Cadent
Your Gas Network

RIIO-2 Sector Specific Methodology

Cadent draft response to Ofgem on Cross Sector Methodology

March 2019

Contents

Output Categories

Key Messages – Output Categories

- **We support the three output categories proposed by Ofgem. These output categories align with the outcomes we have tested with, and had positive feedback on from, our customers.**
- **We agree with the overarching framework for licence obligations, price control deliverables and output delivery incentives. Ofgem must provide clear criteria for each type of output. We have included our thoughts within this response.**
- **We do not support the introduction of relative incentives. Their use will reduce collaboration and best practice sharing amongst networks to the detriment of customers. They will increase uncertainty and risk within the framework and will reduce the overall power of both individual incentives and the overall incentive package.**
- **We do not support the inclusion of dynamic targets set at a sector level. Inconsistencies in data capture, processes and reporting between companies would lead to incorrect targets and potentially unjustified rewards / penalties.**
- **Dynamic targets could be set at a network level to 'bank' improvements in performance for customers. This would need to be assessed on an output by output basis.**
- **We support the opportunity for network companies to work with their User Group or Customer Challenge Group to propose bespoke measures, targets and incentive rates. The same assessment approach should be applied to all common and bespoke measures, as all proposals should be shaped with customers and stakeholders.**

Key Messages - Appeals

- **There is an existing statutory framework in place for appeals. Ofgem cannot use its general powers to undermine the specific powers given to the CMA by parliament.**
- **There is no need to introduce new measures. Ofgem already has powers under Section 23 of the Gas Act 1986 to make licence modifications and the CMA already has the power to consider "knock on" consequences of an appealed point on other aspects of the price control.**
- **The reference to a "discretionary mechanism" suggests that Ofgem intends to introduce a measure that allows it to "undo" the effect of the CMA's decision without the licensee having recourse back to the CMA. This is not a fair process or transparent process and would create a significant degree of regulatory uncertainty.**

CSQ1 - Do you have any view on our proposed approach for considering the extent to which a successful appeal has consequences, if any, on other components of the price control?

Paragraph 2.20 of the consultation appears to suggest that Ofgem is proposing to introduce a discretionary mechanism to address potential consequences of a successful CMA appeal for the appealing party and other licensees. Such a mechanism is unnecessary and not in the interests of consumers, licensees, investors or other industry participants for the reasons set out below.

Position of an "Appealing Licensee"

The Act provides the statutory framework for price control appeals and gives the CMA the power to determine appeals. Ofgem cannot use its general powers in a way which would undermine the specific powers given by Parliament to the CMA and it would be illegitimate for it to seek to do so, without a change in legislation.

Whilst the CMA must determine any appeal "*through the prism of the specific errors alleged by the appellant*"[1], it is able to consider any knock-on consequences to other areas of the price control and, indeed, has done so. This point was specifically discussed and accepted in British Gas' appeal in relation to ED1 and in SONI's appeal against the regulator in Northern Ireland. In the Firmus appeal (also against the regulator in Northern Ireland), the CMA found that the connection target appealed by Firmus had an effect on the level of certain cost items which were defined by reference to the number of connections. It dealt with these knock-on consequences in the directions issued to the regulator as part of its remedies.

In addition to the fact that seeking to undermine the effect of the statutory appeal framework would be beyond Ofgem's powers, there are other important reasons why it would be wrong for Ofgem to adopt such a position:

- An effective, fair and transparent appeals process is a key part of the overall regulatory framework and it plays a very important role in ensuring proper decision-making by the regulator and maintaining investor confidence – all of which helps to ensure a low cost of capital. Confidence would be seriously undermined if the benefits of a successful appeal could then be removed by Ofgem, taking an "in-the-round" view. This would not be in the interests of consumers, both current and future.

- Reopening the price control following an appeal process would prolong the period of uncertainty following a price control decision and is likely to give rise to protracted appeals. This is not in the interests of regulatory certainty and stability and would delay a licensee from getting on with implementing the price control in the interests of consumers.

- Any reopening by Ofgem would involve only certain parts of the overall price control, meaning that a licensee could only bring an appeal in respect of that narrow part of the price control, as it would then be too late to appeal other aspects of the price control, which the licensee had accepted as part of its overall assessment of Ofgem's original decision. This would be unfair.

[1] British Gas Trading Limited v The Gas and Electricity Markets Authority, Final Determination, para 3.48

Position of other licensees - "Non-Appealing Licensees"

We understand that there may be circumstances in which a successful appeal by one GDN has logical consequences for the price control of other GDNs. For example, if one GDN establishes a serious error in the calculation of the cost of equity, the error would in principle apply to all GDNs. In such a case, it is likely to be fair for the non-appealing GDNs to receive the benefit of this error being corrected in their price controls. However, if the logical consequence of a successful appeal by one GDN would be a reduction in the price control of another, we do not think it would be fair to reopen the price control of other GDNs to reflect this for the following reasons:

- The non-appealing GDN will have decided not to appeal on the basis of an overall assessment of the price control, having balanced the more favourable aspects of the price control against the negative aspects. If Ofgem changes one of the more favourable aspects of the price control after the statutory window for appealing the remainder of the price control has passed, the licensee will not then be able to appeal the negative aspects of the price control – and may well feel that it does not have grounds to appeal the specific change made in the re-opening.

- The non-appealing GDN would already have started to implement the new price control. The prospect of a reopening or an actual reopening may well affect the basis of this implementation.

- The prospect of a reopening or an actual reopening would result in a protracted period of uncertainty. It may also result in an increased number of appeals against Ofgem's original decision being brought as licensees feel they need to protect their position against the risk of a subsequent reopening.

The small gains to the consumer that may result from such a change would be outweighed by negative effects on consumers from regulatory uncertainty, an increased likelihood of "defensive" appeals and real or perceived unfairness.

Discretionary Mechanism

A "discretionary mechanism" suggests that Ofgem intends to implement its measure in a way that would circumvent the ability of the licensee to bring an appeal to the CMA, i.e. without making a licence modification in accordance with Section 23 of the Act. This would allow Ofgem to "undo" the effect of the CMA's decision without the licensee having recourse to the CMA.

It may be that Ofgem is considering relying on Section 7B(5)(a)(i) or Section 7B(7)(b) of the Act, which respectively permit licence conditions to (i) require the licensee to comply with a direction given by Ofgem or (ii) be modified in such manner as may be specified in the condition. These residual powers are carefully restricted and it is highly unlikely that they are sufficiently broad to allow cross-cutting discretionary modifications to a price control.

More generally, a broad discretionary measure would be contrary to the statutory regime because: (i) it would undermine the statutory appeal process; and (ii) it would undermine the statutory framework whereby significant price control decisions are intended to be subject to a merits-based appeal to the CMA. The licence modification and appeals process set out in the Act was introduced

as a comprehensive statutory scheme to govern licence modifications and the Government was clear at the time that it was "*introducing a merits-based appeal process for licence modification decisions, as their broader economic impacts merit factual and economic scrutiny*".[2] The Impact Assessment was clear that an appeal mechanism that allowed the technical merits of the regulator's decisions to be challenged would improve decision making, regulatory stability and in turn lower the cost of capital.[3] It would be arbitrary for Ofgem to provide for a specific part of the price control to be subject to a different appeal mechanism that did not allow the technical merits of the decision to be scrutinised, especially when that decision may be to "undo" the effect of the statutory appeal process.

CSQ2: Do you agree with our proposed three new output categories?

We support and agree with the proposed three output categories underpinned by measurable outputs that ensure delivery. Movement from the existing six output categories to three broader customer outcomes will enable greater understanding, aid accessibility and support the assessment of whether network companies are providing value for money. The output categories proposed by Ofgem align with the outcomes we have tested with our customers.
In order to set the right outputs and associated targets, networks must work with customers and their representatives to understand what they want and need to ensure delivery against these customer outcomes.

We are also supportive of setting the same output categories across all sectors as this encourages a whole system approach in order to deliver the consistent customer outcomes. Another underlying outcome that could be proposed is to ensure GDNs are trusted by customers and viewed as fair and transparent when carrying out activities.

CSQ3: Are there any other outcomes currently not captured within the three output categories which we should consider including?

We are confident that the three proposed output categories capture all the outcomes customers want and need. This is supported by evidence from our customer engagement in which we set out our four customer outcomes:

- Keeping your energy flowing safely, reliably and hassle free
- Protecting the environment and creating a sustainable energy future
- Working for you and your community safeguarding those that need it most
- Value and satisfaction at heart of all our services

Customers could identify with these outcomes and although there was recognition of the interdependencies between each of the outcomes, customers did not highlight any fundamental aspects that were missing.

[2] "Implementing the EU Third Internal Energy Package: Government Response" of 1 October 2010, para 2.18
[3] Impact Assessment entitled "Proposals for implementation of licence modification appeals under the EU Third Package" published by DECC on 22 June 2011, see in particular pages 15 and 16

CSQ4: Do you agree with our overarching framework for licence obligations, price control deliverables and output delivery incentives?

We agree with the output types identified, however Ofgem must carefully consider how each output is treated against a clear criteria. We outline our thoughts below.

Licence obligation

A failure to deliver a licence condition can result in enforcement action by the regulator and open ended liabilities of up to 10% revenue on the network. To be found in breach of licence has serious financial and reputational consequences and therefore a licensee applies several layers of corporate governance and assurance to ensure compliance. In addition, it requires significant regulatory burden of setting up and running an enforcement investigation team and review.
We therefore believe the following criteria should be met when setting licence obligations:

- A must do, where failure to deliver would result in material harm to customers
- Be a minimum standard – licence conditions should not be used as incentives to improve
- Should be a common universal standard for all networks with a common metric and assurance that the metric is calculated in the same way
- Must be controllable by the GDNs and have provision for explicit force majeure events (3rd party damage, extreme weather events)
- Measurement should be precise and a robust assurance applied to the metric
- An appropriate transition period if the minimum requirements are updated (as an overnight change might not be possible to sustain leading to significant financial and reputational consequences)

Price control deliverables

Setting price control deliverables (PCDs) may assist in ensuring that companies do not benefit from delays or failure in the delivery of specific outputs. However, we must ensure PCDs are not deployed in a rigid manner which restricts innovation and/or is unresponsive to genuine changes in the outcomes customers want and need.
When setting outputs as price control deliverables we believe it should meet the following criteria:

- A deliverable where the benefit to consumers can be demonstrated
- Adequate level of funding to allow delivery
- The deliverable should have clear and robust targets and timelines for delivery
- Clear methodology and implications of what happens if an output or input activity is not delivered, is delivered late, or is delivered to a lower or different specification. This should not be left to discretion as it could create an environment of uncertainty

- Allow flexibility to identify innovative ways of delivering requirements at a lower cost. I.e. an output is deemed to be delivered if a less expensive solution has been identified which delivers the same or better outcome for customers

- If there is material change in circumstances, Ofgem and networks should be open to reviewing the requirements to understand if there needs to be changes to the specific deliverable (e.g. allowances, targets, timelines)

Output delivery incentives

Output delivery incentives (ODIs) encourage networks to deliver improvements in service beyond the minimum levels expected from customers. In RIIO-GD1, ODIs have encouraged networks to be innovative and collaborative in delivering much higher levels of service e.g. overall customer satisfaction across the industry has increased from 8.2/10 to 8.8/10 and to date every GDN has experienced an improvement in complaints handling performance with no network falling into penalty. Therefore, ODIs should be used to a greater extent in the RIIO-2 performance framework, subject to setting the appropriate outputs that customers would be willing to support.
In order to maximise the effectiveness of ODIs the following criteria should be met:

- Where it can be demonstrated and robustly measured a reward and/or penalty should apply and where a financial incentive cannot be applied, reputational incentives should be set. However, there must be clear guidance on the implications of non-delivery

- Targets and incentive levels should be in line with customer expectations and their willingness to pay, taking into account long-term benefits where appropriate

- Incentives should be based on absolute targets in order to provide certainty and encourage collaboration between networks, which is essential in the gas industry where collaboration helps to save lives.

- There should be no annual re-set of criteria

- Where there are regional differences in expected service levels network-specific targets should be set and where a specific requirement is demanded by customers in a given network, bespoke incentives should be set

We provide our thoughts on what outputs could be set as licence obligations, price control deliverables and output delivery incentives in our response to the questions relating to outputs in the Gas Distribution annex. The regulatory framework must ensure a balance between risk and reward to provide companies with the right incentives and ensure a fair but profitable package for investors. Across the performance framework for all three output categories, based on Ofgem's proposals and recommended view, the balance is weighted heavily towards risk with limited opportunity for reward.

CSQ5: Do you agree with our proposals to introduce dynamic and relative incentives, where appropriate? Are there any additional considerations not captured in our proposed framework which you think we should take into account?

To answer this question in full we have split our response into two sections: one discusses the use of relative incentives and the other considers how dynamic incentives could work.

Relative incentives

Collaboration vs competition

The use of relative incentives, and the associated increase in competition, in RIIO-2 will not improve the performance that gas network customers in Great Britain receive. Instead, it will disincentivise collaboration amongst, and the sharing of best practice across, networks.

Unlike the energy retail market, where customers can switch to a better performing or lower cost supplier if they are unhappy with the service they receive, a networks' customers are 'stuck' with their current company. As such, collaboration and best practice sharing amongst companies is vital so that all customers, regardless of where they live, can receive a consistent, high quality experience.

Ofgem's outcome categories, shown below, highlight the importance of what network companies do and therefore reinforce the importance of sharing best practice so that all customers receive the best service possible.

Our stakeholders have been clear that network collaboration and best practice sharing across the core outcome areas, shown below, will be vital. As such, any proposals that will disincentivise this must be avoided.

The Gas Distribution Networks current provide mutual assistance to each other during large scale incidents. In a recent example engineers from Cadent, SGN and WWU travelled to Silsden in NGN's network to support with an incident impacting 3,000 customers. This support ensured the safety of those customers and accelerated the process to restore their gas supplies.

Under Ofgem's proposals companies would be disincentivised from supporting a network facing such a challenge as it would increase that networks costs and reduce their performance which would lead to higher returns for the other companies. The diagram below brings out the perverse impacts that Ofgem's relative incentive proposals would have on this specific example.

Relative incentive potentially impacted	Description of impact on Company A	Incentives on other companies to not provide support
Interruptions	Duration of interruptions would increase increasing risk for and impact on customers' lives	Would be more likely to be in top 4 networks and receive a reward
Customer Satisfaction	Customer satisfaction scores would decrease as company move resource from other activities to incident	Would be more likely to be in top 4 networks and receive a reward
Complaints	The number of complaints would increase and the company's ability to respond to them effectively would decrease	Would be more likely to be in top 4 networks and receive a reward
Totex	Costs would increase to manage the incident and try to restore gas as	Would help companies efficiency position compared to company A when

	soon as possible. Increasing costs to customers, amplified by lower sharing factor.	benchmarked
Other output incentives	Would distract from delivering a high quality experience for other customers across all services.	Would be more likely to be in top 4 networks and receive a reward on other output incentives
Return Adjustment Mechanism	The companies returns would decrease and bring the sector average performance down	A decrease in company A's financial performance would mean other companies are less likely to be adjusted under a RAM set at sector level.

The relevance of network ownership structures on the use of relative incentives

In the Gas Distribution sector there are three ownership groups, four companies, five licensees and eight network areas, as shown in the table below. In discussions to date with Ofgem they have stated that they have not yet considered which of these levels the relative incentives would be set at. However, if relative incentives are to be used the level they are set at will have a significant impact on the outcome. For example, if they were set at a network level Cadent would need three of their four networks to be placed in the top four of eight networks to receive any reward. Conversely if set at a company level a company with one network could sit in the top four networks but in the bottom two companies.

As can be seen there are many permutations, discriminatory factors and unintended consequences to consider. As such, by ignoring this key factor in the process to date Ofgem has not allowed stakeholders, including network companies, to fully understand and assess the proposals within their sector specific methodology consultation.

Ownership Group	Cadent Gas Limited	CK Infrastructure Holdings Limited	Scotia Gas Networks
Companies	1: - Cadent	2: - Northern Gas Networks - Wales and West Utilities	1: - Scotia Gas Networks
Licensees	1: - Cadent	2: - Northern Gas Networks - Wales and West Utilities	2: - Scottish Gas Networks - Southern Gas Networks
Network areas	4: - East of England - London - North West - West Midlands	2: - Northern - Wales and West	2: - Scotland - Southern

Audit requirements for the use of relative incentives and the impact on controllability and risk

The use of relative incentives reduces the control of a company on its own revenues; this is because one network's performance would impact the financial performance of other companies. As such, a high degree of confidence in the consistency and comparability of performance data across all relevant networks is required for a relative incentive to be used.

