we take it forward.

In the open letter Ofgem identify common methodologies for justifying investment and potentially delivering longer term benefits. These methodologies are important; however, it should be noted that whilst they are an important and valuable component in a management toolkit, they are not the full answer and they do not adequately reflect professional knowledge and insight that is embedded within management of the company and delivery teams.

33. Should the plans be revised at any stage during the price control, for example annually?

In line with delivering Ofgem's first objective and to deliver a strong customer voice, then it is important that the business plans should be allowed to evolve and change as that customer voice changes.

This evolution of priorities however, needs to be very clearly separated from a more fundamental change in basic business plan which should remain constant across the business plan cycle or only changed through prescribed flexibility mechanisms.

34. Should we retain fast tracking and if so, for which sectors?

We believe that fast tracking is only appropriate if business plans are easily comparable which may not be consistent with the objectives of consumer legitimacy and stakeholder engagement. Given the variations between networks, costs, outputs and regional customer needs diversity is inevitable and any fast-tracking process is likely to become subjective. It may therefore fail its objective to deliver value for customers.

35. Do we collect the right information in the right format and are there better ways to monitor the performance of companies?

We believe that too much information is provided and would be happy to work with Ofgem to understand how information is used and therefore how it can be simplified. It is important that we focus on collecting information rather than collecting data. We believe that this would increase the transparency and value for consumers.

36. What are your views on how the changing role of the electricity SO should be factored into the RIIO framework, including whether or not the electricity SO should have a separate price control?

No comment to add

37. Do you agree with our broad stakeholder engagement approach set out above?

We welcome Ofgem's approach in the early publication of the open letter which serves to focus attention on the complexity of the decisions that need to be undertaken and the importance of good dialogue through-out this process.

Given the importance of bringing the stakeholders along with us on this journey and ensuring that everyone has the opportunity to both participate and engage with some of the complexities, we would encourage Ofgem to publish an overall timeline. We can then ensure our stakeholder engagement is appropriately targeted and focused according to the time available.

We broadly agree with the approach to stakeholder engagement. We would request though that apart from the points of clear conformity across networks (such as finance and pensions) that there is an earlier differentiation between gas and electricity sectors. It is a constant source of concern for the gas networks sector that debate tends to be driven by responding to electricity sector challenges rather than the identifying and opening up opportunities in the gas networks.