

SGN RIIO-2 Framework Consultation Response

2 May 2018



SGN

Your gas. Our network.

Contents

1. Exec Summary	3
2. Introduction.	5
3. Giving consumers a stronger voice	9
4. Responding to how networks are used	12
Length of price control	12
Whole system outcomes	15
System Operator price controls.....	17
Network utilisation, stranding and investment risk	18
End-use energy efficiency.....	22
5. Driving innovation and efficiency	23
Innovation.....	23
Competition.....	30
6. Simplifying the price controls.....	33
Our approach to setting outputs.....	33
Information-revealing devices.....	38
Annual reports/reporting	42
7. Fair returns and financeability	43
Cost of equity.....	49
Financeability.....	54
Corporation tax.....	56
Ensuring fair returns	58
8. Next Steps.....	62

1. Exec Summary

SGN are a regulated network that owns and operates the Southern and Scotland distribution networks delivering natural gas to 5.9m connected customers. We believe that the RIIO framework delivers in the best interests of our customers, stakeholders and investors and RIIO-2 provides an important opportunity to build on this.

RIIO-1 has driven significant improvements in efficiency, safety and reliability. Total gas escapes from historical iron mains have reduced by 47% compared to the highest levels since 2008 and we have delivered a 56% reduction in unplanned interruptions. Over GD1 we have delivered a 9% real reduction in our bills to customers, and our customer satisfaction has improved year-on-year to stand above 9 out of 10 for both networks. In GD2 we need to keep the focus on the 'here-and-now', delivering a safe, reliable network, sustaining investment in key programmes and the skills base and promoting innovation across our networks.

Looking forward we need to consider investment in the network over the long-term. We believe gas networks have a key role to play in an integrated energy system to help solve the energy trilemma. At the start of GD-1 the debate focused on a gas network that would be decommissioned in a decarbonised energy future. At the start of GD-2 the challenge of decarbonisation through electrification of heat is understood and the debate is focused on the role of gas networks in a decarbonised energy future and maintaining security of supply. This decarbonisation of heat requires us to continue investing in innovation during GD-2 to establish the cost and potential for heat decarbonised in the next price control period and maintain optionality for decarbonisation.

As it stands we don't consider the current proposals to provide the appropriate level of support for innovation given the scale of the decarbonisation challenge or to maintain efficiency improvements in delivering the 'here-and-now'.

Adjustment Mechanisms

In the Framework Consultation Ofgem identifies several challenges that have arisen in RIIO-1 and, whilst we may disagree on the cause, we understand that these concerns need to be responded to. We feel that the shorter price control period, greater use of indexation and existing mechanisms provide Ofgem with the appropriate tools to respond.

Reviewing Ofgem's Framework Consultation document, we are concerned that Ofgem's response focuses on creating control structures that add greater complexity to the framework. This greater complexity risks diverting attention from correctly setting the fundamentals of the price control and risks introducing a new set of unintended consequences. It is important to recognise that Ofgem has the appropriate tools and control points already defined and we need to ensure that sufficient time is allowed to get the details correct rather than creating new complexities.

Of these new complexities, we have specific concerns surrounding ex-post, relative adjustment mechanisms and automatic resets. We do not think that these work in the consumer interest. The consumer loses as the lack of clarity dampens the effectiveness of the incentive as a result the customer value generated per pound of incentive money paid is reduced. Secondly these structures break the link between what consumers have stated they are willing to pay and the outcome they receive and finally they risk removing all co-operation and sharing of information among networks. In addition to these direct consumer impacts there are then practical challenges associated with creating a pseudo-competitive market among a handful of companies, of creating a comparable baseline and ensuring that there is comparable effort to improve performance across companies.

We believe that the proposed new structures would be counter to the Government's principles of effective regulation and in principle we think that 'enforcing losers' when overall performance has improved is inappropriate. Such structures could undermine financeability and undermine the level of investment.

Cost of Capital and Financeability

With the proposals around return on capital, we are concerned that the WACC is set too low and that this gives rise to problems of financeability. To resolve this financeability issue the framework consultation proposes a number of actions such as the move to a non-indexed RAV, move to CPI, adjustments to the rate of depreciation and the split between fast and slow money.

Whilst these measures are in principle value neutral, they give rise to a series of unintended consequences for both customers and investors. The direct impact is to substantially increase customer bills in the short-term by bringing money forward to fixing an underlying issue in financeability. This makes the asset more attractive to investors with a shorter time horizon rather than the longer-term investors who have traditionally invested in regulated network assets. The move to a non-indexed RAV is particularly damaging to longer-term investors due to the associated running down of the company balance sheet.

The move from RPI to CPI is another move that we consider unwarranted and increases the cost to the consumer in the short term. Again, the ability to hedge against inflation is an important factor in the attractiveness of investment for long-term investors. The market in CPI based bonds has not been fully established and there is a risk that until it has then there will inevitably be an additional risk premium that needs to be taken into consideration. Notwithstanding these concerns, any move to CPI must be value neutral and should take into account existing levels of RPI linked debt so transitional arrangements are vital.

On the Cost of Equity, we have identified a number of inconsistencies with Ofgem / CEPA analysis and methodologies (such as the application of notional gearing) and an unbalanced view of evidence presented and have put forward a credible range that is notably higher than Ofgem. Given these issues, and given the fundamental elements being consulted upon in the Framework Consultation, we consider it too early to finalise a range at present without further industry dialogue on concerns raised.

The other component of the WACC is the debt funding. We need to ensure that efficiently incurred debt is appropriately covered by any debt mechanism and we believe the continuation of an appropriately re-calibrated trailing average can achieve this (15 years with a trombone to a conceptually correct 20 years over GD-2). We agree that any atypical debt structures that exist need to be dealt with outside any proposed mechanisms.

Delivery of the Business Plan

In defining the GD-1 business plan, the implementation programme was very challenging and there were some areas that could have benefited from more time and analysis. It is important to have allowance in the programme to appropriately calibrate the plan, calibrate incentives and to work on the very significant challenge of quantification.

We believe this should be delivered alongside strengthening the consumer voice and embedding it throughout the business plan. To this end we have undertaken a process of deliberative research as the first stage of a broader engagement project. This deliberative research is designed to explore consumer priorities. Alongside this, feedback from our Stakeholder Advisory Panel has also fed into this consultation response.

This stakeholder feedback should be fed into a strong incentive mechanism that delivers outcomes which are in customers interests. We believe incentives over and beyond Totex are key to incentivising the right behaviour to deliver customer outcomes and incentivise quality business plans.

We firmly believe that by embedding the consumer voice in the business plan, by using existing structures to drive further improvements and through an extended incentive regime that delivers for the current and future customers RIIO-2 can also deliver in the interests of other stakeholders and investors.

2. Introduction.

There were no specific questions posed in Chapter 2 of the Framework Consultation, however, there were some important points made that we would like to explore further regarding the benefits and challenges of RIIO.

Delivering for future customers

Gas Distribution Networks (GDNs) need to be given the opportunity to define their role in the decarbonised energy network. In GD-1 we extensively engaged in collaborative innovation across all the GDNs to build the technical evidence base to support decarbonisation. This needs to be built on in GD-2 to set out the technical and economic potential to re-purpose the gas network to meet our customers' needs in line with Ofgem's principle objective of protecting the interests of existing and future consumers¹.

The RIIO structure provides a good framework through which to do this. However, we have a concern that the multiple measures proposed in the Framework Consultation, along with the proposed changes to innovation funding could stifle innovation and its deployment. This will reduce our ability to deliver improvements in quality and meet the needs of future consumers.

Defining what good looks like.

To ensure that Ofgem and the GDNs are aligned as we move into the development of sector specific strategy, it will be very important to define what good looks for both the business plan and the performance of companies during the price control period.

In our view a good business plan should be:

1. **Simple and clear:** Avoids unwarranted complexity that does not contribute value.
2. **Delivers improved service:** By encouraging companies to innovate and to share best practice the plan should present improved value for the end consumer.
3. **Provides an appropriate return for risk:** It ensures the company is financeable over the long run and sets a level of return that maintains sector attractiveness to stable, long term investors.
4. **Calibrates risk and reward:** Rewards for outperformance are calibrated with the risk and cost of delivery and penalties for underperformance are proportionate.
5. **Calibrates current and future customers:** The needs of future customers are delivered by maintaining a resilient network and enabling decarbonisation.

Whilst a successful business period should deliver:

1. **A safe and reliable network:** Safety needs to remain the primary focus. Since privatisation the safety and the reliability of the network has improved continually. By the end of GD-1 we will have delivered an 80% reduction in explosion risk since SGN was formed in 2005. We need to continually improve to ensure the safety of all our customers.
2. **Focus on the consumer:** Current and future customers remain at the heart of business plan delivery through appropriate incentives and innovation programmes.
3. **Clarity in outcomes:** The outcome should be expressed in a consumer-focused manner with a clear link between the desired outcomes and the incentives in place.
4. **Explainable returns:** A framework through which returns are explainable, linked through to desirable customer focused outcomes and the financial risks are transparent and forecastable for investors.

¹ Powers and Duties of Ofgem: <https://www.ofgem.gov.uk/publications-and-updates/powers-and-duties-gema>

5. **Fully funded emergency service:** At the core of our business is an emergency service. We have a statutory duty to respond to publicly reported gas incidents and other related incidents, such as Carbon Monoxide (CO). The emergency service must be appropriately funded as an essential requirement to mitigate against the potential consequences of gas escapes, upstream or downstream of the meter, that have the potential to result in a gas explosion.

We are concerned the Framework Consultation will not deliver these objectives due to the multiple and complex points of intervention across multiple layers of the price control. As we move into the sector specific methodology it will be important to quickly clarify what makes a good business plan and what success for RIIO-2 looks like. This is important in order to ensure clarity of expectations on network companies, the level of service that customers should receive, and to identify unintended consequences if interventions drive different behaviours.

Observations on the RIIO-2 Framework Consultation

In this consultation response we have answered each of the questions raised. At the start of each section we have also provided observations on the proposed RIIO-2 Framework that are not covered directly by a question. At the end of each section we have provided a summary of the view from our Stakeholder Advisory Panel. There are a number of observations we would like to draw your attention to directly.

1. **Multiple layers of control.** Within the framework consultation, Ofgem proposes to introduce three layers of control. The first layer of control exists within the structure itself with the return to the five-year price control, the increased use of indexation, and the use of data from RIIO-1 to significantly tighten targets. The second layer of control exists with the indexation of output measures, the introduction of output standards as a licence condition and the potential use of relative mechanisms. A final layer of control is proposed through the introduction of failsafe measures.

Our view is that these multiple layers of control are unnecessary and add additional complexity rather than simplifying the RIIO framework. We believe it is possible to deliver the desired outcome by using existing tools and strengthening them. The existence of multiple layers of regulatory control risks encouraging managerial focus on mitigating risk at the expense of delivering consumer focused outcomes.
2. **Unintended consequences of relative mechanisms.** Relative mechanisms are identified as a potentially beneficial structure by introducing competition to both incentive mechanisms and overall returns. However, it should be recognised there will be detrimental consequences as a result. The sharing of good practice and co-operation will stop, leading to a worse consumer outcome; significant changes in financial returns will be determined by a largely subjective calibration; and legacy or geographical factors may condemn a network to a bottom rung and disincentivise any attempt to improve.
3. **Negative impact of ex-post adjustments.** Within the Framework Consultation there are several points where ex-post adjustments are proposed. We do not support ex-post adjustments. They undermine investor confidence, risk undermining financeability, they blunt the power of the incentive mechanism and the forecast-ability of returns. This reduces attractiveness of the asset class for investment and leads to higher costs for all consumers.
4. **Inclusion of Minimum Standards in the licence.** By placing minimum standards in the licence, it introduces the risk that these standards become entrenched and cumbersome. Secondly it creates the risk that they become the de-facto standard; and because they are embedded in legal text are difficult to keep up-to-date. When standards are included in the licence then they must be true minimum standards with an associated strong incentive to drive actual behaviour.

Regulatory Approach and Customer Benefits

We should keep in mind that the introduction of the RIIO structure was a radical change in the approach to regulation in GB. This approach has driven significant management and organisational change. That change, in turn, has led to much higher performance levels and improved consumer outcomes. During the GD-1 period

these benefits have been split between consumers and shareholders. In GD-2 these benefits will directly accrue to consumers as the gains made in GD-1 are incorporated into GD-2 baselines.

In addition, we should be cognisant that given RIIO-1 was a radical change in approach the full savings potential may not have been recognised at the time. The new RIIO-1 business plans were aggressive, based on the outturn from previous price controls. Current levels of performance have arisen from a positive step-change that was unlocked by RIIO and unanticipated. In RIIO-2 we expect more marginal improvements.

Definition and Quantification

As noted the RIIO structure was radically different compared to other regulatory frameworks that had preceded it. There were components of the regulatory structure that, with hindsight, could have benefitted from being more tightly defined and quantified. These included: the structure of incentives and their measurement, the revised enforcement policy of the 3-tier approach for the Iron Mains Risk Replacement Programme, the approach to asset management and the methodology surrounding unplanned and planned interruptions.

We encourage Ofgem to recognise these challenges and that this may have contributed to some of the transparency concerns surrounding GD-1. We are concerned that Ofgem looks to introduce additional layers of complexity and this could distract from the challenge of definition and quantification that needs to be completed prior to the start of the GD-2 price control period on 1 April 2021.

A focus on the definition and quantification of the GD-2 settlement will reduce the potential for misaligned expectations and unintended consequences. As an example, we consider Network Output Measures (NOMs) to be a very important component of a decision supporting toolbox. There remains substantial input to validate the outputs and ensure consistency in approach of the mechanism. We also need to be clear on the boundaries of such a complex tool. Without appropriate discussion and attention to detail, a powerful tool, like NOMs, risks defaulting into a de facto decision-making tool, removing management and engineering expertise, experience and judgement.

Fuel Poverty and Social obligations

In the Framework Consultation document there is a notable lack of discussion on fuel poverty and social obligations. We assume that this is because Ofgem recognised that, whilst there have been issues with changing definitions, they are a success point in GD-1 that can be developed and built upon during in the sector specific methodology, a perspective that we would support.

Distinction between pre-control and during price control period risks

CEPA's review of the RIIO framework distinguishes between the risk prior to the price control period and the risk during the price control period. CEPA argue the risks prior to the price control period are real, and are reduced through regulatory process and the CMA appeal process. CEPA then argues that risk during the price control period is minimised by the regulatory structure.

We disagree with the assessment that risk during the price control period is minimised. During GD-1 we have experienced direct regulatory interventions from changes in government programmes (e.g. the eligibility criteria for fuel poverty), there has been a referendum on Scottish Independence, a general election with nationalisation of networks being a dominant campaign feature and an EU referendum.

High powered vs low powered regulatory regimes

The second observation arising from CEPA's review is the description of the RIIO regime as 'high powered', a concept which is not clearly defined². We have assumed that the definition is that proposed by NERA³ in their report to the Australian Energy Regulator where define 'high powered' as a system where allowances are close to the efficient benchmark in contrast to a 'low-powered' regime where allowances are closer to actual outcomes with a high degree of cost pass through i.e. cost-of-service or rate-of-return regulation.

CEPA and the Framework Consultation appear to advocate moving towards a low-powered regulatory system. Moving to a 'low powered system' transfers risks that are considered by CEPA as being 'outside of network companies control' from network companies to consumers. We should note, however, that the GD-1 price control is already significantly lower-powered compared to the water sector.

In addition, we should note that moving to a low-powered regime does not remove risk, it simply transfers risk from network companies to consumers, along with the incentive to manage and mitigate them.

Real price effects

The CEPA analysis suggests that Real price effects (RPEs) could be considered as being 'outside of network companies control' and that so far networks have been net beneficiaries.

It is important to note, that we still have three years of GD-1 to run, and it is entirely possible that RPEs could change direction during the remainder of the price control period. There are clear signs that prices in key markets are beginning to rise as the market around key resources tightens. Secondly it is important to note that RPEs could easily have gone in the other direction. Finally, it should be noted that whilst these may be considered to be 'outside of network companies control' companies are able to take mitigating actions to reduce their exposure to those risks - through their contracting strategy and hedging strategies – and companies should be incentivised to do so. This is discussed in Chapter 6.

² CEPA reference Ofgem, we can not find the term in this reference or similar Ofgem document.

³ NERA, 2013, [Assessing risk when determining the appropriate rate of return for regulated energy networks in Australia](#)

3. Giving consumers a stronger voice

We are supportive of the proposed approach put forward by Ofgem for a company-recruited Customer Engagement Group, and an Ofgem recruited RIIO-2 Challenge Group. Feedback from our own Stakeholder Advisory Panel also agrees with this.

For these two groups to work effectively, it is important there is clearly defined vires to establish the groups' operation, their coverage, their composition, and how they should interact. This should be developed and agreed as a point of priority.

By giving consumers a stronger voice this will lead to regionally specific business plans. Our business plans will reflect the stakeholder priorities of each of our licenced areas - Scotland and the south of England. It is important that this is recognised and Ofgem are clear in advance where they require consistency and where diversity is welcomed.

Regarding the Open Hearings, we have concerns regarding their implementation. If the role of Open Hearings is tightly defined to points of disagreement around evidence that has been previously presented then it could provide a valuable forum for resolution. If the Open Hearings have a broader scope and allow new evidence to be introduced, then there is a risk this could undermine the broader stakeholder process.

Q1. How can we enhance these models and strengthen the role of stakeholders in providing input and challenge to company plans?

- What are your views on the proposal to have Open Hearings on areas of contention that have been identified by the groups?
- i. **How can we enhance these models and strengthen the role of stakeholders in providing input and challenge to company plans?**

When considering how to enhance these models and strengthen the role of stakeholders there are a number of issues that should be taken into consideration by Ofgem.

1. **Clearly defined vires.** The powers and the structure of the Customer Engagement Group, the RIIO-2 Challenge Group and Open Hearings need to be clearly defined in advance. An Ofgem-approved common set of outline Terms of Reference (ToRs) for Customer Engagement Groups, and early publication of the RIIO-2 Challenge Group ToRs would assist in this regard. Clear definition will help to ensure that these groups are able to fulfil Ofgem's objective of ensuring effective and robust stakeholder representation.

Our understanding is that the scope of the RIIO-2 Challenge Group will be to challenge network companies and Ofgem's approach to the business plan. The basis on which the RIIO-2 Challenge Group can challenge and the scope of that challenge needs to be clearly set out. As an example, should the RIIO-2 Challenge Group be able to challenge Ofgem on its interpretation of the CEPA work or conclusions from this consultation?

With Open Hearings, we understand this is a proposed mechanism to hear alternative viewpoints around areas of contention between companies, the RIIO-2 Challenge Group or the Customer Engagement Group. We think that the Open Hearing structure needs to be tightly defined to ensure it is focussed, and does not stray into areas that are not immediately relevant to the point in question. It will be important to ensure third parties are encouraged to enter into the stakeholder process during the development of business plans rather than simply presenting new evidence at the end of the process.

2. **Composition of the group.** It very important that the composition of the Customer Engagement Group and the RIIO Challenge Group should provide appropriate diversity of views and experience. The success of both groups will depend upon members with a collective range of experience able to give informed and well-reasoned responses to a broad range of issues and an effective Chair.

3. **Quality of Evidence.** It is important that there is a clear understanding on what constitutes high quality and effective evidence. This is particularly important for assessing the quality of the business plan and values attributed to incentive mechanism through quantitative research such as willingness to pay studies.
4. **Regional Differences.** The structure of the Customer Engagement Group should reflect regional differences and enable these to be reflected in each business plan. These differences should be respected by the RIIO Challenge Group.
5. **Consistency between plans.** In addition to respecting regional differences it is very important to recognise where consistency is required. There is already a high-level of consistency on key components, e.g. the asset strategy determined through NOMs, Repex strategy and key incentives. Other points of consistency should be made clear to the Customer Engagement Group from the outset.
6. **Sufficiency in resources.** We understand it is the duty of networks to ensure the Customer Engagement Group is appropriately resourced and we would support dialogue between the chairs to promote consistency in resource provision. We understand it is the duty of Ofgem to ensure sufficient resources are made available to the RIIO-2 Challenge Group. We encourage appropriate resources to be made available to them as it is important that Ofgem and stakeholders are confident that all business plans are robustly evaluated in a timely manner.
7. **Process.** Networks companies need to have clarity on the process through which information is presented to the RIIO-2 Challenge Group, the order of topics considered and the evaluation criteria which they will be held to. The order of topics to be considered by the RIIO-2 Challenge Group will need to be communicated sufficiently in advance to avoid impacting the quality of information presented.