Dependent upon the measure in question, and the associated input variables that influence it, the impacts of different asset types / bases, demographics, business measurement approaches and processes, data recording, data interpretation and reporting upon performance / scores must be understood.

If they are not consistent then it must be assessed if any variance can be normalized to enable comparison or if networks must be required, and funded, to change processes, systems, employee training etc. to enable consistency.

If these challenges can be overcome and a relative incentive can be introduced an independent annual audit programme would be required to ensure continued consistency across all networks.

There would also need to be a methodology for penalising companies that had been found to do something inconsistent to the other networks and another approach to compensate the other networks (potentially over a number of years if the inconsistency was found late in the control period).

There are examples in RIIO-1 where measurements have not been consistent and they have impacted the assessment of company performance, in some instances already leading to detrimental financial implications, which would be amplified through the use of relative incentives.

Two examples are:

Repair risk

All GDNs use different approaches to measuring repair risk and have very inconsistent targets ranging from 2.5 in West Midlands and Scotland to 34.5 in Northern Gas Networks. These targets are clearly not comparable and it would appear require different levels of stretch to achieve them which impacts on the relative costs to deliver. For example, the target for our North London network, from our discussions with other gas distribution companies, appears to require us to have significantly fewer open escapes than others. Hence reporting and measurement of percentage achievement against target could be very misleading to the underlying level of service that the customers is experiencing.

Customer satisfaction

There are demographic and regional differences which impact upon customer satisfaction. Cadent operates the same processes across all of our networks; however see variance in the customer satisfaction score particularly in London. Cadent also operates the national gas emergency phone line for all gas networks, however the customer satisfaction scores on the questions relating to this identical element of the service vary across all networks, with London scoring the lowest. These trends are also seen across other industries, such as water. Further to this under the current regime,

where customers can only respond to the customer satisfaction survey by post, there will be impacts upon response driven by the different demographics across the regions. For example, we see the highest response rate in the over 55 year's old group, however London has the lowest percentage of its population in this group out of all of the networks.

The impact of relative incentives upon the cost of capital

If consistency cannot be assured and companies returns are outside of their control this will increase the risk of the overall RIIO-2 package and therefore increase the required cost of capital. The use of relative incentives must also significantly reduce any assumptions regarding the performance wedge as only half of networks can get the assumed baked-in reward.

Relative incentives will also create significant cash volatility outside of companies' control. This will limit companies' ability to have robust financial plans which will lead to them being considered as riskier borrowers by the debt markets, potentially increasing the cost of debt in the industry.

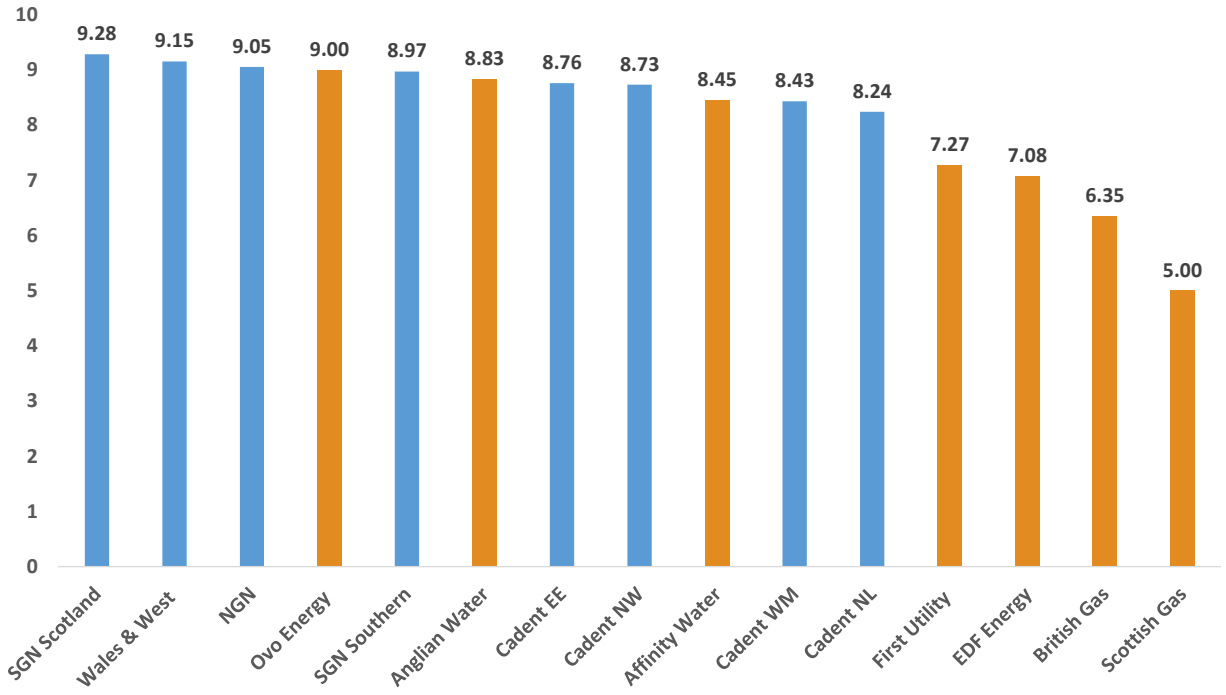
They will also create the requirement for multiple adjustments later in the price control which will introduce further complexity in to the regulatory framework.

The relevance of company's performance to customer expectations

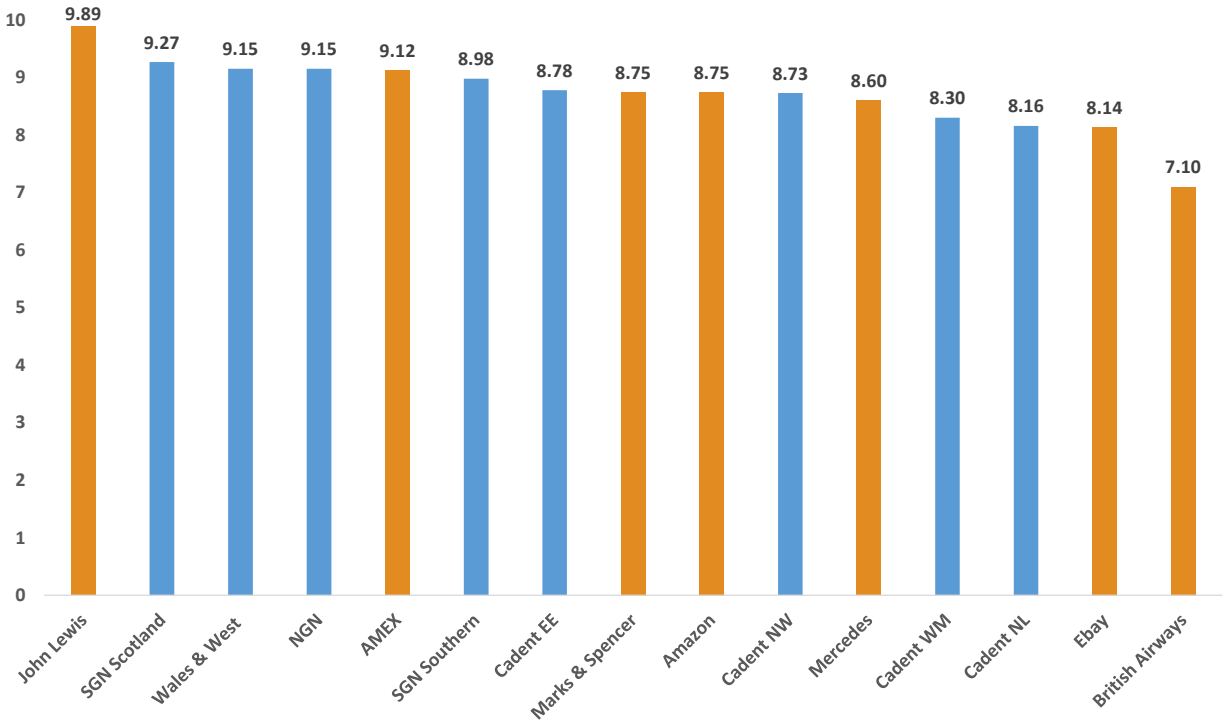
Where the gas distribution networks performance is at, or above, customers' expectations or is above external benchmarks (i.e. other, especially competitive, industries) then relative incentives, and therefore guaranteed penalties, should not be used.

An example of this could be customer satisfaction where GDNs RIIO-GD1 performance benchmarks favourably against energy suppliers within the competitive retail market. Ofgem has stated their desire to use relative incentives to increase competition between monopoly network companies but if the current regulations are already driving better performance than in a competitive market then this would not be in customers' interests.

Overall satisfaction scores by utility companies, Q2 2018/19



Mature benchmark comparison, Q2 2018/19



Dynamic incentives

Dynamic targets could be set at a network level to 'bank' improvements in performance for customers. However, this should only be used in areas where there is likely to be an enduring improvement in performance delivered, for example shrinkage. It would not be suitable for areas where there's likely to be a year on year variation in performance, perhaps due to workload, as this could lead to reward one year, penalty the next and so on and would therefore lead to volatility in revenues and customer bills which would be undesirable.

Where dynamic incentives are used the value should be assessed to recognise the enduring benefit that would be delivered for customers, for example the environmental emissions incentive in RIIO-GD1.

The use of an improvement factor, similar to an efficiency factor on cost allowances, could also be introduced for measures where customers desire better performance. However, they should not be used where networks are close to, at, or above the optimum performance level.

The improvement factor could also be set using the average performance movement, as a percentage, for the sector from the previous year. The use of such an approach would be dependent, however, upon the speed with which Ofgem can assess and assure performance from the previous year so that networks know their targets from day one of the new performance year. Currently Ofgem publish their annual report around 9 months after the performance year has finished so this would not be suitable.

This approach should also not be used where the companies are at different positions relative to optimum performance level, as an x% improvement would be easier for one than another.

CSQ6: Do you agree with our proposals to allow network operators to propose bespoke outputs, in collaboration with their User Groups/ Customer Challenge Groups?

We support the opportunity for network companies to work with their stakeholders, including their User Groups / Customer Challenge Groups, to propose bespoke measures, targets and incentive rates.

This is aligned to one of Ofgem's key overarching objectives for RIIO-2 of 'giving consumers a stronger voice in setting outputs, shaping and assessing business plans'. Allowing the development of bespoke outputs will ensure that we can respond to the requirements of all our customers across all of our regions.

Ofgem's proposals seem to set a higher bar for the introduction of bespoke measures than they have used in developing their common measure proposals. The same level of scrutiny should apply to both Ofgem's and network companies' proposals whether common or bespoke measures.

The same assessment approach for proposing measures, targets and incentive rates should be applied across all outputs, whether common or bespoke, as all proposals should be shaped and tested with customers and stakeholders.

CSQ7: When assessing proposals for bespoke financial ODIs, are there any additional considerations not captured which we should be taking into account?

When setting bespoke outputs materiality should not be measured purely on cost but also impact on service. In order to set bespoke financial incentives we are undertaking research and engagement with our customers to understand the areas they value most and their willingness to pay. We are also engaging with specific stakeholder groups on topics that require more expertise or do not directly impact domestic customers in the short term to understand what further activities we need to focus on in RIIO-2 and may be appropriate to set bespoke measures against.

Enabling whole system solutions

Key Messages

- **The definition of whole system is a sensible and pragmatic first step to deliver value to customers and stakeholders**
- **The framework must recognise the criticality of time, as well as cost when delivering customer solutions**
- **Intra gas and electric collaboration is well established, but gas and electricity relationships and processes will need to be further developed; a baseline level of resourcing will be required to support greater collaboration**
- **Detailed specific Business Plan commitments will be limited by the timetable for the publication of the framework and supporting criteria and measures.**
- **Coordination and information sharing, and long term investment planning should be the focus for the gas networks in RIIO2.**
- **We believe there is merit in a framework where companies can trial initiatives by presenting joint proposals, with measurable customer benefits, with network's rewarded for meeting agreed project success criteria, and implementing across other network.**

CSQ8 Do you feel we have defined the problem correctly?

Yes - at a high level, solutions that are not optimised across the gas and electricity sectors, can increase costs to consumers. The list of problem areas however either needs further detail or additions.

The need to deliver solutions within the timescales required by the customer request, driving the change in energy flows, is a key barrier to effective coordination. As an example, if a new or growing business needs energy, it may go elsewhere if it cannot access its needs promptly. A more expensive option may be preferable if it is the best solution for the required timescales.

A further barrier, and this may fall under an incentive, is the need to have comparable priority for all parties. A gas and electric company may both agree on the solution, both may have adequate funding, but one cannot provide the necessary resource in the same timescales, leading to delay, and/or the pursuit of other options. It may also be hard to identify where this has occurred until well into a projects life, and in some circumstances, the prioritisation of resources may change mid-delivery, for fully justifiable reasons.

CSQ9 - What views do you have on our proposed approach to adopt a narrow focus for whole systems in the RIIO-2 price control, as set out above?

We believe that to deliver the overall least cost for consumers and UK plc, all elements should be included, however, we recognise the complexity and challenges this represents.

We are therefore supportive of this first step of including the sectors under Ofgem's remit, as this represents a pragmatic but significant opportunity, and will leverage Ofgem's expertise across gas and electricity.

Whilst excluded from the whole system scope, elements of transport, heat and waste will be key drivers of network costs, so will indirectly be within scope.

As the economic regulator we would expect Ofgem to work closely with Government to ensure the correct economic decisions, including a wider whole system perspective, are taken when developing energy related policy, including heat and transport. This would include protecting gas consumers by maximising the life and use of the gas networks.

CSQ10 - Where might there be benefits through adopting a broader scope for some mechanisms? Please provide evidence.

As government policy starts to assess the options for reducing carbon emissions from off gas grid domestic heating across the UK, the ability to assess the "best" option will need to consider all sectors given the multitude of options: electric, gas, tankered fuels, district heating, green gas. Transport must also be a factor e.g. an off gas grid community will need a robust energy solution for its future low emission vehicles as well as its heating. How and who determines the optimum solution for each community will require trusted local experts and is likely to require both gas and electricity network expertise to support any optioneering.

Consumers funding in house works undertaken by the networks seems to have been discounted but it isn't clear if this for a socialised cost or bespoke for one consumer e.g. can a gas network complete in house insulation if the cost is passed directly back to the specific householder. This would require change to billing arrangements. We would welcome further clarity from Ofgem on their thinking in this area, especially as our stakeholders are challenging the extent of our role e.g. demand side actions including energy efficiency measures.

When considering gas solutions for electricity network issues, many options whilst utilising the gas network, are not solutions the gas networks are currently allowed to deliver such as energy efficiency, replacement heating systems, or operating gas fired back up power generation and Combined Heat and Power plants. For example, a local electricity network constraint in a community with a high degree of low efficiency electric heating, may find that replacement with gas central heating or District Heating, is the best preferred solution when a wide range of factors are taken into account and the benefits are measured over a longer period.

CSQ11 - Do you have reasons and evidence to support or reject any of the possible mechanisms outlined in this chapter? Do you have views on how they should be designed to protect the interests of consumers?

We believe that there are benefits to customers and stakeholders from the development of Business Plans that include whole system propositions. We would ask however that any criteria or assessment of our Business Plans recognise the late stage at which a detailed whole system framework is confirmed. The timetable presents a challenge for activities within our control, but is even tougher when a coordinated agreed approach is required from multiple organisations. We will have little time to respond and engage and our ability to make specific commitments in a detailed plan will be constrained. The assessment of our plans, particularly if there is a reputational or financial reward/penalty, must be cognisant of how the framework has been developed.

It is worth noting at this point that legislation governing public and utility procurement, requires a very clear scope of works to be finalised and published alongside the weighted scoring framework, before organisations prepare their bids. This is to ensure a level playing field and to avoid organisation wasting effort on areas that are not used or assessed. We would ask Ofgem to bear this in mind and do all they can to avoid wasted and inefficient work, which incurs costs, and could have a direct or indirect impact on proposals and plans in other areas. To compound the potential for inefficiency by penalising companies for the quality of their plans or for the subsequent delivery, does not seem reasonable.

We would support an approach for the gas networks that recognises the starting point of the relationships across gas and electricity, and also takes account of the maturity and intensity of the existing collaboration and relationships across the electricity sector, where the potential benefits are large and reasonably transparent.

We would encourage an approach that supports the sensible first significant steps in cooperation over RIIO2, with the potential for flexibility when RIIO-ED2 Business Plans emerge.

