Northern Gas Networks – March 14th 2109

RIIO-2 Sector Specific Methodology: Question Responses

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?

This is a complex area and in the absence of any firm proposals or details from Ofgem, particularly in relation to how this interacts with the statutory framework under which the appeals mechanisms operates, it is difficult to comment.

However, at a principle level we would strongly object to any discretionary adjustment mechanism which granted unfettered power to Ofgem to change other elements of the price control settlement following a successful appeal. The legal basis of the ability to appeal individual elements of a price control settlement was clearly established during the ED1 appeal cases. Should the CMA wish Ofgem to consider any wider implications of a successful appeal then it has discretion to refer the matter back to Ofgem but should the CMA impose its decision directly then there should be no mechanism for Ofgem to change other elements of the package.

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

We have previously commented that our stakeholder engagement had not identified any issues with the previous six output categories that form part of the RIIO1 framework. Engagement over RIIO1 has meant that the current framework is now well understood and provides a useful framework to discuss performance. The clear stakeholder evidence to support Ofgem's proposed changes in this area has not been provided. This change in approach and break in continuity may cause additional complexity and confusion for stakeholders.

However, at this very late stage in the process, it is a priority that the framework against which companies both complete their stakeholder engagement and the submitted Business Plans is decided upon and clear. Therefore we have no objections to this change to the framework.

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

No. We do not believe there are any further outcome categories that should be included at this late stage.

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

We have no objections to the proposed change to the Outcomes & Outputs framework.

However, we have previously highlighted the differences in the risk-reward parameters of each category. As such, it is important that the framework also clearly addresses how outputs will be classified across each of these categories. A concern would be that an output submitted as an ODI that reflects ambition and hence includes a specified element of downside and/or upside risk is translated unchanged into a Licence Obligation with an unlimited downside only risk.

Clarity on how Ofgem intend to assess and control the classification of outputs has not yet been provided but will be an essential element of the framework

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?

The key consideration for these type arrangements is the greater the potential for unintended consequences (lack of collaboration and best practice sharing) but also the regulatory burden to control for these either ex-ante in the incentive design (adding to complexity) or ex-post (adding to regulatory burden and uncertainty).

The introduction of dynamic and relative incentives would need to be accompanied by a rigorous impact assessment process to ensure that neither of these downside risks are delivered and to illustrate a sound regulatory process has been followed to ensure consumer interests are protected.

It is also clear that the introduction of these types of incentives cannot be separated from other aspects of Ofgem's proposals for the RIIO2 regulatory framework. These include:

- The impact upon any estimate of the expected performance premium netted off the allowed cost of equity.
- The impact upon the assessment of financeability of companies
- The impact of the perceived 'riskiness' of the sector with the greater use of more competitive arrangements into the framework with a rate of return set to reflect a very low risk profile.

It is clear both in the consultation document and in discussion with Ofgem that the impact assessment and the interplay with other parts of the framework have not been fully considered yet. As part of a good regulatory process we would expect both of these areas to be covered fully to support any policy decision presented in May 2019.

CSQ5: Do you agree with our proposals to allow network operators to propose bespoke outputs, in collaboration with their User Groups/ Customer Challenge Groups?

If Ofgem's desire to incentivise both reflection of stakeholders' and customers' requirements into business plans and promote ambition in terms of the levels service provided then the collaborative development of bespoke outputs must form part of the RIIO2 framework.

Strong, correctly calibrated incentives play an important role in revealing 'what good looks like'. Without such a framework it is unclear how Ofgem independently could continue to set stretching benchmarks for companies and create value for customers.

Again it is clear that certain elements of the proposed RIIO2 framework have yet to be considered in the context of how they interact together. Whilst we strongly support the proposal to allow bespoke outputs, it seems that certain aspects of the proposed Business Plan incentive would work to disincentivise this i.e. financial penalties applied for including an ambitious bespoke incentive but no penalty for a plan that includes no bespoke or ambitious outputs. Again we would expect this issue to be fully addressed in any decision presented in the May document.

CSQ6: When assessing proposals for bespoke financial ODIs, are there any additional considerations not captured which we should be taking into account?

It is not clear from the consultation document if the proposed assessment framework applies to all bespoke outputs regardless of whether they are a PCD or an ODI with or without financial incentives. Clarity about the relevant assessment framework for different types of outputs is an important feature of the proposed framework.

As set out, the list of considerations that Ofgem would consider appropriate to include within any assessment of bespoke outputs is extensive and if applied to all proposed outputs would set an inappropriately high bar for outputs that do not include any financial incentive or indeed any additional marginal cost to deliver.

The proposed framework would therefore benefit from the inclusion of a proportionate assessment of proposals depending on for example the level of financial impact on customers either in terms of cost and/or financial incentive arrangements.

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

At this stage there are not any additional considerations or parameters that need to be considered in assessing bespoke ODIs within business plans. To ensure good regulatory process and an effective audit trail that can be demonstrated we would expect Ofgem to set out and clearly publish the process/methodology they intend to use to make such assessments.

Additionally it is important to ensure that the wider framework fully supports the development of proposals that meet customer and stakeholder expectations. There is ambiguity in some of the guidance that has been currently issued that potentially presents a disincentive to bringing forward proposals of this nature if there are penalties for an unsuccessful proposal at the business plan assessment stage.

CSQ8: Enabling whole system solutions questions - Do you feel we have defined the problem correctly?

It is not possible to clearly define the problem without reference to the wider government policy objectives and the role of both networks and Ofgem itself in meeting those objectives. Within the current responsibilities of networks, and how Ofgem is currently defining its role, then the problem appears reasonably well described in the document.

However, it does underplay gas and electricity interactions. For example, during GD1 we have seen alterations to the rules surrounding developments in the electricity generation market directly impacting the gas networks. As government has moved away from allowing diesel generation to bid under the capacity market mechanism then gas networks have seen a surge of gas connection enquiries from developers looking to build gas powered electricity generation plants. A number of these plants have been constructed with more in the pipeline. If such a trend continues then more work will need to be done on gas and electricity interactions e.g. considering the issues of simultaneous peak demand on both the gas and electricity systems. What is difficult to predict is how deep such interactions will be during the GD2 period and consequently what action will need to be taken if any.

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?

Absence any firm direction from government then for the GD2 period this seems a practical approach to adopt apart from the link to any innovation stimulus or funding. It would be very limiting to restrict innovation funding to such a narrow definition. In the longer timeframes associated with decarbonisation pathways, it is appropriate and expected, that innovation should consider a wider viewpoint on whole system issues. Customer and stakeholders will expect such a wider approach to be adopted.

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

In the innovation arena consideration needs to be given to energy system issues not gas, electricity, heat and transport as stand-alone items otherwise sub-optimal solutions and analysis will result as they wouldn't fully consider the benefits and risks.

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 have no reason or evidence to reject any of the possible mechanisms contemplated at this stage. The practical application of any such mechanism needs to be very carefully considered. There is a danger of overcomplicating what should be routine network planning activities between networks. For gas distribution and transmission there is a good level of interaction and we are not aware of any distortion in behaviours caused by the current framework which is driving sub-optimal outcomes for customers.

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

Without seeing any firm proposals about how any such possible mechanisms would be applied to gas distribution networks it is difficult to comment. Generally any mechanism which has a wide degree of discretionary judgements or is ill defined or is not subject to a full impact assessment on all the parties involved will increase regulatory risk.

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

We are not aware of any issue in gas distribution that would necessitate a transfer of revenue with the gas transmission network or another gas distribution network. For the GD2 period we don’t envisage the need for any such mechanism. Any issue of significant scale should be identified during the business planning for GD2.

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

At a theoretical level we have no such recommendations.

CSQ15: Enabling whole system solutions questions Are there other mechanisms that we have not identified that we should consider (please give details)?

Under a narrow definition of whole system none we can identify.

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

Under a narrow definition of whole system none we can identify.

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

Under a narrow definition of whole system none we can identify.

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?

All the proposed mechanisms can be utilised but it will depend on the nature of the development. For gas distribution during the GD2 period we see a lesser role for the business plan incentive and the totex incentive mechanism in any wider whole system considerations. Clearly in the innovation arena and the ability of the framework to adapt to any rapid developments, for example, dramatic growth in hybrid heating systems would have a greater role to play.

CSQ 19: 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?

We support the use of monetised risk to inform investment proposals, however, we do not consider that it is the primary basis for justifying expenditure. Rather, it is one of several sources of information that can help to inform our asset management activities. We consider that monetised risk provides a useful basis for facilitating a greater understanding of the condition of our assets and the ability of these to continue to deliver the service that we have committed to provide for our customers and stakeholders. However, our asset management activities and the interventions that we implement to manage this risk position will be informed by a range of parameters, including legislation, our price control deliverables, the risk appetite of our company and importantly information received by our customers and stakeholders on where their priorities lie.

It is important to note that within the gas distribution sector, legislation is a key driver for a large part of our investment programme and at a technical level it must also be understood that monetised risk within the gas distribution has been developed as a reporting tool and not a cost benefit analysis tool.

In the development of our RIIO-2 Business Plan we will use monetised risk to inform the counterfactual risk position and provide evidence of how our assets change over time. The justification of our expenditure will trade off the cost, risk and service data that we have collected to ensure that we can continue to deliver service to our customers and prioritise our investments to the areas where customers consider that we deliver the most value. Risk will form a core part of this assessment, but it won’t be the primary basis upon which we justify our expenditure.

CSQ 20: Do you agree with our proposals to define outputs for all sectors using a relative measure of risk?

The RIIO-GD1 monetised risk target is based on a relative measure of risk and NGN consider that maintaining this target at a network level for RIIO-2 is appropriate. The relative measure of risk at a network level provides flexibility for companies to manage their total portfolio of assets, rather than on an asset by asset basis. Our gas distribution network is interconnected and as such there are a number of interdependencies between asset types. A relative measure of risk allows holistic decision making and avoids redundant, short term decisions. We consider that this will allow companies to optimise their outputs to deliver greater value to customers over the course of RIIO 2.

NGN also consider that the use of a relative measure of risk maintains a more direct link between allowances and the work that will be required to deliver our outputs, whilst still maintaining the option for in period risk trading.

CSQ 21: Do you agree with our proposals for defining outputs using a long-term measure of the monetised risk benefit delivered through companies' investments?

NGN understand that under the RIIO-2 framework, the NARM is intended to play a central role in ensuring that gas distribution networks (GDNs) record and understand the location and condition of their network assets, to ensure that they are maintained and operated efficiently and that intervention plans are appropriately implemented.

We consider that Ofgem's proposal to move towards a longer-term view of the monetised risk benefits beyond the RIIO-2 period, is aimed at facilitating a leading indicator of long-term inherent risk within the asset base. We consider that the reason for introducing a leading indicator is that price control deliverables (PCDs) on in-period performance are heavily influenced by historic investment and are therefore lagging in nature, i.e., asset health today is a result of historical decisions made over many years. Due to the level of the inertia in the asset base, investment decisions made by GDNs during RIIO-2 and that contribute to visible short-term performance, will only have their full impact understood over the longer term under current framework. Given this difficulty with observing and understanding the benefit of investment decisions made today.

In principle NGN welcomes Ofgem's proposals to introduce outputs that make the future consequences of today's decisions as visible as possible and this aligns with NGNs asset management decision making approach and the tools and resources, we have implemented through GD1.

However, we consider that the success or failure of the Ofgem approach depends on the detail of the practical implementation. We reference the long journey that GDNs have been on in the development of the Network Output Measures (NOMs) methodology in GD1 and the fact that despite being in year 7 of RIIO 1, targets have not been agreed and we have had little chance to practically assess and understand the impact of this methodology. As such, whilst Ofgem's approach is sensibly based on estimating the long-term benefits of asset interventions, inevitably it will be the detail of implementation that is important. NGN would advocate a progressive approach to implementing the NARM approach for delivering long term benefit through RIIO 2. What appears to be a simple and worthwhile proposal from Ofgem, in practice involves significant practical considerations. This stems from how Ofgem is likely to use the results via benchmarking. We consider that Ofgem's suggestions of working with companies to define the key components of estimating long-term monetised risk will be essential.

CSQ 22: Do you agree with our proposed approach to setting allowances and outputs?

In the RIIO-2 consultation Ofgem outlines its intention to use monetised risk as a key part of its approach to setting allowances and outputs. As outlined in our response to CSQ 21, NGN considers that while the intention is practical, the detail regarding the implementation and application of the approach is crucial. We agree that monetised risk will be an important tool in informing and assessing aspects of a company's business plans, however, it should not be the primary basis on which business plans are assessed or justified. We consider that Ofgem should be mindful of the scope of the existing monetised risk approach across assets. There are several asset classes for which we cannot currently calculate monetised risk and the application of the models may not be sufficiently granular to cover all assets type. As outlined above, we consider it is the level of detail on Implementation that is important in Ofgem's approach rather than the theoretical practicality which at face value appears sound.

We note in 6.31 of the consultation Ofgem refers to the use of NARMs in benchmarking companies as a part of their approach. We do not agree with the use of NARMs in benchmarking. We accept that benchmarking using the long-term monetised risk could take several forms and could be used to set a range of different stretching targets (i.e. PCDs, Costs or ODIs) and could be applied across or within companies. However, due to the relative immaturity of the application of monetised risk in any practical manner in GD1, using it to assess or benchmark GD2 allowances at a granular level is not appropriate.

If Ofgem does progress with the use of NARMS in benchmarking, there are five areas that need to be carefully considered to drive the right behaviours and ensure the best investment decisions are made:

- **Level of granularity**: Ofgem could set PCDs at a range of different levels of granularity – increasing detail tends to result in less flexibility and potentially less efficiency. We consider NARMs is a strategic tool and as such should be applied at this level rather the granular level.

- **Normalisation**: Risk data need to be normalised across companies for Ofgem to make meaningful comparisons. The current process to rebase GD1 targets has shown that there are still several inconsistencies between companies' approach to NOMs, such as the approach to banding risk, even though a consistent methodology has been developed for monetised risk. In addition, larger companies or areas of higher population concentration will invariably carry more risk.

- **Basis of target**: e.g., average or frontier performance. We would consider that the more stretching the target or the stronger the incentive the more robust the underlying data needs to be. Benchmarking needs to take account of legitimate differences across companies.

- **Speed of catch up**: Over time or immediate.

- **Incentives and penalties**: Differing absolute risk positions between companies. If Ofgem seeks to compare companies on the amount of relative risk being removed (assuming the more risk removed the harder it is to remove and the lower the benefits of removal) this could penalise those who have managed assets well in the past and so start from a lower level of absolute risk or even encourage companies to let the baseline risk position increase. This could create issues of perverse incentives

Successful benchmarking of long-term monetised risk requires careful consideration in order to ensure consistency. In terms of Figure 2 from section 6 of Ofgem's consultation document this means there needs to be consistency in:

- The counterfactual i.e., baseline (red line in Ofgem's Figure 2)
- Actions (blue line in Ofgem's Figure 2)
- PCDs and reporting requirements
- The approach to Cost Benefit Analysis
- Timescales

NGN agrees and is supportive of the implementation of cost benefit analysis across its asset portfolio. We consider that a consistent approach to CBA should be implemented, however, as the current monetised risk modelling does not incorporate the ability to use customer willingness to pay parameters there should be flexibility in how companies assess and include this into their decision-making processes for expenditure. It should also be noted by Ofgem that current modelling incorporates both asset age and asset condition. As such there will be covariance between these two parameters and the monetised risk outputs, which would mean that any cross checking between companies would be of very limited value.

We understand that a specific working group has been established across sectors to discuss the details of these factors and NGN will continue to contribute to these.

The use of monetised risk in setting allowances and outputs should be appropriately balanced with the expenditure and service outputs that a company intends to deliver. For example: a company who proposes significant risk reductions based on its asset intervention programme and has high expenditure would presumably deliver a greater monetised risk reduction than a company who develops a balanced plan that might stabilise risk, with a repair, maintenance and refurbishment intervention programme. The focus should be on the best programme to consistently deliver on service objectives and is affordable for customers. The key focus of Ofgem's approach for RIIO2 should be on customer outcomes using risk as a lead indicator that the company is managing its risk position consciously.

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

NGN does not consider that it will have significant number of schemes that will span price controls between RIIO – GD2 and GD3, as the general nature of investment in the Gas Distribution Networks tends to be high volume, low cost activity with benefits being quickly realised.

In considering the two options that Ofgem has proposed in 6.33 of the consultation, NGN supports Option 1 which would allow costs in RIIO-2 only for those outputs delivered in RIIO-2, and any expenditure in RIIO-2 on outputs for delivery in RIIO-3 would be logged up and considered for funding in the next price control. NGN consider that this option reflects the delivery of high volumes of work where benefit is quickly realised and ensures that customers receive the benefit as they pay for it.

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

We consider that the proposals set out by Ofgem as they stand, may encourage conservative behaviour, such as the setting of conservative rather than ambitious and stretching targets. They are unlikely to encourage the dynamic behaviour which would result in stretching targets that could be out-performed to deliver additional consumer benefits. In its entirety, we consider the proposed regime is weighted heavily to the downside and the application of a penalty for the full benefit that is proposed in GD2 is too blunt of an instrument and could drive perverse behaviours leading to lack of innovation and ambition for fear of failure and resulting penalty.

In relation to under delivery we do not consider that the current approach sufficiently accounts for how new information and innovation discovered "in period" may make the agreed target no longer optimal for consumers. Ofgem's approach should include incentives to encourage companies to continually review their plans and to implement changes if they are in customers' best interests. We consider that clarity and agreement on a simple process to show that the change is justified is required, otherwise innovation and improved data will not be encouraged. This would be in opposition to Ofgem's policies elsewhere in the methodology.

Factors outside of company control should also be included in the process, as they may result in higher costs of delivery and all other things given (including consumer value) this could mean that under-delivery is economically rational. Companies should not be incentivised to deliver inefficient outputs.

We also consider that there is a trade-off between strong penalties for under-delivery and encouraging companies to develop stretching plans and targets. If the penalty for under-delivery is too large then companies will be incentivised to commit to targets that they know they can deliver, which goes against Ofgem's aim of encouraging stretching and robust targets.

Ofgem is proposing that where companies over-deliver they will suffer a cost penalty under the totex incentive mechanism. However, if companies can show there is material consumer value to justify the over-delivery then Ofgem will "consider relevant criteria and options for maintaining cost neutrality" i.e. enabling the company to recover justified costs. This approach may be overly static and discourage companies from innovation and seeking out additional benefits for customers. We propose that the approach includes additional incentives to encourage dynamically efficient behaviour in keeping with Ofgem's aims of encouraging innovation. In effect, where over-delivery is economic (i.e. there is a positive net benefit to consumers as the additional benefits are larger than the additional costs) then it would be appropriate to recognise any costs of over-delivery. Ofgem should incentivise companies to seek out these situations.

Incentives for over-delivery should be symmetrical to the proposals to penalise under-delivery. Such an approach has been implemented in the UK water sector at PR14 and PR19, where companies are incentivised through cost recovery plus a portion of the additional net benefit. In applying this approach, the application of deadbands around the reward (with symmetrical deadbands around the penalties) should be applied to protect companies from financial impacts for factors outside their control

As the proposals set out by Ofgem stand, they may encourage conservative behaviour and are also one-sided. NGN support the application of a penalty and that companies should be held to account for their asset management decisions in ensuring that risk is managed, and outputs are delivered. However, the penalty that is applied must be proportional to the risk that is incurred and where economic over delivery is realised a proportionate reward should be attainable.

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

There are potential interactions and overlaps with how Ofgem intends to treat Repex and if the asset management components of Repex should be included within the NARMs or as a separate PCD, as for the mandatory Repex.

The approaches proposed by Ofgem for Repex and NARMs need to work together consistently and seamlessly so to ensure that there is no double counting.

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?

NGN considers that interventions that would not normally be applied within its ordinary activity should be considered for ring fencing. This refers to projects or intervention that we must undertake to ensure that the outputs are delivered in the interest of our stakeholders but are not necessarily driven by risk or customer benefit.