Allowing network companies to define their own timetable for presenting information to the RIIO-2 Challenge Group risks reducing the comparability of plans and introducing inconsistency. In this instance an iterative evaluation process may be required to ensure consistency around complex topics.
8. **Transparency.** We would suggest all information that is not commercially confidential should be made available in a timely manner to promote transparency.
9. **Timing.** We need to ensure there is sufficient time for the RIIO-2 Challenge Group to consider evidence and challenge across networks. This needs to be considered alongside proposals for fast tracking.

ii. What are your views on the proposal to have Open Hearings on areas of contention that have been identified by the groups?

Whilst we are supportive of the concept of Open Hearings, we have concerns about their proposed scope. There is a risk a wide scope could throw open the regulatory process to an additional level of scrutiny and challenge at the end of the price control review which could undermine the established price control process, including rights to appeal.

We think Open Hearings could be a beneficial step in the regulatory process if they have very clearly defined ToRs. We think the ToRs should restrict the Open Hearings to examining areas of disagreement between the Customer Engagement Group and RIIO-2 Challenge Group, or to challenging inconsistencies in RIIO Challenge Group recommendations. This could provide an effective forum through which evidence is presented to Ofgem for consideration.

Secondly, we need to clarify the extent to which Open Hearings provide an opportunity for third parties to present new evidence. There is a risk that by allowing evidence to be submitted later it could open the price control process to unmanageable proportions. Secondly, it may discourage participants from actively engaging with the primary stakeholder engagement programme.

An appropriate approach could be that a third-party offering additional evidence should demonstrate it has made reasonable endeavours to engage with the company during the business planning process, that the evidence is material, has not been considered, and could give rise to a discrepancy or stakeholders in the way networks are treated.

Consumer Voice: Feedback from the Stakeholder Advisory Panel

As a part of our response to this consultation we consulted with our Stakeholder Advisory Panel. Their broad observations align with our own and are reflected in the above response. Specific observations include the following:

CEG and RIIO-2 Challenge Group

- Broad support for the proposals to enhance the level of customer engagement, although there are currently limited details provided.
- The proposals support the wider transparency trend towards open governance, encouraging Network Companies to be proactive and adopt the policy position of being open and transparent by default.

Scope of the Customer Engagement Group (CEG)

- The success of the CEG will of course depend upon carefully recruited members with a collective range of experience, well managed agendas and processes, and a strong Chair.
- Groups should have the experience to fully understand effective engagement with consumers and the wider stakeholder groups.
- The focus should be on topics such as affordability, whole system outcomes, energy transition and decarbonisation, and have limited focus on the wider economic impacts the regulated utilities have.
- It is important that local authorities, Local Enterprise Partnerships, and such bodies concerned with local and regional development are properly engaged with.
- SGN's proposed approach to set up the CEG with a 'core' group, with 'stakeholder experts' is sound.
- Whilst the group will be independent, it may be sensible for company representatives to attend meetings to ensure the right level of understanding.

RIIO-2 Challenge Group

- The RIIO-2 Challenge Group could be a particularly important part of the price control process, but there is currently little detail on this.
- The RIIO-2 Challenge Group should also challenge Ofgem's thinking as well as company plans.

Open Hearings

- Transparency is vital in the regulatory system and Open Hearings would be helpful in making the system more transparent. One might anticipate that most of the contentious issues would be addressed during meetings between the RIIO-2 Challenge Group and companies during the preparation of business plans.
- Open Hearings could be a good thing, but there is little detail in the current consultation on matters such as how will they run and who will give evidence. It could be that those attending such hearings would be self-selecting. The risks that a particular position is over-represented, or that Open Hearings become highly politicised, will need to be managed.

4. Responding to how networks are used

We agree with Ofgem's proposal to limit the price control period to five years. It is our opinion a five-year price control goes a significant way towards mitigating the risk inherent in forecasts. We believe a shorter price control period will be more supportive of investor confidence and offers more stability than an eight-year price control with a substantial mid-period review.

A shorter price control is one of the key changes that we feel can address a lot of the enhancements stakeholders would like to see in RII0-2. However, we should recognise that there will be an adverse impact on long-term or new programmes where longevity helps to provide confidence to develop the supply chain. To mitigate this, we would encourage Ofgem to give assurance on the longevity of key programmes, and the targets industry will need to deliver.

Similarly, we are supportive of 'whole system outcomes' and we stress this should encompass the whole energy system. We remain concerned there is a tendency to bind thinking on whole system outcomes to the electricity system. The whole system outcomes approach is about delivering energy to the end consumer in the most convenient and efficient manner whilst recognising the need for decarbonisation and the potential disruption in delivering decarbonisation.

We are pleased the Framework Consultation recognises the strength of feeling among GDNs regarding the valuable role the gas pipe network has to play in the decarbonised economy. However, we think Ofgem is being overly cautious with regards the risk of asset stranding. In our view the perception of stranding and investment risk is significantly lower than at the outset of GD-1. There are few plausible scenarios that currently exclude a future role for the gas pipe network, at a minimum the gas networks provide an insurance role for peak heat demand. Comparing the Future Energy Scenarios (FES) from the start of GD-1 to those today shows a significant uplift in the peak demand forecast through to 2040.

Going into GD-2, we need to focus on sustaining the levels of investment that ensure the continued operation of a safe and reliable network; and enables future options for decarbonisation. The networks need sufficient capital and replacement allowances for the distribution (<7 bar) and transmission (>7 Bar) systems to maintain a safe and reliable network. For both the investment drivers are capacity (growth in gas demand) and integrity (managing aging assets from faults and corrosion). We see the main driver to be integrity and hotspot areas of gas demand through new developments, and major housing developments.

Length of price control

Q2. Do you agree with our preferred position to set the price control for a five-year period, but with the flexibility to set some allowances over a longer period, if companies can present a compelling justification, such as on innovation or efficiency grounds?

- What type of cost categories should be set over a longer period?
- How could we mitigate the potential disruption this might cause to the rest of the framework?
- What additional measures might be required to support longer-term thinking among network companies?
- Do you instead support the option of retaining eight-year price controls with a more extensive Mid-Period Review (MPR)?
- What impact might the alternative option of an eight-year price control with a more extensive MPR have on how network companies plan and operate their businesses?

iii. Do you agree with our preferred position to set the price control for a five-year period, but with the flexibility to set some allowances over a longer period, if companies can present a compelling justification, such as on innovation or efficiency grounds?

We agree with Ofgem's proposal to limit the price control period to five years. It is our opinion that a five-year price control goes a significant way towards mitigating the risk inherent in forecasts. We believe that a shorter price control period will be more supportive of investor confidence and offers more stability than an eight-year price control with a substantial mid-period review.

Longer term contracts

We recognise there is a risk that a short price control period may have an adverse impact on long-term programmes. A five-year price control could reduce confidence about the durability of important programmes. We believe there are two particular areas; the high-pressure transmission upgrade programme, and the Iron Mains Risk Reduction Programme (IMRRP) that could benefit from longer term confidence.

A shorter price control could have an adverse impact on overall costs for these programmes. We think this could be largely mitigated by Ofgem providing assurance that the programmes will continue into RIIO-3, subject to a review of allowances. Greater certainty and a commitment to see these programmes through to completion would provide confidence to underpin longer term contracts and investment plans.

We also consider it is important, that there is consistency across GDNs in the time allocation, otherwise a mismatch in the duration of the programme would be beneficial to the GDN that secures the longer period.

New Programmes

A second consideration is where a new incentive mechanism or programme is proposed. New programmes or incentive mechanisms take time to become established and the supply chains necessary to deliver them take a significant investment of time and financial resources to become established. An example, would be if GDNs became more involved in improving energy efficiency. This would take time and resource to establish and could benefit from extending over, say, two price control periods.

We recognise new programmes also have greater uncertainty surrounding costs and deliverability and Ofgem may have less confidence in its ability to forecast those costs for a longer period. Accordingly, rather than a longer-term period we would support a clear commitment from Ofgem (with associated cost recovery if it is discontinued) to a longer-term programme. This would give the assurance necessary to support development of the supply chain; whilst reopeners could give an opportunity to review and allow a reflection of efficient costs.

Innovation Mechanisms

The third consideration is then with regards to innovation. It is widely recognised that without specific structures in place to support innovation regulated companies typically under-invest in innovation. This is because regulated companies incur the financial cost of innovation, bear the risk of it being unsuccessful, and if the innovation is successful the benefits from innovation are extracted to consumer benefit in the next price control period.

In principle, innovation could be incentivised by allowing the benefits to accrue over a longer period; however, we consider the complexity of devising an appropriate structure would be challenging. Any structure that allows benefits to accrue over a longer period would need to accommodate the diversity of innovation projects, the risk of delivery, or the quantum of any financial benefits that may or may not accrue to the company.

Accordingly, we do not consider a longer time period in isolation an appropriate structure to support innovation. This is discussed further in Chapter 5.

iv. What type of cost categories should be set over a longer period?

As we have set out above, we think there could be a case for specific cost categories associated with substantial new programmes where there may be benefits from setting allowances over a longer period, with appropriate re-openers due to the cost of establishing the programme.

For the cost categories associated with existing long-term programmes we propose that a clear assurance from Ofgem regarding a long-term commitment to such programmes would mitigate any potential additional costs.

For cost categories associated with Innovation, we expect the complexity associated with such a structure could outweigh the benefits.

v. How could we mitigate the potential disruption this might cause to the rest of the framework?

To mitigate the risk of potential disruption, any longer-term programme would need to:

- Be clearly separable from other expenditure;
- have allowances set over a longer-term period;
- have clearly separable cost benefits or efficiencies gains; and
- run over two price control periods (to avoid a mini-review or cliff-edge).

vi. What additional measures might be required to support longer-term thinking among network companies?

As stated above clear-commitments and objectives from Ofgem to provide a clear strategic direction beyond the immediate price control would promote longer-term thinking. Secondly, a strategy on the decarbonisation of heat that includes regional governments, the HSE and BEIS along with Ofgem. Finally, subject to appropriate definition and testing roll-over mechanisms could be considered.

vii. Do you instead support the option of retaining eight-year price controls with a more extensive Mid-Period Review (MPR)?

No, given the concerns Ofgem has expressed regarding the ability to forecast accurately - which we agree with - we think a short-term price control period helps to support a legitimate business plan.

viii. What impact might the alternative option of an eight-year price control with a more extensive MPR have on how network companies plan and operate their businesses?

The impact of the MPR would depend upon its scope. If the scope is set too broadly then it would undermine the benefits of a longer-term price control by reducing the investment and certainty that underpins the financial benefits. A more extensive MPR may result, by default, in four-year price control periods.

Length of Price Control: Feedback from the Stakeholder Advisory Panel

When asked their opinions on the duration of the price control period members of our Stakeholder Advisory Panel had a mixed response. There were a number of views in favour of a five-year control suggested that it was appropriate considering the challenge of uncertainty. Others on the panel expressed a preference for an eight-year price control in order to promote stability, with a broad scope for a mid-period review that could be utilised if there are substantial unanticipated changes.

Whole system outcomes

Q3. In what ways can the price control framework be an effective enabler or barrier to the delivery of whole system outcomes?

- If there are barriers, how do you think these can be removed?
- What elements of the price control should we prioritise to enable whole system outcomes?

i. In what ways can the price control framework be an effective enabler or barrier to the delivery of whole system outcomes.

In order to define the structures that will enable whole system outcomes and to ensure we do not inadvertently create barriers, the industry needs to have a clear understanding of how we define 'whole system outcomes'.

From our perspective, the whole system outcomes approach is about delivering energy to the end consumer in the most convenient and efficient manner whilst recognising the need for, and the potential disruption arising from, decarbonisation.

The concept of whole system outcomes approach needs to consider electricity, heat, transport and waste. It should look to derive a system that integrates delivery of energy, energy efficiency and decarbonisation at least cost. For heat there are multiple routes and, in our view, no single solution. We believe the solution is likely to include a blend of waste to gas (syn gas), biomethane, hydrogen, dedicated heat and dedicated hydrogen networks. Network companies should therefore be incentivised to enable these solutions in an impartial way, and promote the enabling innovation.

Similarly, a whole systems outcomes approach recognises there are barriers between regulated components of the system. These are due in part to the compartmentalisation of the regulated structure and subsequent lack of availability of information across the different sectors. These barriers can be reduced by incentivising optimisation between the transmission and the distribution operators and between the gas and the electricity networks. The price control framework should support interactions between the provision of heat, electricity, and transportation.

In order to do this, we would encourage Ofgem to promote a whole system outcomes approach in its own working. For example, within regulatory impact assessments there should be a specific consideration made to evaluate whole system outcome opportunities for cross-sectoral issues such as smart systems and energy storage.

To fully remove the barriers to a whole system outcomes approach, however, Ofgem's vires and the respective Acts of parliament (e.g. Utilities, Electricity and Gas Acts) need to be considered. These Acts contain duties, such as an obligation to supply gas or maintain a connection, that may impede an alternative whole system outcomes solution.

Finally, we need to recognise that there are financial and organisational barriers. Developing a whole system outcomes approach extends operational activities. Such extensions have a direct cost and their success is highly inter-dependent with multiple parties, as such they have a higher risk of not progressing or not providing a direct payback to the company compared to other sector specific projects. This needs to be recognised when promoting whole systems outcomes.

It is in consumers interests that these barriers are overcome, and RII0-2 should look to bring about a change in business as usual and the current regulatory structure to enable a whole systems outcome approach.

ii. **If there are barriers, how do you think these can be removed?**

The requirement to reduce the current barriers in the regulatory and licence framework will take time, but the process of change should start as soon as possible.

In the meantime, in the RIIO-2 price control period there are many whole system benefits and outcomes that could be realised through the design of specific incentive mechanisms. It is important to recognise that whole system outcomes need to be directly incentivised because they are typically non-core and high-risk projects where the financial benefits may accrue to multiple parties.

Some of the areas we would look to promote through an incentive mechanism are set out in our response to question Q3 (iii) below.

iii. **What elements of the price control should we prioritise to enable whole system outcomes?**

We should prioritise stakeholder engagement on whole systems outcomes to understand in more detail what our stakeholders would look for in such an approach. Areas of focus could include:

- **Improvements in planning, co-ordination and collaboration across utilities.** This could be particularly focused on the provision of new services or during major infrastructure projects that have long planning horizons.
- **Considering whole energy systems when making investment decisions.** For example, whether electricity network reinforcement costs could be resolved more cost effectively by utilising the storage capabilities of gas networks and power to gas plants.
- **Proactively engaging different sectors and supporting solutions.** These could range across the transport, heat networks, and innovative new business sectors. For example, collaborative projects for gas fuelled vehicles in the heavy goods or rail sectors to reduce diesel emissions in city areas.
- **Promoting security of supply by networks supporting each other for resilience.** Energy storage is likely to be an increasing challenge for the electricity sector as we progress towards decarbonisation. The gas networks are particularly well placed for managing diurnal variations and monthly variations and that potential should be utilised.
- **Collaboration across the energy sectors.** For example, between the transmission and the distribution network operators and owners within and between gas and electricity sectors to promote more effective use of the network.
- **Facilitating the move to open data access and move towards energy service providers.**
- **Contributing to policy development objectives and ensuring regulation is not a barrier to optimal solutions.** For example, the way that network charges are applied or identifying where connection charging methodology could be adjusted to reduce barriers to innovative new entrants and furthering the understanding of the role of gas networks in the long-term and within a decarbonised energy system.
- **Promoting dialogue between regional network companies.** For example, in both electricity and gas, to develop optimal solutions for a local area. This could be particularly important if decarbonisation progresses on a zonal basis, with different regions adopting different approaches to decarbonising heat.

Whole system Outcomes: Feedback from the Stakeholder Advisory Panel

Regarding whole system outcomes, the Stakeholder Advisory Panel referred to the speed of regulatory change being a barrier when new evidence emerges, and the potential for a rapid pace of change potentially taking place with the integration of heat and transport alongside electricity production.

This view was put into context during the recent cold weather experience, and the magnitude of the challenge with heat demand being five to six times that of electricity. Our Stakeholder Advisory Panel also identified that achieving whole systems outcomes may require legislative and not just regulatory change. For example, if gas was to be removed from high rise buildings, how would this be reconciled with a GDN's obligation to provide energy?

Q4. Do you agree with our minded-to position to retain the current start dates for the electricity transmission and electricity distribution price controls, and not align them?

We agree gas distribution and gas transmission should remain aligned to promote closer co-ordination between investment plans in the business planning process. We do not have a position on electricity

Q5. In defining the term 'whole system', what should we focus on for the RIIO-2 period, and what other areas should we consider in the longer-term? Are there any implementation limits to this definition?

As set out above.

System Operator price controls**Q6. Do you agree with our view that National Grid's electricity SO price control should be separated from its TO price control?**

No position.

Q7. Do you agree that we should be considering alternative remuneration models for the electricity SO?

- If so, do you have any proposals for the types of models we should be considering?

No position.

Q8. Should we consider alternative remuneration models for the gas SO?

- If so, why and what models?

We do not think there needs to be significant change in the remuneration model for the gas System Operator. This is a small component of the overall cost of operation and therefore should not be prioritised as an area for consideration.

Gas Transmission Charges are in contrast more substantial. Under the proposed transmission charges there is no longer a logical reason why transmission charges should be passed through GDNs. In the sector specific review, we should look to review whether transmission charges should be charged directly to the Shipper.

Network utilisation, stranding and investment risk

Q9. What options, within the price control, should be considered further to help protect consumers against having to pay for costly assets that may not be needed in the future due to changing demand or technology, while ensuring companies meet the reasonable demands for network capacity in a changing energy system?

The Framework Consultation notes that Ofgem have already taken into consideration the risk of asset stranding for gas networks by considering a 24 year pay-back period and by front loading depreciation to encourage more Opex based solutions. Ofgem also states that front loading risk can reduce the risk of increasing consumer charges if the network was utilised less than planned.

We disagree with this comparison against the level of load placed on the network. As a network operator our statutory duty is to firstly to manage the risks of aging assets from an engineering integrity perspective and fulfil our statutory safety obligations, an example would be our 3200km of high pressure transmission pipelines and 30 national offtakes, which were constructed in the late 1960s and early 1970s.

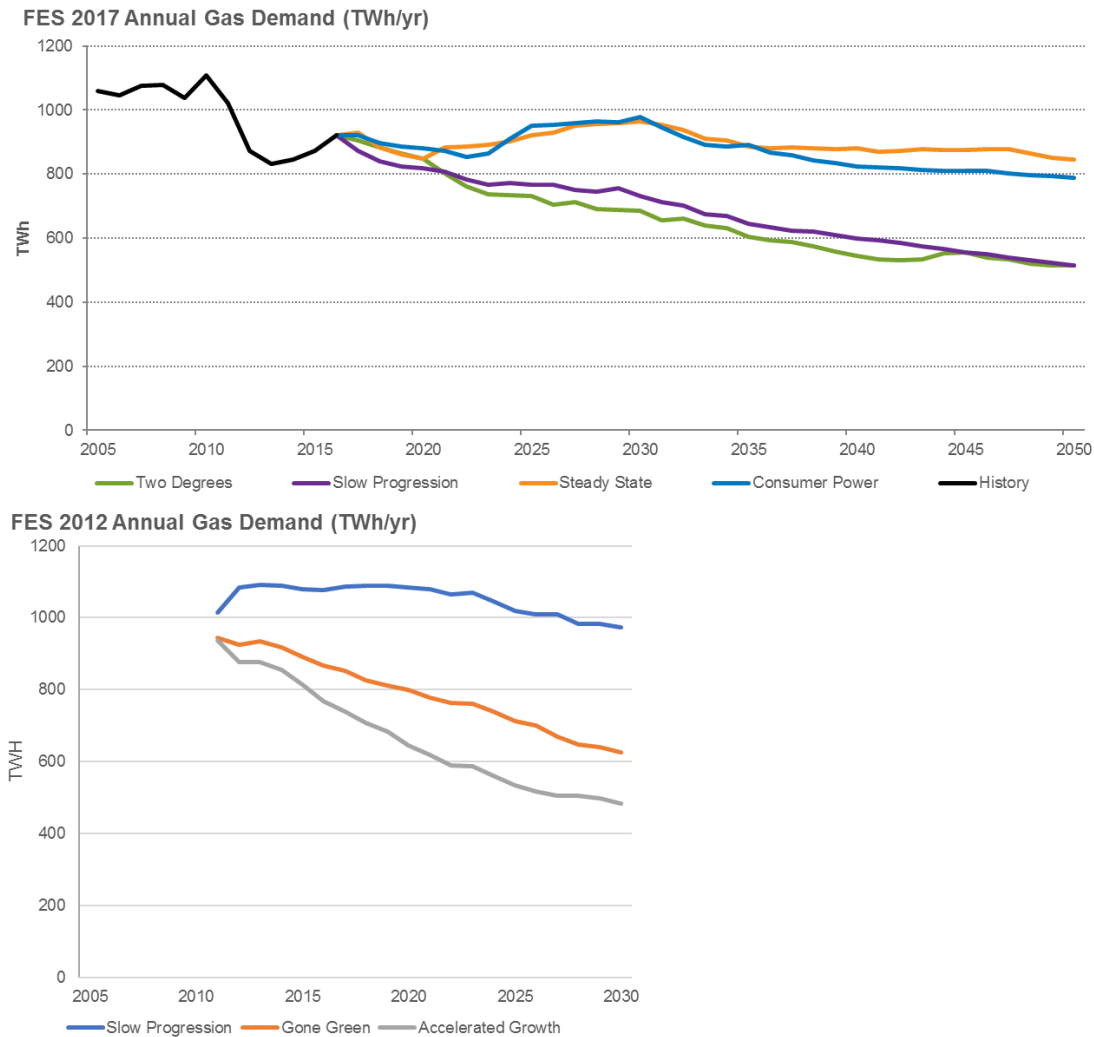
Secondly our statutory duty is to provide the 1-in-20 peak period. Whilst there may be welcome reductions in average demand due to increased energy efficiency, the peak demand may not decrease or may increase as peaking plant respond to a shortfall in electricity production and exert greater loads onto our network.