A summary of our thoughts on each of the consultation proposals is set out below:

1) Business Plan Incentive

We do not think this could work initially without the involvement of the electricity DNOs. We see the biggest opportunities in collaboration between gas and electricity supporting decentralised and regional energy solutions. This could be addressed by enabling a re-opener where changes to gas network funding can be justified to deliver value by coordination with the DNO's Business Plans. This would require funded resourcing for the gas networks to support collaboration as the DNOs build their Business Plans.

If a Business Plan approach is taken forward, once more detail is provided on exactly what is expected, including appropriate weightings, we can set out our strategy for whole systems which can be assessed/reviewed. We would however be limited in what firm specific commitments we could make, where other networks involvement is critical.

As cross gas/electric coordination is in its infancy, and the primary electricity focus to date has been intra-T&D, we do not think a symmetrical penalty/reward approach is appropriate for inter gas/electricity coordination. It may however be more applicable with electricity T&D which has invested considerably in cross sector working. It may be pragmatic to apply such an approach to electricity networks initially, and then consider expanding them to gas and electricity for RIIO3, where the lessons learnt can be deployed.

We note that any approach that seeks to measure cooperation performance would be extremely difficult. It would be very hard to know who was to blame, and hard to distinguish between a party refusing to cooperate, and one that delays and defers. Assessing the level of cooperation of two parties in a business plan quality mechanism is likely to have a high degree of subjectivity, potentially too high. This would be amplified if there is a penalty applied rather than a lower reward.

2) Ensuring network innovation has a whole systems focus

We support this approach as it builds on existing processes where innovation is coordinated across gas and electricity. We would seek clarity on what "consumer benefits" include; for example, would improving consumer knowledge and understanding the customer experience be included.

Any assessment of whole system benefits must feed into how the costs are born. If 75% of the benefits are received by electricity consumers, gas bill payers should only be funding 25%. A similar principle should be applied to measure the overall level of whole system activity with for example an aim over RIIO2 for whole system project funding to be shared broadly equally or in line with a ratio established at the start of the regulatory period. We think whole system thinking should not be dominated by electricity only, when we know the major longer term challenges lie across all sectors.

2) **Coordination and information sharing**

We see some merit in this approach but it would need a balance of allowance and incentive/reward.

As set out above, we are uncomfortable with any mechanism that seeks to measure failure or refusal to cooperate, as this is extremely hard to assess. Parties can also be barriers to cooperation due to valid operational reasons, or may delay or frustrate a project without ever stating their refusal to participate.

Co-operation to understand and identify opportunities and to listen to and feed in all stakeholders views will require additional resource, before any implementation. This option could sit well with option 5 below: Flexible mechanisms.

4) Balancing financial incentives between traditional and whole systems behaviour

We believe this may be too complex a mechanism to design and apply to gas and electricity interactions, where the relationships and processes are not mature. It could have merit between gas transmission and distribution, although other options would be preferable.

5) Ensuring the framework is able to flex to meet whole system needs

A whole system uncertainty mechanism could be the basis of a workable approach to support the identification and implementation of cross sector solutions. We would propose a variation where pilots and trials could be approved, benefits shared, and if there is success, the regulatory framework updated for all. This would drive value adding and scalable solutions.

6) Whole system discretionary reward

We do not support this approach. There are clear benefits to be realised from collaboration, and there are also customers waiting for the solutions to be implemented - an unknown funding and reward system will not encourage the right behaviours at the right times, with any degree of certainty or consistency.

Our proposal, taking features from 3) and 5) is as follows:

- Small level of baseline funding to enable BAU coordination across sectors.
- A use it or lose it allowance is available for partnership bids for pilots/trials with well-defined benefits, success criteria, and customer/stakeholder support. A deminimus level of benefits could apply either for the initial project or if rolled out across all networks.
- On completion the benefits are signed off independently with the networks receiving a percentage (set at the start). Note: a project that demonstrates what doesn't work may also be as valuable a success as showing what can be achieved.
- Where scalable, the framework should enable, with necessary supporting funding, the implementation of the pilots in other territories.
- A level of coordination will be necessary to avoid duplication, such as that already employed with innovation projects.
- A table of benefits delivered can be published to show relative performance.

CSQ12 - Which of the possible mechanisms we have outlined above could pose regulatory risk, such as additionality payments or incentivising the wrong behaviour?

As noted above, the timetable limits the inclusion of detailed specific commitments in our business plan submissions, and also drives inefficiencies.

We do not support rewards/penalties based on measures of cooperation performance as we do not believe it will be possible to robustly quantify the party leading or causing a success or failure. For example, a party may visibly promote a project, but then constrain the release of the necessary resource to implement. We would support funding and incentives against clear upfront measures that all parties can be assessed against, and ideally such that one party could meet without the other party.

Any information sharing would need to recognise commercial confidentiality and the role of Independent Gas Transporters in delivering connection services. The IGTs may also need to be bound by any information sharing obligations.

We think that the proposal to redefine outputs is too complex to be applied across the gas and electricity sectors, and so would be difficult to implement and at higher risk of undesirable consequences. We support a simple starting mechanism that can show benefits and which can be developed further in RIIO3. The whole system approach for RIIO2 should be about showing the art of the possible with the first significant steps with the gas and electricity networks working together.

If the separation of electricity and gas distribution price controls is shown to represent a barrier to delivering benefits to consumers and stakeholders, then working towards alignment of controls in the future would be justified. If this is done in a well-managed way, Ofgem would be able to address any resourcing issues, to ensure the best outcomes for customers.

CSQ13 - Are there obstacles to transferring revenues between networks that disincentivise networks from using a coordinated solution (please give details and suggest any changes or solutions)?

We would hope any issues could be overcome, and more complex arrangements may be more applicable to the much more mature interactions between electricity T&D. For gas interactions we would support a simplified approach that supports the identification and roll out of significant value adding initiatives, as set out above.

CSQ14 - Can you recommend approaches that would better balance financial incentives between networks to enable whole system solutions?

We suggest an ability to propose joint trial initiatives with bespoke funding/sharing would help ensure the real value adding projects are implemented at pace, and the successes rolled out for all. Submitting proposals also enables clear definition of success criteria which can then be linked to incentives e.g. if party delivers at lower cost than target, they receive a greater share if they meet/outperform success criteria. Sharing of benefits could be agreed between the parties if necessary to offset other regulatory mechanisms which advantage/disadvantage the parties. We would urge an element of pragmatism however, as a small benefit for one party arising from a trial that delivers clear benefits, may be acceptable and deminimus, and too complex to remedy for a trial. Indeed, an output from the trial could be the understanding of the full implications across the regulated entities. The framework can be adjusted however to protect against unreasonable windfalls, should the initiative be rolled out more widely.

CSQ15 - Are there other mechanisms that we have not identified that we should consider (please give details)?

We have set out above a proposal that we think is proportionate and pragmatic to support the first steps in cross sector collaboration for RIIO2.

CSQ16 - Are there any additional framework-level whole system barriers or unlocked benefits, and if so, any price control mechanisms to address these?

It should be recognised that where customers are awaiting solutions, delivery at pace will be critical and the level of cooperation more limited. The longer lead times for higher pressure and higher voltage, and above ground projects should therefore be acknowledged in the framework. Lower pressure gas distribution solutions are generally lower lead time and not on the critical path for a customer project.

A framework that supports long term planning, including optioneering to support strategic initiatives such as regional development plans, would enable time to consider a wider range of options to meet the customer needs, as economically and efficiently as possible.

CSQ17 Are there any sector specific whole system barriers or unlocked benefits, and if so, any sector-specific price control mechanisms to address these?

Some of the cross sector benefits involve activities the regulated networks are not allowed to undertake, such as electricity or gas production, or appliances/equipment downstream of the meter e.g. district heating or energy efficiency. This may require involving third parties to design and implement solutions, which may delay delivery.

CSQ18 Which of the proposed mechanisms would be most suitable in circumstances where a broader definition of whole system is likely to deliver benefits to network consumers?

A combination of funding for baseline coordination and to develop proposals to then submit in flexible whole system uncertainty mechanism could be effective as well for a broader definition. If the re-opener was treated as a sandbox with an ability to flex the regulatory framework for a trial/pilot, then broader definitions and activities could be accommodated.

Cross Sector- Asset resilience

Key Messages

- **We support the development of the NARMs methodology for GD2. However, we caution that the tool is still in its infancy. The GD1 targets and close out arrangements have not yet been agreed and there is limited time to make refinements to the models**
- **There are a number of technical challenges and uncertainties outstanding which need to be resolved through the NARMs working group, or deferred for work in GD2.**
- **We must remember that safety legislation is a primary driver for most work in Gas Distribution**

CSQ19 Do you agree with our proposals to use monetised risk as the primary basis for network companies to justify their investment proposals for their asset management activities?

No. Whilst we support the use of Risk Monetisation (NARMs), and its extension in GD2, we do not agree that it is a primary basis for network companies to justify their investment proposals. The primary basis for justification is compliance with legislation.

There are a number of asset interventions on gas networks mandated by safety or environmental legislation. For example the Medium Combustion Plant Directive [Environmental Permitting (England and Wales) (Amendment) Regulations 2018] sets a standard for emissions from large water bath heaters which must be achieved regardless of the NARMs assessment.

In some cases monetised risk values for legislatively driven investments can be calculated, but it is the legislation and not the NARM that justifies activity.

Beyond legislative compliance, NARMs do have a role to play in justifying activity. However it must be understood that the technique itself, whilst significantly more advanced than at the start of RIIO1, is still in its infancy and as such should not be seen as a universal solution. There are many 'local conditions' or 'unique factors' which the model does not understand – the presence of a care home, a 'one off' asset configuration etc. Whilst a perfect model will never be possible we would welcome the opportunity to work with Ofgem during GD2 to strength the approach ready for GD3.

At a technical level it must also be understood that RM in Gas Distribution is a reporting tool and not a CBA tool. It does contain values (benefits) which can be fed into investment planning (CBA) but cannot itself be used to perform the calculation or for optimisation.

At a fundamental level it is the customer that drives a company's asset management approach. Customers views may be expressed through legislation or represented by the HSE. We are always seeking to gain further insight into customers wants and needs and building our planning tool and plans to best reflect this insight.

CSQ20 Do you agree with our proposals to define outputs for all sectors using a relative measure of risk?

Yes. Gas Distribution currently operates with a relative measure (or delta target). We agree that this has a more direct link between the measure and the work required to deliver outputs.

CSQ21 Do you agree with our proposals for defining outputs using a long-term measure of the monetised risk benefit delivered through companies' investments?

We agree that it is the long term (whole life) benefit of an intervention which should be considered as part of optioneering. We also agree the conceptual illustration presented in the consultation. However, there are a number of technical issues which must be concluded before the approach can be properly evaluated.

1. What is the long term? A specific future point (say 2050) or a future time period from the point of investment (say 25 years).

2. Would the long term be the same for all sectors?

3. Given discounting through time how would in period scheduling of work be accounted for both in terms of target setting and subsequent variation in delivery profiles – a scheme scheduled for year one will have a different net benefit from the same scheme scheduled in year 5.

4. How can long term benefit targets be tuned to a 5 year price control maintaining companies' abilities to risk trade without creating loop holes for in-period activity?

5. How are changes between regulatory periods accounted for, i.e. improved models and changes to the asset base (caused by growth or decommissioning) factored in?

We have commissioned a study by the Economic Team at ICS which considers these issues and are happy to share the results with Ofgem. We will also actively support the Ofgem group set up to work out the approach to estimating the long-term benefits.

We would at this stage challenge the first aspect set out in section 6.28 of the consolation document ('It is unrealistic to assume that an asset will deteriorate in perpetuity if there is no intervention – at some point in time the asset will fail or a point will be reached where intervention will have to take place.'). Whilst we agree that in the real world a 'burning platform' would require intervention, for modelling purposes it is necessary to allow assets to deteriorate to this state. If deterioration to full failure is capped the model would also be capping the benefits of intervention, that is we should include the benefits of not having a burning platform when building the justification of investment.

We do acknowledge that some specific elements of the Gas Distribution model would need a cap – for example maintenance visits – and cross industry work is required to remediate this if the models are to be used for long term benefit assessment.

We would also challenge the notion of an 'intervention point' which takes us away from a risk based approach and back towards condition based or age based intervention planning.

CSQ22 Do you agree with our proposed approach to setting allowances and outputs?

Building on our answer to CSQ19 we would highlight a number of technical issues with this section of the document.

6.29 suggests cross-checking with asset age and condition data. Asset age is built into the RM models as is condition. As such there will be co-variance between these factors and the RM outputs rendering cross-checking of limited value.

6.30 We support the idea that willingness to pay (WTP) values could be incorporated into the monetised risk approach. However, we would highlight that the current Gas Distribution methodology does not allow for this. As a forward thinking company we have started the process of updating our models to include WTP values for interruptions. This will however lead to two models, one following the Gas Distribution methodology and one with enhanced features.

6.30 also suggest that 'Utilising monetised risk should help stakeholders better understand the benefits of companies' proposals and therefore lead to more meaningful engagement.' This statement is untrue as written; the RM methodology is necessarily complex and not accessible to stakeholders. Elements within the models - the value of greenhouse gases, interruptions or repair costs for example can be the basis of meaningful conversations but the total RM score is an overly abstract concept on which to engage.

6.31 states that RM will be used for benchmarking. We would highlight that this has potential flaws.

- A company which has historically managed its assets poorly will have high RM scores and opportunities to deliver high risk reduction per £ invested interventions i.e. its investment plan could appear more efficient than that of a well manged company.

- Although the Gas Distribution methodology validation process has promoted much greater harmony between company models, variance still exists which would make benchmarking unrealistic.

- Looking at RM scores without also considering costs and service performance could lead to false conclusions. Companies may take legitimately different positions on a cost/service/risk plot – reflecting their customer's preferences and the risk appetite of their Board.

CSQ23 Do you have views on the proposed options for the funding of work programme spanning across price control periods?

This issue is less material for Gas Distribution than for Transmission. The nature of investment in Gas Distribution networks tends to be high volume, low cost activity with benefits from individual interventions being quickly realised. We would support option 2 on the basis that it would smooth customer costs through time leading to more stable bills.

CSQ24 Do you have any views on the options and proposals for dealing with deviation of delivery from output targets?

Ofgem have not yet confirmed arrangements for closing out NOMs in GD1, with discussions ongoing on dealing with deviation from plan.

Ofgem state in 6.40 that a penalty 'equivalent to the monetised risk benefit that consumers have lost as a result of the under-delivery' could be applied.

We propose that a simple mechanism would be more appropriate. One in which the funding associated with the benefit not delivered is returned, with a penalty fine being added: the GD1 penalty is 2.5%.

Ofgem wording is unclear but appears to suggest that the total RM benefit would be used. This figure contains a number of elements - private (company) costs such as the cost of repair and societal costs such as the cost of carbon or valuation of the risk to life. Leading companies may also build on the standard model to incorporate customer willingness to pay in their risk benefit calculation. We do not think it is right for Ofgem to penalise based on 'full consumer surplus' - imagine a scenario where the RM benefit is £1m, the cost of the scheme is £100k. The scheme is not delivered. Using the RM value would not be proportionate. Similarly it would not be right to return societal benefits such as carbon costs to specific network customers.

The points raised in CSQ21 with regard to phasing of work through time are relevant to close out. As risk is an annual calculation is it envisaged that only the final year variance will be used (the simplest option) or will in period phasing be taken into account?

CSQ25 Do you have any views on the interaction of the NARM mechanism with other funding mechanisms?

We agree the principle that the risk benefits derived from load related work should not be counted towards the RM target. However, the new assets would need to be factored into a refresh of risk calculations for GD3 to avoid the model drifting from reality. Any costs not recovered would also need to be allowed.

CSQ26 Do you have any views on ring-fencing of certain projects and activities with separate funding and PCDs? Do you have any views on the type of project or activity that might be ring-fenced for these purposes?

We would promote the need for simple and transparent arrangements. We agree that companies should not be able to trade down certain plan elements if they are included in NARMs – legislative mandates for example. However, companies should be able to choose to deliver more of a ring-fenced element if it is in customers interests. As such we would support a 'one way gate'.

Work Resilience

Key Messages

- **Workforce resilience is an important area for networks to consider and we welcome its introduction into the business plan guidance**
- **There are several areas where measures could be developed around New Talent Retention, Employee Engagement and Employee Churn. Detailed engagement will be required to ensure measures are meaningful and comparable**
- **Each network will have different areas of focus and therefore any targets are best suited to be bespoke ODI's proposed by individual networks.**

CSQ27 Where companies include a sustainable workforce strategy as part of their business plans, what measures do you think could be established to hold companies to account for delivering these plans, without distorting optimal resourcing decisions?