Such schemes would relate to activity driven by legislation or wider infrastructure projects that would require intervention in our assets that under normal business as usual would not be required e.g. diversion as a result of HS2 or mandated repex. In such instances we consider it important to still measure the monetised risk impact (where relevant) as the residual asset will need to be managed over its life consistent with the NARMS methodology.

CSQ 27: 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?

There are two separate elements to this element of the assessment of business plans.

The first of these is an objective measure of any funding that is requested to deliver a project or initiative that supports the development of the resilience or sustainability of the workforce within a network. To the extent that these are clear and discrete then the framework will allow for a PCD to be constructed to deal with this issue.

However, a more complex situation arises when attempting to assess whether an overall outcome has been delivered to obtain a particular level of resilience or sustainability. Ofgem have requested that this issue be explicitly addressed within business plans and as such must already have or be forming a view on the level that it is expecting to see. Or will need to form a view once the business plans are submitted.

It must be recognised that different companies will be at different stages in their workforce resilience and be putting forward differing strategies as a result. NGN has addressed this issue during RIIO-GD1 by moving the organisation onto new, modern and market-tested T&Cs whilst reducing the average age of the workforce to a sustainable level for the longer term. This change has funded directly by the shareholders during RIIO-GD1. The scenario where no funding is requested to deliver a proposed strategy must also be considered and ensure that those companies are not disadvantaged by any process that is put in place.

There are many areas of the regulatory contract that has to deal with these issues including NARMs where an outcome is set but the networks has a choice on how to deliver that and be flexible in the choices it needs to make taking into account factors that are relevant at that time. Companies can be asked to report on this at the end of the price review and a view taken on whether the overall outcome has been delivered efficiently. Even without a PCD companies can be either required to return funds that have not been spent or asked to deliver the proposed outcome in future without any further funding.

CSQ 28: 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.

National Grid Gas Transmission (NGGT) and the Gas Distribution Networks (Northern Gas Networks (NGN), Wales & West Utilities (WWU), Cadent and SGN) have established a cross industry working group as a part of the delivery of the Physical Security Upgrade Programme (PSUP) for security requirements at Critical National Infrastructure (CNI) Sites. This working group propose that the funding arrangements for shared gas sites are amended and that the PSUP guidance is updated to reflect this.

All definitions are in accordance with the PSUP Guidelines (December 2018).

For the scenario where the site user is the sole driver of PSUP at a shared site, the current arrangements state that the capital costs for PSUP shared sites sits with the site user and the site owner is responsible for ongoing operating cost (Opex) once the scheme is completed. After internal consultation across the network companies, we have reviewed four credible options and these are set out in Table 1. Our proposal is that a single network company is responsible for both Capex and Opex as this reflects the most effective way of delivering this work (option 2 or option 3 in Table 1), and therefore the best value for consumers.

The decision on whether option 2 or option 3 is selected would be by mutual consent between the site owner and the site user. The site owner will inform the site user of their preference promptly.

Table 1: Options considered for PSUP Capex and Opex future funding arrangements

Option	Outcome
1) As per current PSUP guidelines. User funds, builds, owns PSUP solution. Site owner to operate, undertakes alarm handling and maintain PSUP assets thereafter.	Not preferred as splitting ownership and ongoing operation and maintenance of assets increases asset management complexity and leads to inefficiencies.
2) User funds, builds, owns, operates, undertakes alarm handling and maintains PSUP solution. Site user becomes responsible for security on site.	Single entity responsible for delivering PSUP upgrade and security of assets going forward.
3) Site owner funds, builds, owns, operates, undertakes alarm handling, and maintains PSUP solution. Site owner responsible for agreeing and delivering the PSUP output.	Single entity responsible for delivering PSUP upgrade and security of assets going forward.
4) User funds and builds the initial PSUP solution, followed by transfer of ownership of assets to the site owner who operates and maintains thereafter.	Not preferred as complex accounting and recovery of allowances.

CSQ 29: 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?

We agree with the proposed approach of ex-ante allowances for PSUP works mandated by government. Due to the specific nature of the requirement of PSUP schemes, experience of delivering these schemes through RIIO 1 and relative inflexibility in deviation from scope, each company should be able to provide robust forecast of project cost for delivering compliance with the PSUP obligations. As such, the ex-ante funding mechanism is an appropriate approach for determining allowances for PSUP works that have been mandated by government.

CSQ 30: 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?

As the PSUP programme is sensitive to changes in threat and asset criticality, a company may have an obligation imposed by government in RIIO 2 for which it has not received the appropriate funding. We do not consider it fair that the company carries these costs and as such agree that a reopener should be included to deal with any additional investment that is required due to government mandated changes to the PSUP.

CSQ 31: We would also welcome views on the frequency that is required for any reopener, e.g. should there be one window for applications during RIIO-2 and if so when?

As the PSUP programme is sensitive to changes in threat and asset criticality, a company may have an obligation imposed by government in RIIO 2 that requires a rapid response. The ability to apply for funding at any time through the price control, or in line with the Department for Business, Energy and Industrial Strategy (BEIS) review process (every 2-3 years) would ensure a more agile and efficient response to changes to PSUP. This approach allows enough time to plan for work that could be delivered in RIIO 2 but would also allow for deferral to RIIO 3 if there is any uncertainty in the timing of delivery of schemes.

CSQ32: Do you agree with the scope of costs that are proposed to fall under cyber resilience, ie costs for cyber resilience which are (1) incurred as a direct result of Real price effects questions 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.

No. NGN's approach to cyber security is driven by factors wider than the NIS Directive as part of our work to secure our systems and data from a range of external threats and risks.

The NIS Directive provides a framework to assess and report on Cyber Security levels for some of the systems and process that NGN operate, not all of our information and systems fall under the scope of the NIS directive. The NIS Directive provides a mechanism to allow governance and potentially a penalty mechanism for failing to meet these requirements on the systems that are in scope of the directive.

Whilst the additional workload and potential financial impact of NIS Directive must be taken account of under the scope of Cyber Security costs, this area of increased investment needs to be far broader. This should reflect all of NGN's systems, the data we hold and process and the changing cyber risk threat that exists and is rapidly increasing in both traditional IT and operational technology.

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

No. We know from experience, our historical spend profile and stakeholder and sector feedback that Cyber Security requirements, risk management and investment has in the past exponentially increased and it will continue to do so in the future. We can therefore predict with a degree of certainty, that this increase in estimated forecast spend will occur in GD2.

It is essential that our estimated expenditure allowance is structured is such a way that it will ensure that this risk can be adequately managed through multi-year investment programmes that allow flexibility and the ability to respond to changing requirements, demands and threats. It would be misleading and inappropriate to attempt to detail specific projects or areas of investment as this plan will almost certainly need to change over a seven year time horizon.

Also, the nature of GDPR and NIS directives are such that failure to adequately address these risk will result in significant fines and penalties for our respective organisations. This is in effect, a mechanism to ensure expenditure is invested sensibly and penalise organisations accordingly if not. Additionally, we expect that Ofgem will monitor Cyber Security capability on an ongoing basis through the Cyber Assessment Framework which will provide detailed and granular assessment on whether investment is being directed appropriately and efficiently and will enable corrective action to be enforced.

We believe that this level of scrutiny being proposed will enable Ofgem to give customers assurance that costs associated with Cyber Resilience are being incurred sensibly and efficiently whilst giving additional assurance that Cyber risk is being adequately managed to enable adequate energy resilience to UK customers.

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 reopener mechanism

Yes. It is important to note that the nature of this risk is such that it is a constantly shifting risk profile and Cyber security threat is impacted by numerous external factors such as the international and national political climate and vulnerabilities and weaknesses exposed by external groups and third parties.

In addition to this, changes to legislation, as has been the case with NIS Directive, may require a substantive additional investment to meet the ever changing needs of this risk.

It is also important to note that the fast and ever-changing nature of technology may mean that meeting the same or improved levels of Cyber resilience over a long-term time horizon until 2026, may require substantive changes in approach and potential investment requirements to achieve the same level of Cyber resilience expected by Government and customers.

We would propose that the reopener should be triggered on a % increase basis over and above annual allowances based on changes to;

- National or International threat to UK Utilities that require a substantial improvement in cyber security.
- Significant change in third party or activist group and/or exposure of technology third party vulnerabilities that requires an immediate and/or substantive change.
- A major shift in technology adoption (including operational technology) that was unforeseen in 2019 at the time of submitting business plans that requires a fundamentally different or new approach to Cyber Security management in order to achieve the same or improved levels of Cyber resilience.
- A significant change in legal or regulatory requirements that warrant a substantial shift in the organisations approach to Cyber Security

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 would agree with your proposal to use a relevant index to account for RPEs within the framework. And would also agree with the proposal to make separate assumptions for changes in input prices and ongoing efficiency.

We would not support the proposal to adjust for RPEs at the end of the price control period. This proposal has to be considered in the context of the wider cash flow position for companies that the framework is proposing. The use of an externally published index to adjust for prices is used extensively within the framework already with a high degree of success. E.g. General inflation and wholesale gas prices for Shrinkage gas purchases.

Many of GDNs contracts for goods and service already have specific price indexation including within them to reflect the fact that these move differently to general inflation reflecting the very specific nature of the activities of a GDN. E.g. Polyethylene pipe and fittings, electrofusion kits etc. These can imply movement sin prices that are 10% higher than base inflation for specific products in different years.

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

Yes we would agree with the view to retain notional cost structures as a starting point with a consistency check across cost categories and companies.

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?

Yes we would agree with your proposals on the methodology to apply RPEs.

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?

Since the global financial crisis, it is evident that there has been a marked slowdown in productivity growth across many industries.

Gas distribution networks are not immune from the productivity trends affecting the wider economy, not least because they rely heavily on supply chain alliances and contractors. Recent empirical evidence suggests that productivity might have been broadly flat across the network industries in the last ten years. It is unclear whether the factors that have been acting as a drag on productivity are a temporary phenomenon or are likely to be more long-lasting and affect companies through the whole of the RIIO-2 period.

The normal starting point would be to ontinue the practice of benchmarking to observed rates of productivity improvements in comparator sectors of the UK. However, this is problematic at this point in time for two reasons. First, there isn't a sufficiently long run of data in the EU KLEMS database or elsewhere with which to make a statistically robust extrapolation of current productivity growth rates (NB: each annual EU KLEMS estimate come with a considerable margin of error, while best practice involves taking a reading over a minimum of one full business cycle). Second, and more importantly, there can be genuine uncertainty about how much the factors that have pushed down productivity growth in other sectors might have shaved off of the energy networks' productivity growth potential and how long those factors will persist for.

We would therefore not consider it unreasonable that the Bank of England's and the OBR's position be adopted which implies a reduction in productivity compread to the assumptions employed during RIIO-GD1.

CS39: Do you think there is a need for a 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 would agree with your assessment that is no requirement for a separate asset utilisation incentive either at a gas distribution or a broader sector level.

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

In general the direction of travel on anticipatory investment seems appropriate.

From NGN's perspective, at a Gas Distribution level there is no significant driver for large scale anticipatory investment in new/additional network capacity. Small scale reinforcement at a very local level will continue to be required to address capacity/pressure constraints on the local Low Pressure network. However, this is not anticipatory but primarily in response to observable constraints on the network due to changing demand levels and patterns.

NGN have for some time sought to use non-asset based solutions to address capacity constraints on the Local Transmission System LTS) evidenced through the use of interruptible contracts with larger customers to manage usage at times of peak network demand. We would anticipate this approach will continue to be appropriate during RIIO-GD2.

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

The risks of highly anticipatory investment are largely associated with the potential pathways to deliver the necessary energy transition. At its simplest level, the business case is whether no investment provides a greater risk to achieving these targets compared to the potential costs of stranding some anticipatory investment.

This anticipatory investment could be aimed at a number of objectives including keeping policy options open to ensuring a timely delivery of large scale investment following a policy option. Beyond classifying projects at this level there does not seem to be a consistent criteria that can be applied across the sector. There are problems with defining criteria solely in terms of scale, geography, technical solutions or even sector.

It is clear that each project would need to be considered on its own merits.

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

The proposals on risk-sharing within the consultation document are at a very early stage of development. As such there is little detail on how this approach would operate in practice. If Ofgem is to stimulate a ‘market’ for this type of investments then providing absolute clarity on the terms on which this type of investment will be remunerated.

Key questions need to addressed around the regulatory treatment of this type of investment within the regulatory ring-fence. Including its inclusion and treatment within RAV, how would the different risk profile of this type of investment be viewed by investors (debt and equity) and credit-rating agencies and consequently would there be any impact on the financial position of the core regulated business.

Lack of clarity results in uncertainty which will not only have an impact on the appropriate investment costs but also the appetite for investment. Significant amounts of additional work is required to deliver this detail and clarity.

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

In considering 'business as usual' within this risk-sharing approach one important element to consider appropriate timescales. For example, an investment is considered highly anticipatory against a set of criteria and allowed and awarded a higher rate of return but within the price control period i.e.1-5 years from the award a policy decision is made that moves it categorisation from anticipatory to required.

This provides another example of why the proposal needs significant additional thought and investigation before it can be properly considered for inclusion in the regulatory framework. Given the very late stage at which this has been introduced and the amount of work needed to provide the necessary clarity, it will provide a significant challenge for companies submitting business plans in 2019 to utilise this approach.

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

Throughout RIIO-GD1 as the innovation culture continues to develop, so has the number of projects that are undertaken as BAU (revenue funded) mechanisms. The development of innovation management processes in networks is enabling the effective management of higher TRL/Lower risk opportunities and the level of certainty for success is significantly decreased.

However, in the very low base return and very small incentive package environment that Ofgem are proposing for the sector, it must be recognised that this is not conducive to continued investment in high risk activities. It is likely that any investment as part of BAU will inevitably only fall into those activities that have a very high technology readiness level. Referencing both economic theory and experience in other markets both in the UK and internationally it is unclear how Ofgem have arrived at the conclusion that significantly lowering base returns and the potential additional returns from innovative investment will lead to an increase in this activity. It would be useful to see the analysis that Ofgem have completed to support this conclusion and the long term benefits case it presents for consumers.

Additionally, considerations should also be paid to the complexity of the required change to release the benefit. For example, introducing a new operational system may require an organisational restructure. Such constraints of change could mean some projects may not deliver net value within the five-year pricing period and could potentially be perceived as an innovation project directly as a result.

To enable networks to improve the culture and the processes associated with innovation, the continuation should be a core a core element of the business plan of funding mechanism available.

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

Yes, as the networks continue to innovate as part of BAU the IRM has become redundant. NGN have not made any applications to the mechanism in GD1.

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?

Yes, accessibility to a funding pot for the energy system transition (EST) challenges is beneficial and we support this move. The accessibility enables greater access to a wider fund that is focused on energy rather that gas or electric specifically. This therefore encourages applications for more whole system transitional projects, furthermore, the connected nature of this challenge fund will aid alignment with other government departmental funding and assist coordination with wider industry challenges.

It should be noted that it would be easier in the future if Ofgem change the regulations regarding ownership and production of gas units i.e. electrolysers. This has hindered NIC project proposals in the past and could restrict the benefits of the future funding pot.

The strategic innovation this enables is focussed on making the long-term horizon less uncertain and providing critical evidence to enable evidenced based policy decisions. It is positive to recognise that tactical innovation applications may also be possible in the mid-term for demonstration projects.

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

No. We believe that this approach continues to be appropriate. However, consideration needs to be given to how joint Gas and Electric projects will be funded and how the relevant sectors funds are raised.

CSQ48: Do you think there is a continued need for the NIA within RIIO-2? In consultation responses, 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?

Yes, NIA has proven a successful mechanism throughout GD1 and has demonstrated innovative solutions across a range of business needs at varying TRL levels. Networks have both delivered and implemented solutions that enable valuable benefits to be realised as part of balanced innovation portfolios.

These portfolios consist of projects that have been completed from the commencement of GD1 to date and have been a mix of high TRL/low risk solutions that deliver immediate tactical improvements. Additionally, NIA has also enabled and delivered a broad range of low TRL/high risk R&D projects that have enable transitional innovation to take place. This transitional innovation is uncertain and would not have taken place and is highly unlikely to take place due to high levels of uncertainty without an allowance such as NIA.

The NIA mechanism has acted as a strong stimulus for SMEs to support networks general but also supported growth in relatively small markets such as gas distribution. It allows adoption of technologies from other sectors into what is otherwise a more limited market in gas distribution.

Networks are required to balance investment decisions that may prioritise performance over research and development which in turn can stifle innovation. The complexity of change for some opportunities and business challenge could mean the innovation is inefficient in the current pricing period.

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

A framework that enables clear, consistent and comparable reporting of all benefits associated with innovation is essential. This could be such as the Innovation Measurement Framework that is being jointly developed by the majority of GDN's and DNO's.

However equally important, to feed into any uniform framework is clarity of the metrics used to undertake cost benefit analysis assumptions and calculations. Benefits should be demonstrated on multiple levels, cost of innovation and cost of implementation measured discretely and combined allow for analysis of discrete investment and net benefits. The required investment and cost of implementation is a key determining factor, for example - Resource time saving is different to a 'bottom-line' cost saving, recording of net benefits or ongoing benefits after procurement etc.

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

No response

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

The consultation document sets out a broad range of models and concepts where competition at different stages could be appropriate and act in the interests of customers in the longer term. However, it is clear that to move towards a very clear policy decision to include within the framework a significant amount of work needs to be completed in a short time to evaluate the options presented and any variations that this investigation might identify.

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?

The proposed criteria for assessing the suitability of late competition models seems appropriate at this stage. For Gas Distribution these criteria would imply that very limited or even no investment during the forthcoming regulatory periods would qualify for this type of competition. This would seem to be appropriate given the overall size of Gas Distribution network investment and the separability of projects.

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

It is difficult to form a view on the relatively high level analysis and broad assumptions that have been used in the IA analysis provided by Ofgem. It is clear that more work is required to fully consider the all the relevant costs and benefits that either do not yet appear in the analysis (e.g. risk) or a rebased on broad assumptions at this stage.

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

It is clear that there are very large differences in the amount of investment and project size across the different sectors and as such your proposals will have significantly different impacts across sectors. It is unlikely that for the period in question that the gas distribution sector has projects or indeed overall investment programmes large enough to make your proposals efficient in this sector.

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?

The issues raised on early competition seem valid. The only other consideration could be in some circumstances the development of alternative options will include significant research and design costs top fully understand the deliverability and certainty of the options being proposed. These costs are potentially at risk if the bid is not accepted. It is not clear that this is being considered in the framework or the IA presented.

CSQ56: Are there other potential drawbacks of early competition?

The key consideration must be deliverability and acceptability of any solution proposed and a full and proper evaluation of liabilities when a chosen option does not deliver against the stated costs and or benefits.

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?

NGN are not in a position to provide any additional examples of this concept.

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?

The high level assessment is an appropriate summary of the early competition model. The issues raised highlight the relative complexity that surrounds the introduction of this approach and the scope for additional cost and unintended consequences of a poorly designed framework. It is clear that significantly more work is required to address the details of this approach and provide certainty of how and the extent to which it can provide long term consumer benefit.

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?

The general criteria seem appropriate for consideration at this early stage of assessment of the options.

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 general criteria seem appropriate. The criteria do present a high hurdle for the broad range of skills and experience that will be required to deliver the necessary outputs. To drive real value it will need to attract and retain high calibre specialist resources from across the market place. This will need to cover the technical and commercial aspects of each sector. For this to be efficient it will need to exploit significant economies of scale and scope and hence the work basket large enough to ensure there is little or no underutilised resources. It is not clear that Ofgem is well placed to deliver this type of capability over the longer term.

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?