Average demand

At the time of GD-1 the NG Future Energy Scenarios (FES) 2012 suggested there was a viable scenario that showed the rapid decline in both total domestic gas demand and peak demand. We understand these were based on a view from DECC (now BEIS) determining future heat provision would be full electrification.

These scenarios framed Ofgem's thinking at the time but have substantially changed. Several recent reports have clearly shown the challenge of meeting peak heat demand from the power grid. In figure 1 we have compared current forecasts with those at the start of GD-1. In FES 2012 the lowest gas scenario reached 483 TWh by 2030/31, under FES 2017 the lowest gas scenario is 689 TWh in 2030/31 and only reduces to 514 TWh by 2050. Meanwhile the highest gas scenarios in FES 2012 and FES 2017 are broadly equivalent.

Figure 1: Annual gas demand in the 2012 and 2017 Future Energy Scenarios.

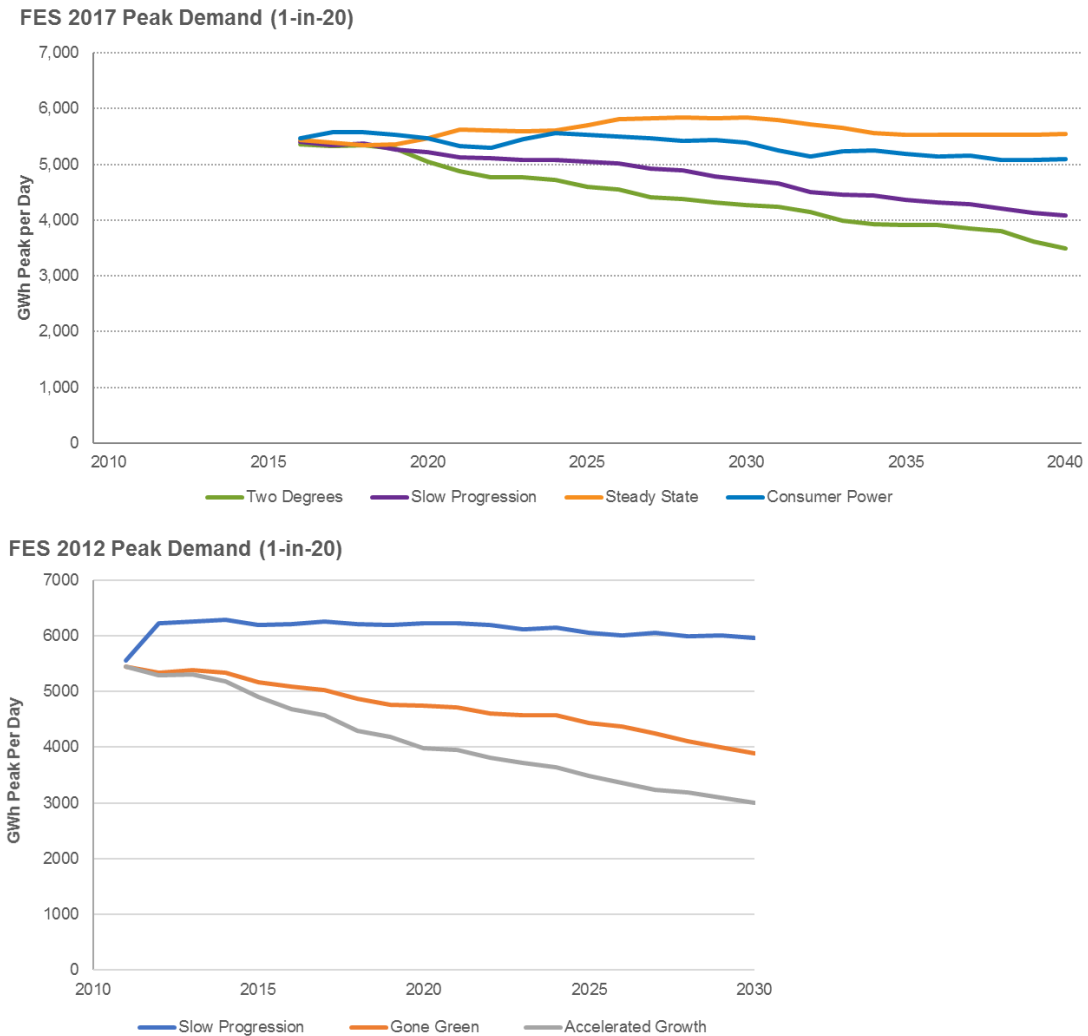


Peak demand

In addition, we saw the importance of the gas networks as a reliable source of energy during the recent cold-weather spell (March 2018). Even in severe conditions the gas networks provided secure energy provision with a reliability unmatched by any of the other networks (electricity, water or transport). Even under the lowest demand scenario this reliability makes the gas networks an important insurance product that protects life during extreme cold-weather events.

Accordingly, under FES 2017 peak demand from a 1-in-20 peak day stays nearly constant out to 2040 under two of the scenarios and a reduction of 25% to 35% under the two lower demand scenarios, Figure 2 below.

Figure 2: Peak gas demand in the 2012 and 2017 NG Future Energy Scenarios



Impact of overly cautious approach to asset stranding

The revised expectations for average and peak demand suggest that during GD-1 the criteria applied by Ofgem for asset stranding may have been overly cautious by implying certain investments may not have been worthwhile at the time.

It should be noted that being overly cautious with regards to asset stranding, whilst reducing the cost exposure, may not be in consumers overall best interests as it may prevent efficient investment taking place. As an example, an overly restrictive set of investment criteria can mean smaller remedial works are undertaken to meet safety criteria rather than a broader upgrade; this can lead to greater consumer disruption and lower consumer value.

Alternatively, a slow down or pause in any of the major works programmes - a mains replacement or the asset integrity management of the transmission systems - would see an associated loss of specialised contracting and direct labour teams to undertake this work and may reduce the skill base from which to recruit for future projects.

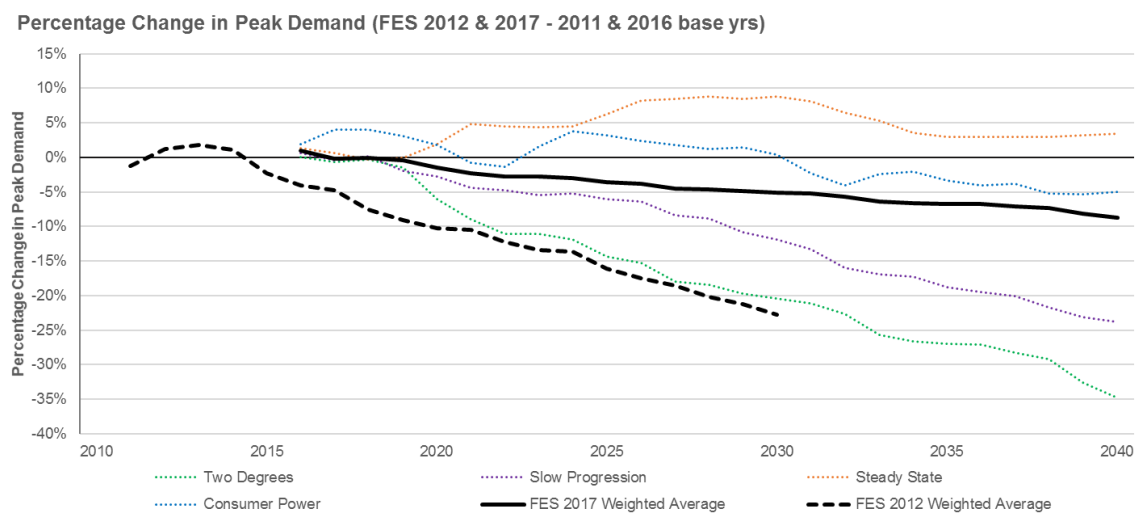
No Regrets investment

As we develop our business plans for GD-2 we need to ensure options are not closed off, and minimise the risk customers are defaulted into a higher cost decarbonisation pathway because of earlier investment decisions.

On this basis we would accept that FES provides a suitable point of reference given that it is the most widely consulted point of reference for the national picture. However, it is important to recognise regional scenarios will vary according to local needs.

Furthermore, the assessment should be against forecast peak demand. Peak demand is the statutory obligation that we have to deliver. As an example, the average of the peak demand scenarios (assuming all four have an equal probability of being realised) allows us to define a mid-point which is shown in figure 3 below;

Figure 3: Percentage change in peak demand



This indicates peak demand reduces by less than 5% out until 2030/31 and less than 9% out until 2040/41. This is substantially higher than 2012 when peak demand was forecast to decline by more than 20% by 2030.

This broadly correlates with our latest [Long Term Development Statement \(LTDS\)](#) which forecasts a 4.5% peak day decrease across our three LDZs by the end of the ten year forecast (out to 2027) and an 8.2% reduction in annual demand.

Stranded Assets: Feedback from the Stakeholder Advisory Panel

It was noted in the group there needs to be sufficient flexibility to ensure investment in necessary housing, economic and social development is not held back due to a lack of investment in energy infrastructure. The example was cited in London where the GLA is currently looking at possible models for reducing delays whilst protecting the consumer.

End-use energy efficiency

Q10. In light of future challenges such as the decarbonisation of heat, what should be the role of network companies, including SOs, in encouraging a reduction in energy use by consumers in order to reduce future investment in energy networks?

- What could the potential scale of this impact be?

Delivering heat and energy efficiency is an important policy objective which is currently under-served. We think gas networks have an important role in helping to deliver energy efficiency as a trusted company with multiple points of customer interface and that this should be developed further in the Sector Specific Methodology.

Through the Fuel Poor Networks Extension Scheme (FPNES) we have been working with end consumers in a strategic manner to deliver gas connections and would suggest a similar approach could be taken with helping to take families out of fuel poverty by improving the efficiency of housing.

The precise form this should take needs to be determined by a technical and economic assessment of the opportunities available. It is our understanding that many of the easier measures, e.g. cavity wall insulation, have already been extensively deployed leaving the more challenging options to be tackled.

Secondly, for energy efficiency to be delivered successfully we need to learn lessons from the FPNES including the need for a regular review of the scheme, alignment of targets and eligibility definitions, and alignment with broader government policy.

Finally, to clarify, we do not expect efficiency investments to result in a significant reduction in future network investment. As described previously, peak demand reduces at approximately a third of the rate of average demand. Therefore, to expect a specific reduction in network investment that is directly attributable to energy efficiency investment would require the maintenance of some very challenging assumptions.

End Use Energy Efficiency: Feedback from the Stakeholder Advisory Panel

There was recognition that the decision on End-Use energy efficiency was intertwined with BEIS and so it was hard to provide an effective response. It was noted the energy efficiency programmes have been subject to constant change. However, it was also noted that it was sensible all companies involved in the energy networks should have a role to play in reducing the number of units of energy consumed as a part of a whole systems approach.

Other members of the advisory group noted there was limited reference in the consultation document to fuel poverty and energy efficiency, and questioned whether there could be closer co-operation with local authorities, national affordable warmth and energy efficiency programmes. Some members of our Stakeholder Advisory Panel believe suppliers should be held to task in assisting customers to reduce energy bills through in-house efficiency measures.

There was general recognition network companies could play a bigger role, and this could work well if customers ultimately receive a more holistic approach to achieving improved energy efficiency. However, the challenges shouldn't be underestimated, as the debate is nuanced and would require changes to primary legislation pertaining to the ECO scheme.

5. Driving innovation and efficiency

We believe the current innovation mechanism, the NIA and NIC, are delivering significant benefits for consumers by pushing the boundary of innovation, promoting cross-industry learning, and encouraging deployment. They are valuable platforms for creating future benefits for energy customers. We are concerned Ofgem's proposed approach places unwarranted restrictions around its application and this will reduce the level of innovation that takes place.

By the end of the next price control period, it will be important to have greater clarity on the technical potential and associated cost of decarbonising heat. To do this we need to be enabling a higher level of innovation and reduce the barriers to the deployment of technology on the gas networks. We believe this will require an increase in total funding from current levels for innovation.

Whilst we agree that changes are necessary to provide a greater focus on whole system outcomes, we believe that abandoning the NIA and NIC would be a backward step. Ofgem's current proposals will leave significant gaps in innovation funding, and risks the scenario that only a few projects with short paybacks and a high probability of success will be progressed. Furthermore, innovation projects risk becoming commercial sensitive competitive advantage rather than openly discussed points of collaboration.

In the Framework Consultation, Ofgem suggest that innovation could be supported by allowing an extended period to secure returns over. We do not think that this would effectively support innovation; it would add a lot of complexity, and creates the risk that the complexity rather than consumer value defines which projects progress.

We have also explored alternative ways in which innovation could be supported, such as enabling higher returns, patents, and direct incentives. As with an extended time we think that these alternatives have challenges associated with them, and as such we support the continuation of direct funding of innovation, roll-out mechanisms and the funding of industry working groups. These should be explored further in the sector methodology.

Regarding competition, we broadly agree with the aim of competition and note that the IGT market provides a large share of the connections market. We do not think there are further areas to apply of competition in gas networks. The major engineering capital and replacement expenditure is centred around upgrading existing "live" gas assets from the low pressure to the high-pressure system. From a safety perspective, it is essential that the GDNs has full control of these works. With smaller projects the cost of artificial competition rapidly escalates to out-weigh the realisable benefits.

Innovation

Q11. Do you agree with our proposal to retain dedicated innovation funding, limited to innovation projects which might not otherwise be delivered under the core RIIO-2 framework?

We support the proposal for retention of dedicated innovation funding, but the limitations applied to the projects that will be supported under RIIO-2 are too constrained. The current stimulus allows NIA and NIC funding for projects where there is uncertainty of success, which did not form part of our RIIO GD-1 allowances and therefore would not be speculatively carried out. We think that this is appropriate and should not be constrained further.

If the innovation gives rise to a financial benefit then these are shared with customer for the remainder of this price control and will be fully accrued to the customer in the next price control period.

An example a clear financial benefit can be demonstrated from the 'Opening the gas market' project where the upfront innovation allowance of £2.1m has delivered significant savings, and has been fully rolled out to the rest of the mainland Scottish Independent Undertakings. This not only saves the customer significant sums, but also ensured security of supply for 8000 customers.

As a direct result of this project a further consumer benefit can be achieved through the adoption of broader gas standards to the rest of the GB market where customers could benefit from non-network related savings upwards of £325m per annum. This is being managed through the Gas Quality Standard Working group. Further information on the Opening the Gas Market and the rollout out other SIUs can be accessed from [OGM project and SIU rollout](#).

A second example includes street-work projects that have delivered benefits through cost avoidance and reduced public disruption. Robotics/CISBOT delivered this by minimising public disruption whilst proactively rehabilitating potentially leaking joints, avoiding future reactionary unplanned disruptive street works.

The robotics project is divided into four elements. Regulatory outperformance for element 3 has been achieved, a procurement event to the market showed actual savings were far higher, customer disruption significantly reduced and social cost savings recognised by key stakeholders. A recent study⁴ by Brighton and Hove City Council re-enforced this.

The success of an NIA project can also be gauged by the key learning points taken to inform the direction of future projects. After the success of the first three elements of the Robotics project, Element 4 was not cost effective and efficient system when compared to our current processes (this may change in the future as Lane Rental charges come into force). The high-level learning from this project helps to inform future innovation benefit realisation models and ensure value for money for our customers. Further information on the robotics project can be accessed from [Robotics](#)⁵.

The examples above would not have been carried out under business as usual due to starting technology readiness levels, the lack of alternative funding or allowances, and the ability to support SME partners.

Innovation: Feedback from the Stakeholder Advisory Panel

Our Stakeholder Advisory Panel were supportive at a very high level of the proposals put forward by Ofgem around Innovation. However, there were questions about the level of scrutiny surrounding the process of evaluating bids by Ofgem. The Stakeholder Advisory Panel queried whether there is currently sufficient focus on the outcomes for consumers and how the decisions around the allocation of innovation funds are made. The Stakeholder Advisory Panel also recognised co-ordination could be improved to identify where alignment of funds could address critical issues and achieve more transformative approaches.

Q12. Do you agree with our three broad areas of reform:

- increased alignment of funds to support critical issues associated with the energy transition challenges
- greater coordination with wider public sector innovation funding and support and
- increased third party engagement (including potentially exploring direct access to RIIO innovation funding)?

⁴ A copy of the report can be provided to Ofgem upon request

⁵ The final report for this will be published in May 2018

i. increased alignment of funds to support critical issues associated with the energy transition challenges

Whilst we accept Ofgem's proposal to align funds to support critical issues associated with the energy transition and the importance of that topic. It is our view this focus is too narrow and will reduce the level of innovation to the detriment of consumers. That said we are open to explore the most effective manner through which innovation could be sustained. From our perspective innovation can be broadly categorised into:

- **Innovation for 'public goods'.** This appears to be the proposed target of the Framework Consultation with a focus on the long-term challenges of the future energy transition and medium-term challenges around system operability, whole system co-ordination and decarbonisation.

We agree this is an important focus of innovation. However, we consider the proposed scope to be too limited. Projects such as the Open Gas Markets and Real-Time Networks are substantial projects with clear public good attributes. It is important such projects continue to be supported.

- **Innovation from high-risk projects (TRL 2- 5).** We have also been very active in high-risk innovation projects to bring them through the technology readiness levels⁶ (TRLs). The robotics project was a £7.4 million project funded through the NIC and progressed the technology from TRL 4 through to TRL 8. We then invested in the implementation of Robotics into business as usual. From the proposals in the Framework Consultation we are concerned this type of project would no longer be supported despite the clear benefits achieved.

These projects have significant risks surrounding their effectiveness, the cost of development and the time to deployment. Without a specific support mechanism, these projects would not have progressed as there would not have been any real prospect of a return within the price control period.

- **Innovation from pre-commercial projects (TRL 6 and 7).** A typical project takes several years to progress from inception through to full commercial readiness. This is particularly true for higher TRL projects on critical assets, an example would be our 'Microstop' project that started with a TRL of 7, but has been through several iterations of redesign, offsite and onsite field trials. If these technologies are not supported through an innovation mechanism then they will not be developed.
- **Innovation from near-commercial projects (TRL 8).** Whilst the technology risk is lower, the key challenge is to ensure there is sufficient testing so that it can be incorporated safely into existing processes and financial benefits realised.

Testing and accreditation both offsite and onsite are essential to ensure the safe deployment of a technology. While the technology risk is relatively low at this stage, live demonstration testing on the network carries risk which is subject to significant process control. High value learning takes place at this stage of demonstration with knowledge disseminated and adoption by other networks.

Whilst it is possible that the most promising of these projects could be developed by network operators without innovation funding this would only be the case, if there is a high probability of success, rapid deployment potential and involves non-critical assets. In addition this would remove the obligation to share best practice and learning.

It is our opinion that under the proposals put forward in the Framework Consultation, innovation will be constrained in high-risk and pre-commercial projects (up to TRL 7) and that this will be detrimental to the level and pace of innovation and to consumer outcomes.