Future definitions and measures of resilience need to be kept simple, transparent and if possible comparable. They must act as critical 'weather vane' of the organisation ability to provide a consistent service to its customers in a reliable and sustainable way - long term in a dynamic operating environment.

Cadent believes that there are a number of possible measures that indicate the effectiveness of an organisation in addressing resilience, these include:

New Talent Retention

The ability to attract, develop and keep our new talent (a strategic investment). This measure could cover work with schools, colleges but also attracting 'mature talent'.

Employee Engagement

A Voice of Employee Survey (morale & productivity) – Typically looking for performance above 70% but would requires the same approach across all organisations for a benchmarkable measure.

Employee Churn

Are we minimising regretted leavers (keeping the best, performance management of the ineffective). Typically less than 10% regretted loss.

Internal movements & promotions

The extent we invest in our staff by providing training & development and the opportunities to grow/build their skills within Cadent.

Specific challenges will vary from organisation to organisation. For example, Cadent will need resources to support the HS2 project which will have a major impact on our network in the 2020s and to be able to compete in the buoyant employment market around London. As such we believe these measures are best dealt with using bespoke ODI's that should be proposed by companies.

Physical Security

Key Messages

- **We support the proposed approach. Agreement of sites and measures with BIES and agreement of efficient costs with Ofgem**

CSQ28 Do you agree with maintaining the existing scope of costs that fall under Physical Security, i.e. costs associated with the PSUP works mandated by government? Please explain your reasons and suggest alternative definitions you believe should be considered.

Yes, the PSUP documentation is clear on which sites require protection and the standard of that protection. GDNs can work with BEIS to confirm mandatory requirements and with Ofgem on cost efficiencies

CSQ29 Do you agree with our proposed approach of ex ante allowances for PSUP works mandated by government? Please explain your reasons and suggest alternative approaches you believe should be considered.

Yes, for the reasons outlined in CSQ28.

CSQ30 Do you agree with our proposal to include a reopener mechanism to deal with costs associated with changes in investment required due to government-mandated changes to the PSUP?

We agree. Whilst the program and approach is now well established, variance in nature and magnitude of threat may lead government to change guidance during the period, which in turn may add/reduce costs.

CSQ31 We would also welcome views on the frequency that is required for any reopener, eg should there be one window for applications during RIIO-2 and, if so, when?

We suggest a single review in year three would be appropriate

Cyber Resilience

Key Messages

- **The proposed NISR is to narrow to provide full protection and considering this element in isolation may restrict efficient whole system solutions.**
- **This is a rapidly changing area, as such we need to design mechanisms which allow companies to respond the threats as currently understood and to develop their plans in period.**
- **As such we feel that a UIOLI mechanism may be overly restrictive. We would support a re-opener mechanism**

CSQ32 Do you agree with the scope of costs that are proposed to fall under cyber resilience, i.e. costs for cyber resilience which are (1) incurred as a direct result of the introduction of the NIS Regulations, and (2) above 'business-as-usual' activities? Please explain your reasons and suggest further or alternative costs you believe should be considered.

We do not agree. We believe that NISR scope is too limited as it only focusses on the resilience and security of systems that directly impact on the supply of gas. A large number of systems that support business processes (the security chain) are not in scope but do require resilience to ensure the business can continue to operate and that they do not become the 'weakest link' in a security attack.

The definition for BAU must be clearly defined for all GDN's so that everyone is fairly compensated for adopting good security controls and are not penalised for having higher BAU security control standards.

The scope appears too rooted in "today's" risk, rather than being adaptable over time. It is vital that the ever escalating nature of cyber risk is accounted for and investment able to increase appropriately to match. Security predictions correctly identified that nation state attacks would increase, vulnerabilities would become easier to exploit and adversaries would increasingly improve their skills but the scale of vulnerabilities and attacks has been underestimated, and the rapid adoption of emerging technologies is increasing the attack surfaces. These trends will continue, or accelerate further and need to be appropriately and efficiently funded.

We suggest that for known and existing cyber threats and vulnerabilities, mitigation can be included in company plans. For unknown, emerging threats and vulnerabilities, they will require dynamic allowances possibly via re-openers where the change is material.

CSQ33 Do you agree with our proposed approach of ex ante 'use-it or lose-it' allowances? Please explain your reasons and suggest alternative approaches you believe should be considered.

UIOLI allowances will enable investment in the known-knowns. However, it will not help with the predictions of the future. The UIOLI approach needs to allow for flexibility in estimating investments, because we may not be able to accurately predict all investments, based on emerging technology, and understanding how to secure it.

Given that NISR requirements are likely to increase in cost and complexity over time, we need a framework that supports changes in regulatory requirements. We are unclear how the proposed

framework supports sudden, new major vulnerability discovery, such as recent events with Huawei, or supplier compromise "dragonfly". These would best suit a re-opener in addition to UIOLI

CSQ34 Do you agree with our proposal to include a re-opener mechanism for cyber resilience costs? Please also provide your views on the design of the re-opener mechanism.

We agree, a re-opener is an essential tool for the coming RIIO period. However, there is a whole range of reasons why a re-opener could be required. We would want to see a wider scope and wider justification for a re-opener, not just driven by the NIS Regulations, but by any significant cyber threat change:

- The current proposal seems to only include security resilience relating to the CAF security assessment. For security to be effective we need to look at security controls holistically and whilst NIS applies to a very limited scope of systems, resilience needs to be thought of in the wider business context.

- The NIS systems in scope may change over time and it's not clear how changes in scope will be accommodated.

- The NIS risk profile may also change over time, should the geo-political landscape change.

There should be a mechanism to trigger a reopener for any significant material investment in protective, detective and recovery security controls, as we have no way of knowing what future cyber challenges we will face:

- We do know that adversaries are upskilling and getting access to technology and information about technology that is likely to enable more sophisticated, targeted attacks;

- The threat to utilities, or gas in particular, could increase;

- Vulnerabilities in our existing estate could be revealed, requiring wholesale replacement;

- Digitisation and use of social media continues to increase, by organisations and attackers alike. This can cause inadvertent over-sharing of information;

- Organisations will become more dependent on the internet and other entities for which resilience cannot be directly managed. Other mitigating factors will be required;

- Investment in people and upskilling must be a priority.

Real Price Effects

Key Messages

- **We believe that appropriate indices need to be representative of efficient network costs, not dominated by networks, produced by a reputable body, continuous in their method of calculation, and finalised on a timely basis.**
  We agree with Ofgem's proposals to use notional cost structures for RPE indexation, include a forecast of RPEs in allowances and update these annually.

CSQ35 Do you have any views on our proposed factors to consider in deciding on appropriate input price indices? Do you have any evidence justifying the need for RPEs and any initial views on appropriate price indices?

We believe that the first step is to decide which costs should be subject to indexation, for which we need to consider the likely variability in the level of cost, as a proportion of totex. Our initial view is that a cost where the expected variability represents 0.5% or more of totex should be subject to indexation where possible, this representing around 0.2% of RoRE – the comparison against RoRE being especially appropriate in the context of Return Adjustment Mechanisms.

Based on past cost variability, we believe that for Gas Distribution, Direct Labour, Contractor Labour, PE pipe & fittings and blacktop reinstatement materials should all be subject to indexation, and possibly metallic pipe, fittings and valves (made of copper, steel and brass).

In order to assess whether potential indices are fit for purpose, we believe that five criteria should be used. A suitable index should be:

- representative of efficient network costs;
- not dominated by networks;
- produced by a reputable body;
- continuous in its method of calculation; and
- finalised on a timely basis.

Applying these criteria, we have not yet decided on the most appropriate indices to propose, although the subject has been discussed previously at Ofgem's Cost Assessment Working Group (CAWG), at which we set out the most suitable potential indices for key cost types as shown below.

Cost type	Potential index
Direct Labour	ONS Average Weekly Earnings – Sectoral: Construction, Professional Scientific & Technical, Admin ONS Annual Survey of Hours and Earnings – notional GDN workforce
Contract labour	TBC
PE pipe and fittings	BCIS PAFI PE pipe & fittings ICIS London Oil Reports PE100 index (PE resin only)
Reinstatement materials	BCIS PAFI coated macadam and bituminous products

Based on work to date, we expect the identification of a suitable index for our repex contract labour to be most difficult index to identify or create, and we will also need to consider whether labour indices should be calculated on a national or regional basis. We acknowledge that we will need to develop proposals for all relevant costs by the time we submit our Business Plan in December 2019.

CSQ36 Do you agree with our initial views to retain notional cost structures in RIIO-2, where this is an option?

We agree with Ofgem's initial view to retain notional cost structures in RIIO-2, where this is an option. The alternative approach, based on individual company cost structures, would incentivise certain organisational structures and methods of reporting, discourage other approaches, and would also be more difficult to implement.

CSQ37 Do you agree with our initial views to update allowances for RPEs annually and to include a forecast of RPEs in allowances? Do you have any other comments on the implementation of RPE indexation?

We agree with Ofgem's initial view to update allowances for RPEs annually, and to include forecasts of RPEs in allowances. Under this approach, changes in customers' bills will be more regular but smaller than under the alternative end of price control approach, and costs and revenues will be more closely matched. This has the benefit of supporting network cash flow, and is also consistent with the principle of inter-generational equity.

Ongoing efficiency

Key Messages

- **We agree to the use of EU KLEMS dataset to assess UK productivity trends, but believe that given the step change since the financial crises of 2007, it is not appropriate to use earlier time periods.**
- **We have instigated external consultancy to advise on our assumption for an appropriate level of ongoing efficiency which we expect to take account of EU Klems data, its application and potential additional data sources.**

CSQ38 Do you agree with our proposal to use the EU KLEMS dataset to assess UK productivity trends? What other sources of evidence could we use?

We agree with Ofgem's proposal to use the EU Klems dataset to assess UK productivity trends, although we have concerns over how it is applied. We note that the data runs from either 1995 or 1998 (depending on the series) to 2015, which covers two quite distinct time periods. The period before the financial crisis of 2007 featured strong productivity growth, but since that point, now twelve years ago, it has typically been either very low or negative.

Consequently, when considering likely productivity growth for the period from 2021 to 2026, unless there are good reasons for believing that the economic conditions similar to those prior to 2007 will return, we believe that experience since 2008 is likely to be a better predictor for GD2.

In addition, we had a number of other concerns over the application of ongoing efficiency at RIIO-GD1, such as whether the assumption should reflect the fact that the gas industry was in decline, as measured by peak day flows, and whether it was reasonable to apply improvements in historic average efficiency from other sectors to an upper quartile level of efficiency in gas distribution.

We have commissioned and are presently awaiting external consultancy advice to inform our assumption of an appropriate level of ongoing efficiency in our Business Plan, which we expect to take account of EU Klems data, potential additional data sources, and the issues described above.

Managing the risk of asset stranding

Key Messages

- **The timely provision of energy infrastructure is a known barrier to regional ambitions and the framework should support appropriate risk sharing.**
- **Anticipatory strategic investments to support entry gas may be justified.**
- **Large decarbonisation projects may require anticipatory detailed development costs ahead of final overall policy supported commitment.**

CSQ39 Do you think there is a need for an utilisation incentive at the sectoral level? If so, how do you think the incentive would operate coherently with the proposed RIIO-2 price control framework for that sector?

We understand that the main focus for a utilisation incentive is in the electricity sector, however we note that increasing utilisation with minimal or no investment does have the effect of reducing customer bills. For example, if the gas networks can support an additional 50TWh of gas demand for Compressed Natural Gas vehicles with no wider system reinforcement, then this would contribute to lower customer bills: the gas network costs would be shared across a wider charging base. There is a clear customer benefit from increased asset utilisation which the overall framework should recognise and encourage the right behaviours.

CSQ40 Do you have any views on our direction of travel with regard to anticipatory investment?

Given the similarity on topic, we have combined our answer to this question with that for CSQ41.

CSQ41 What type of projects may be appropriate for a risk-sharing approach?

A recurring issue in our engagement with regional bodies is the barrier that energy infrastructure can present to their growth ambitions. This is more often an issue with electricity, but the same principles apply to gas. Regulated networks are low risk and avoid making speculative investments that can expose consumers to asset stranding risk. A proposal we have developed and are engaging on with our stakeholders, enables gas network infrastructure to be installed at the correct size for future growth, at an earlier date. This is enabled by a third party taking the asset stranding risk for a period.

We recognise that demand growth is not always predictable to a specific year, so there must be some flexibility for the projected demand to be seen. There may also be opportunities for the regional body to encourage and incentivise new demand where they are financially securing the new infrastructure. We see having a standard off the shelf option for third parties to initiate critical infrastructure works early by taking the demand risk, could remove a significant barrier our stakeholders are highlighting.

We discuss elsewhere in our response the need to support network investments for gas coming onto the distribution networks, including biomethane and shale. We are considering in our plans whether there is a case for some anticipatory strategic investment. This could be in the form of installing in-grid compression at known pinch points, or it could be by completing smaller scale pre-works at some sites to reduce the installation lead times should the expected entry gas demand be confirmed. An example of this could be the preparatory civil and electrical works.

We note that mechanisms to support decarbonisation and energy system transition initiatives have been proposed. These mechanisms must also support preparatory works and also the development of regulatory, commercial and operational arrangements, ahead of a firm policy decision to go ahead. They must also accommodate large projects that may need to be funded by the regulatory asset base rather than a one off contribution. There may also be situations where projects may need to have an element of risk underwritten by the Government. A large project like our HyNet North West proposals, will require significant early detailed development works, and has a degree of uncertainty due to the innovative nature.

CSQ42 How can we best facilitate risk-sharing approaches for high-value anticipatory investments?

The concept of a higher return for higher risk investments makes sense, but need some clarity around how this would work in practice as these are likely to be projects that networks could 'pull the plug' on if the funding arrangements are not fair. To ensure stability Ofgem need to give an indication of what this could look like (if not the number but the mechanics of getting to one).

CSQ43 How can we guard against network companies proposing risk-sharing arrangements for project they may have undertaken as business as usual?

Companies will need to clearly articulate why risk sharing is appropriate. For gas networks, the majority of spend is high volume low cost activity – this is clearly business as usual. The initiatives described above, innovative hydrogen work or anticipatory investment, are clearly a step away from business as usual.

Innovation

Key Messages

- **Incentives to Innovate will be impacted by the overall risk and reward framework that is created. We set out our views later in the "achieving a reasonable balance" section of the consultation that we do not think the framework as proposed is balanced and as stated would have a detrimental impact on the incentives to innovate in BAU to deliver better outcomes for customers**
- **There should be small company-specific allowances to deliver low Technology Readiness Level research and development projects. These are the most uncertain projects and are vital in developing larger NIC-style transformational projects and projects that can then be delivered as BAU.**
- **We agree that the IRM has not worked in RIIO-1 and that it should not be retained in its current guise for RIIO-2.**
- **There should also be a large cross-sector fund to deliver transformational innovation against the critical customer outcomes of decarbonized heat, power, transport and industry.**
- **Transformational funding should prioritise innovation in heat and transport given the significant progress made in decarbonising power in RIIO-1.**
- **We are broadly supportive of continuing to raise innovation funds through use of system charges. We would urge Ofgem to identify a solution for joining up the gas and electricity innovation funding pots as this would enable better outcomes.**
- **Networks are already working with the Energy Innovation Centre and Ofgem to develop a proposal to assess the outputs from innovation. This work should shape the approach for tracking benefits in RIIO-2.**

CSQ44: Do you agree with our proposals to encourage more innovation as BAU?

We support the principle of encouraging more innovation as BAU in RIIO-2. To achieve this there must be:

- Strong Totex and Output Delivery Incentives to reward the transition of non-transformational innovation to business as usual; and

- An avoidance of mechanisms that will discourage innovation and collaboration.

However, a significant number of the proposals outlined within Ofgem's RIIO-2 Sector Specific Methodology Consultation are contradictory to these criteria. As such, the proposed overall RIIO-2 methodology, and shift towards a higher risk / low return framework, will not support the transition of innovation to BAU in RIIO-2.