The consultation document provides a very general description of native competition and some of the processes that are employed by well managed organisations to drive value for customers. However, the consultation document does not adequately set out the issue or problem that it believes exists within the current framework. It is therefore difficult to assess whether Ofgem's assertion that significant changes to the framework are required. Again we would expect that the necessary IA required to be provided by Ofgem to accompany any key policy decision would provide this clarity.

It is clear that Ofgem have a very narrow focus on how competition frameworks are generally used and targeted. The consultation document refers exclusively to native competition being used to reveal and drive unit costs. In reality many other aspects of the service that is expected by our customers, stakeholders and other regulators are considered and traded of to make appropriate commercial decisions. Competition frameworks are used to drive performance across a range of criteria including Safety, Service Levels, Customer Service, Environment and Compliance alongside unit costs. The trade-offs between these issues, particularly at a gas distribution level, are very complex.

The proposals set out in the consultation document will add significant complexity into the regulatory framework along with a further enhanced role for Ofgem in the day to day decision making within networks. There seems to have been little consideration of the practical implementation of some of the proposals. Investment programmes for GDNs will consist of potentially thousands of individual projects across a price control period. The scale and resource required to administer this scale of activity must be considered in assessing these options.

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?

NGN would contend that closer and more detailed examination of activities within the sector would reveal to Ofgem numerous examples of where the current regime has and is driving real innovation and customer value in the way that standard procurement/competition frameworks are deployed.

NGN has been aggressive in the way that it has deployed these frameworks to drive real improvements in both efficiency, safety and customer service. These have included radical and innovative operating models such as the full contracting out of all operations to a third party under and aggressive Asset Services Agreement, the creation of new supply chain models that directly challenge industry practice and being the first utility to contract out areas of network activities such as maintenance.

Many of these initiatives have contributed directly to NGN maintaining a frontier position in the industry in terms of both efficiency, safety and customer service. All this has been delivered under a strong incentive regime. We would expect that all of these benefits will be captured and returned to customers through at the start of RIIO2 at both a regional and national level in line with the principles of incentive regulation.

We cannot see the basis of your position that it is lack of competition that is creating an uneven playing field between network and non-network solutions. The points you raise are clearly more related to the level and types of costs that should qualify under any totex incentive. It is clear that the thinking in these areas has been developed separately without consideration of how different elements of your proposals will interact.

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?

There are several issues that need to be considered alongside of this proposal that do not seem to be addressed. These include:

- How would the proposal address benefits from the competition that are not only cost related? The process might reveal that a higher level of service (Safety, Reliability, Customer Service, Environmental performance) can be delivered for an equivalent cost. Ofgem are addressing this issue in an extremely narrow way with a view that the only valid output from competition is cost. In reality the picture is more complex than the simplistic view of the world held by Ofgem.
- Over what time frame are the costs and benefits to be considered? Some non-network options will be trading lower short term costs with much higher long term costs and/or longer term uncertainty.
- How will the funding level and margin/fee for competition interact with the any Totex incentive rate and innovation funding? E.g. the competition reveals costs that are higher than the benchmark and hence no fee awarded but efficient costs have been revealed. Or the margin or fee is less than the blended sharing factor Totex incentive rate which will provide different incentives for networks across different elements of the same cost line.
- As you have already identified running extra competitions poses in some areas significant additional costs. How will costs of running competitions be funded particularly if it is revealed that the benchmark cost is the most efficient.

It is clear that the proposal are currently at a very high/theoretical level and have yet to fully consider any meaningful practical application. Once these practical issues are reviewed and addressed it will almost certainly add significant complexity and cost to the framework. Only then can a full and proper IA be completed in line with Ofgem's obligations to ensure it is driving value for customers.

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

No. Not without significant investment in its own resources and capabilities. This would also require an extension of its statutory and licence remit. These additional costs and complexities do not present an obvious benefits case for this change.

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

In principle we have no objection to the establishment of a Business Plan incentive. However, it has for the first time in the regulatory framework set out to explicitly link assessments of quality and ambition to a financial reward/penalty.

The key uncertainty raised by this type of incentive is the highly subjective nature of the assessment. The business plan guidance published by Ofgem are a first set of high level thoughts on what some of the criteria might be included in the assessment. There is yet no clear understanding of the framework against which the assessment will take place and hence acts as a disincentive for ambition and hence risk within the business plan.

Furthermore, reading the Business Plan guidance, it is clear that there are elements of the assessment package that act against the stated objective of encouraging and rewarding ambition. E.g. Including ambition in the plan which is not accepted may attract a financial penalty but submitting a less ambitious plan will attract no reward or penalty – seemingly providing an incentive for a conservative approach.

It is also not yet clear how the Business Plan Incentive and the Totex Incentive will interact and not produce incentives that work in opposite directions.

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?

A detailed understanding of your proposed approach to benchmarking suggest that it can only work with the inclusion of the entire Totex submission. Given that many of the benchmarking models are in fact complex unit cost models, excluding uncertain cost lines from Totex will make those companies with uncertain costs look more efficient in your analysis without any subsequent change to the cost driver to reflect the costs excluded from the analysis. Where the cost drivers are measures of ‘scale’ which they are in many instances it is not clear how you could make this adjustment fairly and accurately.

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?

There is a significant issue with your proposal with three bandings producing too little resolution in separating companies’ performance against your benchmark. Under your proposals a company with a score of 0.99 could have a significantly different outcome to a company with a score on 1.01 (a difference of only 0.02. Whilst the company with a score of 1.01 would be treated exactly the same as a company with a score of 1.39 a difference of 0.38.

Secondly, the benchmarking methodology employed by Ofgem in the past and proposed to continue for RIIO-GD2 has been aimed largely at identifying the 'perfect GDN'. Under this scenario, with benchmarking undertaken at a very low level, there could still be a wide spread of performance between companies but no difference in the way they are evaluated. Using the same example as above the most efficient company could attract a score on 1 and the least efficient a score of 1.39 and the proposed methodology would treat them as equal despite there being significant differences in the level of efficiency.

The method needs to be reconsidered to ensure that these perverse outcomes are avoided.

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)?

It is clear that the thinking on the incentive arrangements for the Business Plan incentive have been driven by the recurring theme throughout the consultation of limiting the upside potential for companies to earn financial returns and without full consideration of whether this delivers delivering good long term outcomes for customers.

This is clearly reflected in the decision to potentially share any upside whilst give full exposure to the downside. There is clearly no strong economic rationale for this decision and certainly not one supported by any IA assessment provided by Ofgem. We would argue that the proposed incentive arrangement for the Business Plan incentive is not consistent with the stated objectives.

Additionally, the proposed sharing of any upside return adds additional risk into the evaluation of ambition that companies believe they can include in the plan. As the risk/reward relationship is unclear or indeed in itself risky (ranging from 2% to 0.25% for GDNs) it is likely to have an impact upon the decision making of companies when submitting business plans.

We would encourage Ofgem to remove the sharing of the upside incentive and make the assessment relative to the assessed performance of the other networks.

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?

We have previously commented in detail on our belief that the IQI mechanism contains all of the relevant characteristics to drive both short and long term benefits for consumers. It has been errors and/or lack of rigour from Ofgem in its application that has led to outcomes that have are believed to be less than optimal.

The IQI does not and has never precluded the ability to overlay an assessment of quality or certainty onto the outcome of allowances or sharing factors. It is just that

Ofgem has chosen not to do it explicitly. This has largely been as a result of Ofgem not being believing they have a detailed enough understanding of the cost forecasts to make those assessments. Instead the incentives through comparative competition, which is being now being promoted elsewhere in the framework, have been used to reveal efficient cost benchmarks which allow capture of these benefits and provide long term benefits to consumers.

Again there is no detailed IA in line with good regulatory process that underpins Ofgem's assertion and assumptions that any alternative will provide better long term outcomes for consumers.

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?

The blending sharing factor approach is built upon the outcome of a subjective assessment of quality and certainty from within Ofgem. This is largely outside of company's control even with significant detail or rigour in submitting forecasts.

It is not clear how the assessment of efficiency will interact with certainty in Ofgem's analysis. It seems plausible at this stage that a company can submit a highly efficient cost plan (as assessed by Ofgem) but with some ambitious but less certain cost elements and be in no better position than a company with much less efficient costs but very certain cost items.

The lack of clarity in how these two elements of Ofgem's assessment will work – one highly objective and the other highly subjective – will be brought together to deliver the right outcomes for consumers. Lack of clarity on how these key incentives will work makes the decision making processes for developing business plans more difficult particularly when considering whether to take on more risk by including more ambition within plans.

CSQS71: 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 benefit of both the IQI and the Ofwat approach to assessing expenditure and setting appropriate sharing factors that incentivise ongoing efficiency is that they are objective in their assessment. Ofgem's approach is almost wholly subjective and focusses less on incentivising companies to reveal costs through relative and native competition it is relying on Ofgem's ability to make that assessment.

We would contest that Ofgem's assessment is less focussed on providing a framework that drives real long term value for customers through strong market based mechanisms and instead placing itself at the heart of determining that outcome upfront with more limited information and understanding.

Ofgem's assessment has focussed entirely on a series of either/or questions. There are strong elements of the objective IQI and Ofwat approaches that should be retained alongside of the qualitative assessment implied by the proposed approach. Consideration does not seem have been given to how these features can be drawn together to provide a more optimal outcome.

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?

As mentioned above. All of the criteria will rely on a highly subjective assessment by Ofgem or even individuals of those criteria. To date no clear ground-rules have been set out that make it clear how this evaluation will take place. This increases uncertainty and risk to the approach making it difficult to assimilate into decision making processes and raises the likelihood of challenge and appeal on Ofgem's decisions.

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)?

It is clear that the grater the level of disaggregation of costs at which the subjective assessment of certainty is applied the higher the probability of all companies sharing factors tending towards the average of any range that is proposed. The greater the resolution of costs the less likely to be able to qualify for high degree of certainty in all categories.

It is not unreasonable to assume that the effective sharing factor range would be in the clustered closely around the average 35% sharing factor currently proposed by Ofgem.

We have previously argued that the lack of true differentiation in the totex sharing factors that reflect the underlying performance of networks has been a failure of the regulatory process in RIIO1 and is a key factor in not delivering the range of financial performance that might be expected.

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

From the detail set out in the consultation document there is not enough detail or explanation to be able to evaluate how these two incentives will interact and whether there will be any perverse incentives or unintended consequences. Given the late stage at which these concepts are being brought forward into the framework and the timescales on which any further clarity will be provided it is not certain that it can be effective in delivering all requirements within the business planning process. This has been a clear failing of the regulatory process to date.

It is not clear at present if companies can be operating at different points of the two incentives at the same time and hence whether that will drive the right behaviours. E.g. can a company be average on the Business Plan Incentive for overall quality, inefficient costs but have a very high certainty of costs and sharing factor.

Lack of clarity on this cannot therefore be certain to be driving the desired behaviours.

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

It is incorrect to think that sharing factors as low as 15% will not affect companies decision making when considering investment decisions to deliver further efficiencies. There are certain actions that NGN undertook during GD1 that were funded directly by shareholders (outside of Totex) that would not have been undertaken at the level of sharing factors implied by Ofgem. Therefore your firm statement that lower sharing factors does not affect decision making is incorrect.

Your statement that you have no evidence that lower sharing factors affects company behaviours is spurious as it is impossible for you to evidence the counterfactual. If sharing factors were higher other efficiencies may well have been brought forward.

Your assessment also fails to account for the impact on customers of overspends with very low sharing factors. At very low sharing factors less efficient companies may become more indifferent to operational overspends particularly where customers picking up 85% of that cost. It may be more beneficial to seek returns through other incentive performance or financial structuring of the companies.

To answer this question there are a number of factors that need to addressed to ensure that it is the 'effective' incentive rate that is being considered.

- Firstly there needs to be clarity on whether the sharing factors apply on a pre-tax or a post-tax basis – the consultation document is silent on this and it is not clear that this has been considered.
- Secondly, it is not clear that the consideration has been given to other elements of the framework proposals on the sharing factors. In particular, the decision to remove 50bps from the base cost of equity to reflect the first portion of any outperformance has a direct link to the 'effective' sharing factors proposed. A simple calculation suggests that if only half of the 50bps related to Totex efficiency then the 'effective' sharing factors are in fact around 10-12% lower than the 15-50% quoted i.e. in the range of 5-35%.

Given these factors it is impossible to support your contention that these 'effective' sharing factors will not have an impact upon company behaviours. Again it would be useful to review the analysis and evidence you quote to support your proposal.

Finally, the CMA in its assessment of the Bristol Water appeal, concluded that a Totex sharing factor of 50% was appropriate. Again the key points of difference between this conclusion and Ofgem's proposals would be useful to understand.

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

As discussed above. The potential impact of totex sharing factors is not limited to company responses with respect to costs only. The impact of any decision on sharing factors must be considered in the context of the impact it has on the wider incentive package and whether it drives the correct long term behaviours by companies by appropriately balancing the risk and reward between customers and investors.

CSQ77: Do you have views on whether adjustments to sharing factor levels after the price control is set are desirable or necessary?

The RIIO2 proposals as set out in the consultation document are the most complex set of arrangements that the UK regulatory framework has seen since inception. They are an order of magnitude more complex than those at RIIO1 and as such have failed in your stated objective of simplifying the regulatory framework.

Part of this complexity is the increased role that Ofgem is providing itself in actively attempting to control for and intervene in multiple aspects of both companies' daily operations and any developments that may occur over the duration of the price control. This is clearly taking the framework a significant step away from the broad incentive framework and much closer to greater intervention and ex-post regulatory framework and the well documented issues that brings for customers and investment.

It would be naive to think that the potential for Ofgem to step in at any time and reset key elements of the regulatory framework will not impact upon the perceived stability of the regulatory framework in energy in the UK (even compared to other sectors in the UK such as Water), the investment decisions taken by companies to deliver cost sand service improvements as there will be no certainty over payback rates in cost benefit analysis and ultimately financing costs in the sector.

Again it is clear that this proposal has not been through in any detail and as with all areas of Ofgem's thinking to date not accompanied by any form of detail IA of whether the impact of these proposed changes will work in the customers' longer term interests and in line with their primary obligations.

We do not believe that this change can be justified in light of the failure to address the above issues.

CSQ78: Under which circumstance do you consider such adjustments should take place?

As noted above we do not believe that it is appropriate to change sharing factors within the price control period.

CSQ79: When do you consider an adjusted sharing factor should be calculated?

As noted above we do not believe that it is appropriate to change sharing factors within the price control period.

CSQ80: Do you agree with our comparative assessment of RAMs set out in Table 18 in Appendix 4?

We previously submitted a detailed report evaluating the options for RAMs in the sector via the ENA. It is not clear where Ofgem have considered this evidence in its assessment and in line with its duties as a regulator.

We would refer you back to the evidence already presented on this issue in previous consultations in answer to this question and address directly the issues set out in that paper.

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

Yes we would agree with the proposal for no discretionary adjustments as this provides further complexity and uncertainty.

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

N/A

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

No. We previously submitted a report to Ofgem providing a critical review of the options for a RAM set out by Ofgem. That analysis showed that the sector average-based approach was the option that had the most significant drawbacks in terms of the high levels of uncertainty and distortion to incentives and company behaviour. We continue to support that position.

It is disappointing that Ofgem have failed to adequately respond to the information and evidence presented to them in that report as required by their obligations. We would ask that Ofgem review the evidence presented in that report and directly address the challenges set out to what has become Ofgem's preferred approach.

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?

No. This proposal further exacerbates the negative aspects of this approach set out in our report to Ofgem. In practice this means that the impact on companies are even greater than otherwise would be the case and hence further increasing uncertainty and distorting incentive properties. I.e. best performing companies would be adjusted backwards further and suffer the greatest penalty whilst the worst performing companies would receive the greatest financial support.

It is hard to understand the economic rationale that Ofgem have deployed to reach this conclusion and proposal.

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?

Any proposed upper or lower range for a RAM will have an impact on decision making at the margin and beyond that point. Even if further benefit can be identified for customers it will not be delivered and hence not revealed for customers to take of advantage of either short term or longer term. This is not a desired outcome for customers.

Whether the proposed range is fair can only be assessed against whether additional benefits could be delivered for customers that have a greater value than the costs are not delivered. This would seem to be against the customer's interests.

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 as currently defined is a crude metric for measuring directional performance against regulatory allowances. What it does not do and never set out to do was be a measure of either profitability or cash/earnings of a company. This is because it is not a cash measure. It measures a pound saved of 'Fast' money as being equal to a pound saved of 'Slow' money. This does not equate to the cash that companies receive for these different types of expenditure i.e. fast money received in full in the year and for gas distribution allowed slow money received as 1/45th every year plus an element of return.

Using RoRE within a RAM mechanism looks to try and convert a non cash measure of performance directly into cash adjustment mechanism. This has a number of undesirable effects. Firstly it reintroduces a bias between fast and slow money and undermines the benefits of the Totex approach. It complicates how the adjustment to WACC and Revenues can/should be made to adjust for any out or underperformance with potentially unintended and iniquitous impacts on companies and ultimately inefficient decision making.

The measure against which the RAM is calibrated and operates needs significant further consideration if it to drive the desired outcomes and not distort decision making that would deliver long term consumer benefit.

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

Including financial performance within the calculation of RoRe and the RAM also needs further consideration. The proposal without any adjustment would treat them as being equal in value and impact for customers. However, this is not the case.

For Example: One company performing well through delivering strong operational efficiency and incentive performance against service levels could find its financial reward pulled back by another company who is performing very well through financial engineering. If this is the case, the strong operational company will pull back on its operational efficiency which requires resource and investment. The customer longer term will benefit less under this scenario as it will reveal less to the regulator in terms of frontier operational performance that could be applied to all customers at the next price review. The performance being delivered financial parameters will not be shared at the next price review and indeed may be only short-lived because of a particular arrangement that is in place.

This is a very clear example of where a simplistic RAM can have distorting effects on company behaviours that is clearly detrimental to long term value for customers.

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?

Under either scenario the uncertainty that the proposed RAM approach will bring is very significant. A true-up at the end of the price control will provide a clearer indication of the likely outcome as annual performance is reported and will allow companies to change their behaviours to respond to the evolving outcome and address some of the uncertainty that will still be prevalent.

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

It must be recognised that the proposals put forward in the consultation document represent the most complex set of regulatory arrangements presented in regulated industries in the UK. There are several outcomes from this increased complexity within the framework and include;

- a significantly increased role for Ofgem on a regular basis to intervene in the regulatory framework and in some instances make clear commercial decisions on behalf of the customer and companies
- an increased regulatory reporting and burden on companies and Ofgem
- increased volatility in prices and service levels and with that reduced transparency for customers and stakeholders
- significantly reduced stability in the regulatory framework through regular and ex-post interventions by the regulator

There are elements of the proposed framework that we believe are beneficial and others that we disagree with. These are summarised below:

- **Uncertainty Mechanisms & Indexation** – the use of uncertainty mechanisms has been an integral part of the regulatory framework for some time. We would support, with the correct design of each mechanism, the continued and in some areas increased role for this approach. We also support the use of indexation in the areas proposed.
- **Cashflow floor** – analysis of this proposal suggests there is little or no benefit to this mechanism. It does not achieve its primary objective of enhancing or even supporting credit quality. The focus on liquidity is spurious as in most cases the mechanism would only come into force after it loses its investment grade rating and hence fails to meet a key licence obligation. This adds significant additional complexity to the framework for no benefit and should be removed.
- **Network Resilience Measure** – We support the inclusion of this measure in the framework. However, it will require Ofgem to accept the need for flexibility for the companies in choosing the right intervention decisions to deliver the required outputs.
- **Innovation Stimulus** – we agree with the proposal to continue to support investment in R&D and innovation.
- **Returns Adjustment Mechanism** – Whilst continue to question the need for a RAM within the mechanism. Our greater concern is the form of the mechanism that Ofgem has chosen for the gas distribution sector and the potential it has to drive counterintuitive responses from customers.
- **Competition** – it is clear that many of the options presented for introducing competition cannot be applied the relatively very small scale of investment at a gas distribution level. However, at a larger scale we accept that it may have potential to drive value for customers.
- **Business Plan Incentive & Totex Sharing Factor** – We support the general principle of both of these elements of the framework. However, we do have remaining concerns on the detail of the proposed mechanisms and the lack of consideration and clarity of how these incentives will interact.