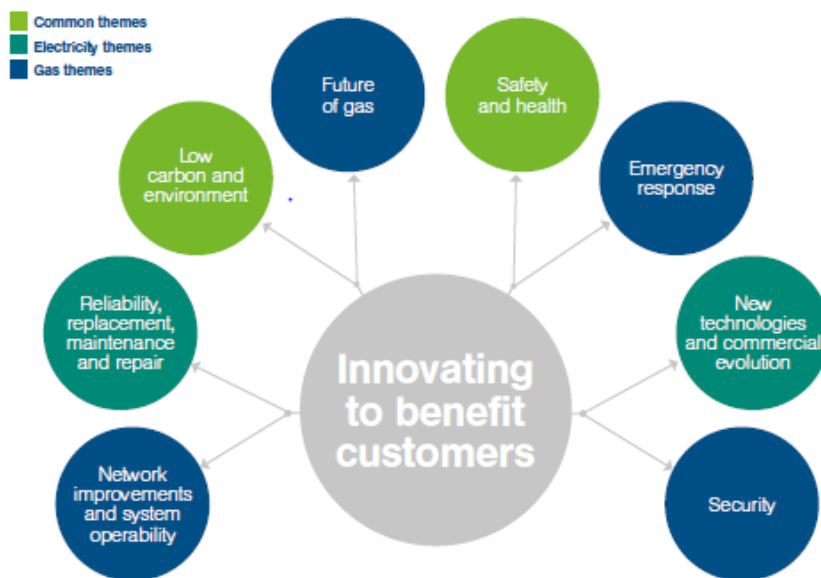
⁶ The Technology Readiness Levels run from TRL 1 through to TRL 9. TRL 1 is very early stage innovation focusing on principles. TRL 4 is validation of the technology level in lab. TRL 6 is the demonstration of the technology in the relevant environment, TRL 8 is a complete and qualified system and TRL 9 is deployment. Funding under NIA/NIC is limited to TRL 2-8.

Higher level innovations (TRL 8 and 9) could be enabled through appropriate incentive mechanisms. However, the need to achieve a return within a 5-year price control period means only the most promising and rapidly deployable projects will be progressed.

When discussing the desire to focus innovation the Framework Consultation references the Australian Energy Regulator's more targeted innovation mechanism. This document references a very specific point of innovation in Electricity Demand Side Management and we would caution against its extrapolation to a broader approach to innovation where a safety case needs to be made on critical infrastructure.

The consultation document also references and commercial business model evolution and consumer behaviour as a point that requires further focus. We would like to clarify that this is only one point of focus. Figure 4 below is from the [Gas Network Innovation Strategy](#)⁷ and demonstrates a much broader spectrum.

Figure 4: Gas Network Innovation Strategy



ii. greater coordination with wider public sector innovation funding and support and

We support the idea of greater co-ordination with public sector innovation funding and support where this is 'additional-to' and not 'a-replacement-of' existing funding structures. To support the decarbonisation of heat, significant funds are required to demonstrate hydrogen technologies and associated carbon capture and storage, and other green gases. Enabling demonstrating these technologies at an appropriate scale will require public sector funding in addition to existing Ofgem innovation funding.

For other TRL levels, public sector innovation funding does not provide an appropriate vehicle for funding that to date has been delivered through NIA and NIC funding mechanism. Specific challenges associated with third party funding include;

- **Limited remits.** Public sector funding bodies often have defined remits that may not include core energy proposals. For example, hydrogen network demonstration and roll-out is not covered by BEIS.
- **Reduced co-ordination.** Funding for projects derives most benefits if it is co-ordinated between networks and at a regional level. Introducing multiple sources of finance with competing objectives will reduce strategic co-ordination.

⁷ <http://www.energynetworks.org/gas-innovation-strategy-consultation.html>

- **Reduced consumer focus.** These funding mechanisms are not focussed in the same way on customer benefits as the current NIA and NIC stimulus.
- **High contributions.** Other funding bodies often require matched funding. This may be appropriate where returns can compensate for the risk incurred, but is not appropriate in regulated networks or for the delivering of public goods.
- **Timing.** Many of the sources of alternative funds take place through funding cycles, these may not align with the price control period.
- **Intellectual Property.** Many sources of public funding put conditions on created IP that constrains the willingness of technology providers to participate.

One of Ofgem's principal objectives is to protect the interests of existing and future consumers including the reduction of greenhouse gases, security of supply, and the objectives set out in the EU energy directives. We believe creating a dependency on third party funding could undermine the pace of innovation and could potentially stifle it altogether, reducing our ability to support Ofgem in delivering this objective.

iii. **increased third party engagement (including potentially exploring direct access to RIIO innovation funding)?**

As stated in our response to Ofgem's previous consultation⁸ we do not think that providing third-party access to innovation funding without a network company partner would deliver Ofgem's objectives of promoting innovation that delivers value for money.

Our reasons for this are; firstly, GDNs need to maintain management control over projects at all times to ensure conformity with licence conditions, safety and reliability standards. This is particularly important for the gas networks where managing safety of fuel delivery to the customers' premises in a manner that is consistent with the design parameters of the end equipment is of paramount importance.

Secondly, a major point in the innovation cycle is determining how an innovation works within a defined process that is defined by established safety and engineering principles. Promoting innovation in isolation to these processes risks promoting innovation in a vacuum. Furthermore, these rules and processes take time and specialist technical resource to evaluate and redefine. Given the level of specialism involved this needs to be prioritised effectively and network companies supports this prioritisation.

Finally, there are many organisations that purport to co-ordinate innovation projects and research and development programmes in the United Kingdom (UK), Europe and the United States (US). They typically have a high 'management' cost which reduces the contribution of each pound of innovation funding.

We fully recognise the value third parties bring to the innovation process. When working with project partners we provide direct access to our expertise, assets and associated safety protocols, allowing problems and solutions to be well defined and demonstrated in a controlled and effective manner.

We also reduce the financial barriers generally cover all third-party project costs (particularly SMEs). Our projects are structured to manage cashflow as well as uncertainty of success. Third parties can be 100% de-risked on projects through the NIA / NIC mechanism. This support can extend into transitioning into BAU.

For NIA and NIC projects partnerships with SMEs and Micro-SME's account for three quarters of our projects⁹, which we consider particularly successful. Over the course of GD-1 there has been a substantial expansion in the ecosystem of companies coming forward with innovative ideas and concepts to be tested and deployed

⁸ Reviewing the benefits of the Low Carbon Networks Fund and the governance of the Network Innovation Competition and the Network Innovation Allowance

⁹ <https://www.sgn.co.uk/uploadedFiles/Marketing/Pages/Publications/Docs-Innovation-NIA/SGN-NIA-Annual-Summary-2016-17.pdf>

on our networks. This is something we actively support and promote. Enabling direct access to RIIO funding may introduce inefficiencies and waste by allocating funding to projects that we are unable to deploy on our network.

Q13. What are the key issues we will need to consider in exploring these options for reform at the sector-specific methodology stage, including:

- What the critical issues may be in each sector and how we can mitigate the bias towards certain types of innovation through focusing on these issues?
- How we can better coordinate any dedicated RIIO innovation funding with wider public-sector funding and support (including Ofgem initiatives such as the Innovation Link and the Regulatory Sandbox)?
- How we can enable increased third-party engagement and what could be the potential additional benefits and challenges of providing direct access to third parties considering the future sources of transformative and disruptive innovation?

i. What the critical issues may be in each sector and how we can mitigate the bias towards certain types of innovation through focusing on these issues?

We have drafted, in collaboration with the other networks an overarching innovation strategy covering many themes for innovation - Gas Network Innovation Strategy¹⁰ that was shown in figure 4 above.

In terms of the perceived bias Ofgem is planning to mitigate, it is not clear from the consultation document what the specific concern is. In our opinion, innovation should be guided by the potential to demonstrate greatest consumer value and targeting it towards the areas which have been identified as desirable by the consumer should help to mitigate any potential bias.

ii. How we can better coordinate any dedicated RIIO innovation funding with wider public sector funding and support (including Ofgem initiatives such as the Innovation Link and the Regulatory Sandbox)?

As we state in our response to Q12(ii) we support the idea of greater co-ordination with public sector innovation funding where it is 'additional to' and not 'a replacement of' existing funding structures. There are important areas of heat decarbonisation that require a broader political support and tie in to the industrial strategy.

We have also noted there are a number of challenges associated with this that require careful consideration and we are happy to explore how best to achieve this.

In terms of network specific innovation then we are less convinced the benefits are as easily identifiable or necessarily in consumer's interests. We feel that funding through networks companies reduces overall costs. This is because network companies use their technical expertise to select projects with a greater probability of delivering. The vetting process is less effective with a more generic funding mechanism.

iii. How we can enable increased third-party engagement and what could be the potential additional benefits and challenges of providing direct access to third parties in light of the future sources of transformative and disruptive innovation?

¹⁰ <http://www.energynetworks.org/gas-innovation-strategy-consultation.html>

In general, we are not aware of concerns in this space for GDNs. Through the course of GD-1 we have established an ecosystem of innovative companies coming to us with proposals. Currently we have partnerships with over 200 companies, but a database of over a 1000.

An area we expect to see greater third-party engagement is potentially the quantification of risk, testing and evidence gathering before any product or technology is deployed on the live network. In many instances, this technology requires formal design and appraisal prior to installation. Test houses and technical assurance are part of this process and are supported by a competitive market where the number of players have increased due to the volume of work created by the innovation stimulus.

Additionally, access to data to support innovators in problem definition. This would require further development to understand the type of data that would be helpful and the costs of provision.

Q14. What form could the innovation funding take.

- What would be the advantages and disadvantages of various approaches?

There are a number of alternative funding mechanisms which could be explored, most of which we don't think would viably support innovation. These include;

- **Extended Period.** Within the Framework Consultation Ofgem suggest a longer period could enable the appropriate returns from innovation to be captured on the basis that the standard price control period is too short and any benefits are recovered by consumers rather than shareholders too quickly. Such a mechanism would depend upon the benefits of innovation being clearly identifiable, separable and quantifiable. This is important as quantifying the efficiency gain to be recovered by shareholders requires the definition of a counterfactual that would have happened in the absence of an innovation. This would be a complex process which would be time consuming and costly to define. Given the complexity it is likely to bias innovation according to the accounting mechanism rather than the value to the consumer. *For these reasons, we do not believe this is an effective alternative funding mechanism.*
- **Higher Returns.** Normally elevated risk is compensated for by elevated returns. Because of the failure risk of innovation projects, the return expectations are many times higher than regulated network companies' returns. In theory innovation could be incentivised by enabling a higher return for efficiencies derived from innovation. However, given one of the key risks in innovation is the innovation deployment time, higher returns as of themselves are likely to be insufficient and would need to be combined with an extended period. Providing a higher return also shares many of the challenges of having to separately quantify the benefits of innovation to allocate a higher return to. *For these reasons, we do not believe higher returns would be an effective alternative funding mechanism.*
- **Patents / licencing.** Typically patents or licences would be used to create competitive advantage and secure higher returns in the unregulated sectors. Network companies could actively engage in patenting to protect a position of higher performance or licence an innovation to other networks for fee. There is a high cost associated with developing and maintaining patents, defining appropriate licence structure and then selling the potential to other networks which we do not consider in the consumers' interests for a regulated company. *We do not think this is in consumer interests as it removes any potential for collaboration.*
- **Direct Incentive for Innovation.** We find it challenging to consider how direct incentives around innovation could be defined appropriately and in a way that avoids post event bias. Incentives could be in place to encourage the production of higher quality of evidence and analysis of innovation projects, and to encourage other networks to take up successful innovation projects. *We do not think it is possible to define a direct incentive mechanism to promote innovation.*

- **Direct Funding.** Direct funding of innovation through the NIA and NIC has been one of the success stories of RIIO-1. It has worked in consumers interests by encouraging innovation by de-risking it and sharing the benefits with consumers. Whilst the mechanisms can and should be reviewed to make sure that they remain fit for purpose, we think that they have the benefits of clarity and transparency and can be directly targeted at delivering value for customers and sharing knowledge.
- **Innovation Roll-out Mechanisms.** The innovation rollout mechanism could be more fully utilised to de-risk implementation. This way the costs of technology could be supported in this price control period with the benefits for consumers paid back over the current and next price control periods. This may be particularly important with high capital cost projects where the delivery risk could be shared with the consumer.
- **Industry Standards Groups.** Another area for improving rollout would be the funding of industry standard groups, via IGEM or other, so that industry standards can be agreed for new technologies. The makeup of these groups is currently based on membership, rather than properly funded.

Of these options we consider the last three – Direct Funding, Roll-Out Mechanisms, and Industry Standards as the most important areas of focus for the Sector Specific Methodology.

Q15. How can we further encourage the transition of innovation to BAU in the RIIO-2 period? How can we develop our approach to the monitoring and reporting of benefits arising from innovation?

As we set out in our response to question 14 we think that encouraging the transition to BAU is most effectively achieved through improvements to the roll-out mechanism and support for industry standards groups to increase their capacity.

Competition

Q16. Do you agree with our proposal to extend the role of competition across the sectors (electricity and gas, transmission and distribution)?

- What are the trade-offs that will need to be considered in designing the most efficient competitions?

In principle, we are in favour of competition, where it can be shown to be cost-effective, clearly in the interest of the end consumer and avoids fragmentation of the network. However, there is mixed evidence of its success across GB energy networks: whilst competition in connections and independent network operators are now mature, the extension of competition into onshore transmission assets is embryonic; and the OFTO competitive regime is not comparable. Evidence of success of different competitive models internationally and from different network sectors (such as the East Coast mainline rail franchised and TFL's private public partnerships) is also mixed.

We are very firmly of the opinion that primary legislation is the only effective delivery mechanism for competition. Primary legislation ensures:

- A robust and transparent process for the scrutiny of proposals from all affected stakeholders; and
- An open and transparent debate on how to best secure the wider interests of consumers.
- An appropriate balance between the focus on lower cost provision compared with robust technical and delivery capability.

Such a process also provides guidance to Ofgem on the Government's expectations in relation to outcomes. As such, we believe that the CATO models, developed by Ofgem with significant industry input under the

Extending Competition in Transmission (ECIT) programme, are the way forward for extending competition across the sectors.

Whilst Ofgem has proposed alternative models for RIIO-T1 strategic wider works projects, our view is that these are potential interim measures, for use in T1 only; and, indeed, have yet to be fully developed and tested. We do not believe they are viable solutions to be taken forward in RIIO-2:

- The competition proxy model is a bespoke, project specific price control settlement, it is not competition 'for the market'; and
- The special purpose vehicle and its interaction with the current regulatory regime requires significant development. The GB experience of the Thames Tideway Tunnel required primary legislation to enact it. And we would note that gas distribution and its regulation is very different from that of water.

It is notable Ofgem has put a lot of emphasis on the OFTO model. We do not consider this to be directly comparable to onshore competition. The OFTO model is for the provision of capital into an otherwise largely de-risked investment. As such they are not directly comparable to the savings that might be expected to arise from later stage competitions.

It is also important to note that through competition in connections and the licencing of IGTs there is already competition on key parts of the GDNs. Currently we estimate that IGTs delivered 51% of the gas connection market.

We do not consider there to be other areas of the regulated gas networks where competition would be cost-effective or in the interest of the end consumer. Our reasons for this centre around the new, separable and high value criteria and are discussed in response to Q17 below.

Q17. Do you consider there are any reasons why our new, separable and high value criteria might not be applicable across all four sectors?

- If so, what alternative criteria might be suitable?

The gas distribution regulatory regime is very different from electricity transmission (where Ofgem has sought to introduce competition during RIIO-T1), particularly with regards to safety. The current 'separable and high value' criteria are unlikely to be appropriate for gas distribution. Because of the safety requirements of GDNs the separable criteria will require significant modification to ensure the continued focus on gas safety across the industry. If competition is to be extended into new, separable gas distribution assets then we believe the development of the 'separable' criteria should be taken forward through an expert industry forum, which includes the Health and Safety Executive

Notwithstanding the above, any monetary or 'high value' criteria is likely to mean extending competition beyond the current new connection regime is not in the interest of consumers at the gas distribution level. There are two main reasons for this:

- Firstly, there are unlikely to be many +£100 million projects on the GDNs during RIIO-2 and for the avoidance of doubt, we do not believe that 'bundling' of projects to reach the high value threshold will prove to be practical; and
- Secondly, reducing the 'high value' threshold below £100 million is likely to mean competition is uneconomic and unattractive to third party providers. The work previously carried out on the level of the monetary threshold for electricity transmission will need to be revisited to assess this; the Regulatory Impact Assessment carried out in March 2015 as part of the final conclusions on ITPR.

We support the recommendation made during the pre-legislative scrutiny of the Government's draft legislation on energy¹¹ that where projects meet the criteria for competition, there is a need for Ofgem to undertake project specific impact assessment of costs, benefits and risks. This will ensure each project due to be considered for competition is rigorously assessed and any decision is in the best interest of consumers.

Q18. What could the potential models be for early stage competitions (for design or technical solutions)?

- What are the key challenges in the implementation of such models, and how might we overcome them?

The development of the CATO framework in Electricity Transmission was undertaken with significant industry and interested third party (e.g. potential CATO) involvement. The late model was generally supported by all interested parties; but there was concern the early model could add significant complexity to the process, and this may outweigh the benefits of introducing innovation at the early stages of design.

In addition, the cost and uncertainties inherent in an early model will need to be addressed. It is unclear to us that there would be any benefits for developing and introducing such a model for gas distribution.

As Ofgem and industry consider competitive forms it must be kept in mind where there is likely to be a difference in the risk of exposure on the network that hosts the competition and the competition winner. These risks need to be very clearly defined and then allocated to either the host network or the competition winner. There could be consequential implications for primary safety requirements, reliability and customers or environmental considerations if this is not done. As you move from later stage models to earlier stage models then the boundaries of risk and responsibility become increasingly complex and as a result costly.

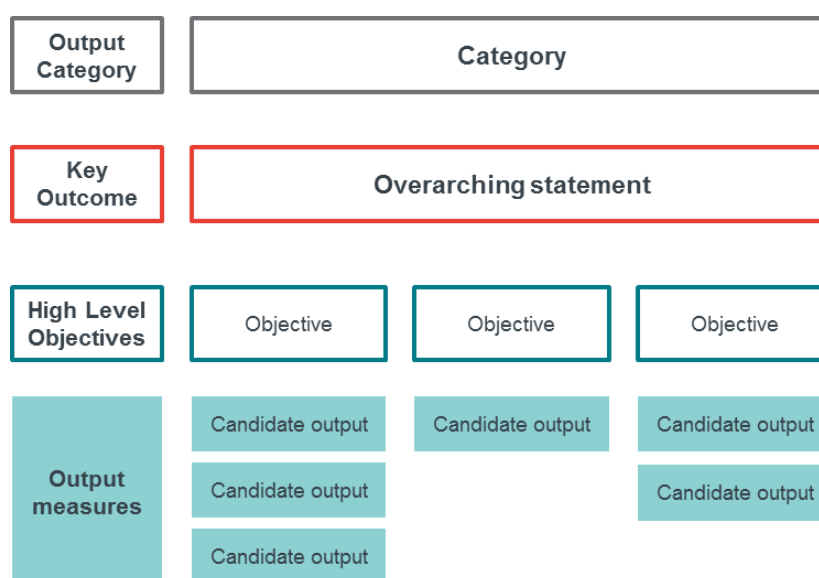
¹¹ Pre-legislative scrutiny of the Government's draft legislation on energy Sixth Report of Session 2015-2016, published 4 May 2016

6. Simplifying the price controls

Approach to setting outputs

We think that it is very important that setting outputs should be a stakeholder led process where there are clearly defined output categories, which are supported by a statement of the key outcome and these in turn are supported by high level objectives. Each of these should be understandable to informed stakeholders; and be supported by a detailed set of specific output measures which can then be incentivised or penalised according to whether performance exceeds a set standard or not, this is depicted in figure 5 below.

Figure 5: Approach to Setting outputs



We are supportive of incentives that are linked to customer based outcomes and consider this will drive correct behaviour that is supported by customer and helps to promote transparency. Where delivery incentives are applied however, it is essential that they are workable, can be linked to a customer based outcome and incentivise the right behaviour. We do not think that ex-post incentives, zero sum incentive structures or automatic resets deliver this as they undermine the clarity of the incentive and may fail to reward companies that have improved their performance relative to an agreed benchmark.

It is important that incentives are in place and appropriately reward companies for delivering the level of service and standards customers are requesting and prepared to fund. Dynamic, relative or ex-post incentives breaks this link between stated preference of customers and the value of the service delivered.