The proposals that will discourage innovation and collaboration include:

- A significant increase in the number of licence obligations leading to increased network company risk aversion;

- A reduction in the number / value of upside incentives – including Totex and Output Delivery Incentives;

- An increase in the number of downside only incentives;

- The introduction of relative incentives which will guarantee that some companies receive penalties regardless of their performance. For Cadent this will mean that we will need at least three of our networks in the top four positions of any incentive to receive a reward;

- The introduction of relative incentives which will result in reduced collaboration in innovation projects across the industry and lack of best practice sharing;

- The introduction of dynamic targets which will mean that unless the incentives are calibrated accordingly (i.e. roller mechanism) that the rewards available will at least reduce by a factor of five;

- The introduction of targets and assessment at a sectoral level which increases the impact of an Ofgem mistake in assessing one network's business plan upon the returns of all other networks thus increasing company risk; and

- Limited free cashflow as a result of the very tough settlement driving companies in to 'survival mode' which is incompatible with innovation.

We believe that Ofgem could rebalance these features to ensure that network companies build on the successes of RIIO-1 in embedding a culture of innovation within their organisations as BAU.

CSQ45: Do you agree with our proposals to remove the IRM for RIIO-2?

We agree that the IRM has not worked in RIIO-1 and that it should not be retained in its current guise for RIIO-2.
If there are strong Totex and Output Delivery Incentives within the RIIO-2 framework then this will enable networks to make effective business decisions about rolling out successful innovation projects whether completed by them, another network or a third party.

However, there are very limited upside incentives within Ofgem's current proposals along with proposals that will make networks more risk averse, or less likely to spend discretionary funds, and will mean that companies will not collaborate within their sector. As such, unless these issues are addressed separate funding will be needed to encourage networks to roll-out innovations and support other networks in rolling out successful projects they have completed.

Funding will also be required for networks to support the testing and demonstration of third party innovations and for rolling them out, especially if roll-out is mandated to networks and they cannot adopt solely based on the incentives within the framework.

Encouraging third party participation in RIIO-2 innovation

It is in customers' interests for third parties to have direct access to innovation funding in RIIO-2, but network companies must not take on any additional obligations or risks as a result of this.

To encourage third party participation in RIIO-2 Ofgem will need to address the barriers created by the Intellectual Property (IP) rules within the current regime.

CSQ46: Do you agree with our proposals to introduce a new network innovation funding pot, in place of the Network Innovation Competition, that will have a sharper focus on strategic energy system transition challenges?

We broadly support the proposal to introduce new innovation funding with a sharper focus on strategic energy system transition challenges. We support the concept of a revamped governance arrangement to set the challenges and criteria, and possibly to bring additional funding streams to bear.

Whilst we note Ofgem have yet to propose a fixed funding cap, we do think the proposals have two key deficiencies, which we would ask are addressed.

1) **Cost recovery through the regulatory asset base.**

   The proposals suggest a similar approach to the NIC with "one off" funding of initiatives. For large scale projects such as our hydrogen hub initiative in the North West of England, the funding levels are almost certainly too large for a one off fast money type approach. Inclusion in the regulatory asset base would be more appropriate and with this then recovered across all gas consumers, as with NIC funding today.
   We would welcome a modification of the proposals to support funding over an assets lifetime.

2) **Government funding/directions**

   For some decarbonisation projects, where there is local and/or government support, the mechanism should accommodate direction where appropriate, as well as supporting funding. For example, the Government may wish Cadent to implement a specific large scale project, and may want to fully or partially fund it through taxation. We'd support an approach that could facilitate such a situation.

3) **Funding limitations to electricity or gas.**

   Large scale projects such as those involving hydrogen, are likely to have benefits outside the gas sector. HyNet for example could support power generation, and low emission transport. Given the wider benefits, we'd support a whole system approach to the funding, that allowed such projects to be funded by electricity consumers as well as gas consumers.

CSQ47: Do you have any views on our proposals for raising innovation funds?

We are broadly supportive of continuing to raise innovation funds through use of system charges. It is, however, we would urge Ofgem to identify a solution for joining up the gas and electricity innovation funding pots. This will be vital for delivering whole system outcomes and the energy system transition so if a solution cannot be identified for doing this for innovation funding it is difficult

to see how Ofgem will address this longer term funding challenge and therefore decarbonisation at the lowest cost.

We would be keen to understand why Ofgem do not believe this to be possible. Would it be possible to raise the NIC-replacement funding across gas and electricity customers by applying a percentage of the total fund by customer, allowance, revenue or RAV split between gas and electricity networks?

If not, then Ofgem must ensure that gas and electricity funds are at least equal to balance the focus across all types of innovation or technology. This is particularly important given the need to make rapid progress on the decarbonisation of heat and transport.

Historic focus towards certain types of innovation and technology can be seen through the longer duration and larger scale of innovation funding for electricity networks seen to date, as shown in the table below[4].

<table>
<tr><th rowspan="2">Year</th><th colspan="2">Electricity Network Innovation Funding</th><th>Gas Network Innovation Funding</th></tr>
<tr><th>Low Carbon Networks fund</th><th>Network Innovation Competition</th><th>Network Innovation Competition</th></tr>
<tr><td>2010</td><td rowspan="3">£500m</td><td rowspan="3">n/a</td><td rowspan="3">n/a</td></tr>
<tr><td>2011</td></tr>
<tr><td>2012</td></tr>
<tr><td>2013</td><td></td><td>£27m</td><td>£18m</td></tr>
<tr><td>2014</td><td></td><td>£27m</td><td>£18m</td></tr>
<tr><td>2015</td><td rowspan="6">n/a</td><td>£81m</td><td>£18m</td></tr>
<tr><td>2016</td><td>£81m</td><td>£18m</td></tr>
<tr><td>2017</td><td>£70m</td><td>£20m</td></tr>
<tr><td>2018</td><td>£70m</td><td>£20m</td></tr>
<tr><td>2019</td><td>£70m</td><td>£20m</td></tr>
<tr><td>2020</td><td>£70m</td><td>£20m</td></tr>
<tr><td>Total</td><td colspan="2">£996m</td><td>£152m</td></tr>
</table>

This allocation reflected the industry's uncertainty regarding the future of gas at the time the DPCR5 and then the RIIO-1 controls were set. This focus on electricity has contributed to significant developments in the decarbonisation of power during RIIO-1 but limited progress in the decarbonisation of heat and transport. This balance needs to change significantly to encourage further progress in these latter elements and will require the gas networks to transform the way they operate for their customers.

[4] Table excludes Network Innovation Allowance funding in RIIO-1 of between 0.5% and 1% of revenue for each gas and electricity network.

CSQ48: Do you think there is a continued need for the NIA within RIIO-2? In consultation response, we would welcome information about what projects NIA may be used to fund, why these could not be funded through totex allowances and what the benefits of these projects would be?

There is a need for small company-specific allowances, evolving the NIA and potentially delivered through the business plan, to deliver low Technology Readiness Level research and development (TRL 1-4) projects which might not otherwise be delivered.

These are the most uncertain projects, but are vital in developing larger NIC-style transformational projects and the projects that can be delivered as BAU once enough information is available to make an informed business decision based on the Totex and Output Delivery Incentives within the RIIO-2 framework. As such, without the funding there is a risk that networks will only focus on ideas that have been developed already and true innovation will stop.

The funding could be managed through a small 'use it or lose it' allowance for each company expressed as a percentage of revenue, similar to the NIA in RIIO-1 or alternatively networks could include specific requests for research and development funding within their business plan. The drawback to the later model would be the ability to respond to emerging areas of innovative thinking during RIIO-2. Access to this funding should require companies to share learnings across all networks.

CSQ49: If we were to retain the NIA, what measures could be introduced to better track the benefits delivered?

Networks are already working with the Energy Innovation Centre and Ofgem to develop a proposal to assess the outputs from innovation. This work should shape the approach for RIIO-2.

At a high level, networks should report on the progress of, and benefits from innovation projects delivered through direct funding, whether they are successful or not – as the learnings from an unsuccessful project could be just as valuable to share.

However, in developing any benefits measurement framework it must be recognised that, by the very nature of innovation, not all projects will be successful. The approach should also be proportionate to the funding.

The framework should consider the enablers of innovation and their progression over time. The enablers should include a company's strategy and vision, organisation and culture, capability and technology as well as results and outcomes. These should be considered over three phases of a projects lifecycle from initiation and evaluation, demonstration, iteration and learning as well as deployment and optimization.

Innovation delivered through Totex and Output Delivery Incentives should form part of networks' annual regulatory reporting pack narrative, unless relative incentives are utilised within the framework. In this case, networks should not be required to give up their competitive advantage, and potentially revenues, even though it would be in customers' interests to collaborate and share best practice.

As part of Ofgem's assessment of innovation in RIIO-2 there should be a review of where successful low technology level readiness projects were not rolled out due to insufficient, or counter-productive, incentives within Ofgem's RIIO-2 framework. This learning can support the development of the RIIO-3 framework.

CSQ50: Do you agree with our proposals for electricity distribution companies prior to the commencement of RIIO-ED2?

We support the continuation of the NIA and NIC funds for Electricity Distribution Networks (DNOs) until 31st March 2023. Other network companies, that have already begun RIIO-2, should still be able to partner with DNOs to access this RIIO-1 funding during this period.

Likewise, DNOs should be able to partner with network companies that have entered RIIO-2 to obtain funding under any replacements for the NIA and NIC. They should also, along with other third parties, be able to access RIIO-2 funding focused on strategic challenges independently, i.e. NIC-replacement, in the period 1st April 2021 to 31st March 2023 even though they will still be operating under the RIIO-ED1 framework.

This approach is likely to deliver the most customer benefits under the NIC in RIIO-ED1 and its replacement in RIIO-2.

Competition

Key Messages

- **We consider Ofgem is over-stating the benefits of competition and has made errors in its assessment of the impact of competition.**
- **Early in the formation of a new market, companies will want to explore different business models. Ofgem's approach should support this exploration.**
- **We do not consider the ESO has the skills or experience to run gas network competitions.**
- **This is a conflict between Ofgem's aims. On the one hand Ofgem wants to increase the level of competition. On the other hand, it is asking network companies to share their commercial strategies**

Introductory comments

Customers who want to connect to the gas network already benefit from fierce competition. Competitive providers are now responsible for a significant number of new customers to the grid. Independent gas transporters provide services for more gas customers than some of the smaller GDNs.

We support the principle of extending competition wherever it is feasible and beneficial to do so. We agree that it is likely to be appropriate to extend competition into areas where assets are separable and where the benefits for customers outweigh the costs of establishing and implementing a competitive process. However, we do not envisage projects of this nature in the gas distribution sector in RIIO2.

Any expansion in the scope of competition carries significant risk and is likely to require material effort. In line with regulatory best practice, Ofgem should only seek to expand the scope of competition where it is clear that this is beneficial to customers.

We consider Ofgem is over-stating the benefits of competition:

- We consider it is unlikely that it will be possible to utilize either the early or late competitive process in gas distribution during RIIO-2. Across our four regions we are unlikely to spend over £100m on any separable assets over the course of the next price control period.

- Ofgem has made material errors in its Impact Assessment, which has led the regulator to over-state the benefits of competition. We set out these errors below.

- We consider Ofgem has not given adequate weight to the way that the introduction of new competitive processes has the potential to delay investments:

- As Ofgem acknowledges, further work is required to develop the policy and processes to support late and early competition.

- The experience of introducing competition to offshore transmission operators (OFTOs) reveals the potential for competitive processes to result in unanticipated delays. This risk

was highlighted by the NAO in its review of OFTO competition, "It took longer …for the Authority to close the competitions than the 100 days it indicated in its published tender rules. It awarded the first four licences between 350 and 600 days after receiving the tenders. At 20 June 2012, the other first round competitions were still ongoing after more than two years … Delays happened on all projects including two where wind farms were already operational." It would not be appropriate for customers to miss out on the benefits of investments as a result of the introduction of a new regulatory process.

CSQ51: Have we set out an appropriate set of models for both late and early competition to explore further?

We consider Ofgem has identified an appropriate set of high-level models for late and early competition. We agree with Ofgem that these models will need to be refined before they are capable of implementation.

Early in the formation of a new market, companies will want to explore different business models. It will be important that the way Ofgem defines the competitive framework does not restrict the ability of companies to pursue innovative delivery models, including through strategic relationships, partnerships and joint ventures.

CSQ52: Do you agree with the proposed criteria we have set out for assessing the suitability of late competition models? Would you suggest any other criteria, and if so, why?

We agree with Ofgem's three main criteria. We think the criteria need to be expanded:

- To include **the need to complete projects in a timely way**. This is particularly important as local homes, jobs and regional industrial and economic growth could be dependent upon project delivery.

- To **address the complications of first-of-a-kind projects**. For example, Ofgem has not made the case that its competition models would be an appropriate way to procure and deliver innovative projects such as the HyNet.

CSQ53: Do you have any views on the costs and benefits we have used for our draft impact assessment on late competition?

We consider Ofgem has made errors in its Impact Assessment, which has led the regulator to over-state the benefits of competition. It has:

Failed to update its analysis of the impact of competition

As evidence of the positive impact of competition, Ofgem draws on the OFTO Impact Assessment produced by CEPA. We do not accept that the financing arrangements for OFTO are relevant to our circumstances. Nevertheless, even on its own terms Ofgem has exaggerated the scale of the benefits. CEPA found that the majority of the OFTO benefits relate to finance savings. These savings were assumed to arise as a result of the difference between historical regulatory settlements on the cost of capital and current market rates. However, Ofgem is proposing to reduce the allowed cost of capital for RIIO-2. It is an error not to adjust CEPA's analysis for the lower cost of

capital that Ofgem has proposed for the next price control. Had Ofgem made this adjustment, it would have concluded that the benefits from competition would have been materially smaller.

Ofgem has ignored the disbenefit of potential delays

As observed above; the introduction in new arrangements for competition is likely to result in delays to some projects. Ofgem has assumed that it will be able to avoid delays though proactive action, however, it has not tested the sensitivity of its conclusions to potential delays.

Ofgem has underestimated the scale of transaction costs

The NAO report on the OFTO regime indicated that transaction costs were in the range of 8% to 21%. In contrast, Ofgem has assumed that these costs will amount to no more than 1.5% to 3%.

Given the magnitude of these errors, Ofgem has not proven there is a case for the further extension of competition.

CSQ54: Are there any considerations for a specific sector we should include in our IA?

Ofgem's approach is intended to be applicable across different sectors. We do not consider there are any sector specific considerations that should be included in the IA

CSQ55: What are your views on the potential issues we have raised in relation to early competition? How would you propose mitigating any issues and why? Are there additional issues you would raise?

We agree with Ofgem's assessment. In addition, we would highlight that it may be difficult:

- to assess the suitability of some projects for a competitive approach at an early stage in their development. For example, it may prove difficult to confirm that some projects meet all of the relevant criteria for competition (e.g. 'new, separable and high value'); and

- to ensure the timely delivery of the project in circumstances where the range of solutions span a wide range of different approaches.

CSQ56: Are there other potential drawbacks of early competition?

We agree with Ofgem's observations on the potential drawbacks of early competition. We would underline:

- The possibility that competitive processes may end prematurely as a result of changing circumstances. For example, Ofgem notes that the only occasion that it has engaged with the market through early competition was in the context of the Shetland Energy Solution. On this occasion, the competitive process was stopped before it had run its course because market conditions changed. If early termination were to be a common feature of early competition processes, it would imply a significant cost to market participants that would not be matched by customer benefits.

- Our earlier observation that Ofgem has made errors in the way that introducing new competitive processes have the potential to delay investments.

CSQ57: Do you consider that there are any existing examples of early competition (including international examples or examples from other sectors) which demonstrate models of early competition that could generate consumer benefit in the GB context?

We are not aware of any relevant examples.

CSQ58: What are your views on the advantages and disadvantages of the high-level approaches to early competition outlined? How would you recommend mitigating any disadvantages?

We are open to the idea that early competition can deliver benefits for customers. However, the introduction of early competition is a substantial regulatory innovation which requires further development and consideration. It would not be prudent to require all licensees to adopt a new regulatory process until there has been an opportunity to trial the approach.

Ofgem should work with the industry to identify one or more projects that are suitable candidates for early competition to trial and refine the approach, potentially for application in RIIO-3.

CSQ59: Do you have any views on the potential criteria for identifying projects for early competition discussed above? Would you suggest any other criteria, and if so, why?

We consider some of Ofgem's criteria will be difficult to apply in practice. For example:

- Ofgem considers one criterion might be the contestability of solution. However, it may prove difficult to identify whether there are potentially different solutions to a network problem without running the competition itself.

- Effort might be expended seeking to solve problems that do not lend themselves to innovative solutions.

- In advance of running the competition itself the benefit associated with early competition will be entirely speculative.