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

We have previously supported the inclusion of a mechanism within the GD proposals to more appropriately deal with funding of the mandated Repex programme through the use of a revenue driver linked to the volume and diameter band of work completed. We would continue to support consideration of this approach.

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

We believe a more appropriate balance can be achieved by addressing the concerns raised above.

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?

There are a number of risks that you have so far failed to consider in your analysis. The risks you describe are not separable in the way have outlined and fails to consider the interlinkages between these.

Firstly, the asset stranding risk is not addressed by using the standard economic life of the asset particularly for the gas distribution sector. Whilst there is a strong economic case for continued use of the gas networks in a decarbonised energy sector through a conversion to Hydrogen. This is contingent upon key government policy decisions. Standard economic lives of assets in the gas sector extend beyond those potential timeframes. Ofgem explicitly recognise this risk in their business plan guidance and assessment criteria applied to companies but fail to recognise this in their assessment of risk when considering an appropriate risk/reward package.

Secondly, Ofgem's own proposals are introducing additional risk into the sector that again is conveniently not being considered. As an example the proposed financial parameters proposed by Ofgem lead to a base position that an efficient 'notional' gas distribution network is not financeable against the minimum criteria for investment grade credit ratings. The only viable option to address this gap is for shareholders to inject more cash into those companies to remain financeable. This is a position that endures well into the 2030s under Ofgem's proposals.

There is significant theoretical and empirical evidence that shows that this type of extension of cash flows from an investor perspective has a negative impact on risk and hence return. This issue is further exacerbated when Ofgem's proposals imply that shareholders may get their money back post this period i.e. into the 2040s, which given the above point, they have recognised that there is a risk that networks may not be required. It is clear that Ofgem have so far failed to consider both the additional regulatory risk they are bringing to the sector but also the interaction between key assumptions and longer term risk that certain parts of the sector and their investors face.

Finally, the broader proposals conveniently move between explaining networks as very low risk because of their monopolistic nature, whilst at the same time bringing forward mechanisms more that expose them to risks faced by companies in competitive markets such as exposing large elements of the expenditure base to competition and using dynamic and relative target setting to outcomes. These factors are not considered within the risk profile of the sector.

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?

It is not clear to us at this stage that when taking the whole price control package into consideration that your statements that it will be a 'failsafe' that is highly unlikely to be triggered will be reflected in reality. It is clear that the RAM mechanisms proposed for the gas distribution sector does raise issues of uncertainty both for companies but also for key external parties such as rating agencies. Assessment of individual company performance will now need to be linked to assessments of other companies directly. These issues have yet to be addressed in Ofgem's proposals.

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?

There are a number of key challenges to the concept of an expected-allowed return wedge. Ofgem have stated that the basis for this is an assumption of an 'expectation of a probability' based on history and as yet have not attempted to calibrate or understand the impact on this assumption. If you add into this Ofgem's own admission that they suffer from an asymmetry of information and understanding of the detail of the companies they regulate than this presents a challenging background to Ofgem's proposals.

There is a distinct possibility that Ofgem's assumption of the new framework incorrect and there is on average no systematic outperformance of the regulatory settlement and if there is Ofgem get their analysis wrong and significantly overestimate this impact. Where this is this level of ambiguity it would seem more appropriate to deal with this through a single mechanism that addresses the issue if and when it occurs. This would simplify the framework significantly and remove the potential for unnecessary risks in the framework that Ofgem get it wrong.

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

The balance between customer groups and between customers from an intertemporal perspective are key considerations for the balance of the price control.

We fully support the proposed agenda for dealing with vulnerability and affordability and has been a key part of NGN's business during RIIO-GD1. It is important to remember that value for customers is not only represented in terms of cost.

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?

The methodology does not introduce any unreasonable bias between different groups that would not be supported by customer sand stakeholders.

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

Detailed modelling of your proposals for a notional GDN has shown that some of your key parameters do cause issues with both levels of charges and financeability over the longer term. The low cost of equity parameters set out in your proposals are only made viable by the decision to move cash forward from future periods to RIIO2 through the switch to CPIH as the inflation measure and adding a wedge to the base cost of equity and require equity investors to inject funds into the notional structure. This is a position that cannot continue without placing upward pressure on costs for financing these activities.

The corollary of this is that beyond RIIO2 further cash will have to be identified by future customers to address the shortfalls that will exist. It is clear that the decisions on the financial parameters within RIIO2 have not been modelled over the longer term and the question you raise has not been fully analysed. As a result it is not clear that you are in a position to present a view at this stage on whether you can illustrate how you have fully considered or addressed the intertemporal or intergenerational impacts of some of your decisions in RIIO2 and achieved an appropriate balance.

We would propose that you need to consider these impacts over more than one price control period to be able to satisfy your obligations to both current and future customers.

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

Our primary concern is that Ofgem has not undertaken full regulatory impact assessments to date for the major policy changes that are being made as part of the

RIIO-2 proposals other than the potential expansion of late competition. The rudimentary assessments in appendix 5 are not fit for purpose and do not meet the statutory requirements. It is important to initiate regulatory impact assessments (RIA) very early in the wider policy development process otherwise these simply become a back-end justification activity. This point is heavily emphasised in cabinet office guidelines and by the National Audit Office in its general assessment of these exercises. Given Ofgem has been considering many of the changes since early 2018 it is disappointing, and not following good regulatory practice, that there are no RIAs on core changes to the price control methodology. It is in the initial stages that structured thinking can contribute most to policymaking, and leaving full assessments until after decisions have been made, simply leads to self-justification and box ticking.

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

It is difficult to assess the assumptions given so little detail is provided and many are simple statements of opinion with no evidence trail to support them. The problem the change is seeking to address is not clearly defined. Overall there is little or no consideration given to “do nothing” or “alternative options”.

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

There are additional uncertainties that have not been captured:

- the response of credit rating agencies and debt investors to the suite of changes in the financing elements of the proposals.
- the response of customers and other stakeholders to reductions in the focus on environmental and social outputs
- the alignment of Ofgem proposals to government policy initiatives as laid down in the Industrial Strategy and Clean Growth Strategy.

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

Ofgem has a well-established methodology for carrying out regulatory impact assessments. This methodology should be applied to the significant RIIO-2 methodology proposals. It is not clear that Ofgem have undertaken any detailed analysis to support the key framework changes presented and as such cannot be seen to have fulfilled its obligations in ensuring that these changes are demonstrably in the customers’ better interests.

RIIO-2 Sector Specific Methodology Annex: Finance - Question Responses

FQ1. Do you support our proposal to retain full indexation as the methodology for setting cost of debt allowances?

On the understanding that other methods of setting the cost of debt allowance in RIIO2 have been discounted we support indexation as a concept in principle. We are indifferent as to whether full or partial indexation is utilised provided that the chosen permutation of indexation period, index rating band and appropriate uplift for other costs provides adequate cover for our efficiently incurred costs (on existing and new debt) throughout the period.

FQ2. Do you agree with our proposal to not share debt out-or-under performance within each year?

Yes we agree. In our view in-year sharing is not in the best interests of network companies and customers for a number of reasons including:

- Complexity of data gathering and mechanism implementation; and
- The potential diminution of incentives to raise debt efficiently and the prospect of unintentionally rewarding inefficiency and undue risk-taking at the expense of customers.

In any event, whilst we do not necessarily support the concept of Return Adjustment Mechanisms, these would potentially be at the regulator's disposal to "correct" for any "excessive" outperformance on cost of debt.

FQ3. Do you have any views on the next steps outlined in Paragraphs 2.22 to 2.25 for assessing the appropriateness of expected cost of debt allowances for full indexation?

In terms of Ofgem considering potential improvements to the indexation mechanism we take the following view:

- A rolling average of 10 years is inappropriate as a mechanism to use in the RIIO-GD2 period to compensate network companies for the cost of efficiently incurred debt;
- As a notional concept there is logical merit in seeking to match the averaging period inherent in the index mechanism with the average life of the network assets being funded (c20 years) and the average tenor of actual debt issued by networks (also c20 years);
- Regardless of the averaging period used the index should be calibrated to ensure that it adequately captures the interest rate and credit spread environment pertaining at the time that much of current sector debt was incurred, i.e. in the months after network sale in 2005 and in the wake of the Global Financial Crisis (broadly up to the end of 2011).

- Submitted in support of our response is an expert report[1] we commissioned from Frontier Economics (Frontier) to establish the optimum indexation period and method that should be adopted within the allowance mechanism to ensure that the allowance would cover a notional GDN's efficiently-incurred debt costs without placing an unnecessary burden on customers. Frontier's analysis, which models potential outcomes under a range of plausible interest rate scenarios, strongly supports our contention that sector average debt costs would not be met by an allowance based on a 10-year trailing average. It also provides evidence that a number of alternatives could be expected to provide a Cost of Debt Allowance for RIIO-GD2 that would be appropriate in meeting Ofgem's objectives for the sector:
  - A 15-year rolling trailing average; or
  - A 13-17 year "trombone" trailing average; or
  - A partial indexation variant, subject to correct calibration of embedded debt costs and the ongoing weighting between embedded and new debt.
- Whichever method is used, the benchmark should be calculated with reference to corporate bonds rated in the wide BBB band, rather than using an average of BBB and A. The majority of network companies are rated in the BBB/Baa space and the lower returns contemplated by Ofgem for RIIO2 are likely to lower the average rating of the sector.
- We do not acknowledge the existence of a "Halo Effect" whereby UK regulated utilities can supposedly issue debt more cheaply than comparably rated issuers in other industry sectors. Accordingly no downward adjustment to observed index readings should be made in setting the allowance.
- As any allowance based on observed market yields will only cover the interest / coupon cost of a network company's debt a separate explicit allowance should be given for the other costs of maintaining a substantial debt portfolio so that all financing costs are adequately compensated for by the allowance. These will include:
  - Arrangement fees etc. payable to banks for managing the issuance of capital markets debt;
  - New issue premia on debt issues (as the allowance mechanism only accounts for secondary market yields);
  - Legal, credit rating and agency costs etc.;
  - Commitment fees on bank facilities and other liquidity costs; and
  - Hedging costs;

  The quantum of these costs will be the subject of further analysis by us but for a notional company we believe they represent additional costs of up to 0.20% on total debt. We also estimate that carry costs where maturing debt is refinanced to a prudent timetable can also result in additional costs of around 0.20%.

[1] Frontier Economics (2019), 'Cost of debt in RIIO GD2. A report prepared for NGN', March.

- Consideration should also be given to providing adequate compensation for the additional credit spread demanded by investors in index-linked debt relative to fixed rate, a phenomenon liable to be amplified in the case of the currently illiquid CPI/CPIH market. This is on the basis that the iBoxx indices currently used to calculate the cost of debt allowance comprise nominal bonds, the credit spreads on which are lower than those which would be payable by an issuer of index-linked bonds.
- For a "small company" additional costs may arise so the concept of a small company allowance is one we support. For example, sub-benchmark bond issues typically attract a higher rate than benchmark issues due to liquidity considerations and a smaller pool of interested investors driving price competition. Smaller companies are also likely to have less influence on pricing for fees associated with debt issuance.
- A network issuing debt only infrequently over the duration of a price control period (rather than in small amounts as above) is exposed to additional timing risk against an allowance based on a rolling average (where the interest rate environment in which the debt is issued might be particularly low or high relative to the average across the period). This could result in the allowance materially under- or over-compensating the network for the actual cost of the debt issue. There is therefore merit in applying a company-specific time-based weighting to the average allowance to mitigate this risk (along similar lines to the weighted allowance applicable to SHETL in RIIO-T1).

FQ4. Do you have a preference, or any relevant evidence, regarding the options for deflating the nominal iBoxx as discussed at Paragraph 2.14? Are there other options that you think we should consider?

- Our preference would be for option (ii) (use of an OBR forecast) although we do not necessarily accept that CPI and CPIH are sufficiently similar (retrospectively and prospectively) for one to be used as a proxy for the other.
- We do not think that the use of a measure of breakeven inflation would be appropriate (regardless of the method of calculation) as we believe that breakeven inflation tends to overstate outturn inflation. There is historic empirical evidence for this and the effect is potentially justified on the basis of an Inflation Risk Premium.
- Whichever method is used there is still a potential mismatch insofar as the inflation rate used to derive a real cost of debt allowance is liable to differ from the actual inflation rate used to calculate nominal revenues and index RAV.

FQ5: Do you agree with our proposal to index the cost of equity to the risk-free rate only (the first option presented in the March consultation)?

In principle, we agree that estimating the cost of equity as a weighted average of an indexed risk-free rate and a stable TMR with the weight equal to the fixed beta factor is superior when contrasted with other proposed cost of equity indexation options.

We recognise that if the implied increase of the risk-free rate were to materialise, it may be regarded to be marginally beneficial for the network companies. However, the quantum of this marginal benefit should not be overestimated: using Ofgem's assumptions for the TMR and Beta (with which we do not agree) the increase on the cost of equity is unlikely to be higher than 0.03%, which is not sufficient to solve financeability problems that GDNs are going to face with in GD-2.

NGN maintains of the view that cost of equity indexation is not devoid of challenges and unintended implications for both consumers and finance providers.

Ofgem itself identifies the following practical challenges:

- Deriving a CPIH real risk-free rate, given the lack of CPIH or CPI-linked government bond information;
- Choosing the appropriate tenor for risk-free rate;
- Estimating expected CPIH-RPI wedge;
- Choosing appropriate averaging period and a cut-off date to measure the risk-free rate.

Other implications include increased volatility and reduced predictability of customer bills, of cash flows and of returns for shareholders. We understand that indexation of the risk-free rate has been designed to avoid forecasting errors and to substitute the established "ex-ante + aiming up" approach which has been a common practice among utility regulators since privatisation. However, we do not share a belief that indexation is by definition a better substitute for this established practice. The fact that risk-free rate has turned out to be lower than predicted in RIIO-1 does not in itself warrant a transition to mechanistic indexation. As we know, history is not a flawless predictor of the future and often a balanced combination of hard market data with expert judgement provides a more balanced solution.

Moreover, in the environment of heightened political uncertainty and constrained returns a mechanistic approach to setting the cost of equity may even further exacerbate financeability concerns should the markets take a downward turn. The ability of companies to withstand any market shocks and maintain investment grade credit ratings may be strained even further. It is also disputable that equity beta in GD-2 should be lower than in GD-1 and hence the cost of a potential forecasting error might have been overestimated.

However, it appears that having considered all associated risks Ofgem has decided to proceed with the implementation of the cost of equity indexation. If this is the case, the exact calibration of the mechanism becomes critical in mitigating the downsides of this approach. We provide our view on some of the elements of such a calibration in the answers to the subsequent questions.

FQ6. Do you agree with using the 20-year real zero coupon gilt rate (Bank of England database series IUDLRZC) for the risk-free rate?

We agree that 20-year tenor of the benchmark gilts is an appropriate maturity for the estimation of the risk-free rate for the gas network companies. However, we argue that nominal instead of real gilts should be used.

Our view, substantiated by NERA economic consulting[2], is that 20-year nominal gilts serve as a better proxy for the risk-free rate. To derive risk-free rate in CPIH terms nominal rates should be deflated using the latest OBR/HMT 5-year CPI inflation forecast or the long-term Bank of England CPI target. The rationale for our opinion is as follows:

- 20-year gilts are better aligned with an average asset life in the gas sector and average tenor of companies' debt;
- 20-year gilts are more stable than 10-year ones,
- 20-year gilts are used by DMS and other financial practitioners to derive risk-free rate;
- nominal gilts are less volatile than real gilts;
- long-term real guilt yields are suppressed by excess demand created by pension funds' asset allocation policies;
- 20-year real gilts are less liquid and hence are a less objective measure of a risk-free rate than nominal gilts;
- using nominal gilts avoids the need of an RPI/CPIH wedge, the estimation of which presents a separate challenge;
- OBR/HMT/BoE inflation forecasts are more objective measures of inflation than breakeven inflation, which is known to be overstated;
- Other UK and European regulators have been principally using nominal gilts.

FQ7. Do you agree with using the October month average of the Bank of England database series IUDLRZC to set the risk-free rate ahead of each financial year?

No, we do not agree. As we have set out in the response to the previous question, Bank of England database series IUDLRZC is not the best proxy for the risk-free rate. In terms of the tenor, 20-year nominal series should be used instead.

As for the averaging period, we believe that 1-month averaging period may capture short-term market noise and not be reflective of a sustainable interest rate trend.

2 NERA (2019), 'Cost of equity indexation using RFR. A report prepared for the ENA'.

Conversely, a very long averaging period may not be able to capture the latest market developments. Therefore, we believe that the averaging period should span a period of six to twelve months, which appears to strike a better balance between capturing the most recent data and avoiding an overreaction to market noise.

FQ8. Do you agree with our proposal to derive CPIH real from RPI-linked gilts by adding an expected RPI-CPIH wedge?

No, we think that this approach is inherently liable to distortions, is more complex and less transparent than the one outlined in our response to FQ6.

We believe that 20-year nominal gilts deflated by OBR/HMT/BoE long-term forecast of CPI inflation would serve as a better proxy for real risk-free rate for gas networks in the UK.

FQ9. Do you have any views on our assessment of the issues stakeholders raised with us regarding outturn inflation, expected inflation, and the calculation of arithmetic uplift (from geometric returns)?

Ofgem appears to have put considerable weight on the recommendations contained in the UKRN study on the cost of capital, including those on inflation and the arithmetic uplift from geometric mean of returns to calculate TMR in CPIH terms.

The issues of using the outturn inflation as published by the Bank of England in the Millennium dataset to deflate nominal returns to derive real returns in CPIH terms and of applying UKRN approach to arithmetic uplift were considered in detail by NERA in a study commissioned by the ENA on behalf of UK energy networks. We believe this study contains useful evidence and must be thoroughly considered by Ofgem prior to the methodology decision[3].

In summary, NERA's analysis shows that the Millennium CPI dataset does not provide a reliable measure of historical CPI inflation, which leads to the conclusion that the historical TMR measured starting from 1900 has to be calculated relative to the official RPI inflation and then adjusted upwards by the expected RPI-CPIH wedge.

NERA also found that UKRN's assertions on the issue of the "predictability" of returns do not appear to be well founded and that CMA's (NIE, 2014) position on this issue is much more robust. NERA, therefore, believes that there is no evidence that supports an overturning of recent regulatory precedent on this issue, and that an adjustment to the arithmetic average should be of the order of a maximum of 30 bps.

When one contrasts the difference between the arithmetic and geometric averages of around 200bps (180bps as per DMS 2017 publication)[4] with UKRN's recommendation

[3] NERA (2018), 'Review of UKRN Report Recommendations on TMR', 20 November 2018.
[4] Dimson, E., Marsh, P. and Staunton, M. (2017), 'Credit Suisse Global Investment Returns Yearbook 2017', p. 14.

of using an arithmetic uplift of only 77 bps it becomes very clear that the UKRN adjustment is too low.

Therefore, we would share the CMA's view and other academics and practitioners' conclusion, stating that the arithmetic average return provides the most relevant measure for the purposes of setting the allowed cost of equity.

We are not persuaded that cross-checking of returns in US dollar terms, suggested by Ofgem, can assuage the concerns raised above..

For example, the statement that Purchasing Power Parity should hold in the long-run, may indeed be valid in theory but is much more questionable in practice. There are several reasons why PPP should not be expected to hold in practice: transaction costs and trade barriers do exist, not all goods are sold internationally, etc.