We believe the ex-ante setting of allowances should be preserved as this provides stability and predictability that is not possible with ex-post adjustments. However, we recognise that this may not be appropriate in all instances. Uncertainty mechanisms and volume drivers may be appropriate to deal with output uncertainty. Indexation may be appropriate to deal with price uncertainty. Both require the definition of an appropriate index.

We should also recognise that with a five-year price control period there will be a briefer opportunity for significant outperformance or underperformance. At the end the price control period targets, by definition, will be reset.

Q19. What views do you have on our proposed approach to specifying outputs and setting incentives?

- When might relative or absolute targets for output delivery incentives be appropriate?
- What impact would automatically resetting targets for output delivery incentives during a price control have? Which outputs might best suit this approach?

i. When might relative or absolute targets for output delivery incentives be appropriate?

When considering how relative targets might be applied we can consider two types of relative targets;

1. Relative targets where an ex-ante judgement is made on the expected standard of service and additional value can be secured for exceeding that standard; and
2. Relative targets where an ex-post judgement is made about the expected standard of service based on the performance of the sector as a whole enforcing 'losers' and 'winners'.

There may be circumstances where the incentive is not directly quantifiable – such as customer service measures – where competition between networks in the form of relative targets using an ex-post judgement of service levels is the only option. However, it should be recognised for its limitations.

We do not believe that introducing competition between networks through relative targets on an ex-post basis and enforcing losers is an appropriate form of competition for network companies. We do not believe that this will be in consumer's best interests, with multiple reasons for this which we have set out below:

- **Calibrating incentives.** To set in advance how the mechanism would work and not to introduce perverse incentives or unintended consequences around the calibration of incentives is extremely challenging. Furthermore, it relies on robust data that may not be available.
- **Accommodating Exogenous variable.** Unlike competitive markets and unregulated markets, network companies cannot move to find the market niche that will enable them to operate most successfully. Network companies must accommodate exogenous variables - geography, climate, density of customer, network flows or legacy considerations. These exogenous variables need to be adjusted in order to enable a fair competition.
- **Calibrating baselines.** Relative targets assume that there is high level of consistency between companies in terms of their current standards of performance at the individual incentive level. Examples include:
 - **Customers Service Expectations** - There is substantial evidence to demonstrate that populations around the South East and London having a less positive attitude to customer service compared to more northern populations.
 - **Gas Escapes** - The measure used for deferring gas escapes on grounds of safety and priority applies a calculation of the residual risk of deferring and actively monitoring of outstanding gas escapes. GDNs take different approaches to the risk assessment that are not comparable.
- **Co-dependency of outcomes.** The incentive mechanism and the baseline must be very carefully defined, as an error or mistake on one network will have implications for all other networks and the level of effort they need to put in to deliver their targets. At worst, a significant error in one network could enable a frontier company to secure a high incentive without any additional effort.
- **Reduction in the power of the incentive.** As the financial reward is not clearly defined in advance the power of the incentive is significantly reduced. The relationship of marginal costs and benefits is completely broken, this will undermine investor confidence.

- **Reduced Collaboration.** In addition to reduced effectiveness of the incentive, relative incentives and competition through ex-post performance adjustments reduces consumer benefits by reducing the willingness to share information and best practice between networks. Without collaboration between networks fewer innovations and best practice approaches will be deployed.
- **Delinking Customers and Outcomes.** The stakeholder process is intended to identify how much customers are willing to pay for an improvement in service. This link is broken under relative targets as the payment is dependent on another networks performance. Rather the customers of one network risk having to pay for other networks performance even if their own standards have been delivered. This significantly increases the complexity of the customer communications.
- **Ineffective competition.** For gas networks there are four companies covering eight licences. One company operating across approximately half of the market and a second covering a quarter. As a result, it is very difficult to have effective competition. Rather, there is a risk that the company that performs poorly chooses not to compete. This in turn risks reducing the standards for the sector as whole, putting less incentive on the incumbent 'winners' to continue improving.

In principle, we believe that companies that deliver better performance should be recognised and rewarded for that performance.

Secondly, we believe that it is important that the companies that are tasked with delivering better performance should have a clear understanding of the financial benefits that they can expect to receive as a result. If the financial benefits are not clearly understood then you will have inefficient decision making and companies are likely to underinvest in that output.

We think a more effective outcome for the consumer could be delivered by maintaining absolute targets and using the data that is now available to ensure that network companies are appropriately challenged. Such a challenge should ensure higher performance is delivered in return for incentive payments being made.

ii. **What impact would automatically resetting targets for output delivery incentives during a price control have? Which outputs might best suit this approach?**

Automatically resetting targets within a price control shares many of the challenges identified in our response to Q19(i). We do not think that it will drive improved performance and is more likely to focus improvements on marginal gains with a very quick pay-back. This is because any improvements made may then only benefit the company for a limited period before the benefits accrue entirely to the consumer. This approach could therefore undermine the cost-benefit assessments that are undertaken.

We believe that targets should only be reset if legislation or equivalent events outside our control are significantly different from original expectations and that the boundary of expectations should be clearly set out in advance, this could be through a dead-band range applied to the average performance of networks. Any reset mechanism must be clearly set out in the licence.

For these reasons, if resetting of targets is implemented then we would strongly suggest that it should be implemented only under exceptional circumstances; that these should be defined at the time of the price control settlement and be considered in context of the back-stop devices (see Chapter 7, Q45). We accept that the threshold of exceptional circumstance may need to be tighter for areas where the incentives are new, do not have a significant body of evidence under pinning them or have undertaken a substantial change in reporting methodology. Such adjustments should be fully reciprocal and should accommodate regional variations.

Outputs and Incentives: Feedback from the Stakeholder Advisory Panel

Our Stakeholder Advisory Panel noted that some of the detail is not entirely clear around the way incentives will be structured. In RIIO-1 the incentives were Ofgem-designed. With the water companies they designed their incentives which is a completely different approach. It is essential that Ofgem is clear on its plans for incentives before companies begin their programme of engagement with customers.

Our Stakeholder Advisory Panel acknowledges the question of whether incentives should be based on the company's relative or absolute performance. Whilst setting incentives based on relative performance helps ensure that on average companies returns stay the same, this means companies get a reward if their performance is better than others.

However, this could mean that average performance is rewarded if the other networks do not do well either, and it makes it hard for the companies to know what they need to do to earn a reward. There are some areas, for example around Stakeholder Engagement, where a relative incentive may make sense. However, if there is an objective metric (and in particular if it can be compared across sectors) then the companies should be rewarded (or penalised) for absolute improvements (or worsening performance), regardless of what other companies do.

In particular, through consumer engagement, companies should explore with consumers how much they value changes in performance. It will be difficult to reflect these values if ultimately the incentive a company receives depends on what others do.

Q20. What views do you have on our general approach to setting cost allowances?

In general, we believe ex-ante setting of allowances should be preserved as this provides the stability and predictability that are not possible with ex-post adjustments. However, we recognise that this may not be appropriate in all instances.

Upfront Baseline Allowances

Upfront baseline allowances are the simplest and clearest way to promote efficiency gains, which are then shared between the customer and the company. It is important to recognise that there is now substantial data from multiple years and across multiple networks which should enable increased accuracy of baseline development and increased accuracy of associated regressions. As with RIIO 1, allowances should continue to take account of regional specific factors, such as the increased cost of working in London and the implications of sparsity for Scotland.

Uncertainty Mechanisms

We recognise the benefits of using uncertainty mechanisms in certain limited circumstances, i.e. where there is significant uncertainty surrounding either the cost of delivery or the scale of the challenge, and there is a substantive impact on either the consumer or the company. However their use should be constrained to those circumstances as they are resource intensive for both Ofgem and the companies involved. They require a substantial information gathering exercise for the companies to demonstrate the associated costs and deployment levels and this needs to run over a substantial period of time prior to any uncertainty mechanism being implemented.

It should also be recognised that the use of an uncertainty mechanisms puts pressure on Ofgem to determine whether the costs have been incurred efficiently. This can be a challenge, particularly where there is a high

degree of technical specialism involved. It is for these reasons we would suggest that uncertainty mechanisms should only be used for specific expenditure categories that are identified in advance and involve significant uncertainty.

Volume Drivers

In the Framework Consultation document Ofgem references the use of volume drivers to allow for the automatic adjustment of expenditure to changes in circumstances, such as growth in connections according to housing stock demand, similarly volume drivers could be used for reinforcements on the less than 7bar system or for general growth not otherwise identified and named as specific projects.

In principle this makes sense, however, we need to recognise that there are similar challenges to the use of indexation for RPEs (Question 21). Specifically, we need to recognise that the application of volume drivers could lead to unintended consequences and discourage innovations in the way a solution is delivered. Careful design of any volume drivers is therefore required.

If the volume component is completely outside of the network's control then it makes sense to have a strong volume component. However, if an element of the volume component can be influenced by a network – e.g. the way a new connection is made - then it may be less appropriate to introduce a volume component, or at least a volume component that is weighted to recognise the networks potential influence on the base unit.

It should also be noted that the application of volume drivers requires detailed consideration as to the definition of the base unit, the availability of robust data series, the timing of the data release and what happens if a selected data series is adjusted or discontinued. This invariably increases the complexity of definition and time should be allowed for this.

Q21. What views do you have on our intention to index RPEs?

We believe indexing RPEs may be appropriate in certain cases to protect consumers and companies but it is essential that any index used is robust and relevant. It is important that any approach requires the identification of an index that broadly reflects the costs incurred by the energy network, and that we recognise this will never be fully cost reflective. As with forecasts there will be winners and losers in implementing a RPE index and we need to ensure that these discrepancies are minimised.

When considering the appropriateness of an index we need to ensure that it is a robust point of reference, which is based on a sufficient volume of data, avoids (or can be corrected for) strong seasonality or other volatility and has clearly defined methodology that can be corrected for if the measurement basis changes.

Secondly, we need to consider the manner in which the index is applied and the timing of any relevant indexation data against the regulatory reporting timeline. A substantial mismatch between the two could reduce the confidence in the financial reports that are generated.

Finally, we need to recognise that the gas industry has some unique cost pressures relating to age profiles, skill requirements, competition and regional issues (e.g. in London / South East) so we need to ensure any index is accurate and relevant enough to capture these points.

Due to the complexity of defining an appropriate benchmark from which to index RPEs it will be very important that Ofgem and the industry work together to define appropriate methodologies for where an index is implemented. Potential indices could include the Construction Price Index (CPI), Producer Price Indices (PPIs), Price Adjustment Formulae Indices (PAFIs). Each of these can be produced by a number of different associations and organisations and they will need to be assessed according to their relevance, reliability, robustness and sustainability.

Q22. What impact would resetting cost allowances based on actual cost performance (eg benchmarked to the average, upper quartile or best performer) during a price control have? Which cost categories might best suit this approach?

As we set out in our response to Q19(i), it is our opinion that ex-ante productivity assumptions still provide the most robust method for delivering consumer value as they incentivise the company to outperform and there are many challenges identified in Q19(i) with resetting of cost allowances.

To reset cost allowance according to performance is a negative step and unnecessary within a five-year price control period. Resetting will have multiple implications on actual cost performance during the price control period that we have set out below:

- **Reduces management innovation.** There are many different delivery strategies that may play out over a longer period than a single year or shorter time period. These include contracting and outsourcing strategies, the supply chain and stock acquisition. By introducing a mechanism for resetting of cost allowances in a price control period, the potential for resetting of allowances becomes the point of management focus rather than efficient delivery.
- **Weakening incentives to outperform.** Resetting targets will weaken the incentive to outperform if there is limited retention of the benefits due to the target being reset.
- **Reduced collaboration between companies.** Network companies work together to share best practice and to share knowledge. As an example, there have been multiple discussions surrounding the approach to risers in multi-occupancy buildings, these cover the collection of data and innovative methods for reducing outages and reducing costs. This style of constructive engagement would almost certainly disappear if a component of relative cost allowances is introduced.
- **Normalising performance.** Cost performance would need to be normalised between network companies to account for distorting or one-off factors that result in a network having lower costs than others. If network companies are not normalised, then one company is likely to be unable to compete effectively due to geographical or legacy issues. Any mechanism for normalising is likely to be complex.
- **Impacts on financeability.** If the adjustment is applied broadly across all measures then resetting allowances could impact overall financeability particularly if targets are reset based on the performance of other networks and crystallises a loss-making situation for a less efficient network.

We believe that these challenges, alongside those identified Q19(i), could easily out-weigh any perceived consumer benefit derived from resetting allowances based on actual performance. This is particularly the case given the five-year price control period.

Information-revealing devices

We agree with incentivising network companies to submit a robust forecast that is as close to their view of the likely out-turn over the price control period as possible. Any such incentive mechanisms needs to be set well in advance of business plan submission to achieve the desired results. It is very important that the criteria for assessing the business plan are also set out so that we can work to deliver those objectives.

It is our opinion information revealing devices should remain focused on the IQI rather than fast tracking and that the incentive should be based on an uplift in equity rather than an uplift in sharing factor or perceived benefit of earlier determination. We also think that decisions on information revealing devices and failsafe control mechanisms should be considered independently of each other.

Q23. Do you agree with our assessment of IQI?

We understand the importance of incentivising network companies to submit a robust forecast that is as close to their view of the likely out-turn over the price control period as possible. However, such mechanisms are hard to design; and need to be prepared well in advance of the business plan submission to achieve the desired results.

We note that in the GD-1 price control period whilst the presence of the IQI incentive mechanism was known in advance, the strength of that mechanism was not fully set out. We believe this may have dampened the effectiveness through which the incentive mechanism fed through to business plan preparation.

In the Framework Consultation, Ofgem points to the fact that the majority of companies underspent against these forecasts and believe this is an indication that IQI was not therefore an effective mechanism and that there was a systematic bias towards costs being forecast higher than their out-turn costs. This has the benefit of hindsight and post event rationalisation. At the time companies submitted very challenging business plans based on the experience of previous price controls. They potentially underestimated the extent to which savings could be delivered through innovative efficiency strategies such as improved contracting strategies and the benefits of improved management practices that were unlocked by the RIIO-framework.

Secondly it should be noted there is a general tendency for organisations to look to deliver a target. The fact there is not an equal distribution of companies under and over performance should not be therefore taken as a surprise. Rather, the question should be whether this was improved by the IQI or not and what can make that incentive sharper (recognising that consistent state of under estimation would be more harmful than over estimation).

So, whilst we agree that the IQI mechanism could be improved, we think this is best achieved by stating an incentive mechanism clearly in advance so that it can be built into the business plan thinking at a much earlier stage. This will ensure network company boards and senior management can be fully appraised as to the impacts of underestimating and overestimating costs and volumes.

Q24. Do you agree with our assessment of fast-tracking?

We are not convinced that fast-tracking is an effective means of incentivising network companies to deliver well justified business plans. There are three constituent elements of the fast-tracking mechanism – the time benefit of early award, the financial benefit and competition between networks.

Of these three the second, the financial benefit, was clearly the strongest driver, and fosters the competitive element to which Ofgem has referred. As Ofgem notes, this was a combination of the financial incentive that could be achieved through fast-tracking which was directly related to Totex and the higher cost of equity. We do not consider the time benefit of an early award something as meaningfully quantifiable, rather fast tracking could truncate the time available to produce a good business plan and effective stakeholder engagement.

If the staged nature of fast-tracking was maintained then the objectives of fast-tracking should be carefully evaluated against the objectives of the RIIO-challenge group. Assuming the role of the RIIO-challenge group is to challenge the main components of the business plan there would be a clear overlap.

Our preference would be for a well-resourced and effective RIIO-challenge group rather than a combination of a RIIO-challenge group and a fast-track process a combination that we think would add complexity to the price control process.

Q25. What are your views on the options we have described?

- How might these apply in the different sectors?
- Should we retain the IQI, amend it or replace it entirely?

We agree that efficient business plans should be strongly incentivised and rewarded, and this will be to the benefit of all stakeholders.

We do not think that the fast-tracking as a mechanism in isolation is effective, an amended IQI or a single business plan incentive could both work effectively, however the key requirement from our perspective is to have an appropriate level of financial incentive and sufficient notification as to the structure and the value of the incentive that it can be taken into consideration from the outset.

Option 1 – Retain but amend the IQI

As we describe above, the challenge is to send a clear signal that provides clarity on the value of being more aggressive; and that the risk of under-performance is offset by the financial benefit of a more aggressive business plan submission. A well designed, unambiguous IQI mechanism has the potential to do that in a clear and objective manner.

Furthermore, the graded response available under the IQI reduces the risk of a ‘winner-takes-all’ structure where companies may adopt a strategy of not competing rather than competing and being unsuccessful.

As a result, there are benefits of the IQI that could be emulated within the final choice of any incentive structure.

Option 2 – Retain fast-tracking

Fast-tracking in isolation is our least preferred option. As we state above, we do not think the time component of fast-tracking is a particularly robust incentive. The financial incentive is more robust, however, there needs to be clarity regarding the structure of this incentive.

Option 3 – Single business plan incentive

If structured correctly a single business plan incentive could be effective in promoting the submission of a well justified plan, and we agree that a more efficient plan should receive an efficiency incentive.

Ofgem’s suggestion though that a single business plan incentive could be created through an adjusted sharing factor where well evidence business plans secure a higher share of performance does not work effectively. By combining these two incentives in this manner they effectively negate each other. A more efficient business plan should be less likely to outperform and, as such is less likely to be able to realise the benefits of the higher sharing factor, as such this is unlikely to provide an effective incentive mechanism. The second consideration with a share of out-performance is that it is based on motivating behaviour based on a hypothetical event. This is unlikely to provide as strong an incentive as an uplift in returns that can be directly quantified and is not subject to a chain of further future events.

Ofgem also suggests it is considering whether an additional reward should be applied for the ‘best plan’ to avoid gaming. Furthermore, for gas, we would welcome clarity from the outset whether the ‘best plan’ is awarded to a specific licence area or to a company; such a decision could also promote strategic behaviour surrounding business plan submissions.

Q26. What factors should we take into account when assessing plans for example, under fast-tracking (option 2) or a single business plan incentive (option 3)?

There are a range of options that we think should be taken into consideration when assessing business plans regardless of which option is used. These include:

- **A well evidenced plan on Repex and Capex requirements.** This remains the bulk of expenditure, and should be supported by a robust and independently verified evidence base.
- **Engagement with the Customer Engagement Group.** Demonstrating that the Customer Engagement Group has effectively challenged the business plan and the views of the group have been taken on board effectively during the plan's development.
- **Engagement with the RIIO Challenge Group.** Demonstrating that meaningful and relevant information is presented to the RIIO challenge group to enable it to challenge effectively; and demonstrating feedback has been taken on board before the plans submission.
- **Cost efficiency.** The cost of delivering the business plan relative to other companies and Ofgem's expectation of efficient cost will clearly be an important consideration in the development of the business plan with clear linkage of cost and outputs which will evidence value for money.
- **Incentives.** The quality of the incentives proposed within the business plan and the extent to which they provide a robust structure through which good performance is incentivised, that these are demonstrated to be in consumers' interests and that rewards are calibrated.
- **Innovation.** The level of innovation applied and the extent to which new technologies and their adoption are considered in the business plan.

We think these points are important considerations for comparing business plans.

Q27. Do you have any views on the factors we should take into account when deciding how to differentiate efficiency incentives for companies if we do not use the IQI?

If there is not an explicit IQI then we would expect an appropriate appraisal process which provides an equity incentive to submit a high-quality business plan.

Q28. Is an explicit upfront financial reward required to incentivise companies to submit high quality business plans, in addition to differential incentive rates or sharing factors?

Our opinion is that the more explicit and upfront the financial reward is, the more likely it will induce the desired behaviour. As stated above we do not think differential sharing factors are likely to create the right behaviour.

Q29. Do you have any views on our proposal to remove fast-tracking for transmission?

No position.

Q30. Do you have any views on how we propose to incentivise better business plans from transmission companies, including removing the prospect of an upfront financial or procedural reward and placing greater reliance on user and consumer engagement and scrutiny?

No position.

Annual reports/reporting

Q31. How can we best improve the suite of annual reporting requirements to be as efficient and useful as possible?

We agree with the objective of improving the annual reporting requirements to be as useful as possible and improve the strategic insights associated with the data collected.

A key component of this is ensuring the information which is reported and the level of detail the information is reported to is in line with the price control structure and contains the information required to monitor performance against the targets set in that price control structure.

In this it is important that we allow enough time during the business planning process to agree the definition of outputs and incentives and the data which will support those outputs and incentives. This will help to ensure the relevant data is collected which helps to demonstrate the level of performance achieved.