CSQ60: Do you agree with the criteria we have set out for assessing who should run competitions? Based on these criteria, which institution do you consider is best placed to run early and late competitions?

The criteria for assessing who should run a competition seem broadly sensible.

We support Ofgem's view that the organization that runs the competition should be technically competent. In our view, this rules out asking the ESO to run a competitive process for gas distribution networks. The ESO has no experience of gas distribution.

We consider that Ofgem's proposed criteria should be expanded to include the legal powers of the organisation that is asked to run the competition. For example, it is not clear that the ESO would have the vires to run a competition process for the gas networks.

CSQ61: Do you agree with how we have described native competition? Do you agree we should explore the proposals described above to enhance the use of native competition? Are there any other aspects we should consider?

We agree with the way that Ofgem has described native competition.

We support the proposal that companies should set out in their business plans how they intend to use competitive processes and pressures during RIIO-2. As part of this, we would expect companies to set out their proposed high-level approach to monitoring the execution of their plans. However, it would not be appropriate for us to publish commercially sensitive information, which might undermine a future procurement process.

We do not consider that native competition requires new governance arrangements – companies do not have a conflict of interest which would require any separation of responsibilities. It is in the companies' interest to seek opportunities to reduce its costs through market mechanisms.

Companies are already incentivised to pursue an efficient commercial strategy through cost benchmarking and the Totex Incentive Mechanism. We strongly disagree with any suggestion that companies should be forced to enter into competition or should be penalized for not doing so. There are a host of reasons why it may not be appropriate for companies to seek to engage with markets for certain activities. For example:

- There may be concern that a competitive procurement process will result in unacceptable delays to the delivery of customer needs
- Activities might fall within the scope of framework arrangements which have already been competitively tendered
- The network problem may be novel and it may not be feasible to identify enough parties to mount an effective competition
- The potential benefits from a procurement process may not exceed the potential costs.
- A competitive process might result in risks, which will be unfairly borne by the network company

In any and all of these cases, requiring companies to engage in a competitive exercise may work against the interests of customers.

We also consider there is a conflict between Ofgem's proposals across the RIIO-2 methodology consultation. On the one hand. Ofgem appears to be aiming to seeking to increase the level of competition between networks. On the other hand, it is asking networks to share their commercial strategies with stakeholders including 'rival' network companies.

CSQ62: How do you think competition undertaken by network companies should be incentivised? Is the use of totex the best approach? Will this ensure a level playing field between network and non-network solutions including the deployment of flexibility services?

Network companies are already incentivised to find the lowest cost of delivery through efficient cost benchmarking and the Totex Incentive Mechanism.

Where efficiencies are delivered during the control, the benefits are shared with customers and then fully passed through at the next price control review.

Companies will already be undertaking commercial tenders to understand and find the most efficient method of delivery.

CSQ63: What views do you have on an approach where totex allowances would be based on costs revealed through competition, with a margin or fee for the competition-running entity?

We do not consider that companies should be obliged to undertake native competition when they would not otherwise do so. But, if Ofgem were to require companies to undertake competition, it would be appropriate for them to be able to recover the costs they incur in running the process.

It may prove difficult for Ofgem to adjust totex allowances for the cost revealed through competition:

- It is not uncommon for companies to "bid low" in competitions in an attempt to secure work. Ofgem will need to either require that all companies adopt the same risk appetite when they procure work, or adjust revealed cost for the risk of overruns.

- Ofgem will need to consider what it will do in the event that a competitive process indicates that a company had underestimated its costs.

CSQ64: Do you think the ESO could have a role to play in facilitating competition in the gas sectors?

We have concerns this suggestion. The ESO has no track record and no competence in gas distribution networks. It would be wholly unsuited to facilitating competition in gas distribution.

Furthermore, with the energy debate dominated in recent years by electricity, placing the ESO into a role overseeing gas, could be counterproductive, and could also lead to real or perceived discrimination between sectors, that could be easily avoided by pursuing a different route excluding the ESO.

Business Plan and Totex Incentives

Key Messages: Q65-68

- **The Business Plan incentive needs to be symmetrical, be based on a continuum or sliding scale, rather than being cliff-edged, and have assessment criteria that are objective, measurable, simple and known in advance**
- **As with the IQI at RIIO-1, differences in cost levels due to differing views of required workload should be excluded from the comparison – if not, networks will be discouraged from proposing work, which would not be in the long term interest of customers**
- **We support a Business Plan incentive set at a level of 2%**
- **It is simplistic to categorise costs as either high confidence with a 50% sharing factor, or low confidence with a 15% sharing factor – there should be at least one more intermediate level of confidence (though we consider even 50% is too low)**
- **In categorising cost forecasts, the deadband should be increased to reflect the level of uncertainty in the modelling – 12% between the highest and lowest approaches at GD1, 14% at ED1 – with a continuum or sliding scale either side, rather than a cliff-edge**

Key Messages: Q69

- **We support Ofgem's removal of IQI due to issues of complexity and calibration**

Key Messages: Q70-74

- **The blended sharing factors approach does not encourage efficient cost Business Plans, but does incentivise companies to propose workload drivers – which we support**
- **To aggregate the blended sharing factors, Ofgem could pro-rate the efficient cost projections provided by the Top Down (and Middle Up) approaches to those provided by the Bottom Up approaches**
- **To incentivise the right behaviours, the sharing factor should be increased to at least the RIIO-GD1 level and the rewards and penalties of the Business Plan incentive need to be symmetrical.**

Key Messages: Q75-77

- **At low sharing factors, such as 10%-15%, companies will have insufficient incentive to restrain costs to their lowest potential, as previously stated by Ofgem and the CMA.**

Key Messages: Q78-80

- **Adjusting the sharing factors after the price control is set is not necessary or desirable, being ex post and ad hoc.**

CSQ65 What are your views on our proposed approach to establishing a Business Plan incentive?

We agree that Ofgem should apply incentives in its assessment of Business Plans, both for cost efficiency and quality, however in our view such an incentive should follow a number of principles:

- Must be symmetric.
- The criteria for business plan assessment must be objective, measurable, simple, and known in advance.
- Must be based on a continuum or a sliding-scale.

We welcome the guidance document that was published shortly before Christmas, although we believe that more detail needs to be provided on how Ofgem propose to assess the individual quality factors identified, and any weightings between them. Transparency is important to the process, so it would be helpful if, like Ofwat, Ofgem could publish some quality criteria in advance.

We do not agree with the asymmetry of the proposed incentive, with the 2% of totex reward to be shared between companies, potentially greatly reducing its size, and 2% penalties to be absolute. Symmetrical incentives provide balance between the interests of customers and investors, and were recommended by the RPI-X@20 review. The Consultation Paper suggests that limiting the size of the potential reward ensures that it would not be "excessive" at a sector level. Using that logic, an absolute 2% penalty is also excessive.

In respect of the organisational level at which the incentive is applied, the Consultation Paper states that the incentive will apply to "companies", but it is not clear how it would be applied in a sector when a number of networks are under common ownership. We believe that it needs to be calculated at a network level, given that cost assessment in particular will take place at that level.

We note that the application of the incentive is cliff-edge – both costs and quality are assessed as "Good", "Average" or "Poor". Given the uncertainties involved in cost estimation in particular - at GD1 there was a variation of up to 14% between the four different efficiency assessments - we propose using a continuum rather than a cliff-edge in applying rewards and penalties – see CSQ67.

CSQ66 Under the blended sharing factor approach, should the scope of stage 2 evaluation of cost assessment be based on the entire totex or only on cost items that we consider we can baseline with high confidence?

We believe that the stage 2 evaluation of cost assessment should be based on entire totex, rather than a subset of totex which Ofgem believes it can baseline with high confidence. We have supported Ofgem's application of the totex approach to cost assessment, and in the incentives around actual costs, as this should provide the outcomes customers desire at the lowest overall cost. The alternative, of treating the costs of different activities differently, brings additional costs to customers.

However, as with the operation of IQI at RIIO-1, we believe that differences in costs levels arising from differing views of required workload should be excluded from the comparison. If this is not

done, networks will be discouraged from proposing work, which could bring significant additional risk to network operators and would not be in the long term interest of customers.

In addition, we believe that it would be simplistic to categorise all costs as either low confidence with a 15% sharing factor, or high confidence with a 50% sharing factor, as it is likely that many costs will fall somewhere between these two extremes. Consequently, we consider that at least one additional level of "moderate" confidence should be applied. Alternatively, a continuum could be used, with no step changes in levels of confidence, but rather a gradual slope.

Therefore, we believe that the evaluation of cost assessment should be at the totex level, with adjustment for different views of workload requirements between networks and Ofgem, and that more than two confidence levels should be used.

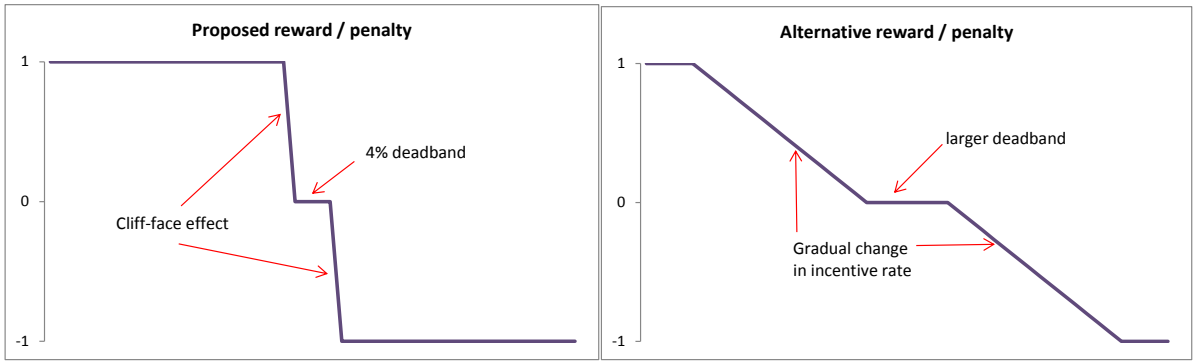
CSQ67 What should be the method for categorising cost forecast as High, Medium or Low? Are the indicative boundaries of 1.0 (High to Medium) and 1.04 (Medium to Low) appropriate?

We believe that the suggestion in the Consultation Document could be improved by:

- Increasing the range of the dead-band between reward and penalty to take account of the difference between Ofgem's highest and lowest view of efficiency. With a range of 12% (GD1) or 14% (ED1) between differing Ofgem views of efficiency, a swing in reward of 2% of totex based on a 4% cost assessment differential, is inappropriate.

- Either side of the dead-band, using a continuum rather than a cliff-edge to apply rewards and penalties. As presently envisaged, a 0.1% change in the assessment of cost efficiency could lead to a change in the reward / penalty of 1%, which is not proportionate.

A stylised view of the proposal in the Consultation Document and our alternative is shown below.



At GD1, Ofgem recognised that with eight networks, and three or four ownership groups, there was insufficient data to assess the efficient level of costs precisely.
At GD1 Ofgem took account of this by:

- Using four modelling approaches, with the average difference in assessment between the highest and lowest approach being 6.4%, and the maximum 12.2%.

- Applying totex interpolation, under which Ofgem's assessment of the efficient level of costs was uplifted by 25% of the gap between that and the Business Plan.

Similarly, at RIIO-ED1, three modelling approaches were used to reflect different views of efficiency, the average gap between the highest and lowest approach was over 6%, and the maximum gap around 14%.

Under the method proposed in the Consultation Paper, there is no totex interpolation, and the efficiency assessment of the average network at GD1 and ED1 varied by 50% more than entire 4% range from "Good" to "Poor", depending on which modelling approach was used. Therefore, the proposed 4% differential in the assessed efficient level of costs from "Good" to "Poor" is far too small. In addition, given the wide range of reasonable views of efficiency, we also believe it inappropriate for there to be a "cliff-edge" point, at which the Business Plan reward falls from 1% to 0%, and also from 0% to -1%.

Consequently, we believe that a continuum should be applied, rather than a cliff-edge, and that the range between maximum reward and penalty should reflect the range of reasonable views of efficiency.

CSQ68 What should be the range for the business plan reward/penalty? Is the range of ±2% of totex equivalent appropriate for incentivising high quality and ambitious business plan submissions (eg Value or Good Value)?

We believe that a maximum Business Plan incentive of ±2% is reasonable**.**

Independent of the level of sharing factor, as set out in our response to CSQ 65 above, the Business Plan incentive needs to be symmetrical, based on a continuum or sliding scale, and the assessment criteria should be objective, measurable, simple and known in advance.

In addition, we are not entirely clear whether the reward or penalty is intended to be applied to the network's plan totex, or Ofgem's assessment of the efficient level of totex. We suggest that the reward / penalty should be applied to Ofgem's assessment, otherwise a "good" network with a forecast / Ofgem ratio of 0.95 would receive less of a reward than an otherwise identical but higher cost network with a ratio of 0.99. In addition, a "poor" network would receive a "double-hit".

Finally, from a financeability perspective, companies would need clarity on how the reward/penalty would be paid i.e. upfront in year 1 or phased throughout the price control period.

CSQ69 Do you agree with our assessment of the IQI? (if not please provide your reasons). Do you agree with our proposal to remove the IQI?

Whilst not agreeing with all aspects of Ofgem's assessment, we acknowledge issues over complexity, as mentioned by the CMA in the Bristol Water Inquiry of 2015, and problems with the IQI being difficult to calibrate.

Therefore, we support the removal of IQI and agree that business plan assessment should include quality of plans and not just efficiency.

CSQ70 Do you have views on the effectiveness of the blended sharing factors approach and in particular the incentive it provides on companies to submit more rigorous totex submissions?

Under the blended sharing factors approach, the factors are based on the degree of confidence Ofgem has on the different elements of each network's Business Plan, weighted using the values of each activity included in the Plan.

The rigour of totex submissions

As to whether it would encourage networks to submit more rigorous totex submissions, it is helpful to separate Plans between the "unit" cost of different activities and their workloads. In respect of the unit cost of activities, the proposed incentive is based on Ofgem's confidence in benchmarking, which appears to be largely based on all networks' historical costs, rather than the cost projections of any single or all networks. Therefore the blended sharing factor would not seem to incentivise low cost or high cost Plans.

In respect of workloads, Business Plans have always required robust justification of workloads. However, the increased reliance on revenue drivers and price control deliverables will make it less important for a network to have an accurate workload forecast in its Business Plan – price control revenue will vary in line with actual workloads, so the importance of accurate workload forecasting is lessened.

Consequently, the blended sharing factor would appear to provide little incentive to submit rigorous Business Plans. In contrast, the Business Plan incentive would appear better suited to that role.

Effectiveness of the approach

In respect of the general effectiveness of the Blended Sharing factors approach, we believe that a significant reduction in the incentive rate in RIIO-GD1, plus a shortening of the length of the price control, would cause a significant reduction in the search for efficiency, to the long term detriment of customers.

We also note that Ofgem's proposed approach aims to influence quality of business plans through the use of a quality incentive and the process of cost assessment. Therefore, it is not necessary to try to use sharing factors to influence plans, and it would be preferable for these to remain the same as in RIIO-GD1.

In addition, it would be helpful for networks and their investors to have a broadly accurate view of what sharing factors are likely to be well in advance of Business Plan submission. To achieve this, it would be helpful if Ofgem could provide further information on how it will determine High and Low Confidence for individual cost areas.

CSQ71 Do you agree with our assessment of the blended sharing factor in comparison to the Ofwat cost sharing mechanism? If not, please provide your reasons.

The Consultation Paper describes five criteria for comparing the Blended Sharing factor with the Ofwat cost sharing mechanism.

Overall we broadly agree with the assessment of the two approaches in the Consultation Paper. The Ofwat approach encourages incentives and ambitious forecasts, whereas the Blended sharing factor approach encourages uncertainty mechanisms and lower sharing factors based on a view of costs independent of networks' Business Plans.

We also have comments on two of the criteria, as set out below:

- In respect of the first criterion, "*ability to set a sharing factor based on an independent view of costs*", we agree with the assessment of the two approaches, but question whether this is a key criterion for assessing a sharing factor. We believe that it is necessary to set a broadly reasonable allowance for the efficient level of costs, and to provide a strong enough incentive for networks to manage costs efficiently once the price control is set. The degree to which cost assessment is based on historical costs rather than company projections probably does influence the regulator's confidence in the result, especially looking further into the future, but setting the sharing factor based entirely on this takes no account of either the regulator's confidence in other approaches, or the impact on incentives.