An empirical equivalence of UK returns in GBP and USD terms for the 1899-2016 is not a robust basis for concluding that the 'back-cast' index of historical CPI is an unbiased estimate of the unknown true historical CPI. On the contrary, this reasoning implies that the greatest part of the DMS dataset, i.e. 1899-2012 series which was based on RPI, is a more appropriate measure of inflation over the long term, as it produces real UK equity returns in GBP that are identical to UK returns in USD.

Therefore, Ofgem's choice of using CPI-labelled Millennium dataset as the preferred historical deflation technique and adoption of lower arithmetic uplift are not consistently supported by the cross-check against returns in USD terms.

FQ10. Do you have any views on our interpretation of the UKRN Study regarding the TMR of 6-7% in CPI terms and our 6.25% to 6.75% CPIH real working assumption range based on the range of evidence?

We believe that the suggested range of 6.25% to 6.75% CPIH real TMR is too low as it was derived using flawed data on CPI inflation and an unfounded averaging methodology of analysing long-run returns.

We base our view on analyses and findings of prominent academics and economic consultancies, which have provided regulatory expertise for UK regulators and regulated companies. Below we refer to some of their findings, but we encourage Ofgem and all relevant stakeholders to consider the mentioned studies in full detail to inform the thought process and decision making.

We remain of the view that both historic and forward-looking evidence supports the TMR in CPIH terms to be in the range of 7 – 7.5% (6 – 6.5% in RPI terms) as recommended by Oxera in its report on the cost of equity for RIIO-2[5].

Following the abovementioned report, Oxera has provided further analyses to test whether Ofgem's cost of equity proposals are consistent with evidence from debt

[5] Oxera (2018), 'The cost of equity for RIIO-2', 28 February, p. 35.

markets. In its recent report[6], Oxera contends that asset risk premium should be materially higher than the debt risk premium in order to ensure that the expected equity returns are calibrated correctly relative to the expected debt returns. It has tested Ofgem's working assumption for the cost of equity and has found that Ofgem's proposals do not meet its proposed test, with the midpoint of its proposed range being 70-100 bps below the midpoint level proposed by Oxera's test.

Ofgem suggests that returns have declined in recent years and refers to CEPA's DGM-implied return of 8% nominal to support a TMR range of 8-9% nominal, inferred from the UKRN study. NERA has analysed both of these points to find that "there is no market evidence to show that the TMR has declined in the recent past" and that "once we correct for errors, CEPA's DGM model supports a forward-looking TMR of 6.5 to 7.1 per cent (real RPI)", which is equivalent to 9.5 – 10.1% nominal[7]. Based on the Bank of England DDM, Oxera has calculated TMR from 2004 to 2017, which demonstrates that nominal TMR stays over the 10% mark over the whole period. It also shows that the expected TMR is not currently abnormally low and has not followed the downward trend in interest rates over this period[8].

Regarding the evidence from investment management firms to cross-check the TMR, we agree with Oxera, who recommends that no weight should be placed on these observations[9], due to a number of limitations, outlined in our response to FQ 16.

FQ11. Do you have any views on our reconciliation of the UKRN Study to previous advice received on TMR as outlined at Appendix 2?

From our perspective, waterfall charts on Figure 18 and Figure 19 implicitly suggest that the TMR recommended by UKRN to Ofgem is expressed in RPI terms, which would have been consistent with earlier pieces of advice (produced in RPI terms) also co-authored by Professor Stephen Wright.

However, following clarification from Professor Wright it transpired that a UKRN recommendation of a TMR of 6-7% was expressed in CPI terms.. This means that in RPI terms the TMR has fallen since 2013 by 125 bps (from '6.25 to 7.25% for the assumed arithmetic average real market return on a consistent RPI basis'[10] in 2013 to 5-6% in 2018). This is counterintuitive and directly contradicts Ofgem's own acknowledgement of a stable TMR within a relatively short period of time: 'TMR, when estimated with long-run averages, would be expected to change very little over the price control'[11]).

[6] Oxera (2019), 'Asset and debt risk premiums. Prepared for Energy Networks Association'. '.
[7] NERA (2018), 'Further evidence on the TMR', 20 November, p.I.
[8] Oxera (2018), 'The cost of equity for RIIO-2', 28 February, p. 28.
[9] Oxera (2019), 'Rates of return used by investment managers', 6 March, p.10.
[10] Stephen Wright, Andrew Smithers (2013), The Cost of Equity Capital for Regulated Companies: A Review for Ofgem, p.2.
[11] Ofgem (2018), 'RIIO-2 Sector Specific Methodology Annex: Finance', 18 December 2018, para 3.22, p.16

It appears that inflation has been one of the drivers of this decline. UKRN study argues that historical real total market returns should be analysed with reference to historical CPI inflation published by the Bank of England in the ‘Millennium dataset’. However, given that the DMS dataset is accepted as a reliable input for nominal returns, it is not clear why the same credible source of information should not be used to inform the inflation assumption. The usage of disparate sources of information for nominal returns and for inflation, by definition, creates distortions. We believe that if adjustments to DMS inflation data were required, they should have been transparently set out and justified separately.

Moreover, given that CPI has almost always been lower than RPI, it appears logical that inflation used in the UKRN study labelled as ‘CPI’ (as pointed out by NERA and Frontier it cannot be regarded as true and reliable CPI inflation as the relevant CPI data does not exist since 1900) should have been on average lower than the RPI/CPI hybrid measure of inflation used by DMS. This, in turn, means that real CPI-deflated TMR should have been higher than the RPI-deflated TMR. However, some of the UKRN study authors concluded that due to this difference in inflation the geometric average of long-term real returns on UK equities has fallen from 5.5% to 5.2%. This is counterintuitive and requires explanation.

All parties accept that transition from RPI to CPIH moves cash forward, hence it appears to be wrong to assume that real CPI-based TMR is equal to the RPI-deflated TMR. Therefore, we fully share NERA’s proposal, formulated as follows: ‘For the purposes of determining a forward-looking CPI-deflated TMR for setting the cost of equity allowance at RIIO-2, the historical RPI-deflated TMR should be adjusted upwards by the expected RPI-CPI wedge, of around 100 bps to 130 bps’[12].

As for a lower than normally adopted arithmetic uplift, we have outlined our position in the response to FQ9. Here it is worth emphasising that Wright and Smithers in 2013 have pointed out that ‘since evidence of predictability is contentious, we argued that regulators should explicitly consider whether they wish to take this factor into account’[13]. We would question whether anything has changed since 2013 and would urge the regulator to follow the above advice and provide the stakeholders with an “explicit” consideration of the predictability factor.

FQ12. Do you have any views on our assessment of the issues that stakeholders raised regarding beta estimation, including the consideration of: all UK outturn data, different data frequencies, long-run sample periods, advanced econometric techniques, de-gearing and re-gearing, and the focus on UK companies?

We note that over and above the pieces of evidence from NERA and Oxera mentioned by Ofgem in the Sector Specific consultation, Oxera has undertaken further research

[12] NERA (2018), ‘Review of UKRN Report Recommendations on TMR’, 20 November, p.5
[13] Stephen Wright, Andrew Smithers (2013), The Cost of Equity Capital for Regulated Companies: A Review for Ofgem, p.8

on the issue[14], the findings of which should be carefully considered prior to the Methodology decision.

We do not believe that there is enough justification to break with regulatory convention of using OLS methodology in beta estimation by introducing GARCH class models.

We remain of the view that the estimation horizon of the most recent years would be consistent with the established regulatory practice, advice from academics and industry experts, including above mentioned evidence from Oxera and NERA, and a five-year longevity of the next price control itself. Structural breaks identified in the comparator companies' data invalidate any potential benefits (if any) of longer observation periods.

On the issue of de-gearing and re-gearing, we believe there could be two distinct alternatives:

1. if the notional level of gearing assumed for the cost of capital is set independently of betas and its level is different from the gearing levels underpinning raw beta observations, raw equity betas must be re-levered to a notionally assumed level to account for the impact of gearing on financial risk;
2. alternatively, if raw betas of the companies are to be used unadjusted, the regulator must adjust the notional level of gearing used to set the WACC and other financial parameters to the level of gearing underpinning raw observed betas. However, the latter approach may not only lead to inefficient corporate structures, generally detrimental to customers, but it would also require customers to cover fairly material costs of transition from previously assumed notional gearing level to the new one.

Using data around Global Financial Crisis (GFC) may indeed be potentially useful but only if chances are high that similar circumstances are likely to be repeated in RIIO-2. In our opinion, currently there is not enough evidence to suggest that the same circumstances, which prevailed at and after the GFC, should be envisaged in the next price control.

We are concerned that if lower frequency observations are to be used (which we disagree with), choosing a particular anchor point in time will inevitably be a matter of judgement, which is likely to be biased.

We disagree that there is any inconsistency with the proposal to use long-run evidence on TMR and a shorter observation period for estimating beta. TMR representing the whole market is less likely to have been materially influenced by structural breaks relating to comparator companies, where changes in external environment, internal business models, levels of gearing, etc. result in material changes in betas.

[14] Oxera (2019), 'The estimation of beta and gearing'.

If Ofgem considers that international comparators may create additional issues relative to UK benchmarks, it would be useful to see a full impact assessment of these "additional issues" with the robust justification of why they have led to discounting of this potentially invaluable facet of evidence.

FQ13. What is your view on Dr Robertson's report?

We do not regard Dr Robertson's report as overwhelmingly supportive of GARCH-class models' superiority over OLS for the purpose of beta estimation for RIIO-2 price control. However, some of the findings of the report appears to share and support our position outlined in the response to FQ12 in relation to using recent data in beta estimation, shorter estimation window, higher data frequency, anchoring to a particular point in time and in relation to structural breaks.

To illustrate the above statement, it may be useful to provide selected quotes from the report:

- "Higher frequency data provides more precision in estimation" (p.3)
- "…beta in the immediate future may be well approximated by the current estimate, in which case OLS on the most recent data may still be the most useful strategy and this is very much the standard approach where a recent window (of say five years of monthly data) is used to obtain a current estimate of beta" (p.4).
- "…the average value of beta over the recent past can be used to estimate the expected value of beta over some comparable future interval" (p.5).
- "…the addition of a single day or a month can generate substantial movement in the estimated Beta" (p.7)
- "GARCH needs large sample to estimate accurately. Using the estimated coefficients looks risky if we only have say 500 observations" (p.22).
- "…at lower frequencies we have many fewer non-overlapping blocks of data. Using even longer intervals of data is of course possible but then raises the problem that over very long periods there may be structural changes in beta due to the changing nature of the underlying business. (p.34)
- "The conclusion would seem to be that a sensible estimation strategy would be to use high frequency data and also to use the longest estimation window possible unless there clear evidence of changing structure of the business" (p.35).

Indepen points out that a company specific solution may be required to adopt an appropriate GARCH specification[15]. We think that this contradicts with Ofgem's

[15] Indepen (2018), Beta Study – RIIO-2, p. vii.

determination of using notional rather than company-specific approach in setting the cost of capital.

The report rightly acknowledges the existence of structural breaks around the GFC and as a consequence an inappropriateness of using a pre-2008 data. Instead the authors suggest that 'the period since an identified structural break … should result in a stable estimate of the equity β'[16].

It also acknowledges that structural breaks by implication invalidate a suggestion to analyse the full available set of data. Hence, the proposed approaches for the measurement of Beta are contradictory: 'Collate an extensive data set – probably for the period from 2000, even though this will include some structural breaks'. Advice to 'Review data for structural breaks and decide how to proceed'[17] does not appear conclusive to us.

It is notable that Indepen has not endorsed the use of quarterly data; it presents only daily, weekly and monthly estimates[18]. We believe this implicitly supports our position of inappropriateness of using quarterly data.

We disagree with the suggestion of application of a "normal" MAR to adjust the RAB gearing estimate to make it a closer proxy to an Enterprise Value measure. MAR is reflective of subjective investor expectations of outperformance at a point in time and should not affect systematic risk that Beta is meant to measure. To illustrate this point, if Ofgem were to adopt this proposal, it would imply that Beta should be indexed to reflect movements in MARs.? This would contradict Ofgem's chosen approach to the cost of equity indexation.

There is also another inconsistency with this adjustment: if Ofgem were to introduce Allowed vs Expected return adjustment mechanism (with which we strongly disagree) alongside EV/RAV normalisation, companies' outperformance would be double counted resulting in the amplified arbitrary reduction of the allowed cost of equity as part of both "Step 1" and "Step 2" of the three sequential steps, outlined by Ofgem, to estimate the cost of equity[19].

FQ15. What is your view of the proposed Ofgem approach with respect to beta?

We disagree with Ofgem's approach in a number of instances:

1. As per the Table 12 of the Finance annex, the level of gearing of the comparator companies has been adopted as an average of the gearing of 5 utility companies (SSE,NG,UU,SVT,PNN) taken as of 19 October 2018. Given the spread in the gearing ratios between these companies and their volatility during

[16] Indepen (2018), op.sit, p.vi
[17] Indepen (2018), op.sit, p.ix
[18] Indepen (2018), op.sit, p.vii
[19] Ofgem (2018), 'RIIO-2 Sector Specific Methodology Annex: Finance', 18 December 2018, para 3.22, p.14

the period over which the raw equity betas have been observed, this approach would have inevitably distorted asset betas. Each company should be separately de-geared, using its own market gearing ratio that reflects the average of the gearing over the same period as the time horizon used to estimate raw equity betas.

2. We disagree with the validity of the EV/RAV gearing adjustment in principle. De-gearing market equity betas using an ‘adjusted’ gearing ratio produces a spurious asset beta that conflates the actual level of market risk with an artificial adjustment – the resultant asset betas and re-geared equity betas are therefore unreliable and in this case under-estimated.

3. Debt betas adopted by Ofgem are too high. As per the latest Oxera findings, an appropriate debt beta for RIIO-2 would be circa 0.05[20].

4. Notwithstanding differences in the jurisdictions and regulatory regimes, the limited sample of UK utilities should be supplemented with evidence on European energy networks.

5. Quarterly and pre-crisis data should not be used in estimating betas.

As a result of the above issues with the proposed beta estimation methodology, we believe that asset beta range of 0.35-0.36, suggested by Ofgem, is too low. We remain of the view that the body of evidence supports an asset beta in the range of 0.40 to 0.42 (in line with the results of an earlier comprehensive research on the cost of equity for RIIO-2 conducted by Oxera in 2018)[21].

FQ16. Do you agree with our proposal to cross-check CAPM in this way?

We would exercise great caution in using MARs to cross-check the CAPM-implied Cost of equity. We believe that MARs are reflective of multiple debatable assumptions and generally represent a subjective quantification of investors’ sentiment measured at a point in time. Hence, MARs should not be directly used to inform or cross-check CAPM elements.

As for the specific evidence presented in Figure 11 of the Finance annex, all three publicly listed companies (Pennon, Severn Trent and United Utilities) are water networks, which cannot be regarded as direct comparators for energy, especially gas networks. The corporate transactions, referred to in Figure 12, have taken place well in advance of the time when Ofgem’s approach to regulating energy networks in RIIO-2 has been published.

Professional forecasts from investment managers and advisors are not a reliable source of information for cross-checking the cost of equity for the energy networks

[20] Oxera (2019), ‘The estimation of beta and gearing’
[21] Oxera (2018), ‘The cost of equity for RIIO-2’, 28 February, p. 45.

either. In a recent study on this subject matter, Oxera recommends that no weight is placed on these observations due to the following limitations[22]:

- the majority of the underlying publications explicitly state that the figures presented therein cannot be used as estimates of future returns;
- academic research has established that forecasts made by professional market participants have poor predictive power;
- some of the publications quoted by Ofgem present extremely broad ranges for the TMR (e.g. -3.5% to 20.7% in case of BlackRock).

As for the infrastructure fund discount rates, we note that all funds apart from 3i (which was already discounted by Ofgem) consist either entirely or to a very large part of long-term availability-based public private partnership (PPP) contracts, which are less risky than energy networks due to the government support they receive. Almost all PPP projects are either owned by the government or have some form of government support.

Therefore, the quoted by Ofgem discount rates of 7.2% - 7.9% nominal may be applicable for a lower risk portfolio but should not be used to inform the cost of equity for regulated energy networks, which by implication should have a higher cost of equity. The quoted premiums to NAVs are not a valid cross-check either as they are very sensitive to the exact date of observation. For example, when one takes the share price just one day prior to Ofgem’s chosen date at close of 26th of November 2018 (which would match the date on which the NAVs were published) premiums to NAV drop from 3.5%-15.5% to – 9.1%-11.1% (with a weighted average of 1.8%).

The above strongly suggests that the discount rates used by the infrastructure funds are not a valid cross-check for the cost of equity in regulated energy networks, especially in gas networks with heightened risk of asset stranding.

We do not have enough information to review and comment on the bids for offshore electricity transmission assets in detail. However, a completely different profile of risk between gas distribution companies and companies operating offshore transmission assets suggests that the merit of this cross-check is naturally limited.

FQ17. Do you agree that the cross-checks support the CAPM-implied range and lend support that the range can be narrowed to 4-5% on a CPIH basis?

No, we do not agree. We believe that a wide range of evidence supports the cost of equity for energy networks in RIIO-2 within the range of 6.51-7.34% (real, expressed in CPIH terms), which was recommended by Oxera in a comprehensive report on the cost of equity[23].

[22] Oxera (2018), ‘Rates of return used by investment managers’.
[23] Oxera (2018), ‘The cost of equity for RIIO-2’, 28 February, p. 5.

The cost of equity for gas networks should be set at least at the high bound of this range due to uncertainty around the future of gas and additional risks born by the shareholders due to the extended duration of cash flows in the gas sector, which is already the case in GD-1 (due to the differences in the Fast/Slow money split between GDNs and DNOs) and is likely to be exacerbated in GD-2 (if GDNs are compelled to forego or reduce shareholder distributions).

NGN's preliminary financial modelling results suggest that Ofgem's "base case" working assumptions, particularly in relation to the cost of equity, raise considerable financeability concerns for the notional gas company. More specifically, some of the key credit metrics become stretched into sub-investment grade territory with a high probability of breaching minimum bank covenants, stipulated by the existing debt contracts. Given the paucity of financial levers that can be realistically pulled by a GDN (and accepted by the Rating agencies) to improve the metrics, GDNs may be left with the equity injection and/or "dividend holiday" option as the only plausible solution. We believe that such a solution is not an appropriate option, given the timeframe over which the problem is likely to persist. Moreover, any extension to the normal flow of cash flows has a cost and hence should entail an additional cost of equity allowance.

The results of the abovementioned financial modelling have been audited and verified by Oxera. Oxera has also studied and quantified the implications of the extension of cash flows, should the "base case" assumptions materialise in GD-2[24].

FQ18. Are there other cross-checks that we should consider? If so, do you have a proposed approach?

Yes, there are. One of the recently developed cross-checks draws on evidence from debt markets to ensure that the allowed returns set by the regulator are commensurate with the risk associated with operating and owning the associated assets.

This cross-check was developed by Oxera, which points out that since the claim for interest and repayment of principal of the debt holders has priority over dividend payments to equity holders, the risk premium of the debt holders must be less than the risk premium of the equity holders. Therefore, the asset risk premium for RIIO-2 should be higher than the debt risk premium. The full details regarding the proposed approach and the quantification of the required ARP-DRP differential can be found in the report, prepared by Oxera for the Energy Networks Association[25].

Oxera has found that the midpoint of Ofgem's cost of equity range (4.5% in CPIH terms) is in the bottom ten percentile of the distribution of the observed UK ARP-DRP differential. It concluded that Ofgem's proposals are insufficient to compensate for the relative risk of holding equity rather than debt and that one or more of the CAPM parameters currently assumed by Ofgem should be revised upwards to provide a sensible market-based result for the cost of equity. Moreover, if Ofgem were to

[24] Oxera (2019), 'Review of NGN's financial analysis for RIIO-GD2'.
[25] Oxera (2019), 'Asset and debt risk premiums'.

implement its suggested approach to adjust allowed returns for expected outperformance, resulting in the reduction of the cost of equity to 4% in CPIH terms, the above argument would be reinforced even further.