In line with this it would be helpful to move to the point that there is only one regulatory submission for data which is standardised and taken as the point of reference. Currently information which is contained in the RRP is reported in other regulatory submissions and this creates duplication and introduces a greater risk that errors in reporting may materialise.

Q32. How can we make the annual reports easier for stakeholders to understand and more meaningful to use?

The annual reports have improved as they have become more focused on the material measures. We support this change as long as there are appropriate links to more detailed information and stakeholders are able to navigate their way to more information and more detail if that is what they require.

Annual Reports: Feedback from the Stakeholder Advisory Panel

The feedback from the Stakeholder Advisory Panel was that the annual reports were relatively technical in terms of the jargon used and text heavy. This made them inaccessible and difficult to follow. Their recommendation was that the reports should be written in plain language with greater use of graphs and infographics. They suggested an educated non-expert reader should be able to understand the key metrics and targets and whether they have been met or not.

7. Fair returns and financeability

The Framework Consultation opens some important questions regarding fair returns and financeability. Fundamentally we are concerned that the proposed real WACC is too low and that this creates challenges maintaining network financeability.

In response to this challenge, rather than addressing the WACC, Ofgem have proposed a series of measures through which financeability could be improved, most notably the move to a nominal WACC, RPI to CPI and slow to fast money. Each of these measures increases the short-term cashflow at the expense of long-term cashflow and creates wider policy issues including higher short-term bills and inter-generational equity. This is likely to make the asset more attractive to investors with a shorter time horizon rather than the longer-term investors who have traditionally invested in regulated network assets.

We believe that these financeability measures should not be implemented to paper-over cracks in financeability bought about by the WACC being too low. We have commissioned the following independent reports which we have used to evidence and support a higher real WACC;

- Two Oxera reports commissioned, and submitted, through the ENA on the Cost of Equity;
 - ‘The Cost of Equity for RIIO-2’ (Feb 2018), which will be referred to as Oxera Report 1 from hereafter
 - ‘Review of Ofgem’s Initial Cost of Equity Proposals for RIIO-2’ (May 2018), which will be referred to as Oxera Report 2 from hereafter
- A Nera report ‘Regulatory Finance Issues – Response to RIIO-2 Framework Document’ (May 2018), which is submitted with this consultation response

Cost of Equity

Oxera have provided a view on cost of equity which is higher than CEPA. Whilst they agree that CAPM is the most appropriate mechanism to use, there remains fundamental differences on how to calculate the building blocks that Oxera Report 1 brings out. In table 1 below we have compared the CEPA proposed range for the cost of equity, as set out in table 7.1 of the CEPA report, with that in Oxera’s report (p6);

Table 1: Comparison of ranges for the cost of equity

	CEPA Proposed Range		OXERA Recommended	
	Low	High	Low	High
Gearing	65%	50%	60%	60%
Risk free rate	-1.75%	-0.6%	-0.5%	0%
Total Market Return	5%	6.5%	6%	6.5%
Equity Risk Premium	6.75%	7.1%	6.5%	6.5%
Asset Beta	0.25	0.4	0.40	0.42
Debt Beta			0.05	0.05
Network Specific Risks	-	-		
Equity Beta	0.71	0.8	0.93	0.98
Cost of Equity	3.07%	5.08%	5.51%	6.34%

The differences are driven by several factors including, in our view, a lack of balance in assessing available evidence and in some cases not utilising the evidence at all. In addition, we believe there has been a move away from regulatory precedent in some areas that have not been justified.

Summarised below are a few key themes we believe Ofgem needs to address in its Cost of Equity analysis. A more detailed critique is covered in Q35 and Q36 later in this response.

- **Gearing:** As detailed below, the 50% gearing assumption for re-levering of the asset beta results is an underestimation of not only the equity beta but also, consequently, the cost of equity.
- **Risk Free Rates:** Ofgem's proposed methodology for estimating the ex-ante risk free rate is to consider spot and forward trailing averages. The low end of Ofgem's range is based on observed current spot rates of Index Linked Gilts and we believe the anticipated forward rates for the RIIO-2 period should be used, taking into account current uncertainty.
- **Total Market Returns:** Both Oxera and UKRN support the view that Total Market returns are relatively stable and there is a significant body of evidence to support this. Therefore, significant weight should be placed on long term market returns, enabling the stability of total market returns to be aligned with the long-term nature of investments. The differences in the proposed ranges are driven by Ofgem's unsupported assumptions on how investors in UK regulated utilities target returns relative to inflation and a move away from regulatory precedent, particularly in interpreting evidence and academic literature.
- **Beta:** The asset beta needs to be calculated using the correct interpretation of available comparators. In deriving their beta range CEPA has taken an average of historical rolling betas, rather than estimating betas based on the latest data, for the bottom end of the range. We disagree with this approach as it involves relying on historical data outside the normal estimation window (2-5 years). Additionally, extrapolation of rolling beta data from the aftermath of the global financial crisis (2011-2014) and reliance on water company data is not appropriate as;
 - Asset betas from the financial crisis will reflect exceptional market conditions,
 - Asset betas from Water do not reflect the significant differentiations between water and energy risk which is widening in RIIO-2 due - to the uncertainty over the future use of energy networks,
 - Asset betas from energy are constrained, due to the availability of market data for only one suitable energy network comparator.

As a result of these factors it is important to draw upon European network comparators using regulated networks which have a broadly similar regulatory framework as the ones in the UK (UKRN Report p,129). Consideration of such factors in the Oxera Report 1, gives a recommended range of 0.40 to 0.42.

Network specific risks for gas distribution, such as asset stranding risk and operational leverage, also need to be considered. These may be more appropriate for the sector specific review.

In addition, the GARCH estimation technique considered by the UKRN is not a technique used widely by capital market participants or academics and the use of quarterly data is unusual. As per the Oxera Report 2 (p2);

'Under more standard assumptions of data frequency (e.g. daily) and time period (e.g. five-year), the GARCH approach produces similar beta estimates to the more conventional ordinary least squares regression (OLS) approach which has traditionally been used by regulators'.

- **Cost of Equity Indexation:** we do not believe Ofgem makes a strong enough case to implement indexing of cost of equity and we believe there exists a credible process for setting ex-ante allowances and therefore avoiding introducing more complexity into the process.

- **Sense Check:** A sense check to the cost of capital range put forward by Ofgem is that the remuneration required for the risks associated with the assets of the project is higher than that accorded to the debt on the same assets reflecting the relative priorities of claims in the event of distress or default.

For both the low and midpoint of the cost of capital range, the implied risk premium on unlevered equity is lower than the risk premium on debt suggesting the cost of equity estimate for RIIO-2 needs to be significantly revised upwards.

Given these issues, and given the fundamental elements being consulted upon in the Framework Consultation, we consider it too early to finalise a range at present without further industry dialogue on concerns raised.

Cost of debt

We broadly agree with Ofgem's principles put forward in this area which should ensure that where historic debt has been efficiently issued, funding of this debt is honoured.

NERA's review of the cost of debt mechanisms (Nera Report, Chapter 2) has estimated that the embedded cost of debt is materially higher for the three GDNs who have not undertaken a wholesale restructuring of their debt as a part of a sales process. Therefore, Ofgem could consider bespoke mechanisms for companies with typical profiles.

Nera have analysed the three funding options put forward by Ofgem and believe that a recalibrated index in line with regulatory precedent as set out in our response to Q34 will best meet Ofgem's policy objectives. The existing 10-year trailing average will leave SGN underfunded and we propose a recalibrated index starting at 15 years with a trombone to 20 years.

Gearing

The notional capital structure is a valuable concept that should be supported as providing an appropriate balance of risk and responsibilities, and the notional gearing should be set accordingly, and we have seen no evidence at this stage in the process to move away from 65% for GDNs.

Financeability

We are encouraged by Ofgem's continuation in using the established rating methodologies to assess financeability, the recognition of the licence holders' requirement to maintain investment grade credit rating and Ofgem's role in supporting that.

Ofgem have flagged up that proposed changes to the cost of equity, combined with a lower indexed cost of debt, are likely to lead to a much lower allowed return - and thus challenges to meeting financeability metrics.

When considering the tools that are available to solve a financeability issue there needs to be strong consideration of whether there is a financeability problem that is simply getting delayed into subsequent price controls.

In the Framework Consultation Ofgem present three options of a nominal WACC, a revenue floor or leaving the onus on companies to solve the problem by changing fast slow splits or depreciation. These are simply short-term fixes, bringing forward future cashflows which should be applicable for managing consumer bills rather than financeability. However, the fundamental issue is that if the projected financial ratios imply that the regulated business cannot raise debt finance on the terms (i.e. credit rating) as assumed in the allowed rate of return, the regulator has not set overall revenues that allow the company to have a reasonable prospect of recovering its costs. The regulator must either increase the cost of equity allowance to ensure the integrity of the revenue proposals or set the cost of debt indexation mechanism based on an index which corresponds to the projected rating.

We believe there needs to be a full impact assessment of long term financeability, wider policy implications such as customer bills and intergenerational equity, and appropriate use of fast slow money splits. This should include all relevant stakeholders including consumers, equity investors and debt financiers.

CPI / RPI

We are not comfortable with the proposal to move from RPI to CPI. Currently there is not an active CPI based debt market and until one is established we need to recognise that there is a high potential risk exposure to network companies arising from such a move. Notwithstanding this, any move to CPI/CPI(H) needs to maintain value neutrality and there needs to be a full assessment of what this entails, both to customers in terms of bills and shareholders in terms of the value of their investment.

If Ofgem determine it is appropriate to move towards CPI then it also needs to be recognised that companies have RPI linked debt and shareholders have invested in RPI yielding assets. As such, appropriate transitional arrangements need to be put in place to ensure that these investments are protected and additional financing costs mitigated.

We have no strong view on either CPI / CPI (H) but believe Ofgem should put forward an evidence based review of the alternatives for the industry to comment upon.

Tax

We believe maintaining the current notional tax allowance with tax clawback mechanism is the best approach as it provides an incentive to manage tax costs. We see no reason to move to a pass-through type mechanism.

Q33. What are your views on the policy objectives that we have defined with respect to the cost of debt?

We broadly agree with the principles stated in the Framework Consultation document for setting the cost of debt allowance. In addition, we agree that the debt indexation methodology has worked in the interests of consumers and companies since it was introduced. The Ofgem principles include;

1. That consumers should pay no more than an efficient cost of debt.
2. The cost of debt allowance should be a fair and reasonable estimate of the actual cost of debt likely to be incurred by a notionally geared, efficient company.
3. Companies should be incentivised to obtain lowest cost financing without incurring undue risk.
4. The calculation of the allowance should be simple and transparent while providing adequate protection for consumers.

In addition to the above principles, we think that it is also important to add:

- **Efficiently incurred historical debt must be fully recovered.** This is in line with the legal requirement that the authority should have a regard to licence holders' ability to finance the activities that are subject to obligations imposed under the relevant legislation.
- **Evidence of the Halo Effect.** Ofgem suggests that companies have raised debt less than the current benchmark. This is based on CEPA's analysis suggesting that an adjustment of -25 bps, could be considered. This has been assessed in section 2.4 of the NERA report which shows there is no evidence to support the halo effect when comparison of the network debt issues and the benchmark index is done on a like for like basis, and that the CMA confirms this view.

Section 2.4.1. of the Nera Report shows that the halo effect was almost entirely explained by the inclusion of cheaper Index Linked Debt and a stronger rating of network company's bonds. NERA conclude that once these two factors were taken into account the remaining difference to the iBoxx

index was negligible. Furthermore, the subsequent alternative halo analysis in the RIIO-ED1 Draft Determination does not show any evidence of the halo effect from secondary market debt trading if the sample bias in the selection of companies' bonds, principally, that the remaining tenor of DNO bonds was systematically shorter than that of the index, is taken into account.

In its Final Determination, Ofgem accepted that its analysis did not take account of differences in tenor. Based on its revised analysis, it estimated a substantially reduced halo which it considered to be "negligible" for the substantive period of its analysis. As described in section 2.4.2 of the NERA report the CMA also considered evidence on the halo effect as part of the appeal of Ofgem's RIIO-ED1 decision by British Gas Trading (BGT) and found no evidence of a Halo effect since 2009.

As shown in section 2.4.3 of NERA's report there are also flaws in the CEPA analysis of the halo effect, incorrectly using the use of a stronger rating of network company bonds, and not using the yield at issuance – which was used by Ofgem at RIIO-ED1 Strategy Decision, and the CMA at the appeal of Ofgem's RIIO-ED1 decision by British Gas Trading (BGT). NERA's analysis shows that once these factors are corrected for there is no halo effect.

- **Transaction Costs.** In the absence of a halo effect Ofgem should provide an explicit allowance for debt transaction costs, i.e. the unavoidable costs associated with issuing and subsequently holding debt. These transaction costs are detailed in section 2.4.4 of the Nera Report.

At RIIO-1, Ofgem estimated the transaction costs at 20 bps, which in the absence of the halo effect should be provided for in full.

- **Inflation assumptions.** Ofgem is considering the inflation assumption to use for calculating a real cost of debt, citing the potential use of a 20-year breakeven inflation to match the average tenor of the issuance of the networks debt.

We would note, however, that breakeven inflation overstates expected inflation due to the inflation risk premium that is priced into gilt yields to protect investors for the risk of unexpected changes in inflation. However, this consequently understates the real cost of debt which drives the funding to Companies. As explained in section 2.5.1.1. of the NERA Report, this issue would be exacerbated by the use of 20-year breakeven inflation due to lack of liquidity in the index-linked gilt market. NERA goes on to show how the potential for 20-year breakeven inflation to overstate inflation is apparent when considering alternative long-term inflation evidence from the OBR and HMT, commonly used by UK Regulators including the CMA as a basis of forecasting inflation.

The use of outturn inflation data is the most equitable methodology to calculate the real cost of debt as described in section 2.5.3 of the NERA report. However, it risks introducing volatility so we would recommend a suitable trailing average.

Q34. Which option might help to ensure that the approach to updating the cost of debt methodology delivers best value to consumers and why?

A recalibrated trailing average should be adopted to match the average tenor at issuance to ensure that efficiently issued bonds receive an appropriate allowance. Analysis by NERA shows this average tenor of bonds for energy networks to be around 20 years (Nera Report, Section 2.2.1.1).

The choice of a 10-year trailing average in GD1 was constrained by the availability of iBoxx indices and the period since DN sales. However, these factors are no longer relevant to the selection of the trailing average in RIIO-2 and if it is maintained it will no longer fund the efficiently issued debt during GD-2. As GDNs have only issued debt since DN sales in 2005 a logical starting point for the trailing average would be 15 years extending to 20 years using the trombone precedent as per ED1.

Of the options set out we support option A (re-calibrate the RIIO-1 indexation Policy). Option B (fixed allowance) could be an option, but we would have concerns regarding to the appropriateness of Option C (pass through). We set out our views on the different options below.

Option A – Re-calibrate the RIIO-1 indexation policy

Of the options presented, we believe option A (re-calibrating the RIIO 1 indexation) is conceptually the most robust provided the correct approach of matching the trailing average to the average tenor at issuance is adopted – thereby ensuring bonds will receive an allowance for the efficient cost of the bond for the lifetime of the bond.

As set out in section 2.2.2 of the NERA report the current 10-year trailing average will under recover our costs of efficiently issued debt in the future over a range of interest rate scenarios, due to the impact of more expensive debt efficiently issued prior to the rolling 10 year trailing average period.

As set out above we propose a 15-year trailing average with a trombone to 20 years.

Option B – A fixed allowance for existing debt plus new debt only

Whilst we do not rule out option B we believe there is greater merit of allowing embedded debt costs base on an appropriately calibrated trailing average iBoxx value (see above) due to the following reasons (as analysed in section 2.6 of the NERA Report);

- the calculation of an industry average (in the case of PR19) requires subjective decisions and therefore regulatory risk, for example what type of bonds are included, and there is then the issue of calculating the average – at PR19 Ofwat had a range of 1.3%-1.9% based on different averaging techniques and proposed an allowance of 1.6%.
- the use of industry own costs also increases regulatory costs for the regulator and the networks due to the complexity and subjectivity.

It should also be noted that:

- notwithstanding the points above - if Ofgem were to adopt such an approach, we consider that any calculation of the industry embedded cost of debt should exclude Cadent, given its atypical debt profile and cost following the recent sale,
- the relative merits of option A and B depends crucially on whether the existing mechanism is well-calibrated to allow recovery of efficient debt costs. If not, option B is likely to be more appropriate based on Ofgem's criteria.

Option C – Pass-through allowance for debt

We do not agree that pass through allowance for debt would be in consumers interest on the basis that it would risk moving away from a notional capital structure, a concept that has been supported by the CMA as allocating risk and reward to the people best able to manage it and incentivising the efficient methods and timings for raising debt.

Other observations regarding Debt Methodology

Reviewing the Framework Consultation document other points need to be taken into consideration.

- **Bespoke mechanisms for atypical debt profiles.** Assessment of our proposed cost of debt mechanism should exclude Cadent, given its atypical debt profile and costs following the recent sale. If necessary, Ofgem could consider bespoke mechanisms for companies with atypical debt profiles.

- **Credit Rating.** In the Framework Consultation Ofgem question whether the credit rating benchmark should be increased to A rather than an average of A / BBB or whether they should consider the ability of companies to issue at lower rates than the benchmark indices.

Under our licence we are required to sustain an investment grade rating and Ofgem expect financeability to come under pressure in RIIO-2. Therefore, it would not be appropriate to move the trailing average index to A and if financeability is significantly compromised in GD-2, we may need to consider reviewing the current weighting.

- **RAV Growth Weighing.** Ofgem question whether to weight the index according to RAV growth as a better proxy for the timing of debt issuance. We believe that a weighted index maybe required in specific cases where there are substantial movements / volatility in RAV.

Cost of equity

Q35. Do you agree with our proposed methodology to estimate the cost of equity?

Whilst we broadly agree with using the CAPM methodology to define the cost of equity we do have points of difference on the way that that CAPM methodology has been applied.

Risk Free Rate (RfR)

The CEPA report recommends that an RfR of -1.74% to -0.6% should be used for the RIIO-2 period. This differs significantly from Oxera's analysis that concluded that the appropriate rate should be -0.5% to 0% (Oxera Report 1, section 2.1).

CEPA's RFR range is based on using a 10-year nominal forward curve for the top end and the bottom end is based on the current market spot rates. Whilst Oxera's range is based on using the average of the 10 and 20-year nominal curves for the bottom end.

For the lower end of the range Oxera (section 3.1, Oxera Report 2) attributed the difference to CEPA's use of current spot market rates. This is not appropriate when setting a forward-looking ex ante allowance for which a forward curve provides an indication of future rates.

The upper end of the Oxera range of 0% uses 10 and 20-year nominal curves but also takes into account the uncertainty in how yields on UK government bonds will evolve between now and the end of RIIO-2. The uncertainty is based on the following factors which are analysed by Oxera (section 2.1, Oxera Report 1);

- **Negative Yields.** Is it appropriate to translate current market evidence of negative interest rates directly into the cost of equity due to the implication that investors will receive less money in real terms in the future than they invest today and the fact that UK economic regulators have been cautious in placing significant weight on current gilt yields in reducing the allowed RFR to zero or below.
- **Volatility.** The volatility of gilt yields suggests that the current market evidence may not be representative of capital market conditions in the RIIO-2 period, it should also be noted that there are still three years to elapse before the start of RIIO-2.
- **Relationship between Volatility and Bond Yields,** as detailed on p13

Total Market Returns (TMRs)

The UKRN study recommends that regulators should continue to base their estimate of the TMR on long run averages. Ofgem propose to estimate the expected market return by considering the historical long run average of market returns as the best objective measure of investor's expectations of the future (FD 7.33.4), citing a long run historical average of 5-6% from the UKRN report (FD 7.41).

CEPA recognise in their Review of Cost of Capital Ranges for New Assets for Ofgem's Network Division (p13) that historic returns are most suitable for long-term investments made on a rolling basis. Energy network investments are long term investments where capital expenditure is being made over multiple price controls. Investors gas networks did so on the basis of long term returns, receiving their return on capital over 45 years. A move to placing more emphasis on short term market conditions would undermine this and break from established regulatory precedence.

Placing significant weight on long term returns enables the stability of total market returns and stability of network investment to be aligned. It would be inconsistent to have significant volatility in the allowed return on capital which will increase the costs to customers who will have to pay for the higher associated risk premium.