- In respect of the second criterion, "*Incentive on companies to provide robust cost justification and mitigation measures against uncertainty*", we agree that the blended sharing factor will encourage networks to propose uncertainty mechanisms and we support this approach to dealing with workload uncertainties. However, as set out in answer to question CSQ 70 above, we are not clear that it will encourage robust cost justification, because, as far as we understand it, cost assessment would appear to be largely based on all networks' historical costs, rather than any individual network's Business Plan.

CSQ72 Considering the blended sharing factor, what are your views on the factors (eg predictability, ability to effectively deal with uncertainty) or evidence that could be used to distinguish between costs that can be baselined with high confidence and other costs?

The three factors outlined in the Consultation Paper, predictability (the link to historic expenditure), ability to deal with uncertainty (an effective uncertainty mechanism or price control deliverable) and quality of evidence are appropriate in enabling Ofgem to consider the degree of confidence in different costs.

As stated in our response to CSQ66, we believe that it would be simplistic to categorise all costs as either low confidence with a 15% sharing factor, or high confidence with a 50% sharing factor, as it is likely that many costs will fall somewhere between these two extremes. We consider that at least one additional level of "moderate" confidence should be applied, or alternatively, a continuum with no step changes in levels of confidence, but rather a gradual slope.

In respect of Ofgem's level of confidence in setting cost allowances in the GD2 period, we expect a number of factors to provide Ofgem with a greater degree of confidence than previously. RPE indexation (subject to obtaining appropriate indices, especially for contractor prices) increased use of revenue drivers and uncertainty mechanisms, tight boundaries over NOM treatment, and no changes in the application of the 30/30 iron mains replacement programme, should all add to Ofgem's confidence in its ability to set baselines. As long as the methods of cost assessment are no less robust than at GD1, we would expect Ofgem to have reasonable degree of confidence in the sharing factor, and the consequently, using the figures in the Consultation Paper, that it will be nearer to 50% than 15% - although we consider that it would be in customers' interests for it to be at least 63%, the level of GD1.

CSQ73 Do you have any views on the level of cost disaggregation we should apply to calculate the blended sharing factors approach on (regulatory reporting pack level or another level)?

For consistency, we consider that the level of cost disaggregation used to calculate the blended sharing factor needs to reflect that used in cost assessment more generally and consequently should represent the balance between Top Down, Bottom Up and potentially Middle Up approaches.

As at GD1, we suggest that Ofgem pro-rate the efficient cost projections provided by the Top Down (and Middle Up) approaches to those provided by the Bottom Up approaches, in order to calculate the efficient level of cost by activity, to calculate the blended sharing factor.

We note that the inclusion of the Top Down approach should improve Ofgem's level of confidence in cost assessment because, at GD1, the Totex regressions had a higher R squared than those for most individual activities, as might be expected given structural, solution choice and cost allocation differences between companies.

CSQ74 Do you have any views on whether the proposed Business Plan incentive coupled with the blended sharing factors will drive the right behaviours?

We believe that the "right behaviours" are companies acting efficiently to manage and restrain costs, having submitting ambitious but achievable Business Plans, which are based on what customers and other stakeholders desire, and are prepared to pay for.

In respect of whether the proposed Business Plan incentive and Blended sharing factors approaches will drive these behaviours, we believe that with some alterations, they could do. Our suggestions are as follows:

- Increase the incentive rate in the blended sharing factors approach, at least to RIIO-GD1 level, to encourage further advances in efficiency. In GD1 Final Proposals Ofgem stated that "*The incentive rates of 60-65 per cent provide (marginally) greater incentives to GDNs to minimise costs than under the current price control, i.e. by allowing GDNs to retain a higher proportion of any outperformance. We consider that the incentive rates provide a correct balance of incentives for shareholders, as well as benefit (or increased cost) to consumers from any outperformance (underperformance)*."

- Furthermore, within a shorter price control the networks will be able to keep the benefit of efficiencies only for 2.5 years on average as opposed to 4 years under RIIO-GD1, which implicitly results in a 40% reduction in the savings that could be retained by the networks, on top of a halved blended sharing factor that Ofgem is proposing. This also places risk on the customers who would have to bear the cost of network's underperformance, without having any ability to influence it.

- Make the rewards and penalties under the Business Plan incentive symmetrical. For predictability and proportionality, we believe that both rewards and penalties should be absolute, and not shared between networks depending on how many fall under the "Good" and "Poor" categories. We also consider that the incentive will need to be calculated at a

network level, rather than a company level to work in circumstances where several networks are owned by one company.

- Provide guidance well in advance on how Ofgem will decide on the level of confidence associated with different costs, which should help companies to provide more robust supporting evidence for their Business Plans.

- Increasing the range of the dead-band from 4% before applying rewards and penalties in cost assessment. Given the uncertainties involved in cost estimation in particular - at GD1 there was a variation of up to 14% between the four different efficiency assessments - we propose using a substantial dead-band with a continuum on either side, rather than a cliff-edge – see CSQ67.

CSQ75 What views do you have on our assessment of the sharing factor ranges?

We believe that there needs to be a strong enough incentive for networks to manage costs efficiently once price controls are set, and that the middle and bottom end of the range are unlikely to provide this.

Paragraphs 9.61 to 9.63 of the Consultation Paper contend that, even at sharing factors of 10%-15%, networks will still have an NPV incentive to underspend their allowance. While this is mathematically true even at a sharing factor of 1%, at 10% to 15% this would not seem sufficient incentive for networks to restrain costs to their full potential, as this requires a very significant effort.

Additionally, a number of cost savings require a significant upfront investment (i.e. in IT systems), which has a certain pay-back period. With a 5-year price control and a low level of cost sharing, the networks could decide that it does not make sense to make such investments, which would then have an adverse impact on customer bills in the long-term, as customers bear the consequences after the end of the price control and get the full benefit of efficiencies or must pay for costs that could otherwise be avoided under a stronger incentive structure.

Ofgem has previously recognised this at the RIIO1 round of price controls, by applying incentive rates for Gas Distribution between 63% and 64%, for Transmission between 44% and 50%, and Electricity Distribution 53% to 58%. We note that at PR19, Ofwat proposes to set sharing rates of around 50%, but with significant variation in either direction, up to 75% and down to a minimum of 25%, and also that the CMA in 2014 rejected a proposed incentive rate of 30% as being insufficient, increasing it to 50%.

Although not stated in the Consultation Paper, the issue of how to apply the sharing factor to companies owning more than one network needs to be considered. We consider that it needs to be calculated at a network level, and then combined to be applied at a company level, otherwise there would be an incentive for companies to move costs around between networks once the price control is set.

CSQ76 Are there any other factors that you think we should take into account in the design of sharing factors?

As set out in our response to CSQ 75, we do not believe that sufficient account has been taken into the impact on incentives for efficiency once the price control is set.

CSQ77 Do you have any evidence on the scope for productivity improvements in the different sectors?

At present we do not have any evidence on the scope for productivity improvements in the different sectors.

However, as mentioned in our response to CSQ38, we are in the process of taking external consultancy advice to inform our assumption of an appropriate level of ongoing efficiency in our Business Plan, and, although the advice is being sought solely for Gas Distribution, the issues considered may shed light on reasons for potentially different productivity improvements in different sectors.

In addition, the Consultation Paper suggests, in paragraph 9.63, that low sharing factors (i.e. 10%-15%) do not incentivise companies to capitalise expenditure (i.e. spend cost allowances) over seeking cost efficiencies. We believe that a significant reduction in the incentive rate would cause a significant reduction in the search for efficiency, to the long term detriment of customers. In this respect RIIO1 incentive rates of 50% and above have been highly successful in encouraging networks to seek cost efficiencies.

CSQ78 Do you have views on whether adjustments to sharing factor levels after the price control is set are desirable or necessary?

We do not believe that adjusting sharing factor levels after the price control is set would be either necessary or desirable.

It may be helpful to consider what the purpose of the sharing factor is. We believe that it is to provide networks with an incentive to manage costs efficiently, without being so large as to risk their financeability or make substantial windfall gains, bearing in mind the degree of confidence the regulator has in setting cost allowances.

We acknowledge the mathematical logic in revising the sharing factor to take into account a change in the balance of price control allowances, based on revenue drivers, uncertainty mechanisms etc. However, in practice the amount of variation in cost allowances is unlikely to be large in proportion to totex, making sharing factor adjustments disproportionate and unnecessary. Even in the unlikely event that there was a substantial variation which worked to network's significant advantage or detriment, the Return Adjustment Mechanism would act to restrict this.

In addition to being unnecessary, we believe the adjustment to be undesirable because:

- Unpredictable ex post adjustments undermine incentives for efficiency, and run counter to the RPI-X@20 recommendations. If the sharing factor were to be adjusted, the adjustment would be unlikely to be finalised until a year after the end of the price control - up to six years after efficiencies were made or additional costs incurred;

- Any adjustments would add complexity and resource burden, as noted by the Consultation Paper;

- The adjustments would further undermine the predictability of the regime, as these would be ex post, ad hoc and subjective decisions that would interact with the RAM.

CSQ79 Under which circumstances do you consider such adjustments should take place?

We do not consider that ex post adjustments to the sharing factor should take place. However, if they are to be implemented, we believe that there should be an extremely high materiality threshold for the change in the sharing factor, and that this should be set out before the start of the price control period.

CSQ80 When do you consider an adjusted sharing factor should be calculated?

Although we do not support it, should an adjusted sharing factor be put in place, we believe it should be calculated and implemented once, after the end of the price control period, after all the necessary information has been received. The alternative approach of recalculating it every year would be more resource intensive and only act to increase uncertainty and complexity.

Ensuring Fair Returns

Key Messages

- **We support the inclusion of a mechanism for ensuring fair returns in RIIO-2.**
- **We support the objective of addressing the risk of systematic outperformance of the price control by means of totex underspending and beating output incentive targets.**
- **The inclusion of financial performance is not required to meet Ofgem's objective for the return adjustment mechanism.**
- **We agree that the return adjustment mechanism should not be set at a sector level in transmission as it would be heavily distorted by one company. For the same reasons it must not be set at a sector level in gas distribution where there are only three ownership groups with one accounting for half of the networks**

As set out in our response to the Framework Consultation, we support the inclusion of mechanisms for ensuring fair returns. We expressed particular support for RoRE sharing factors which are designed to ensure customers benefit more from outperformance while still maintaining the incentive for companies to collaborate and to continue to strive for greater levels of performance. We do not consider that the Class 2 approaches (sector average and anchoring) best achieve these objectives. In addition there are a number of implementation issues that Ofgem has not address, and which have potential to introduce errors in the calibration of the proposed mechanism. These are explained in our responses to the specific consultation questions below.

CSQ81: Do you agree with our comparative assessment of RAMs set out in Table 18 in Appendix 4?

Effectiveness

Whilst Ofgem's assessment that anchoring would ensure that a sector average cannot go outside of set boundaries it will not ensure the accuracy of the price control or justified network returns.

Collaboration

Ofgem's assessment understates the potential negative impact of sector average and anchoring on collaboration across the sector. Setting companies against each other would impact sharing of best practice, efficiency, future of gas and safety. The assessment assumes that BAU collaboration relates (mostly) to safety standards and emergency response, but there are other areas which would also be affected which do not appear to have been taken into account (examples set out in Cadent's Response to Framework Consultation). Ofgem should place appropriate weight on collaboration within its assessment.

Incentives

Ofgem's assessment also incorrectly states the impact on incentives for anchoring. We do not agree that there is a neutral impact on incentives for anchoring – this would more likely have a negative impact on incentives compared with the status quo as it weakens the incentive for companies to continue to drive higher levels of performance for customers beyond the point at which anchoring would kick in.

Risk profile

We note that the Class 2 options both have more uncertainty as adjustments are dependent on where companies' peers are, rather than pre-determined levels. As such, we do not agree that they have a neutral impact on companies' risk profiles (compared with the status quo) as suggested in Ofgem's assessment. A wrong cost assessment of a company / companies by Ofgem could lead to unjustified low or high returns for all other companies, as a result of anchoring.

Complexity and financeability

There would be too many bespoke factors influencing individual performance that Ofgem would have to take in to consideration. One-off adjustment at the end of the price control are very hard to plan (as it is impacted by performance of other networks), creates a lot of cash-flow uncertainty, resulting in further financeability issues. Also the benefit to customers is questionable as it is an adjustment that only kicks in at the end of the price control and might work against other measures implemented in RIIO-3.

Finally, the consultation implies (but does not confirm or explain why) the proposed adjustment mechanism would be applied at the company level in a sector where one company owns 50% of all networks. There are other options, for example, if could be applied at an ownership, licence or network level. Ofgem's assessment does not appear to have explicitly considered whether there are additional implications depending on whether, and how, the adjustments are applied at these different levels. As such, by ignoring this key factor in the process to date Ofgem has not allowed stakeholders, including network companies, to fully understand and assess the proposals within their sector specific methodology consultation.

CSQ82: Do you agree with our proposal not to give further consideration to using discretionary adjustments?

Yes we agree with this proposal.

In our view, any ex-post adjustments need to be supported by clear and defined criteria (published in advance) rather than being subjective, to minimise uncertainty and the risk of inconsistent judgements being applied across companies.

Although this option could better maintain collaboration across the sector, it gives rise of the risk of inconsistent treatment between companies.

Discretionary adjustments would also place a large regulatory burden on both networks and Ofgem either within, or at the conclusion, of the price control period.

Where a company considers returns to be justified but Ofgem (ultimately) does not, there is a risk to the accuracy of forecast customer bills (i.e. greater uncertainty in the assumptions to be applied for discretionary adjustments).

Discretionary adjustments may weaken the incentive for companies to submit ambitious plans or to outperform – companies may take their foot of the gas when approaching a threshold for making adjustments (as they will be unsure of the size of adjustment, if triggered).

CSQ83: Do you agree with our proposal to introduce an individual performance-based adjustment approach (Class 1) for the transmission sectors?

We agree that approaches which rely on anchoring or sector averaging would not be appropriate in sectors where comparisons are not readily available, or where there is a higher concentration of ownership.

This type of proposal would also be suitable for GD to ensure collaboration and sharing of best practice remains.

CSQ84: Do you agree with our proposal to introduce a sector average-based adjustment approach (Class 2) for the GD sector?

No, our preference is for a **sculpted sharing approach**.

As set out in our response to the Framework Consultation, we do support Ofgem's aim to protect customers by introducing RORE sharing factors. However, we consider there are some issues associated with approaches which rely on anchoring or sector-averaging which Ofgem has not addressed.

Ofgem's proposed approach requires high confidence that company determinations are set on an equal and comparable basis. i.e. in theory, there could be no variation in ODI rates between companies, and bespoke ODIs would need to be equivalent across companies in order to ensure no bias in the potential scale of outperformance rewards. This may run counter to Ofgem's proposals on customer engagement and bespoke ODIs. In addition, any error in an individual price control will lead to an error in the calibration of the RAM.

There is a risk that Ofgem's proposed approach compounds the financial impact to companies of poorer relative performance in some areas of the price control. For example, Ofgem is proposing that individual incentives are set on a relative basis, and also proposing an aggregate relative adjustment mechanism. It is not clear that Ofgem has taken this issue into account.

A sector average approach would negatively impact collaboration (as set out in response to CSQ81).

If Ofgem were to adopt a Class 2 approach (which we do not support), we consider that the better option would be targeted proportional anchoring. Out of the anchoring options this departs least from RIIO principles. Notwithstanding, we consider that any anchoring option would reduce collaboration and sharing of best practice between network companies. Overall, anchoring options are more likely to induce more insular and short term behaviours rather than long term focus.

CSQ85: Do you agree with our proposal we should not adjust companies downward if they perform below their base cost of equity or upwards if they perform above their base cost of equity??

Yes. We agree that it would be inappropriate to adjust companies downward if they are already performing below the base cost of equity.

In a scenario where the upper threshold is triggered, it would be inappropriate to impose downward adjustments below the base cost of equity. Doing so is more likely to impact the (actual) financeability of these companies.

Moreover, we consider that **no** downward adjustment should move a company below the base cost of equity (i.e. a company performing just above the base cost of equity should not receive an adjustment greater than the difference between its unadjusted RORE and the base cost of equity)

We note that Ofgem has not made clear whether it will take account of companies' actual financeability position when making adjustments.

CSQ86: Would a return adjustment threshold of ±300bps RoRE achieve a good balance between providing scope for companies to outperform and ensuring return levels are fair?

We agree with Ofgem adopting a wide threshold, as this is consistent with Ofgem's intention to implement RAMs as a 'failsafe' mechanism.