We would also support an established approach of using Dividend Growth Models as a forward-looking evidence and a valid cross-check of the CAPM-implied cost of equity estimates. However, the correct calibration of the underlying assumptions is absolutely critical to the credibility of this cross-check. For example, CEPA's specification of DGM is based on UK GDP growth rate, which is not a suitable basis for estimating dividend growth not least because FTSE companies derive over 70 per cent of their earnings from outside of the UK, where forecast GDP growth is higher than in the UK. We believe that it would be prudent to focus on the unbiased specifications of DGMs, published by one of the most reputable financial institutions in the UK – the Bank of England.

FQ19: Do you agree with our proposal to distinguish between allowed returns and expected returns as proposed in Step 3?

No. We strongly disagree with your proposals in this area. NGN's views on this issue are reflected fully in the report commissioned by the ENA – Adjusting for Returns for Anticipated Outperformance - A critique of Ofgem's proposals by Frontier Economics[26].

'Ofgem bases its proposed 50 bps adjustment to the allowed cost of equity on the theoretical arguments made by Mason, Pickford and Wright (MPW) in the recent UKRN report; and on its own analysis of historic outperformance.

As far as the theoretical foundations Ofgem relies upon are concerned, these are deeply flawed. MPW's conclusions arise from the impossible premise that the outcomes of a general equilibrium framework that assumes perfect competition and efficient capital markets can and should be found where the assumptions of perfect competition do not hold (i.e. in the case of a monopoly and its regulation). Having assumed away the logical inconsistency of this premise, MPW then recommend that regulators should put in place a mechanism to force close convergence between allowed return and expected return (RAR and RER in their notation), whilst at the same time assuming that no other consequences will arise from such a mechanism.

Unfortunately, MPW ignore or misunderstand a fundamental conclusion of regulatory economics which is that it is impossible to simultaneously satisfy allocative, productive and dynamic efficiency. In proposing their regulatory measure, MPW take no account of the widely accepted solution to the existence of monopoly - incentive based regulation – and its implication, which is that RER will not converge towards RAR. The alternative – to force such convergence – may achieve allocative efficiency but would seriously undermine productive and dynamic efficiency. Regulators and policymakers

[26] Adjusting for Returns for Anticipated Outperformance - A critique of Ofgem's proposals – Frontier Economics (Phil Burns & Mike Huggins)[26]

in the UK and elsewhere have been very clear that customers' interests are best served by promoting productive and dynamic efficiency ahead of cost-plus regimes that promote allocative efficiency.

Turning to the out-performance data that Ofgem has used to justify and calibrate its adjustment, this is selective and misleading. Ofgem claims that there is an inherent and systematic informational advantage which means that operators have been able to systematically outperform targets, which both renders this adjustment necessary, and also enables its calibration.

However, the data it uses to support this contention largely relates to the first generation of RIIO price controls, and the last set of pre-RIIO controls. This data did indeed reveal significant out-performance, but this varies strongly from sector to sector. If the data is extended further back in time, it becomes possible to gain some richer insights. For example, at DPCR4, it is clear that the core cost and output targets were set at challenging levels that many companies could not meet. Even more starkly, at the gas distribution price control period ending in March 2007, companies overspent their allowances by £864m, with companies bearing 31% of the value of the overspend.

This fuller dataset allows us to obtain a more rounded view of outperformance. Simply, Ofgem's very limited analysis conflates Ofgem's own competence at price control reviews, genuine forecasting error, and the underlying level of efficiency outperformance that could genuinely not have been foreseen. All these factors would appear to be relevant.

First, it is clear (as Ofgem's own analysis makes clear), that the energy networks have outperformed the UK economy by around 1% per year in the 30 years since privatisation. This is a significant achievement and is due to the mutually supporting pillars of a clear incentive-based model coupled with a stable approach to assessing the financing requirements of the businesses.

Second, it is clear that the outperformance has been most in evidence since the Great Financial Crisis (GFC). The GFC has led to a range of knock on effects for the global economy and for the UK economy in particular, and created a genuine difficulty for regulators in forecasting certain elements of the price control such as the cost of debt and RPEs.

The overwhelming conclusions from history are that:

- Outperformance varies significantly across sectors and over time and is therefore not a one-way bet;
- Outperformance is influenced by the efficiency performance of the operators, which in turn is driven by quality of the incentive regime applied by the regulator, and in the UK this has yielded significant benefits;
- Outperformance is also heavily influenced by both genuine uncertainty and the quality of the diligence undertaken by the regulator; and so
- Consequently, the analysis that Ofgem has undertaken is selective and misleading, and cannot be the basis for the existence of the adjustment nor its calibration.

Furthermore, Ofgem makes no allowance for the fact that the scope for outperformance is likely to be quite different in the RIIO-2 period than the RIIO-1 period, due to its proposals in respect of:

- Tightened calibration of incentives through price control deliverables and license obligations;
- Greater use of uncertainty mechanisms and indexation;
- Price control duration reduced from 8 years to 5 years;
- Dynamic target setting;
- Lower incentive rates; and
- Introduction of Return Adjustment Mechanisms (RAMs).

These proposed changes - coupled with learning by doing within Ofgem in respect of the established parameters of the regime - would reduce the scope for future outperformance compared to the recent past, so to base the adjustment solely on history means that, practically, Ofgem has over-estimated the adjustment.

Even if Ofgem rejects all these criticisms of their approach, what it has not done is properly evaluate the wider consequences of this adjustment. In particular, neither Ofgem nor MPW make an assessment of the damage to the efficiency properties of the incentive based regime from linking the future level of allowed returns with historical outperformance. These customer detriments include:

- Erosion of investor confidence and increased investor risk:
    - The past stability and predictability of the WACC-setting process is the cornerstone of the UK regulatory model, where the focus has been squarely on achieving two highly desirable outcomes: maintaining investor confidence in order to keep investors' true cost of capital of investing in the industry low; and stimulating significant dynamic efficiency improvements (in large part through a predictable approach to remuneration of assets and performance). Ofgem's arbitrary adjustment, for which there is no known UK precedent or satisfactory conceptual or evidential basis undermines those benefits.
    - In applying its adjustment to the WACC, which is then applied to the RAV, Ofgem is in effect retrospectively clawing back the value of past investments. This runs counter to established regulatory practice in the UK, and will unquestionably undermine investor perceptions of risk and company behaviour.
- Weakened incentives for efficiency and innovation:
    - In calibrating its downward adjustment by reference to historical outperformance, Ofgem is clearly signalling that future outperformance will affect its future calibrations of the downward adjustment. This will have a deleterious impact on incentives for innovation and efficiency to the longer term detriment of customers.
- Distortion of incentives to invest:
    - Ofgem's approach directly impacts on the managerial appraisal of new investment projects. The hurdle rate for operators is given by the actual WACC rather than the downwardly adjusted return that Ofgem would

apply. Therefore, for the operator to invest normally it would need to be reassured that each investment project can earn not only the allowed return but also a target level of outperformance associated with that investment. Since outperformance occurs not only at the level of the individual project, but also at the level of collections of projects (across the spatial dimensions of the network and over time), and indeed may be completely unrelated to an particular investment activity at all, then it is highly unlikely that the investment appraisal process would pass projects that would otherwise have been passed without Ofgem's downward adjustment. Investment decisions will be therefore distorted and investment will be likely to be discouraged.

- Loss of clarity over price control calibration:
    - The arbitrary and unfounded nature of the adjustment, coupled with its de-linking from the other elements of the price control package undermines stakeholder engagement with the process and likely weakens the effectiveness of the appeal arrangements.

We therefore conclude that not only is Ofgem's proposal without merit, but it carries with it many potential costs to customers. Ofgem should recognise that dealing with information asymmetry and encouraging efficiency enhancing effort is costly. This is the fundamental conclusion of the pioneering papers in the economic literature on which a body of regulatory theory and practice has developed. It is a body of literature that has informed the many price control reviews that have been undertaken in the UK.

The evidence provided by Pollitt for Ofgem suggests that these costs have been worth it, in that customers have benefitted significantly from the application of incentive based regulation to energy network operators, in the form of lower network charges and enhanced quality of service. The second conclusion of the body of theory and practice, that is also relevant for this report, is that the costs to the customer of encouraging information revelation and efficiency enhancing effort can be minimised if the regulator is diligent in the calibration of incentives and the setting of targets.

It is by now well-understood by most stakeholders that for a variety of reasons and across a number of dimensions, Ofgem underperformed in this task at the RIIO-1 reviews. Ofgem should properly review its own performance with a view to improving the quality of its analysis that feeds into target setting rather than applying a remedy that ignores the underlying problem and creates new problems of its own.'

FQ20: Does Finance annex appendix 4 accurately capture the reported outperformance of price controls?

No. As set out in response to FQ19 above, the dataset that Ofgem has used to justify and calibrate its adjustment, this is selective and misleading. The data used to support Ofgem's largely relates to the first generation of RIIO price controls, and the last set of pre-RIIO controls. If the data is extended further back in time, it becomes possible to gain some richer insights. For example, at DPCR4, it is clear that the core cost and output targets were set at challenging levels that many companies could not meet.

Even more starkly, at the gas distribution price control period ending in March 2007, companies overspent their allowances by £864m, with companies bearing 31% of the value of the overspend.

This fuller dataset allows us to obtain a more rounded view of outperformance. Simply, Ofgem's very limited analysis conflates Ofgem's own competence at price control reviews, genuine forecasting error, and the underlying level of efficiency outperformance that could genuinely not have been foreseen. All these factors would appear to be relevant.

FQ21: Is there any other outperformance information that we should consider? We welcome information from stakeholders in light of any gaps or issues with the reported outperformance as per Finance annex appendix 4.

Again as outlined above, analysis of the fuller dataset which Ofgem have full access to would reveal a significantly different picture to that presented in Ofgem's analysis. It is not clear why Ofgem would choose to ignore a large part of the available dataset in analysing this ssue.

FQ22: What is your view on our proposed approach to assessing financeability? How should Ofgem approach quantitative and qualitative aspects of the financeability assessment? In your view, what are the relevant quantitative and qualitative aspects?

The principle of ensuring that companies are financeable are to ensure that there are sufficient funds to pay efficient interest on historic debts and be able to raise future debt efficiently. It is largely the marketplace directly that will decide if this is the case and there are well established processes and methodologies by which this is assessed.

It is therefore not for the companies or the Regulator to unilaterally decide what factors are appropriate in assessing financeability. Both parties are bound to take these assessment parameters from the marketplace directly.

The credit rating agencies maintain and publish methodologies of how they assess both the regulatory framework more holistically and the quantitative parameters used to evaluate individual entities. This must form the basis of any approach to assessing financeability and illustrate how any proposals could be seen to address these requirements within the price control for a notional and efficient company.

FQ23: Do you agree with the possible measures companies could take for addressing financeability? Are there any additional measures we should consider?

As outlined above measures that companies take to seek to address any financeability constraints are only valid to the extent that they are accepted by the marketplace as effective means of doing so. The suggestion that companies can propose alternative capitalisation rates and/or depreciation rates has been confirmed by the rating agencies as a method that would not be accepted to address financeability. These cannot therefore be proposed or accepted by Ofgem as a means by which a company can address financeability.

The proposal to refinance expensive debt or other financial commitments can only be assessed if it is clear of what the relative term expensive is measured against. If it is the benchmark proposed by a debt index in the framework than the case has to be made by Ofgem that it appropriately addresses a timeframe and basket of products against which it is prudent to make that relative assessment. Such refinancing arrangements are not cost free and will incur significant costs to equity.

The requirement to refinance expensive debt is premised on the fact that it is expensive historic debt relative to the benchmark is the cause of any financeability issue. In many instances this is not the case - a company that has an efficient financing structure and levels of historic debt that are in line with the deemed efficient notional company cannot and should not use this approach. If there are financeability issues under this scenario it points to the fact that there underlying problems with the financial parameters employed in setting the price control.

We would accept that equity investors have a role to play in managing financebaility constraints within the regulatory settlement. NGN proposed arrangements at RIIO1 to this effect. However, there a number of key considerations in evaluating this option, there include size and duration of required equity support and any risks that exist around equity recovering the appropriate return over the longer term.

Our analysis of Ofgem's proposals and the key working assumptions is that even for the efficient notional GDN there sizeable equity injections required to deliver a base level of financeability. This includes an amount to reduce gearing from current levels down to the new lower 60% assumed in the proposals and a complete dividend holiday for a period of time extending beyond RIIO2. This is in part driven by the relatively 'slow' nature of funding for the gas distribution sector when compared to other networks. However, the fact that it extends beyond the RIIO2 and hence is an enduring and fundamental issue with Ofgem's proposed framework indicates that the overall package is not calibrated correctly.

This is not an appropriate balance of risk between customers and investors commensurate with the low risk nature of the regime you are proposing. With companies unlikely to NPV neutral to this equity injection until sometime beyond 2040, the proposals that imply a significant extension of cash flows into the future for equity investors are adding risk and hence costs to the regulatory framework. This is compounded by the risk that is clearly identified by Ofgem that for GDNs is a period where there is greatest risk to assets becoming stranded and again has yet to be considered by Ofgem.

FQ24: Do you agree with the objectives and principles set out for the design of a cash flow floor?

As previously noted above, analysis of this proposal suggests there is little or no benefit to this mechanism.

It does not achieve the stated primary objective of enhancing or supporting credit quality. Indeed it can be viewed that the introduction such a mechanism is a clear signal that Ofgem are aiming to allow willingness to allow credit quality in the industry to decline.

The focus on liquidity is spurious as in most cases the mechanism would only come into force after a company loses its investment grade rating and hence fails to meet a key licence obligation. Given the requirement of companies to maintain an investment-grade rating, the market would expect the regulatory framework to set a regulatory package that an efficient would be expected to maintain an investment grade credit rating or indeed intervention long before a liquidity shortfall. The mechanism fails to address any underlying issue causing the liquidity shortfall. It can therefore be viewed as having limited benefit in the face of enduring performance issues caused by factors outside of management's control.

Given the fact that the majority of the sectors' debt matures after RIIO2 timescales it would require a view that the regulatory framework is stable enough to ensure that any commitment made as part fo RIIO2 would be honoured beyond that period if the market is to place any value on this mechanism. As the development for both RIIO1 and RIIO2 are illustrating Ofgem are inclined to propose wholesale changes to the regulatory framework at each price control. It is unlikely that Ofgem will be willing to formally commit to supporting this proposal beyond RIIO2 and as such this limits the market's ability to trust that it will deal with issues that will persist beyond 2026.

This adds significant additional complexity to the framework for no clear benefit and should be removed.

FQ25: Do you support our inclusion of and focus on Variant 3 of the cash flow floor as most likely to meet the main objectives?

No. As noted above we do not believe that the proposed Cash flow Floor fulfils its stated and adds any benefit to the regulatory mechanism and the proposal should be removed.

FQ26: Do you support our proposal that companies should seek to obtain the "Fair Tax Mark" certification?

No. While there are some merits for certain companies of attaining an accreditation, in our case the benefits are limited, therefore we do not support the proposal.

There competent authority best qualified to judge whether a company has paid the 'right amount of tax' is Her Majesty's Revenue and Customs and we comply with all the laws and guidance they set. Sharing additional company information, which I understand is required to apply for a Fair Tax Mark 'FTM' could be problematic, it will impose additional burden on companies in producing this and may not even be possible in all cases.

This will also bring about additional cost to companies in seeking to get this certification and also in the maintenance of the certification, this additional cost would generally be passed onto our customers whereas effort may be better placed in directing people towards information already available such as Tax strategies and Published accounts. Also shareholders may also not wish to share information that could be commercially sensitive above and beyond the Legal or Listing requirements.

FQ27: Is there another method to secure tax legitimacy other than the "Fair Tax Mark" certification? Could we build upon the Finance Acts (2016 and 2009) with regards to the requirement for companies to publish a tax strategy and appoint a Senior Accounting Officer?

Yes. As mentioned above HMRC are the governing body that should best placed to make these decisions. HMRC have introduced legislation to ensure large companies' tax affairs are more transparent and sufficiently internally scrutinised in the form of the requirement to publish the tax strategy and to appoint a Senior Accounting Officer.

These are both relatively new requirements and we are still to see their full impact. The SAO requirement in particular stipulates that companies must have sufficiently qualified and competent individuals responsible for the systems and controls in place when dealing with tax requirements.

It is difficult to suggest a new method to secure tax legitimacy as you suggest as it is such a complicated and subjective area. Again we would defer to HMRC as being the body designed by the government and with the resource available to do this. We recently participated in a pilot scheme run by HMRC whereby they are expanding their tax review process for companies. In summary this scheme assigns each company a risk rating based on a multitude of factors across all forms of taxation. This process could be a way to assess companies' tax legitimacy based on the risk rating they are assigned however it will may not be perfect as it has not been designed for this purpose.

It is clear that Ofgem are attempting to address the same issue as HMRC themselves and are at risk of cutting across another government's department's responsibilities and objectives.

FQ28: For Option A, how should a tax re-opener mechanism be triggered? Is there a materiality threshold that we should use when considering the difference between allowances and taxes actually paid to HMRC? If so – what might this be?

The 1% deadband for adjustments worked well for RIIO1 so a shift away from that may be unnecessary. Moving to a system of pass through to tax paid to HMRC could have a negative effect on customers as this would be a disincentive for the GDN's to be perform efficiently.

FQ29: What is your view on our proposal for an immediate switch to CPIH from the beginning of RIIO-2 for the purposes of RAV indexation and calculation of allowed return?

There are several key issues to consider on the switch and transition to CPIH.

In general we support the move to CPIH being the key basis of price indexation within the framework. The move away from RPI as an official metric suggests that this change is appropriate and necessary.

It is also clear that the move to CPIH and the necessary inflation wedge that is required on the cost of debt and equity delivers a short term increase in cash flows that is necessary to bridge part of the financeability constraint driven by the lower cost of equity in particular proposed by Ofgem. However, it must also be recognised that the impact the lower rates of return on cash flows is only masked in the short term by the move to CPIH. The cash advantage erodes over time to be broadly NPV neutral. This means that beyond RIIO2 alternative means of addressing cash flow constraints will be required. Given that equity investors will be supporting cash flows in RIIO2 it is not feasible that this can be repeated beyond this period. Pointing to the fact that the proposals form Ofgem are not sustainable for the longer term without future transfers from customers to shareholders. These are not the characteristics of a stable regulatory framework.

We note that the issues surrounding the prospects for the emergence of CPIH-linked financial assets in the market place has yet to be resolved. Without certainty on this issue Ofgem cannot hold the current assumption about the level of index-linked debt in the notional structure at current levels which will impact directly the assessment of financeability.

It has been recognised that CPIH decision will have impacts upon a number of key areas of business pan development including on reporting, business plan templates and RPEs. This detail has yet to be provided by Ofgem.

FQ30: Is there a better way to secure NPV-neutrality in light of the difficulties we identify with a true-up?

We recognise the difficulties in maintaining exact NPV-neutrality over the longer term and the use of a true-up mechanism. However, this place increased emphasis on a clear and robust methodology for estimating the expected RPI-CPIH wedge. We would expect this approach to be fully developed and transparent for challenge by all stakeholders.

FQ31: Do you have any specific views or evidence relating to useful economic lives of network assets that may impact the assessment of appropriate depreciation rates?

There is clearly a significant degree of uncertainty around the future pathways of energy in the UK. This has the potential for a greater impact upon the gas distribution networks than any other part of the sector. However, without a clear government policy decision there is no clear economic rationale for changing (reducing) economic lives win the gas distribution sector.

However, this uncertainty must also be recognised by Ofgem within the framework. They have asked companies to directly address it in their decision making. But have yet to include it anywhere in the analysis of their own proposals. Certain elements of the proposed framework are moving funding decisions directly into this period of uncertainty and risk with a view that seemingly this has no impact on the framework or investors. This is clearly and inconsistent assessment of the same risk within the framework.