More detailed reasoning is presented in by Oxera (section 2.2, Oxera Report 1) that draws on a significant evidence base to conclude that more weight should be placed on the view that the expected TMR is relatively stable and close to its long run average of 7.3%. The issue of intergenerational inequity of the return customers are paying over-time also needs to be considered. On the basis that;

- the increase in the ERP has not fully offset the decline in the RFR, and thus the TMR is not completely stable and below the long run average of 7.3% and the Bank of England forecast (of 7.5%), which is based on analysis that shows that the expected TMR reverts to a longterm average and that changes in the RFR are offset by changes in the ERP,
- the CC in the NIE (2014) price control appeal selected a point estimate at the top end of the WACC range – with one of the reasons for this choice of point estimate was that the CC was less confident in the numbers at the low end of their TMR range (5-6.5%).

Oxera recommend an attenuated TMR range of 6-6.5%, which occupies the upper end of the range recommended by CEPA of 5-6.5% and adopted by Ofgem. An important factor in the difference in the ranges is that the long-term average of 5-6%, quoted by Ofgem from the UKRN report is significantly below the 7.3% real TMR from Dimson, Marsh and Staunton (DMS). This is due to the following factors which Oxera have critiqued (section 3.3, Oxera Report 2);

1. Ofgem have deducted the difference between RPI and CPI inflation (of a 100bs) from the 6.0%-7.0% TMR range presented in the UKRN report, which Oxera state:
 - assumes that investors in UK energy assets consider CPI as the relevant inflation metric when developing return targets, despite the fact these have historically been regulated by reference to RPI and thus the change would not be NPV neutral
 - is inconsistent with market practice and the CC's methodology in the NIE determination
 - contradicts academic opinion previously provided by some of the UKRN authors

and conclude there appears to be little basis for deviating from the interpretation of the historical evidence presented in Wright and Smithers (c. 2014–15), which recommended a range of 6.0–7.0% for the RPI-deflated TMR based on a 25bp adjustment for the 'formula effect'.

2. Ofgem have implicitly increased the weight placed on geometric averages of historical TMR, which is based on the reasoning in the UKRN report that regulators will set allowed returns on a consistent basis over time. However, this is contradicted by Ofgem's re-interpretation of the historical evidence on equity market returns. The academic literature is broadly supportive of placing more weight on the arithmetic averages for estimating equity market returns for the purposes of appraising investment opportunities (see section 2.2.2, Oxera Report 1).

Equity Risk Premium (ERP)

The Oxera and CEPA reports broadly agree with the conclusion that the ERP should be the residual between the TMR and the RfR, acknowledging that there is some evidence that a decrease in RFR may not be fully offset by an increase in ERP.

Asset and Equity Betas

There are the following significant differences between the asset beta estimates in the CEPA and Oxera reports, including inappropriate interpretation of data, exclusion of valuable and relevant European comparators and the failure to recognise the impact of the challenges and uncertainty facing energy networks as future decarbonisation policy is developing;

- **Interpretation of asset beta data.** In deriving the beta range CEPA has taken an average of historical rolling betas, rather than estimating betas based on the latest data, for the bottom end of the range. We disagree with this approach as it involves relying on historical data outside the normal estimation window (2-5 years).

CEPA's current 2 and 5-year latest average asset beta is in a range of 0.30-0.34 as per figure 5.5 on p53 of the CEPA report. This is comparable to the 2 and 5-year average asset beta 0.34-0.38 (from respective company ranges of 0.30-0.39 and 0.35-0.41) in table 3.2 of Oxera report 1 once taking into account the use of a 0.05 debt beta in the latter.

CEPA appear to use an asset beta of around 0.34 as an upper end of their narrower range of 0.25-0.35, but the lower 0.25 2-year average asset beta has not been experienced since around 2013 looking at their graph.

Notwithstanding the point above on going outside the normal estimation window, as explained in Section 6.1 of NERA's report the low 2-year average asset betas from 2011 and 2014 are accounted for by the aftermath of the global financial crisis, whereby there was a temporary 'flight to quality' which depressed the correlation and volatility of the stock returns to the market as a whole.

These trends have now reversed and asset betas have increased – meaning it is not appropriate to place any weight on the betas from 2011-2014. Therefore a 0.25 2-year average asset beta from around 2013 does not seem appropriate and the previous occasion of around 2005 when this point was reached is also not appropriate due to how long ago this was.

As stated by CEPA in their report, the extent to which historic beta evidence represents the proxy for future systematic risk in RIIO-2 is dependent on the overall structure of the price control. The fact that Ofgem are already considering a number of 'financeability fixes' to resolve potential problems in RIIO-2 coupled with the uncertainty over the future use of energy networks suggests that risks, and thus asset beta, are going to increase from current levels.

- **Consideration of Energy Network Beta.** As per section 3.4 of Oxera report 1, the asset beta for National Grid tends to be higher than the asset beta of the two pure-play water comparators (United Utilities and Severn Trent), and somewhat lower than Pennon Group (for which unregulated business comprises a large proportion of its Group business). The asset beta for National Grid is currently estimated as 0.41 (five-year average) and 0.35 (two-year average). The following factors suggest that the 5 and 2-year asset beta ranges of 0.35-0.41 and 0.30-0.39 for UK comparators (water and energy networks), in table 3.2 of the Oxera report, under-estimate the beta for energy networks supported by the fact that;
 - decisions taken by UK economic regulators are consistent with the assessment that energy networks face higher systematic risk exposure than water networks. For example, in the RIIO-1 decisions, the asset betas implied by Ofgem's assumptions for equity betas and gearing were in the range of 0.32–0.43, while Ofwat's comparable PR14 decision regarding the asset beta was 0.30.

- energy networks in RIIO-2 are likely to encounter significant uncertainty over decarbonisation of energy networks and the potential for rapid technological change, asset stranding and the extent to which all assets can be redeployed for transport of alternative gas, and associated expenditure. These risks and uncertainties are clearly highlighted in Ofgem's 'Our Strategy for Regulating the Future Energy System' (2017). It is unlikely that exposure to such risks can be fully mitigated through regulatory mechanisms, e.g. indexation, pass through, volume drivers etc) and that the residual risk will be borne by equity.
- **Consideration of European Comparators.** The CEPA report states they believe it is most appropriate to focus on the UK based asset. Whilst some caution needs to be considered when reading across from European comparators, equal caution needs to be taken into account when reading across from water companies and the only energy network in the Oxera and CEPA UK data set and whether they are representative of the risk exposure for energy networks. European comparators are shown on table 3.3 of Oxera Report 1.

Based on the limited UK data set, it is logical to draw comparators from the European energy networks, which derive almost all of their revenues from the regulated businesses as they have a broadly similar regulatory framework as the ones in the UK (UKRN Report p.129 and section 6.3.1 of the Nera report). Furthermore, as highlighted in section 4.2.2. of the Oxera Report 1 - UK and overseas regulators, as well as market analysts, routinely assess overseas comparators when informing the beta estimate.

The European comparators point towards a higher asset beta for energy networks compared with the water companies that dominate the UK sample, giving on balance an attenuated range of 0.38-0.42 (at a debt beta of 0.05). Oxera give a recommended range of 0.40-0.42 (Oxera Report 1, p45) based on the fact that the CAPM underestimates the betas of companies with relatively low equity betas, such as utilities, at the market levels of gearing. This is known as the 'low beta anomaly'. Also, they detail research that shows there could be factors that are not picked up the CAPM data.

Ofgem state in para 7.49 of the Framework Consultation several reasons why a networks company's non-diversifiable risks should be significantly below the market average (where equity beta =1). Oxera's recommended range of 0.40-0.42 gives an equity beta range of 0.93-0.98 (as shown in the Cost of Equity table on p6 Oxera Report 1). As illustrated on p21 of Oxera Report 2, using the asset beta and gearing at the top end of their CEPA respective ranges, if energy networks have a level of risk that is below market average this does not necessarily imply that their equity beta has to be below one due to the impact of re-levering the asset beta.

Furthermore, the UKRN report gives evidence on a review of the calculation of equity beta and examines the use of the GARCH estimation technique and quotes betas lower than using the more conventional ordinary least squares regression (OLS) approach which is accepted regulatory practice.

As stated in Oxera Report 2 (P2) under more standard assumptions of data frequency (e.g. daily) and time period (e.g. five-year), the GARCH approach produces similar beta estimates to the more conventional OLS approach. This point is also highlighted by Burns on p6 of the UKRN report which highlights that using quarterly data is unusual in academic studies and is not used by any commercial provider, and on p54 that the 'reliance a single piece of research, using an unusual data frequency that yields unusual results would not be the basis on which to overturn the practice to date'.

Importantly, as noted by Oxera (section 4.2.1, Oxera Report 2) the asset beta used for the upper end of CEPA's equity beta range of 0.7-0.8 needs to be re-levered using a forward looking notional gearing that is consistent with the rest of the regulatory price control. Notional gearing for RIIO-1 was in the range of 55%-65%, the latter being used for gas and electricity distribution networks. This indicates that a 50% gearing assumption for re-levering of the asset beta results in an underestimation of not only the equity beta but also, consequently, the cost of equity.

Network specific equity risks

Whilst this may be more appropriate for the sector specific review, we need to recognise that there are network specific equity risks that have not been considered in the Oxera analysis. These include the following factors which are analysed in more detail in sections 6.2.1 and 6.2.2 of the Nera report

- **Asset Stranding Risk:** Whilst the forecasts for gas network usage are more positive than previously according to the FES scenarios, there is no clear Government policy on the decarbonisation of heat, and this therefore maintains the risk that the network itself may become a stranded asset for investors.
- **Operational Leverage:** exposure to unexpected and company specific shocks.

Regulatory Allowed Return Vs Regulatory Expected Return

The RIIO model encourages and incentivises companies to outperform which improves service to customers and lowers bills through sharing and price control re-basing of allowances.

Notwithstanding this, as highlighted in the executive summary of Oxera Report 2 (and supported by Burns on p16 of the UKRN report);

‘To the extent that regulators believe that levels of outperformance are unjustified, this needs to be addressed directly via other mechanisms such as the efficiency challenges, incentive mechanisms, and the extent to which companies can retain outperformance. It would reduce transparency and distort investment decisions if the allowance for the cost of equity were adjusted to address concerns about the potential for outperformance in other parts of the regulatory framework.’

With regards to Ofgem considering evidence from the Competitive Procurement of Network Assets we do not believe these are comparable to energy networks due to fact that, as pointed out by Ofgem, there is not a direct read across as competitively procured assets do not have any construction risk, have long term fixed price contracts and a higher notional gearing.

A sense check to the cost of capital range put forward by CEPA is that the remuneration required for the risks associated with the assets of the project is higher than that accorded to the debt on the same assets. Given that debt has a higher priority over equity in the payment of interest and in the event of financial distress or bankruptcy, investors in the assets (unlevered equity) should be more highly rewarded. For both the low and midpoint of the cost of capital range, the asset risk premium is lower than the debt risk premium (as detailed in section 2 of Oxera Report 2) suggesting the cost of equity estimate for RIIO-2 needs to be significantly revised upwards.

Q36. Do you agree it would be desirable to index the cost of equity?

- Do you have views on our proposal for indexation?

At this stage in the price control process we are not minded to support a move to cost of equity indexation. Indexation is only required where costs are uncertain such that it is difficult to set an ex ante allowance, e.g. cost of debt indexation. This is not the case for the cost of equity given its stable nature over time (see response to Qu, 35). Furthermore, a move to Cost of Equity Indexation would represent a significant change in methodology.

Notwithstanding these points the introduction of a cost of equity index is a fundamental change in approach and each of the options would require more detailed analysis to understand the implications of the indexation methodologies. For example whether they preserve the stable principles of the TMR.

Financeability

Q37. Do you consider there is merit in removing the indexation of the RAV and adopting a nominal return model in RIIO-2?

We are concerned that there is a significant risk in removing indexation of the RAV and adopting a nominal return model for RIIO-2.

A switch to a nominal WACC and real RAV will mean that current customers would pay a higher price than future customers for receiving the same service. This would not be fair from an intergenerational perspective and would be against Ofgem's licence obligations on this matter. Furthermore, as highlighted above, the rating agencies may well see this as an inter-generational movement in cashflow that does not fundamentally alter a company's credit quality.

Additionally, a switch to nominal WACC would remove the RPI inflation hedge offered by RIIO-1 and previous price controls, which companies have used to issue RPI linked debt. This in turn could increase companies' financing costs, e.g. through companies having to hedge their existing RPI exposure using RPI-nominal swaps.

Finally, this change would incentivise the early provision of dividends that are attractive to investors looking for short term cashflow and would be less attractive to investors that are looking for longer term investment opportunities and nominal RPI linked RAV growth.

Notwithstanding these points a switch to nominal WACC and real RAV would need to maintain value neutrality and there needs to be a full assessment of what this entails, both to customers in terms of bills and shareholders in terms of the value of their investment.

In the Framework Consultation document the movement to a nominal return model is presented as a financeability tool for addressing financeability issues. We disagree that this should be considered as a financeability tool as it covers up rather than addressing longer-term financeability and wider policy issues. The move to a nominal WACC would allow a short-term 'shot' to improve financeability concerns.

We consider the price control settlement in its entirety should allow an efficient company to be financeable for the activities that are subject to obligations imposed as set out in the Utility Act (2010). Relying on other mechanisms, except in extreme unforeseen circumstances, is against this policy.

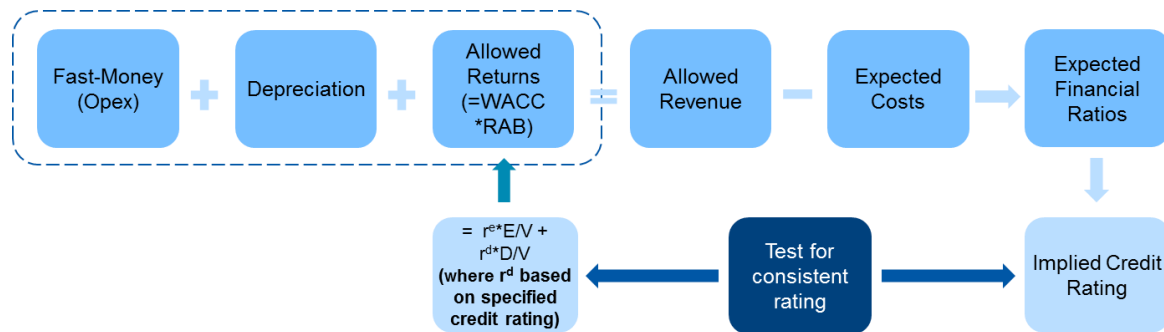
Q38. Should the onus for ensuring financeability lie with the network operating companies in whole, or in part?

From our understanding of the relevant acts and licence conditions, Ofgem has the obligation to ensure that an efficient network operator is financeable and thus to demonstrate the integrity of the price control on a notional basis. This is done through a financeability test which has been a central part of price control settlements in the UK. In contrast it is the responsibility of the network operators to ensure that they are financeable if they are inefficient.

It is also the responsibility of the network operators, through the price control process, to assist Ofgem in developing reasonable measures that ensure an efficient network operator is financeable with due recognition to the impact on future customers and price control financeability assessments.

In para 7.74 of the Framework Consultation, Ofgem states there is likely to be a much lower allowed return in RIIO-2 and that these changes may make it more challenging to meet the standard financeability metrics. CEPA's modelling (p68) gives an Adjusted Interest Credit Ratio of 1.3, below the Moody's target of 1.4 for a BBB rating using a WACC of 3.4%. It states this a mid-point WACC but this is just inside its top end.

Looking at the following illustration of the financeability test (figure 4.1, NERA report) if the projected financial ratios imply that the regulated business cannot raise debt finance on the terms (i.e. credit rating) as assumed in the allowed rate of return, the regulator has not set overall revenues that allow the company to have a reasonable prospect of recovering its costs. In these circumstances, the allowed rate of return cannot be considered reasonable;



In terms of solutions, if the projected ratios are weaker than the credit rating underpinning the cost of debt allowance at RIIO-2, then the direct resolution is for Ofgem to increase the cost of equity allowance to ensure the integrity of the revenue proposals. Ofgem could also set the cost of debt indexation mechanism based on an index which corresponds to the projected rating (e.g. BBB). Furthermore, as noted by Ofgem in para 7.81 rating agencies have said they will discount the alternative approaches of accelerating depreciation and modifying capitalisation rates. (Notwithstanding there is limited scope for altering depreciation rates as they were accelerated as far as appropriate at the start of RIIO-1).

Within the RIIO Framework Consultation, Ofgem raise several alternative adjustments, if the qualitative assessments do not compensate for the ratios not meeting the investment grade credit ratio threshold.

Given that Ofgem are raising the point that its changes to allowed return require adjustments to be made in order to fix the financeability problem created, then the qualitative assessment of the regulatory framework, and whether its stable, transparent and predictable, is unlikely to provide a boost to credit rating ratios. This is a point noted by CEPA in terms of both the regulatory package (pg. 66) and the alternative options (pg. 70).

As stated above our understanding of the relevant Acts and licence conditions, Ofgem has the obligation to ensure that an efficient network operator is financeable and adjusting allowed returns is the appropriate measure to do this.

On the basis that Ofgem has the obligation to ensure that an efficient network operator is financeable they should provide for the equity issuance costs to allow companies to de-gear to any change in notional levels of gearing. This is a logical consequence of Ofgem in RIIO 1, as well as the CMA (NIE 2014), modelling dividend pay-out ratios at 5% of the equity proportion of the RAV, on the basis this is approximately consistent with the post-tax cost of equity in the allowed return. Simply relying on companies to inject equity means that the price control settlement itself is not financeable if the notional debt levels are unsustainable.

Q39. Do you consider the introduction of a revenue floor, to protect the ability of companies to service debt, to have merit?

We do not believe there is a credible scenario where a company should earn below its efficient cost of debt. Whilst we welcome the recognition of the need for security on repayment of debt, these mechanisms should not be used as an alternative to providing a financeable price control structure.

In the Framework Consultation Ofgem express the view that the funding required due to the introduction of a revenue floor would be expected to be paid for by shareholders through either a reduction in the RAV or a

freeze on dividends and a reduced revenue allowance until consumers were repaid. Both structures would be unacceptable if the cause of the problem was the financeability of the overall package.

Secondly, we should recognise that these mechanisms are only as robust as they are perceived by the lending parties. As such they are complex to introduce and would probably need to be supported by substantial legislative structures to ensure that they are robust, which is at odds to Ofgem's objective of simplifying the price control framework. Furthermore, there is the issue to how quickly revenues can be adjusted to react to a financeability problem – presumably at least a two-year lag in line with current revenue adjustments. Given the time available we think that the focus should be on ensuring a robust and financeable price control mechanism rather than adding complexity through new structures.

Thirdly, and most importantly, the approach will simply defer financeability issues to future price controls and, as there is no change in net value due to advanced revenues having to be repaid, again it is unlikely that the rating agencies would see there being any change in underlying credit quality.

Option C Variant 1: Maximum Penalties

Given the complexity of designing such a mechanism, the regulatory cost of implementing it, and the need to bring debt finance along with the proposed changes suggests that it would be better to reduce the risk of this being a problem rather than defining mitigations.

Option C Variant 2: Minimum Coverage Ratios

Minimum coverage ratios are already in place and defined by finance providers as a term of their finance. As a result, we do not see the validity of Ofgem defining minimum coverage Ratios.

Corporation tax

Q40. Do you agree that Ofgem should review the causes of any variances between tax allowances and taxes actually paid to HMRC (including the treatment of group tax relief)?

- Which of the options described in this consultation may be worth investigating further to address any material variances?

We believe that option A (current notional tax allowance with tax clawback mechanism) is the best approach as it provides an incentive to manage tax costs.

The clawback mechanism ensures there is not a tax benefit from having an actual gearing at a different level to notional gearing. Thus, any under/over is related to company's ability to manage their capital structure.

This contrasts with options B and C, which would not provide incentive to efficiently manage tax costs. Our main concern under options B and C would be the length of time taken and the complexity involved with reconciling tax paid to tax allowances.

Under both options we would be concerned about the complexity involved. NWOs all have different costs bases, funding structures, etc. Furthermore, with the combination of regulated accounts and statutory accounts, reconciling between the two and establishing why the actual tax paid was different from that implied from through the regulatory accounts would be a complex exercise.

Q41. Do you agree that we should move away from RPI for RIIO-2 (including for the indexation of the RAV if retained as a feature)?

- If yes, which of the two potential indices – CPI or CPIH – might be most suitable?

- Is a phased transition between RPI and the chosen successor index necessary or desirable?

We are not comfortable with the proposal to move from RPI to CPI. Currently there is not an active CPI based debt market and until one is established we need to recognise that there is a high potential risk exposure to network companies arising from such a move. Any move to CPI/CPI(H) needs to maintain value neutrality and there needs to be a full assessment of what this entails, both to customers in terms of bills and shareholders in terms of the value of their investment.