We consider that a sector average of 300bps above the base cost of equity is unlikely to be exceeded given the other proposals suggested for RIIO-2 (i.e. 5 year control, lower sharing factors, input regulation, "use it or lose it" allowances, additional penalty-only ODIs, RPE indexation etc). Likewise, average performance at 300 bps below the base cost of equity (i.e. sector returns close to zero) is unlikely to be breached and in any event is not consistent with a properly calibrated RIIO price control.

CSQ87: What are your views on the proposed use of RoRE as a return adjustment metric? Would it be suitable for the gas and electricity transmission sectors and the gas distribution sector?

RoRE is a suitable and well established metric used across multiple price controls and allows customers, stakeholder and regulators to compare performance across networks. Operational RORE (i.e. excluding financing performance) is an appropriate measure to apply this.

However, it is critical that companies' potential RORE must be set on an equivalent basis across networks. For example, it is not clear how Ofgem intends to treat returns from ODIs which are calibrated at a network/company level based on customer engagement (and therefore returns may differ between networks for an equivalent level of performance).

In addition, due to perception that RoRE is a measure of performance-based returns, there could be improvements made to RORE if used a comparative measure across sectors (e.g. exclude cost of equity as this is not performance related and may differ across sectors).

CSQ88: Should we include financial performance within the scope of return adjustments? If not, what is the rationale for excluding financial performance?

The issues raised around fair returns have centered around incentive performance and associated costs/allowances. Ofgem has stated that its objective is that the RAM should act as a 'failsafe' mechanism to address the risk of systematic outperformance of the price control by means of totex underspending and beating output incentive targets – i.e. the risk that price control allowances and targets are mis-specified. As a result, the inclusion of financial performance is not required to meet Ofgem's objective for RAM.

Ofgem is proposing to continue with a recalibrated trailing average index the cost of debt throughout the price control period, and not to share out/underperformance with customers. As a result, out/underperformance within the period is more likely to be due to historical financing decisions (embedded debt) and financing costs incurred historically rather than decisions within companies' control during the price control period. Factors out of companies' control going forward should not be within the scope of any future relative return adjustment mechanism.

Within the Finance Annex, Ofgem lists the factors influencing its view on debt sharing[i]:

- implementation issues, particularly an extensive cost verification exercise
- allocating materially more company financing risks to consumers
- exposing consumers to the impacts of companies pursuing higher risk strategies
- the requirement for additional rules/constraints to avoid manipulation, including around gearing levels, intercompany loans, derivatives, foreign currency debt and proportions of inflation linked and conventional debt.

We perceive these to be equally compelling reasons to exclude debt performance from RAMs.

Furthermore, and as Ofgem recognises, periodic recalibration of the trailing average index has the effect of indirectly sharing debt performance with customers between price controls, so inclusion of such performance within RAMs could be seen to be duplicative.

If financing performance is included as a return limiting factor, this could have the effect of loss of focus or ambition on the core incentive properties of the framework that drive positive outcomes for customers.

Ofgem state in the consultation (finance appendix) that debt sharing in the context of RAMs is a "lower risk for customers" and that it wouldn't necessarily require an (annual) extensive financing cost verification exercise. However, we note that to implement RAMs would require annual verification in order to assess whether companies' returns are at the trigger point for RAMs.

The broader definition of financial performance includes taxation. Ofgem is separately consulting on appropriate approaches for tax allowance adjustment. Our view is that such measures are best implemented within source allowance calculations, and further negate the need for inclusion of financial performance within RAMs.

CSQ89: Should we implement adjustments through a 'true-up' as part of the annual iteration process or at the end of the price control as part of the close-out process?

We consider that this is a question for customers which could be determined via customer engagement – customers will have a view on whether they prefer smooth bills within the price control period, or whether they are willing to accept more frequent bill movements.

More frequent adjustments, i.e. made as part of the annual iteration process, would (all else being equal) reduce bill predictability within the price control period.

It would also introduce volatility as a number of deliverables within the framework are set for longer than a one year basis. As such, the impact of one-year and five-year targets must be considered in developing any mechanism.

If Ofgem opts for end of period adjustments, this should be accompanied with a shadow adjustment or other overlay on annual reporting of RORE to provide transparency across the industry.

RIIO-2 Achieving a Reasonable Balance

Key Messages

- **We do not think the mechanisms proposed all work together in the best interests of customers (we have appended additional analysis by KPMG which supports this assessment)**
- **Greater positive incentivisation is needed to reward network companies who outperform and deliver greater outcomes for customers**
- **Ofgem has focused on the balance between the accuracy and simplicity of the RIIO-2 control. It should give more consideration to the balance between accuracy and the incentives on companies to respond to changing needs, to innovate, or to deliver efficiency.**

We support the need to re-balance the regulatory arrangements to ensure that benefits are seen to be fairly shared between customers and companies. We welcome the enhanced role for consumer engagement throughout the process and the focus on transparency, evidence and rigour in determining what customers' and stakeholders' value. This enhanced engagement is challenging us to deliver a huge step change in the transparency of plan development and information. We also support the three key outcome themes of the framework notably; on meeting the needs of all customers including enhancing the focus on those customers in vulnerable situations, the focus on enhancing the environment and the priority to develop resilient networks for now and the future. We have set out our views on the outputs and priorities for each of these outcome areas and we believe we can be more ambitious for customers in considering some enhancements to the outputs particularly surrounding customer service, the environment (in particular innovating to keep momentum in the decarbonisation of heat and transport) and for customers in vulnerable situations.

We support the following additional mechanisms included in the current proposals:

- Introduction of RPE indexation to address concerns of energy networks benefiting from macro-economic issues outside of management control.
- Targeted use of price control deliverables to remove the potential to benefit from not delivering outputs or from customer requirements changing.
- Use of the Network Asset Risk Measures to ensure the capital plans of networks deliver the risk committed to in the plan.
- Introduction of Return Adjustment Mechanisms as a backstop to address any structural errors that lead to windfall under-performance or out-performance (however we have provided our view of the best method to apply)

However, we believe that the proposed package does not provide sufficient positive incentive to stretch performance for the benefit of customers. Taken together the proposals introduce unnecessary duplication, significantly increased complexity, increased risk for all, and uncertainty for investors whilst also undermining incentivisation and collaboration, all of which is ultimately to the detriment of current and future customers.

The following graphic from the KPMG report shows the layering and complexity of different mechanisms:

Source: KPMG report on "RIIO-GD2 a significant over-correction?"

We believe that it is possible to have a framework in place for RIIO-2 that reaches the right balance for customers, stakeholders, network companies and investors and we want to work with Ofgem to do this. There are three main areas that we believe need focus:

a) The overall balance of risk and reward so that companies have strong positive incentives to deliver enhanced performance for customers

b) Ofgem's proposals on financing which require a significant correction to avoid damaging long term financeability and increasing costs to consumers in the short term

c) Helping stakeholders to understand the impact of the proposals given their complexity

Overall Balance of risk and reward

We do not think that the mechanisms as proposed all work together in the best interests of customers. The final framework for RIIO-2 needs to balance the expectations of customers and other stakeholders to achieve short term reductions in network charges against the strategic need for continued innovation and investment for the benefit of future generations of customers. The most significant areas we believe need addressing to encourage better outcomes for customers are:

a) Greater positive incentivisation to reward network companies who outperform and deliver greater outcomes for customers.

The proposals should create a strong incentive package with upside reward for outperformance and an equal penalty for underperformance with a balanced likelihood of achieving – this will ensure that the sector maintains and drives ambition to deliver the best outcomes for customers and strives to achieve significantly in excess of minimum standards. The current proposals risk creating little positive encouragement for network companies to be ambitious and push to outperform the targets. We have set out in the detailed answers where we think the incentive framework can be enhanced.

b) The proposals should seek to set absolute targets wherever possible to encourage collaboration for the benefit of customers

We have set out in our response the value that collaboration has driven in RIIO-1 and propose that Ofgem look to reset absolute targets for incentives wherever possible to encourage collaboration and improvement for all customers.

c) The Business Plan Assessment framework should be recalibrated.

We believe that Ofgem needs to look at recalibrating the Business Plan Incentive mechanism to ensure there is a clear and strong reward for an ambitious plan (i.e. removing the uncertainty of shared upside benefits). Additionally, such incentive should acknowledge the inaccuracies of the benchmarking in the cost assessment process by using a range of estimates to cross check assessments and remove "cliff edges" in assessment criteria. We also suggest that workload disallowances should not be treated as inefficiency in the assessment. These refinements together will encourage networks to be ambitious with their plans

CSQ90: Do you agree with our assessment of the measures we have identified to make the price control more accurate?

Notwithstanding our comments in the summary above on the balance of accuracy versus other objectives, considering only the accuracy of the control, we would observe that:

- The use of indexation will only improve accuracy if Ofgem adopts appropriate indexes.
- Incentive mechanisms which rely on data that is drawn from different companies will only be accurate if the companies are using a consistent definition of this data.
- The use of RPE indexation and the adoption of a shorter price control period have the potential to increase the accuracy of the price control. Given this, this might question the need for Ofgem simultaneously to implement a Return Adjustment Mechanism (RAM).
- Ofgem presents a list of price control elements as straightforward choices – either the element is in the price control settlement, or it is left out of the settlement. In reality, choices are likely to be more nuanced. In many cases, there are options around the extent to which each price control element is implemented. For example, uncertainty mechanisms are appropriate where prices or volumes are highly uncertain and the financial impact is material. They are not likely to be required in other cases.

CSQ91: Are there other measures we should take to improve the accuracy of the price control?

As observed above, incentive mechanisms which rely on data that is drawn from different companies will only be accurate if these companies are using a consistent definition of this data. Ofgem should be seeking to ensure that comparative data is consistent.

CSQ92: Are there other steps we could take to simplify the price controls, without significantly affecting the accuracy of the control?

We do not agree that Ofgem has simplified the price control.

Whilst we are generally supportive of the removal of fast track and IQI, and the introduction of new business plan assessment incentive, we do not agree that their removal will have a material effect on the complexity of the framework:

- The original intent of the fast track process was to remove the need for disproportionate regulatory effort on non-contentious aspects of companies' plans. The new business plan incentive is also directed towards reducing the burden of regulatory scrutiny. However, we are not convinced that the net effect of the removal of the fast track process and the introduction of the new incentive has been to reduce complexity.

- Whilst the IQI is a complex mechanism, we do not consider a lot of industry effort was devoted to understanding or using the mechanism.

We consider there are also a number of other areas where Ofgem is increasing the complexity of the price control including: the introduction of a blended sharing factor, RAMs and the increasing use of relative or sectoral incentives (and the associated requirement for auditable levels of consistency)

We consider Ofgem could significantly simplify regulatory reporting requirements. We and others in the industry have commented before on the burden associated with regulatory reporting. We consider Ofgem should review the benefit of collecting the range of regulatory information.

CSQ93: Do you agree with our consideration of the risks facing these companies? Do you think the measures we are proposing will mitigate these risks? Does the expected level of return indicated by our proposals reflect these risks?

We would refer Ofgem to our responses to consultation questions on Fair Returns and Financeability.

We would also note that a more extensive use of relative and dynamic targets will increase the risk to which individual companies are exposed (as their financial performance will depend on the behaviour of other companies).

CSQ94: Have we achieved a reasonable balance with our proposals in seeking to achieve an accurate price control with return adjustment mechanisms only being used as a failsafe? Should we instead have a simpler price control and put more reliance on return adjustment mechanisms?

Please see our comments in the summary section above

We acknowledge the benefits of seeking to improve the accuracy of the control. However, we also consider that Ofgem is proposing to introduce too many overlapping arrangements that seek to limit the scope for company under and out-performance. Given these overlapping arrangements and the proposed design for RAMs with a generous level of headroom, we agree that the RAMS is likely to be used only as a failsafe. Please also see our responses to specific RAMs questions for our views on the way that RAMs might work.

CSQ95: Have we achieved a reasonable balance in our proposals in considering return adjustment mechanisms alongside the expected-allowed return wedge? Should we instead only rely on one mechanism? What additional value would this bring?

We would refer Ofgem to our responses to consultation questions on Fair Returns and Financeability.

CSQ96: Have we got the right focus on the areas that are of most value to consumers?

Our customers are increasingly demanding of us and our services and it is our clear ambition to deliver against these standards. We do not believe the framework as defined does enough to support this level of ambition and this is not in the interests of, or aligned with the aspirations of our customers.

CSQ97: Are we proposing a methodology that allows us to achieve a reasonable balance between the interests of different consumer groups, including between the generality of consumer and those groups that are poorly served/most vulnerable? Are we missing any group?

We believe more focus should be given to the needs of non-domestic customers. In addition, we believe the framework can be more ambitious in supporting the needs of future consumers particularly surrounding decarbonisation of heat and transport, customer service and through consideration on the balance of bills over time.

We support the fact that the framework allows the creation of network specific or bespoke outputs for different customer groups. We have targeted and tailored our engagement approach to include a broad range of customers and stakeholders and we will be bringing forward proposals based on the insight we have gathered through output delivery incentives where relevant.

CSQ98: Are we proposing a methodology that allows us to achieve a reasonable balance between the interests of existing and future consumers?

We believe that the proposals do not place enough emphasis on the interests of future consumers for the reasons we set out in the summary to this chapter of questions.

Preliminary Impact and Assessment

Key Messages

- **Ofgem has only provided a qualitative assessment of the impact of its sector specific RIIO proposals.**
- **Moreover, the assessment that Ofgem has provided, does not address all of the aspects of an impact assessment.**
- **Ofgem has not sought to assess the impact of its proposals on future customers**
- **We believe in the absence of this, it is difficult to assess the impact of the proposals**

CSQ99: What are your views on the approach we are proposing for assessing impact of our RIIO-2 proposals?

We welcome Ofgem's desire to establish a framework for the next RIIO price control that reflects the experience of the RIIO-1 control and that aligns with the needs of customers.

Ofgem is proposing material changes to the framework for regulating network companies. These changes are important and it will be important to assess their merits through a robust impact assessment.

Ofgem's most recent Impact Assessment guidelines were published in 2016. These guidelines describe how Ofgem proposes to undertake impact assessments. Ofgem will assess options with five domains in mind:

- monetised, aggregate cost-benefit analysis (CBA)
- distributional effects
- hard-to-monetise, strategic and sustainability considerations
- consideration of competition and consumers
- burdens on business.

We do not consider Ofgem has followed its guidelines when preparing its impact assessment. Most notably, Ofgem has not attempted to monetise the impact of its proposals, aside from the impact on vulnerable customers, Ofgem has not assessed the distributional impacts of its proposals, and Ofgem has not sought to quantify the burden that its proposals impose on business. We do not consider that the impact assessment published by Ofgem meets the quality threshold required to support a number of the proposed changes.

We would also observe that there are areas where Ofgem appears to have undertaken additional analysis that is not set out in the consultation document. For example, Ofgem refers to an assessment that indicates that companies will still have an incentive to underspend their allowance at the lower end of the incentive range (see page 120). It would be helpful to have visibility of this analysis.

We are particularly concerned that Ofgem has not given due weight to the impact that it's proposals might have on future customers. For example, there may be occasions when a company identifies innovative ways of working which set a new benchmark for efficiency. Through the way that Ofgem benchmarks relative performance, this innovation will benefit customers of other networks. The

innovation will also yield benefits beyond the price control, potentially into perpetuity. Thus, the benefit that flows from an investment one company makes may be multiplied by many times. It is not clear that Ofgem has taken account of this multiplier effect when considering proposals that potentially dilute the scale of incentives.

Ofgem has indicated that it will be issuing revised guidance on the CBAs that it expects companies to undertake as part of their business plans. We are sure that the regulator would want to hold itself to the same standards in preparing its own impact assessment.

CSQ100: What are your views on the assumptions we have made in our assessment to date?

The qualitative assumptions which underpin the impact assessment appear reasonable. However, given that Ofgem has not undertaken a quantitative impact assessment, it is difficult to comment on the validity of these assumptions.

CSQ101: What are your views on the uncertainties we have identified for the purpose of this assessment

We consider that Ofgem has provided a good qualitative summary of the uncertainties.

CSQ102: What additional evidence should we consider as part of our ongoing assessment?

We consider that Ofgem should gather additional evidence to inform a quantitative assessment of its proposals. This evidence might include:

- Evidence on the quantitative impact of its proposals on customers for the RIIO-2 price control period, and beyond,
- Evidence on the distributional impact of its proposals, including the impact on customers in different geographical locations,
- Evidence on the impact of its proposals on sustainability, and
- Evidence on the impact of its proposals on the burden borne by companies.

[i] Ofgem (2019): RIIO-2 Sector Specific Methodology Annex: Finance, para 2.11