FQ32: Do you agree with our proposed approach to consider capitalisation rates following receipt of company Business Plans?

Yes. However, as mentioned above we would agree only to the extent that the assumed fast:slow money split represents the operational practices within each network. Changes that simply aim to address financeablity constraints would not be accepted.

FQ33: Do you have any comments on the working assumption for notional gearing of 60%, or on the underlying issues we identify above?

It is not clear the basis upon which the assessment of a notional gearing level of 60% is based. At previous GD price control reviews Ofgem has presented a very clear case as to why gearing levels needed to increase to more efficient levels. The decision to reduce gearing would now need to be set in terms of the arguments previously presented for this alternative view.

Ofgem also need to be cognisant of the impact of previous regulatory determinations on gearing have had on company financing decisions. A prudent and conservative financing strategy will have seen some companies finance themselves at or close to the notional level of gearing. The impact of any decision to reduce the notional level of gearing will imply for those companies both a notional and an actual equity injection to finance at the level now deemed to be efficient.

Given the frequent basis upon which Ofgem change their view on the appropriate level of notional gearing within the framework it a lever that is used to address particular regulatory or political concerns that are prevalent at that time. This not good regulatory practice. Given that this has a direct impact upon funding levels, cash flows, rates of return and actual funding decisions this presents a significant element of regulatory risk to the framework.

FQ34: Do you agree with our proposed approach to consider notional equity issuance costs in light of RIIO-2 Business Plans and notional gearing?

The RIIO2 proposals imply a significant level of notional equity injection and issuance to remain financeable over the RIIO2 period. It is therefore critical that the framework correctly recognises that these cost are required, the amount of issuance that is required and the likely costs of raising this new equity.

FQ35: Do you agree that for RIIO-2 we align transmission and gas distribution with electricity distribution and treat Admin and PPF costs as part of totex?

Yes.

FQ36: Do you agree that for RIIO-2 we align transmission and gas distribution with electricity distribution and treat Admin and PPF costs as part of totex?

NGN has no objection to the change in approach for the treatment of admin and PPF levy costs. These costs have been reasonably stable over recent years and the PPF levy has reduced to an immaterial level as the funding level of the scheme has improved. However, we request clarity on the treatment of any increases in costs which are clearly outside our control.

FQ37: Do you have any views on the potential treatment of financial proceeds or fair value transfers of asset (including land) disposals for RIIO-2?

It is in the customers' interest for an incentive to be maintained for networks to dispose of surplus assets. The mechanism in place for GD1 shares the benefit between the company and customers, we believe this is an appropriate balance.

RIIO2 Sector Specific Methodology Annex: Gas – Question Responses

GDQ1: What are your views on the overall outputs package considered for this output category?

The outputs package for the output category "Meet the need of consumers and network users" has a strong focus on customers in vulnerable situations. This is reflected in the number of outputs proposed, the breadth of incentives and funding mechanisms made available and consequently the scale of service improvement expected.

Whilst NGN agrees that we as a provider of essential services have to play a full role in supporting customers in vulnerable situations, we also believe that an equally large scale of improvement should be achieved for all other customers and network users. This view is also reflected in the feedback we have received from our stakeholders. The service levels improvements proposed in the revised GSOP standards, for example, are only incremental as will be the resulting benefits to the customers.

Finally, the main focus of the framework seems to be preventing that networks benefit from "unearned gains" which is reflected in the outputs design elements proposed such as dynamic targets, penalty-only incentives, claw-back clauses, real-time baselines over forecasts, success based funding as well as Ofgem's preferred options. NGN does not agree with this stick-only regulatory approach because it stifles networks' ambition to raise service levels and to innovate.

GDQ2: For each potential output considered (where relevant): a) Is it of benefit to consumers, and why? b) How, and at what level should we set targets? (eg should these be relative/absolute) c) What are your views on the design of the incentive? (eg reward/penalty/size of allowance) d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?

> **Consumer vulnerability minimum standards** - Agree to retain the current Licence Obligation to provide additional services to specified customer group, update GSoPs and retain funding and performance targets for fuel poor connections because these measures have delivered benefits to customers.
>
> We do not object to the introduction of a principle-based licence obligation in line with changes elsewhere within the regulatory framework. However, we would want to ensure that this change is considered alongside the mechanisms that already hold networks accountable for their treatment of customers in vulnerable situations to ensure they support the objectives.
>
> **Consumer vulnerability incentives** - The reputational incentive focusses on the delivery of the strategy which, from a customer perspective, is almost more

important than the strategy because ultimately it is the quality of delivery that creates positives outcomes for the customer. However it is important that the assessment criteria for this incentive are clear, measureable and the same for all networks.

NGN also agrees that the CEG is best suited to carry out the assessments due to their good knowledge of the businesses. An annual assessment would be the most practicable frequency considering the shortage of the RIIO-GD2 price control. However, in most cases it takes time for benefits of new projects and initiatives to materialise which is why an assessment every two years would be more appropriate. In conclusion, the assessment frequency must be aligned with the criteria for this incentive.

Consumer vulnerability and carbon monoxide safety awareness use-it-or-lose-it allowance - NGN supports the availability of this allowance and intends to use it to upscale successful pilot projects for which usually a one-off cash boost is required. NGN also agrees that Option 1 is the best option for all the reasons stated in the consultation.

Fuel Poor Network Extension Scheme - See responses to GDQ10-14

Stakeholder engagement incentive – The RIIO-GD1 period has seen significant advances in the role of stakeholder engagement in the networks' activities. It is important to note that stakeholders themselves see the benefit of maintaining an ongoing incentive to encourage further advances in engagement with the networks.

To ensure that the incentive continues to ensure progression in the type and level of engagement, the criteria used in any assessment needs to reflect the more mature engagement required. We would support the continuation of an annual process of assessment.

Customer satisfaction survey - The customer satisfaction survey has been a success in RIIO-GD1 and has measurably improved customer service performance across the industry which clearly is of benefit to the customer. NGN has been the network that has raised its performance level quickest and thereby has led the industry to follow suit. Given the success of this measure in continuing to drive performance right across the industry it is not clear that there is a case for adjusting the incentive mechanism. Collaboration and sharing of best practice has been a key to driving performance across the country.

NGN has proposed changes to the current survey methodology within Ofgem's Customer and Social working group.

Complaints metric - NGN agrees that the metric has improved networks' overall performance in handling complaints which again is a clear benefit to the customer. NGN supports the proposal of setting dynamic targets.

Guaranteed Standards of Performance (GSOPs) - See responses to GDQ15-22

Unplanned interruptions average restoration time incentive - See responses to GDQ23-25

Emergency response time - NGN agrees that this output should be carried forward into RIIO-GD2 in its current form.

Emergency response and enquiry service - NGN agrees that a high operability level of the emergency response line is extremely important. The proposed changes to this measure implies an almost unrealistic target to achieve on an enduring basis. Any improvement from the already very high standards achieved in this area would imply a significant increase in the costs of providing the service.

GDQ3: What other outputs should we be considering, if any?

NGN will be bringing forward alternative output options in this area that we have been working on with our customers during RIIO-GD1 that will significantly improve the service offering for RIIO-GD2. Ofgem should consider where it is appropriate for individual company proposals to apply across the sector to ensure all customers are receiving the benefits ambitious outputs and targets.

GDQ4: What are your views on the RIIO-GD1 outputs that we proposed to remove?

We agree with the removal of the DRS alongside the introduction of the allowances to deal with vulnerability.

GDQ5: What activities beyond those outlined in paragraph 3.12 should we consider when defining the role of the network companies in supporting consumers in vulnerable situations?

In order to deliver against aspirations to support customers, particularly those in vulnerable situations, the roles and activities are well covered within paragraph 3.12 and whilst some of the following may be implied, it's important that the following are considered as well or in conjunction with the five statements;

- Establishing robust yet dynamic partnership arrangements - In order to effectively manage referrals. This recognises that as GDNs we have a set of core skills and capabilities, both current and in development, which, when combined with effective referral networks facilitates best use of information gained whilst with customers by referral to specialists for advice/support and assistance.

Additional benefits and a more focussed approach with less customer disruption, are those partnerships that not only address gaps, but bring together organisations with similar aims and objectives, offering benefits of more holistic solutions.

- Development and maintenance of a competency framework - A well developed and used competency framework exists for safety and technical competency, to compliment this, thought could be applied to developing and maintaining a similar framework around customer/social and vulnerability. This would ensure an ongoing programme to ensure staff have required knowledge and skills which would be maintained through ongoing training and awareness.

- Priority Service Registration. (PSR) - Whilst a licence condition, and recognising the wide and diverse range of beneficiaries from the PSR, a greater focus on developing and sharing information to better promote the PSR, partnerships with those supporting those likely to qualify for PSR registration could help promote the PSR and as a result provide significant support to those in vulnerable situations.

- Affordability - Recognising that in many instances, affordability is a key factor for those in vulnerable situations, assistance in addressing this either by provision of information or referrals to others;
    - Energy efficiency- simple advice provided at point of GDN engagement with customer
    - Bringing together organisations that may without facilitation fail to "join the dots" i.e developing closer relations with Public Health, addressing affordability and health in a more consistent manner.
    - Referral opportunities to those that can provide assistance
        - Suppliers
        - Energy Savings Trust
        - Step Change
        - Citizens Advice

- Benefits beyond the Gas Network - Some activities will be limited to on grid customers, however within certain areas a greater benefit can be served by considering off grid customers
    - Off grid customers not able to benefit from FPNES are at a significant disadvantage, provision of energy efficiency advice, provided by partners as part of wider programmes, could help to in part address this imbalance and at recent stakeholder sessions this principle has been supported.
    - Carbon Monoxide awareness, challenges associated with awareness of CO are more acute with off grid customers, many of whom are unaware that CO is produced from anything other than burning natural gas, existing programmes look to educate on and off Grid customers, particularly important as current incidents of CO poisoning are

significantly higher from leisure and off grid activities than from natural gas.

GDQ6: Can you provide any evidence that shows how the boundary we have set out for the networks' role in consumer vulnerability could impact the benefits received by consumers in vulnerable situations?

A good gauge could be BSI 18477- inclusive services, which, when applied brings benefits to customers in vulnerable situations through the following assurance/validation. All consumers are different, with a wide range of needs, abilities and personal circumstances. These differences can place some in a position of vulnerability or risk such as limited access, financial loss, exploitation or other detriment. BS 18477 specifies the critical procedures to ensure inclusive services are available and accessible to all consumers equally, regardless of their personal circumstances.

The standard can be used to:

- **Encourage** the adoption of fair, ethical and inclusive practices
- **Avoid** discrimination and complaint mishandling
- **Increase** consumer confidence and customer service
- **Assist** organizations to understand what consumers have a right to expect from them
- **Improve** accessibility to services for all
- **Demonstrate** best practice for organizations in the identification and treatment of vulnerable consumers in relation to the UCPD [2] and other relevant legislation

BS 18477 seeks to embed a more sophisticated understanding of the nature of vulnerability, which can be reflected in your expectations of suppliers and distributors as a matter of best practice. This approach recognizes the dynamic and multi-dimensional nature of vulnerability, which may vary over time and in different settings as a result of their changing circumstances.

GDQ7: What is your preference on the two approaches we have outlined to implement the allowance, and why?

On balance Option 1 would be the preferred option for NGN.

GDQ8: What examples can you provide of initiatives that could be funded through the allowance, and please explain why these activities would not go ahead without specific price control funding?

Allowances could be used to fund a range of options. Projects that have demonstrable value to those most in need often require significant time and money to develop and progress in order to bring maximum benefits, often these can go beyond our current “social obligations”. They need to do so in order to facilitate or enable activities, that do fall under our “social obligations” for example a current project, pop up warm hubs looks to encourage families to attend family focussed events, pantomime, soft play etc. in order to attract an audience that can then be provided with CO/energy efficiency advice.

Examples of larger longer running projects that would have been unlikely to proceed without facilities for funding are;

Warm Hubs- a pilot project followed by a 3 year investment, supporting around 1000/week over winter months, additional external funding over £1million secured, 200 volunteers recruited and trained. Required significant commitment in both time from colleagues and money to kick start, develop and role out the programme, without sufficient funding mechanism, it would be unlikely that this project would have developed and supported as many people as it does.

Groundwork Green Doctors- again a long term project requiring money and commitment from within NGN and NPG, but bringing significant benefits over two years;

- 2343 Beneficiaries
- 932 home energy visits
- Benefits from Switching supplier circa £36k/year
- Benefits from support with WHD application circa 20k/year
- 2372 technical measures with LTS circa £262k

GDQ9: What is your preference on the three potential options we have outlined for a consumer vulnerability package, and why?

We agree that a combined package would bring biggest benefits and have more likelihood of greater success.

GDQ10: What should we include in the FPNES eligibility criteria in RIIO-GD2 to facilitate a well targeted, but effective scheme?

To facilitate a well targeted and effective scheme the FPNES eligibility criteria needs to be aligned with funding streams which ease the installation of first-time central heating.

The difficult element of the current FPNES is not always the eligibility route, it is finding eligible householders who are willing to provide evidence to show eligibility for FPNES and ECO (for example) often this impedes or stops progression of installation of assisted connections and central heating systems.

Inclusion of homes which are at risk of fuel poverty could also be considered. Also consideration could be made to bringing back the 10% fuel cost vs income assessment – this also supports point regarding risk of fuel poverty

Not all Local Authorities (LA) have statements of intent, as a result we find that customers that could be eligible in a neighbouring LA are unable to benefit, where this arises and the a LA doesn't have Statement of Intent, consideration could be made to using a default to the closest LA with one. As an alternative to this, allow the GDN (up to a capped level) to apply a set of flex criteria that could be applied where an LA has no statement of intent.

In order to bring economies of scale implement a 2/3 rule for off gas communities (if 2/3 qualify then they all qualify) this would then not be as divisive as current scheme following the removal of the LSOA criteria.

The current LIHC Is not an effective calculation for assessing homes for fuel poverty at an individual level. The Government calculation is only designed for statistical purposes and not to confirm individual's eligibility. We require an agreed set of proxies which aid the assessment process, and can be applied in order to determine eligibility; this would additionally address some of the challenges associated with obtaining very personal information, particularly at the early assessment stage of potential schemes.

GDQ11: How should we incentivise the GDNs to improve the targeting of the FPNES?

The adoption or development of a common mapping tool would inevitably bring a level of consistency and a corresponding ability to compare relative performances and targets across GDNs and is something that should be seriously considered, GDNS could be encouraged/incentivised to adopt a common model.

An outperformance incentive as introduced in 2015, also encourages greater work to support more people, although following further revisions to FPNES this has been more challenging to deliver.

When considering FPNES in its widest sense, two of the challenges it looks to address as outlined in the SIA review are associated with Affordability and Health, considerations could be given to further incentives around effective targeting based on outcomes achieved from delivery of assisted connections.

Greater work would be required, but in principle a sliding scale of incentive/assisted connection based on outcomes captured independently, by Fuel Poor partners as part of close out reports, related to the following;

- Where a connection/connection has been assessed as eligible under health based criteria (Flex) allow 100% of the connection value

- Where a scheme has connections that have qualified under alternative eligibility criteria, apply weightings based on expected outcomes related to relative improvements in SAP performance; i.e.
    - A high level of improvement(level to be determined) attracts 100% of connection value
    - A medium level of performance improvement (level to be determined) attracts 90% of connection value
    - A measurable level of performance improvement(level to be determined) attracts 70% of connection value

- Using this approach a greater significance/incentive would be applied driving a focus on connections that will bring wider individual and societal benefits

Further incentives could be considered to extend current reach of the network, into fuel poor areas, close to fringes of current network reach based on outcome based factors;

- Areas with prevalence of cold related illness- measured at a GP surgery Level
- Areas under significant wider depravation- using LSOA criteria supported by eligibility criteria

Innovation incentives around fuel poverty, possibly linked to use it or lose it allowances;

- Research- into aspects of fuel poverty and methods to support
- Technology- testing/adoption

GDQ12: How can we ensure that the FPNES is better coordinated with other funding sources to provide a whole house solution for the household?

For the scheme to be aligned with other funding sources, all schemes need to have the same eligibility criteria and the same evidence collection route.

We need to be clear and concise about how a household can qualify for FPNES funding and what evidence needs to be collected, especially the “low income/high cost” route. It should be noted that whilst this may bring benefits and ease to the customer, it is more likely to be burdensome to the GDN and possibly Fuel Poor partner, with a possible increase in costs/connection.

Once clarity has been provided all GDN’s need to work to the same standards to ensure a consistent approach as a result, a stronger alignment with the ECO process should be considered.

Current considerations (para 3.69) around efficiency improvements in part have been considered as a part of our response to GDQ11.

Proposals (3.69) need to be carefully considered, particularly as (3.5) excludes direct delivery of installations and measures, in effect this could bring a reduced number of connection from risk mitigation associated with having little or no control over support activities beyond the connection, and increased costs of validation post installation of measures. This may also seem overly intrusive to customers.

Duration needs to be considered, schemes such as DECC central heating fund, was slow to start, and despite significant progress, access to funding was unavailable to many qualifying customers due to timescales for installations to be made and effective assurance in place. Where this is possible/likely timescales along with less constrained delivery window may afford a more flexible approach assured of greater reach and success.

GDQ13: What are your views on us requiring or incentivising the GDNs to ensure that households receiving FPNES connections also achieve a target level of energy efficiency?

In general agreed targets and consequential tracking/measurement against targets, brings a focus and clarity to ensure targets are achieved. Targets should be SMART (specific, measurable, realistic and time bound), and should also be consistent throughout any delivery period.

More specifically for GD2;

- Specific- an agreed number of fuel poor connections along with agreed and fully understood and consistent set of eligibility criteria
- Measurable- as part of business plan, a clear outline of what will be delivered, across the regulatory period at an annual level
- Realistic-delivery should be stretching, but not unrealistic or unachievable.
- Time bound- this should be considered as performance in year and over the full regulatory period.
- Consistent eligibility criteria

Targets around fuel poverty have worked well in GD1, with opportunities incentivised for, out performance. This approach should be continued in GD2, in order to deliver a greater number of successful outcomes for customers in vulnerable situations.

As such, consideration should be given to an agreed number of fuel poor connections, delivered under FPNES, along with a supporting outperformance incentive.

- Agreed number of connections- delivered and reported on an annual basis
- Outperformance incentive- agreed at a level that compensates for costs of additional connections and encourages greater activity in this area.

GDQ14: Do you think the value of the FPNES voucher would need to be amended if the targeting of the scheme is increased? Please provide any evidence to support your view.

As FPNES has evolved, many of the changes have been absorbed within current cost base, following recent changes to FPNES, particularly more challenging around identification of area based schemes the level of effort needing to be applied has significantly increased, this is something that if continued is likely to bring additional cost.

Costs could be considered from two aspects;

- Costs to deliver Fuel poor connections-operational costs associated with physical connection, whilst these are subject to commercial variations, materials, labour, reinstatement etc., it should not be too difficult to establish and agree these aspects from a cost perspective
- Costs in identifying and qualifying fuel poor connections- Fuel poor partner costs, currently constrained within commercial agreements associated with

current GD1 agreements, these are more likely to increase, due to a range of factors;

- Fewer players in the market- during GD1, two of our fuel poor partners have ceased trading, causing more of a risk of delivery
- Increased efforts required- following amends to FPNES the level of effort has increased significantly in the identification and progression of eligible fuel poor customers;
  - Over 60 criteria removed
  - 10% model amended to LIHC
  - Registered housing providers no longer eligible (other than EFG rated properties)
  - With drawl of area based qualification criteria

When considered fully, it is highly likely that increased costs will occur in aspects associated with the identification and qualification of customers that could benefit from the FPNES.

These costs are difficult to quantify without commercial testing (tender process), but even this is a challenge as the market is only really open to organisations that currently provide these services, due to Ofgem requirements for approval of Fuel Poor Partners.