Whilst it is broadly accepted that in principle in the long run there needs to be no loss in value of the allowed return there also needs to be consideration of;

- the additional costs of finance under a CPI regime due to costs of breaking exposure to RPI linked debt, as stated by CEPA on p82 of their Cost of Capital report, and of an illiquid market and small market for CPI linked debt
- the impact of the fact that CPI linked investments are probably less desirable for investors resulting in a larger cost of equity for these investments, as stated by CEPA on p81 of their report. The Debt Management office has not issued CPI linked products because of a lack of demand for these products.
- As stated on p82-83 of CEPA's report there is preference of a considerable number of investors for capital growth vs cash income. For long life assets (i.e. 40-60 years) changing to CPI would materially adjust the asset valuations in the intervening period. Also, a number of investors have significant RPI linked liabilities and thus have a strong preference for a RPI linked asset

If CPI(H) were to be adopted a phased transition is necessary to reduce the regulatory uncertainty - historic investment will remain a very important element of the RAV that will have been financed by either equity invested, or debt undertaken, on the firm basis of RPI indexation. This fundamental principle needs to be maintained (including RPI indexation of the consequent returns and depreciation).

Notwithstanding the above we have no strong view on either CPI / CPI (H) but believe Ofgem should put forward an evidence based recommendation for the industry to review. There also needs to be consideration on the impact on financeability for future price controls.

Q42. In the light of our proposal not to amend, at a price control framework level, our policies for depreciation and asset lives set in RIIO-1 do you have any views or suggestions that you wish to put forward?

Material changes were made to depreciation in RIIO-1 and we do not believe that there is significant scope or need to change the methodology.

Q43. We propose to review the fast/slow money split at the business plan submission stage, do you have views that you wish to put forward at this stage?

Fast/slow splits could potentially be used to manage customer bills but should not be used as a financeability fix as credit rating agencies would recognise the short-term nature of this value neutral change, a point that has been noted by Ofgem. As set out earlier in the response to Q.38, we believe that financeability should be addressed through adopting a higher WACC.

Q44. Do you think existing mechanisms for providing allowed revenue to compensate for the raising of notional equity are appropriate in principle and in practice?

The price control settlement should allow an efficient company to be financeable. Therefore, the notional gearing should be set at a suitable level to allow for the appropriate levels of equity for an efficiency company to be financeable. Relying on other mechanisms, except in extreme unforeseen circumstances, is against this policy.

Notwithstanding the above if notional equity is required this will need to be compensated.

Ensuring fair returns

In its assessment of fair returns Ofgem acknowledges that underspend can be attributed to genuine efficiency and innovation, but also attributes underspend to a number of factors that were outside of the network companies control. Reasons that Ofgem cite include; lower than anticipated inflation, weaker economic conditions and milder winters, bringing forward lower value and postponement of higher value work, and assumptions on the scope of certain work being higher than required.

It should be noted that whilst we accept that these account for some divergences, we think that the majority of underspend has been delivered through efficiency gains, the implementation of innovative procedures, technologies and effective management. It is important to note as well that we have another 3 years of the price control remaining and Ofgem only have visibility on the first half of the price control period. This gives plenty of time for divergences to reverse out, such as this last February and March 2018 when we experienced extremely cold-winter.

In the Framework Consultation Ofgem question whether the sharing ratio was too generous given the apparent information asymmetry between network companies and whether there was an equal probability of overspend occurring.

In answering this, it is important to take into consideration the type of projects and the risk of information asymmetry. Information asymmetry is likely to be a greater risk in one-off bespoke projects compared with smaller or more repeatable projects where Ofgem are able to use effective benchmarking tools. For GDNs in RIIO-2 we expect the majority of our expenditure to be in this second category.

Secondly, we are concerned that Ofgem may be looking to over engineer a solution that can be easily addressed through its existing toolkit. Ofgem states that, where feasible, it is looking to index costs, stronger links to delivery, greater use of uncertainty mechanisms and volume drivers, reopeners, along with tougher targets, allowances, efficiency incentives and a five-year price control period. These measures provide plenty of scope for protecting the consumer without the need for a further failsafe mechanism.

If Ofgem still consider the need for a failsafe mechanism in addition to these existing measures, then it is important that it is set as a 'true' failsafe – i.e. only to be implemented in extreme circumstances. Otherwise there is a risk of unintended consequences as multiple measures interact and transparency reduces. This will undermine confidence of consumers and investors in service levels and the financial expectations. To reduce this likelihood, we think that there are some key principles that should define the operation of the failsafe. These are that it:

- **Should not impede good price control operation.** The failsafe should be exactly that, consumers, network companies and Ofgem should not anticipate it coming into effect except under extreme scenarios.
- **Should be reciprocal.** It should be protecting both consumers and investors in reciprocal way so that neither group is inappropriately exposed to risk.
- **Should be calibrated.** Any backstop measure should be calibrated to the level of incentives and output measures put in place and that agreed incentives should be able to operate drive consumer value in unimpeded manner. If network companies adopt different incentives then the level of incentives needs to be reflected in company specific calibrations.
- **Should not undermine financeability.** The impact of the failsafe mechanism must not undermine the credit metrics the determine the companies financeability.

- **Must be forecastable in its application.** The network companies and their investors must be able to forecast the application of a failsafe mechanism to adjust their financial expectations and release of information to the market in a timely manner.
- **Should not discriminate against good performers.** We believe that good performance should be rewarded proportionately to poor performance. Any discrimination between companies in the application of a failsafe mechanism must be supported by evidence that there was a specific error in the way the price control structure has been applied to that company.

The application of these principles is discussed further in our response to the questions below.

Q45. What are your views on each of the options to ensure fair returns we have described in this consultation?

In the consultation document Ofgem has proposed five possible failsafe options. These are assessed against each of the principles set out above and discussed in more detail below. A summary is provided in the following table.

	Hard Cap/Floor	Discretionary Adjustments	Constrained Incentives	RoRE Sharing Factor	Anchoring Returns
Non-Impeding					
Reciprocal					
Calibrated					
Financeable					
Forecastable					
Non-discriminatory					



Very difficult to design in a manner that enables this.

Designed needs to be carefully considered to deliver this.

Broadly intrinsic in the design.

Of the proposed options we do not think any of them deliver the principles identified in their entirety. Some proposals could be carefully designed to deliver them, however, this will increase the complexity, the risk of unintended consequences and reduce the transparency of the price control mechanism. Our reasoning is set out below.

Option 1: Hard Cap and Floor

As noted by Ofgem, the key concern with the Hard Cap and Floor is that it distorts behaviour around the points of implementation. If the cap or floor is expected to be triggered then it will change behaviour to reduce either the level of ambition (with the cap) or the level of effort (with the floor) applied. Because it impacts only the companies that are close to either the cap or the floor we believe that it is a fundamentally discriminatory design that we do not think it is in consumer's best interests.

Option 2: Discretionary Adjustments

We think that it is very difficult to design a system of discretionary adjustments that deliver the principles that we have set out. We do not think that it is possible to design a series of ex-post adjustments with sufficient clarity and foresight that it does not impede good price control behaviour due to the risk of strong performance levels being clawed back on an ex-post basis. Because of the subjective nature of when

discretionary adjustments are applied we do not believe that they are forecastable and there is a risk that it undermines financeability.

Option 3: Constraining Totex and Output Incentives

This is a complex proposal where the efficiency incentive applied to Totex would be sculpted according to the level of underspend and the incentives would be capped according to either zero-sum incentive payments or a fixed incentive pot.

Due to its complexity we think it will be very difficult to design this in a manner that does not impede good price control operation. It is likely to distort the Totex decisions that companies make to deliver an optimal sculpting strategy, and there are multiple challenges with the application of zero-sum incentive payments or a fixed incentive pot that we set out in our answer to question 19 on relative targets.

By applying this as a failsafe mechanism to the whole price control structure, rather than smaller components of it, this structure also risks increasing the complexity of regulatory accounting structures on regulatory liabilities and accruals and timely reporting of accounts. We consider that the complexity of this structure will reduce the transparency in the results for both consumer and investors.

Option 4: RoRE Sharing Factor

Of all these options, we consider there to be least obstacles to the design of the RoRE Sharing Factor applied to both Totex and output incentives. The key challenge however is to determine the appropriate profile of a sculpting mechanism and how this reflects the relative risks that the companies take on during the price control period.

In sculpting the RoRE sharing factor we would expect there to be several tranches

- Tranche 1: A deadband range around where there is no sharing. This range would provide a high-powered incentive for smaller variations.
- Tranche 2: A sharing factor in line with current sharing factors to cover the anticipated range of performance on incentives that are applied in the RII0-2 price control.
- Tranche 3: An equal sharing factor for strong performance that are forecastable but exceeds the anticipated range of performance – i.e. it does not imply an unanticipated step change or misalignment of cost or output expectations.
- Tranche 4: A higher sharing factor for performance where the consumer secures the majority of additional returns if they were unanticipated and unforecastable.

Given the annual variations in the sharing factor it is important that the RoRE sharing factor should be applied over the price control period in a formulaic manner to avoid year-on-year variations.

Option 5: Anchoring of Returns

Whilst it is possible to design an anchoring structure that delivers the principles set out above, this fundamentally depends on breadth of the dead-band range and the confidence that it is only implemented as a failsafe mechanism. If this is not the case and it becomes a point of regular intervention then it would share many of the same damaging impacts of relative or zero-sum incentive mechanisms set out in Q19 and the constrained Totex and Outputs Incentives.

In the Framework Consultation Ofgem suggests that an appropriate differential could be the long-run return to the stock market and cost of debt. This identifies the key challenge of this mechanism of setting an appropriate dead-band range. The long-run return to the stock market is the subject of significant debate, and currently Ofgem return measures are not comparable to stock market returns. The NERA report cites return on book equity for the telecoms and transport sectors – which were considered the closest comparators – ranges from -5% to over 100% over a 5-year period.

Rather we think that any dead-band range would need to be set according to reasonable expectation of over-performance in outputs and incentives (i.e. similar to Tranche 4 set out above). It would also be important to consider how these values are weighted across networks when determining the application of adjustment mechanism.

Q46. Is RoRE a suitable metric to base return adjustments on?

- Are there other metrics that we should consider, and if so why?

As we set out above if Anchoring of returns are going to be determined by a stock market performance equivalent then we do not agree that we are comparing equivalent measures and a new metric which is more equivalent would need to be defined.

More broadly however we consider Return on RAV to be a more appropriate measure of returns, and more reflective of the actual performance of the company that is more transparent and comprehensible.

Assessing financing and tax under/over performance in a returns measure is a complex area and warrants further industry dialogue before any conclusions are drawn on whether this is included and how.

8. Next Steps

Q47. Do you have any views on the interlinkages and interactions outlined in this consultation and those that we will need to consider as we develop our sector-specific proposals?

In the consultation document Ofgem identifies four areas of overlap:

- Responding to how networks are used which links the duration of the price control, whole system outcomes, SO remuneration models and appropriate sizing of the networks;
- Driving innovation and efficiency which links through to competition;
- Simplifying the price control which links consumer facing outcomes with the setting of allowances to encourage high quality business plans; and
- Fair returns and financeability which links cost of debt with financeability, changes in tax and fair returns.

From our perspective we consider there to be several further overlaps which should be taken into account as the sector specific proposals are developed. These links include:

1. 'Giving consumers a stronger voice' and the 'fair returns'.
 - Overlap between the role of the RIIO Challenge Group and fast-tracking. With an effective RIIO Challenge Group we consider fast-tracking to be a duplicate process that does not add further value.
 - Fair returns should be linked to the level of incentives agreed with stakeholders, and expanding the value of incentive mechanisms is an important way to demonstrate differentiation between companies.
2. 'Simplifying the price control' and 'Fair returns'.
 - Fair returns and the return to equity should reflect the risk exposure of the equity, this includes the extent of incentive mechanisms that are introduced, the exposure to downside risk, and the impact of relative mechanism that enforce losers.
 - The scale of deadband range or sharing factors adjustments should be scaled according to the level of incentives that have been accepted by the network companies.
3. 'Giving consumers a stronger voice' and each of the four areas identified by Ofgem.
 - *Whole system outcomes.* Clearly consumers have a strong link through to the whole system outcomes and the sizing of the network. The feedback we have received to-date indicates our Scottish and Southern licence areas have different preferences which may influence the optimal size of the system.
 - *Innovation.* Whilst Ofgem appears to be focusing on the more strategic innovation, feedback from stakeholders indicate the importance of innovation in daily interactions. As such we need to consider the overlaps between innovation policy and consumer demands.
 - *How Networks are Used.* Our stakeholders are stating that the role of networks should be broadened out, so it is not just the cross sectoral interactions but also across other National and Local Government policy areas so that policy decisions are less likely to be constrained by network availability.
 - *Fair Returns and Financeability.* The financeability measures will have a direct impact on consumer bills (moving from fast to slow money, moving from RPI to CPI and moving from nominal RAV to real RAV) and we need to ensure consumers are fully supportive of the trade-offs between financeability and prices that could arise.
4. The link between fair returns and the future of the networks.

- *Network Sizing.* The network needs to be sized appropriately, and this needs to recognise the needs of future consumers and ensuring there is appropriate optionality for decarbonisation;
- *Innovative new businesses.* We need to support stakeholders who are looking to interact with the network in innovative ways in the near term.

Q48. Do you have any views on the issues highlighted that we will consider as we develop our sector-specific proposals?

In the Framework Consultation document Ofgem has highlighted twelve cross sectoral and three GDNs issues. Our views on each are given below:

Cross Sectoral

- *Fast tracking and early settlement.* As stated above we need to link this through to an ability to engage stakeholders in a timely manner and whether the additional ‘time’ benefit to network companies is sufficiently and materially advantageous to drive a more effective outcome.
- *Definitions of outputs, outcomes and other deliverables.* This should be a key priority for delivering legitimacy in the next price control period. We need to ensure outputs, outcomes and other deliverables are well defined, supported by consumers and quantifiable.
- *Improving the IQI.* We agree this is an important area to develop. However, it is also important to give companies sufficient visibility so that business plan incentives can be reflected in the business plan from the outset.
- *Uncertainty Mechanism.* We consider use of uncertainty mechanism is less of a priority. Nevertheless, it is important to know they are there, and the broad structure they may take. The primary objective should be to define and quantify outputs, outcomes and deliverables appropriately so they are not required.
- *National, Regional and Local targets.* We consider this to be an important area for discussion as it will undermine legitimacy if regional diversity is removed to promote consistency and comparability between networks.
- *Whole systems and strategic context.* We need to encourage and incentivise efficient trade-offs between electricity and gas transmission and distribution companies as energy systems become more integrated and interdependent, and end to end efficiencies of whole systems are clearly understood. We need to help mitigate the risk that different price control structures should not act as a barrier to cross energy system development.
- *Competition.* We continue to support appropriate competition, but need to ensure there is clarity on where competition is appropriate for gas distribution networks.
- *Capex that falls across price control periods.* From our perspective we do not consider this to be a priority, and are concerned this would introduce risks and become a distraction. As we emphasised previously, it is important there is consistency between companies if longer time periods are chosen.
- *De minimis thresholds for incentive applications.* We do not think this is an area that requires too much focus as it should be self-regulating. Where an incentive mechanism is clearly quantifiable with a strong link between the objective and the deliverable that is supported by the consumer, then it should be relatively easy to administer. Where an incentive application is more subjective and requires the submission of supporting evidence then a de minimis network companies will only want to engage if there is sufficient value.
- *Data Services.* The focus here is with regards to how Ofgem collects and presents data; there should be an equal focus on how companies collect and present data, and how collectively we make data available to relevant stakeholders.

- *Cyber security.* We agree this is an important consideration. Recent events demonstrate the importance of ‘keeping pace with’ rather than ‘responding to’ the increasing issues surrounding security. However, this must not distract from physical security which remains an important focus and challenge.
- *Preparatory Forecasts for RIIO-2.* This is an important area to understand, and allow for, the sensitivity surrounding those forecasts being significantly broader than within price control period forecasts. Enabling this delineation is therefore important.

Gas Distribution

- *Repex.* We agree this is a critical programme where the principles need to be agreed early given its importance, the requirement of compliance with the HSE enforcement programme and the scale of the impacts on all aspects of the business plan including that pipe assets not covered by the IMRRP. It will be important to ensure the programme is managed in accordance with Pipeline Safety Regulations.
- *Future of Gas and Heat Decarbonisation.* We believe there is now sufficient information in the public domain to have clarity that there is a future for the gas networks under all current scenarios. The challenge going forward is how this interacts with the Government’s Heat Policy and the role of networks in delivering decarbonised heat rather than just a decarbonised gas through the networks in the future.
- *Reviewing outputs, outcomes and deliverables.* As we set out above we agree this is a very important focus, along with identifying where a minimum standard of performance is required that should be a part of a broader stakeholder conversation.

Sector Specific Proposals: Feedback from the Stakeholder Advisory Panel

The feedback from the Stakeholder Advisory Panel was that the Regulator’s impact should be considered in a broader context and the wider public policy environment.

Q49. Are there any sector-specific issues or policy areas that we should ensure we review and consider as we develop our sector-specific proposals?

In addition to the areas that have been highlighted by Ofgem, we consider it very important to take into consideration the following:

- *Good Quality and Exceptional Business Plans.* It is very important that Ofgem clarifies what it expects from a good quality and an exceptional business plan. In addition, it is important to understand where Ofgem is looking for consistency between plans and where it is more appropriate to reflect regional differences.
- *Interactions between the Customer Engagement Group, RIIO Challenge group and the Open Hearings.* We consider the interactions between these three groups are fundamental to the success of the business planning process and the resulting legitimacy of the price control settlement. Ensuring these groups are clearly structured and quickly established is key and should reduce the pressure at the key stage once business plans have been submitted.
- *Sector Specific Risks.* As we set out in Chapter 7, there are sector specific risks which need to be taken into consideration when defining the cost of equity. These should be reviewed and taken into consideration from the outset.
- *Approach to debt.* Whilst the importance of the approach to debt is recognised the specific issue with GDNs is a very distinct separation between companies on how debt is structured.

- *Defining Outputs and Incentives.* Output and incentive definition is going to be an important component of the sector specific methodology. It is important that we understand at an early stage the broad scope out incentives, the ability to reflect regional preferences and the strength attributed to incentives in GD-2.
- *Extending beyond de minimis thresholds.* We think there is a role for gas networks to expand beyond existing de minimis thresholds where it can be demonstrated to be in the consumer interests, and that this could have interactions with the innovation programme.
- *Energy Efficiency and Fuel Poor Network Extensions.* We remain supportive of these initiatives; however, we need to recognise they are both subject to external political influences through the lifetime of the programme – through the definitions of eligibility or where there is complimentary funding applied – and the mechanisms need to allow scope for those to change over the course of the price control period.
- *Guaranteed Standards of Performance & Minimum Standards.* Whilst these have been recognised by Ofgem as a point for early consideration we would also encourage not only the standards to be defined early, but also the quantification of those standards. We have the experience of RIIO-1 to consider what worked well and where there are differences in approach and would encourage this discussion to take place to ensure improved consistency in GD-2.
- *Regional Factors.* We need to recognise the cost to deliver a service, expectations of customers served and the historical legacy of the design of the network has impacts on costs across the country. These need to be quantified and considered through the development of the price control.
- *Recovery of the Transmission Operator costs.* During RIIO-1 these have been levied directly through the GDNs as they have been responsible for making the capacity bookings that define the charges incurred. Under the new charging arrangements, the charges incurred are determined by National Grid rather than the GDNs and there is no benefit from the latter continuing to be an additional step in the process.

Q50. Do you have any views on our high-level proposals for timing of RIIO-2 implementation, and on our proposals for engagement going forward?

We would encourage Ofgem to move towards the Sector Specific work as quickly as possible. Within the timeline presented there is a very short window between the Sector Specific Methodology Decision (Q2 2019) and the Initial Submission (Q3 2019).

This is a very tight time line and given the challenge in this we would ask Ofgem's support to ensure there are no surprises in the Methodology Decision that would have a substantial impact on the Initial Submission.

In order to ensure this timeline does not undermine the quality of the business plan submissions we consider it important to establish, at an early stage, what a high-quality business plan looks like; we set out our thinking on this on in the introduction.

The second observation is that the end of the programme is also very tight. In our response we have emphasised some of the challenges of RIIO-1 and how timelines were compressed towards the end; we ask that sufficient time is allowed for this in RIIO.