GDQ15: What is your preferred option for revising customer payment caps?

Our preferred option would be to remove the customer payment caps (but keep the exemptions already detailed in 3.122 and 3.123). We believe that this improvement would provide greater protection for the most poorly served customers, and make sure that the GDN took the necessary steps to get the situation resolved, regardless of the timescales involved.

GDQ16: Where, within the consultation ranges, do you think the standard and payment levels should be set?

Our proposals for the relevant GSOPs are:

- GSOP1 - 18 hours;
- GSOP 2 - 3 WD;
- GSOP 13 - 7 WD;
- GSOP 12 - 10 WD;
- GSOP 14 - 5WD if no site visit, 10WD if site visit;
- GSOP 4 - 3WD;
- GSOP 9 - 14 WD;

During RIIO-GD1 NGN has, on a voluntary basis, moved to increase standard GSOP payments to double the level required by the current standard. We believe this represents a good balance between any failure to meet the standard and the value placed upon those services by customers.

GDQ17: Should any existing GSOP exemptions be removed or changed and should any additional exemptions be considered?

NGN supports keeping the existing exemptions for the existing GSOPs, and working through any new exemptions to accompany the new GSOPs.

GDQ18: Do you support the proposal to make all GSOP payments automatic for RIIO-GD2 and why?

Yes. NGN, again on a voluntary basis, have already committed to make proactive payments, and believe that all GSOP payments should be proactive. As a principle, our customers should not be expected to take extra effort to contact the GDN, to notify of a failure. It should be the responsibility of the GDN to identify where it has fails, and take all necessary steps to get the payment to the impact customers.

NGN were able to put all the necessary steps in place to start making proactive payments - for GSOP 3 these started in October 2018, and for GSOP 13 these started in January 2019. These are being made directly to the customer but this is a costly and manual process. We are currently working with the GDNs to reach a system based solution for GSOP 3 and 13 (through xoserve).

GDQ19: Are new GSOPs (or amendments to existing GSOPs) required and what might these look like?

Yes. The GDNs, together with Ofgem, have identified two areas where new GSOPs may be needed:

- Appointment standard for 'gas-on' following planned works;
- Enhancements to existing GSOPs to take account of vulnerable customer needs, which may also lead to additional GSOPs to that provide enhanced services where needed.

GDQ20: Should there be a licence condition to prevent standards for the restoration of unplanned interruptions deteriorating (GSOP1)? If so, how should we set the target, and should we take into account geographical differences. Please consider alongside our wider proposed interruptions package.

No. It is unclear what the problem is that Ofgem are attempting to address with this proposal. Reliability for gas network users is very high (99.99%) with only a small percentage of customers affected by an unplanned interruption each year (0.4% of customers), the customer scores for this area of our activities are very high (>9/10), customer feedback shows that the performance against the duration of unplanned interruptions is not a significant issue for customers. The consultation document places a significant amount of focus on Unplanned Interruptions. There are already several powerful mechanisms that are addressing the performance on unplanned interruptions with a further two proposed.

There are a number of issues to consider when introducing a new licence condition due to the significant risk:reward profile implied when compared to a standard not specified in the licence. The licence presents a potentially unlimited downside risk to companies to comply with standard and as a consequence the cost of achieving a licence condition standard are much higher to avoid this risk. Ofgem have not included any assessment of whether any additional cost of this proposal would be in the customers' better interests. The criteria that Ofgem has put forward to consider any penalty or reward for a financial ODI must obviously apply to a proposal such as this. We would welcome working with Ofgem to meet its obligations in using its own framework to assess the potential impact upon customers of this change and complete the necessary regulatory impact assessment.

GDQ21: Is the existing 90% target pass rate for connections GSOPs still appropriate, if not how should it be revised?

The existing target pass rate is a backstop to safeguard customers, rather than a performance target. It could be rebased, but if 90% is still considered to be good performance for a customer perspective, increasing this may lead to increased network costs to eliminate the risk of failing. As mentioned above a full regulatory impact assessment in line with Ofgem's objectives would need to completed to assess whether such a change would be in the customers' interests.

GDQ22: Should licence conditions with target pass rates be introduced for any other GSOPs?

As outlined above. The licence presents a potentially unlimited downside risk to companies to comply with standard and as a consequence the cost of achieving a licence condition standard are much higher to avoid this risk. Ofgem have not included any assessment of whether any additional cost of this proposal would be in the customers' better interests.

GDQ23: What do you think of the proposed new output based on average restoration time for total unplanned interruptions?

It is not clear from the consultation document exactly the problem that Ofgem are attempting to solve with this proposal. If there are a specific group of customers that Ofgem believe are not receiving an appropriate level of service, such as customers in MOBs, then a target addressing that specific issue needs to be indentified.

On average there are 12,000 unplanned interruption per when supply is interrupted on NGN's network. NGN achieves 9.5/10 for unplanned customer satisfaction surveys. NGN achieves on average 9.08/10 for this touchpoint, showing that broadly speaking, customers are highly satisfied that gas was restored as soon as possible.

The GDNs have already considered how we can better account for key drivers of satisfaction with the customer satisfaction questions, and have proposed moving to an average of all questions, rather than using the priority question. Moving to this methodology would allow the GDNs to weight two questions within each survey that impact satisfaction the most. The proposal has already been put forward that for emergency and repair, one of these questions should be length of interruption. This would then mean that this area of performance has a stronger focus within GD2, reflected through the customer satisfaction survey scores.

In addition to this, mechanisms are in place already to compensate customers for failure to restore gas supply. NGN is supportive of the move to measure GSOP1 performance from 24 hours to 18 hours, and also to increase the payment (as NGN already pays double GSOP).

It is critical to remember that whilst every effort will be made to ensure that customers' gas is restored as soon as possible following an unplanned interruption, the key focus in these circumstances is always safety. Gas will only be returned to a property when it is deemed safe to do so. We have serious reservations that Ofgem's proposal is not in the customers' interests.

- Ofgem has to be absolutely certain that this proposal will not jeopardise this focus on safety. This takes into account the GDNs primary responsibility but also reflects all the results of stakeholder research that places safety as the number one criteria for customers with respect to their gas supply.
- Secondly, there is no 'standard' unplanned interruption. Each will present its own drivers and engineering and customer requirements. This is particularly true of large incidents it is difficult to see how this can be accommodated within a single average standard.
- Finally, in times of extreme workload such as when there are large incidents there are good examples of where collaboration between networks in the form of the provision of additional resource has been provided that has allowed the incident to dealt with more effectively and the safety risk and time to restoration has been reduced. This collaboration was clearly evident in 2018 when NGN experienced a large scale incident with loss of supply to close to 4,000 customers due to third party damage to our Network. It was only through collaboration with other networks that customer supplies were restored within 4 days. Ofgem's proposal would put this collaboration at risk as it will result in the supporting companies potentially suffering a detriment to their own performance.

It is not clear that Ofgem has considered and effectively addressed these issues in its full assessment of this proposal. Without the provision of this assessment it is difficult to assess if this would clearly be in the customers' longer term interests. We would urge Ofgem to share this detailed analysis so that a fuller consideration can be provided.

Finally, there is a proposal to introduce a licence condition as a backstop for GSOP performance, again which in principle NGN is supportive of. We are uncertain that a further penalty in this area would really be in the customer's best interests, particularly if a licence condition is in place as a backstop. Strong customer performance in this area demonstrates that we are meeting and exceeding customer expectations, and further revising the CS questionnaire in response to customer feedback about safety being a priority.

GDQ24: Average restoration time incentive for total unplanned interruptions

Major incidents (over 250 customers). Not only are large scale incidents unpredictable, and sometimes caused by third parties, but more importantly currently there is a healthy degree of cross-GDN collaboration for operational support to large scale incidents.

As an example, NGN called on this support during the Silsden Incident over Easter Weekend - 31st March - 3rd April 2018. 3,500 customer were without gas in harsh weather conditions. All GDNs answered our request for support. Should major incidents be included in the proposed average interruption standard, it is likley that this will have a detrimental impact on the willingness to support incidents within other networks. This will lead to a poorly customer experience on large scale incidents.

MOBs should be excluded as the number varies highly between GDNs, and it would seem unlikely that a fair approach could be achieved by included them on an average interruption standard.

GDQ25: What are your views on separating interruptions that occur in MOBs into a specific output?

We have very limited experience of unplanned interruptions in MOBs as we only have a small number within our network (5 Storeys of above). However we understand that for some networks, separating MOBs into a specific output would have a clear logic for managing the measurement of unplanned interruptions.

GDQ26: What are your views on the overall outputs package considered for this output category?

It is clear from our engagement that issues surrounding the environment are high on our customers and stakeholders' agenda. These include the big national policy issues related to long term climate change but also include more regional and local issues that extend beyond this to issues such as air quality and the physical environment. This engagement has also shown us that they expect us to be involved where appropriate in addressing these issues through our daily activities. It is clear from the proposals put forward by Ofgem that the issue of the environment is being viewed through a different and narrow lens when compared to our stakeholders.

Furthermore, the proposals put in the consultation are proposing to either remove or reduce the incentives that currently exist for GDNs to play a role in supporting decarbonisation and manage its impact on the wider environment.

There seems to an inconsistency in the approach to the environment across the different sectors in Ofgem with certain outputs being deemed as appropriate in one sector and not in others. Examples include:

- Non Shrinkage Business Carbon Footprint
- Recognition of the role of decarbonisation of transport through EV in electricity but CNG as a route to decarbonise heavy transport is deemed not appropriate
- The exclusion of energy efficiency even where it can be used as an alternative to other forms of network expenditure

Our view is therefore that Ofgem need to reconsider the scope of what is appropriate in this area in line with its own broader objectives.

GDQ27: For each potential output considered (where relevant): a) Is it of benefit to consumers, and why? b) How, and at what level should we set targets? (eg should these be relative/absolute) c) What are your views on the design of the incentive? (eg reward/penalty/size of allowance) d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?

The RIIO-GD1 shrinkage incentive has driven the right behaviour and resulted in si8gnificant benefits to both current and future customers which should be maintained throughout RIIO-GD2. We do not agree with Ofgem's assessment of the shrinkage incentive and have previously pointed out clear errors in their understanding of the incentive itself, the approach deployed in setting baseline allowances and most importantly the complexity of the actions that GDNs can take to drive value through emissions reductions.

Ofgem has not applied the principles it sets out in the consultation document that it expects networks to comply with in proposing new financial ODIs to its own assessment of shrinkage. As a result it is not based upon any objective assessment and in particular does not answer the critical question of whether the proposals present a clearly better outcome for current and future customers. We would encourage Ofgem to complete this assessment before confirming its decision to significantly change the scope of this incentive.

We would agree with the proposal to create space within the framework to accommodate low or no regrets investments within the framework. However, for this proposal to work it must be considered alongside of the wider financial proposals being put forward. Ofgem proposals present a extreme cash constrained scenario for GDNs to meet even it's base expenditure requirements. Further investment expenditure to deliver optionality and lower future unit costs for customers can only be delivered from significant further cash injections from equity shareholders. The current framework does not support enhanced further capital investment in gas distribution networks given this cash constraint.

GDQ28: What other outputs should we be considering if any?

Please see response to GDQ30.

GDQ29: What are your views on the RIIO outputs that we propose to remove?

There is a clear rationale for retaining clear outputs relating to biomethane connections and information provision reporting obligations and to removing the outputs related to these.

We would also propose to maintain operational targets around managing our impact upon the physical environment. The outputs relating to management of spoil and use of virgin aggregate have driven significant improvements in the RIIO1 period and should be retained.

GDQ30: What are your views on the priorities we've identified for the gas distribution sector in delivering an environmentally sustainable network? Should measures proposed for electricity and gas transmission, such as BCF reporting and strategies for including in Business Plans, also apply to gas distribution?

Yes. Regardless of the energy vector they carry, all energy networks are large companies based on their numbers of employees and turnover which is why the government requires networks to participate in the Energy Savings Opportunities Scheme (ESOS) and the Streamlined Energy and Carbon Reporting (SECR) where businesses report on their environmental performance against consistent measures and metrics.

NGN strongly supports the extension of environmental impact reporting requirement which are proposed for Electricity Transmission to gas and electricity transmission and distribution networks because this would provide a consistent framework and promote competition if a reputational incentive was to be introduced. The ESOS and SECR reporting requirements could be used as reference for RIIO-GD2 environmental impact reporting.

In addition, the environmental outputs in RIIO-GD1 have led to performance and business improvements in all areas which demonstrates the effectiveness of regulatory reporting with regard to driving behavioural and business change.

GDQ31: Do you agree with our proposed approaches to funding GDN activities over RIIO-GD2 related to Heat decarbonisation?

We would agree with the proposal to create space within the framework to accommodate low or no regrets investments within the framework with respect to Heat Decarbonisation. However, for this proposal to work it must be considered alongside of the wider financial proposals being put forward. Ofgem proposals present an extreme cash constrained scenario for GDNs to meet even it’s base expenditure requirements. Further investment expenditure to deliver optionality and lower future unit costs for customers can only be delivered from significant further cash injections from equity shareholders. The current framework does not support enhanced further capital investment in gas distribution networks given this cash constraint.

GDQ32: Are the GDNs' Distributed Gas Connections Guides and distributed gas information strategies helpful and effective? If not, how could they be improved?

Distributed gas connections in the form of biomethane have become established over the course of RIIO1. There are a number of regular players in the market who understand the connections process and interactions required with Gas Distribution Networks, therefore the connections guides and information strategies are of less use in these instances. There are of course a number of new biomethane entrants and other distributed gas sources that haven't developed over RIIO1 and these new industries would still benefit from the high level information provided in the connections guide and information strategy. One of the biggest challenges distributed gas connections face is with capacity in the gas grid. In order to improve the connections guide, it may be prudent to provide further information about the pressure tiers GDNs will accept connections to, their benefits and limitations.

NGN believe that the key account management service that has been put in place for distributed gas has been of real benefit to the customer, giving them a single point of contact from initial enquiry through to gas to grid. The development of internal and industry documents have also been of real benefit to the industry and further work is being conducted to align processes across all GDNs.

GDQ33: What are your views on the overall outputs package considered for this output category?

Overall, NGN agrees with the scope of the outputs package proposed for "Maintain a safe and resilient network". We detail our views on the individual output proposals either in the following or as a response to output specific questions.

GDQ34: For each potential output considered (where relevant): a) Is it of benefit to consumers, and why? b) How, and at what level should we set targets? (eg should these be relative/absolute) c) What are your views on the design of the incentive? (eg reward/penalty/size of allowance) d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?

Repex – please see responses to GDQ37-41

NTS Exit Capacity – please see response to GDQ42

GDN record keeping

- NGN supports Ofgem's consideration of including a GDN record keeping output because we recognise the benefits of accurate data records not only for asset management purposes but also for our customer operations. Stakeholders have also told us in multiple occasions that the availability of accurate up-to-date data records is important to them.

- In order to achieve a consistent for MOB record keeping Ofgem needs to provide networks with a clear definition of MOB. A clearer definition would be to categorise this as High-Rise MOBs consisting of 5 storeys or greater. Is Ofgem referring to residential buildings only or also commercial buildings?

- NGN will include a detailed data accuracy improvement work programme in the draft Business Plan.

NARMS – please see response to CSQ19-26

GDQ36: What are your views on RIIO-GD1 outputs that we propose to remove?

NGN supports the removal of all the outputs proposed for removal in this category and agrees with the reasons for removal.

GDQ37: What are your thoughts on our proposals for Tier 1 outputs?

We would support the proposal for a minimum floor output for Tier 1 (qualifying iron within 30m of property) related to the HSE enforcement requirement.

However, we would disagree that the ceiling should be set at the same place as the HSE floor:

- GDNs have a very strong driver from HSE to not fail their minimum requirement.
- Many moving parts (scores of simultaneous projects, risk of late external impacts including weather) drive GDNs to target slight over-achievement of HSE target.
- Setting a delivery floor and funding ceiling at the same HSE point could drive perverse and / or inefficient behaviours. An alternative would be to set the funding ceiling above the HSE target level.
- We would agree that the allowance should be adjusted down for under delivery; however, a small variable amount of funded over-delivery would not disadvantage customers as this workload would have been justifiably delivered and funded early in GD3.
- Outputs should be based on deliverables in the control of GDNs – e.g. the amount of rechargeable diversions to be delivered should not be baked in.
- Need clarification as to where policy (not elective) small diameter steel would fit. Funding required but should this be tied to a specific output delivery given the uncertainty around volumes

GDQ38: Do you think we should set an output for replacing non-PE services?

There are inherent uncertainties relating to the volume of services likely to be delivered within any period due to intervention frequencies, relay:transfer ratios and relays following escapes.

However, costs are ultimately driven by workloads so there is potential to possibly consider a volume driver or a PCD in this area. Similar arrangements have been put in place previously within the framework.

GDQ39: Do you think we should set outputs for asset maintenance repex activities?

Yes, but there is a need to ensure GDNs have the flexibility to manage the assets and respond to changes in actual and forecast asset performance. NARMs is a useful reporting mechanism but for understanding appropriate investments a more focussed CBA is needed.

- For option 2, we would be interested in exploring with Ofgem where "+/- X%" could lie, and whether this percentage would be volume or cost based.

- For options 1 and 2, if there is a PCD requirement (with or without a deadband) with an adjustment for under-delivery but not for over-delivery then this could possibly drive inefficient / ineffective behaviour where there could potentially be a disincentive to make a beneficial investment in a particular category of asset if that would then go beyond the allowance. We feel that, rather than a deadband, there could be ranges around targets where under- and over-delivery drove negative and positive adjustments (potentially with caps and collars to guarantee minimum outputs but limit maximum expenditure).

GDQ40: What are your thoughts on not including Mains Replacement Level of Risk Removed, GIBs and fractures as output measures for RIIO-GD2?

NGN supports the proposal to not include output measures for the level of risk removed, GIBs and Fractures / Failures for RIIO-GD2.

Management of risk by the GDNs is overseen by the Health & Safety Executive and agreed procedures are in place to ensure that iron mains are identified and prioritised for replacement using a method that is informed by risk.

We agree that numbers of GIBs and Fractures / Failures are not appropriate as specific output measures for RIIO-GD2 as these figures are strongly influenced by external factors outside the control of GDNs. However, we support the proposal that these should continue to be reported by the GDNs annually in a consistent manner to ensure that longer term trends can be monitored and discussed.

GDQ41: Do you agree with our proposed approach to repex uncertainty mechanisms?

NGN has some clarifications / suggestions for the detailed areas captured under sections 5.41 – 5.44 of the Gas Distribution annex:

- Ductile iron volume driver – This should only apply to medium pressure ductile iron (DIMP); further, Tier 1 DIMP will qualify towards the HSE T1 target and so should be funded through the T1 allowance rather than having a separate volume driver, which could lead to double-counting. Tier 2 and Tier 3 DIMP will not contribute towards the HSE target and so should qualify for a volume driver.
- Non-standard materials (principally Asbestos for NGN) of all diameters should qualify for a volume driver.
- We agree with your proposal to have a volume driver for Tier 2A iron.

Otherwise, NGN generally supports your proposals for uncertainty mechanisms where there are significant changes to repex workloads through the GD2 period or following submission of our final business plans. We would also propose that any materiality threshold be based on an appropriate timescale. 5 years would imply to a cash flow exposure that is too great given the low risk and low return nature of your proposals.

GDQ42: What are your views on our proposal to use final offtake capacity prices rather than T-3 offtake capacity price estimates in the calculation of incentive rewards and penalties in RIIO-GD2?

The concern around this approach would be around the timing of exit charge publications. Indicative exit prices are published in May and Final charges at the end of July, and due to time constraints in the annual planning cycle we would have to use the indicative charges to inform our capacity strategy, as modelling begins in May and Gemini capacity bookings are made July. This could potentially be an issue for us if there are variances between the indicative and the final charges, this is because budgets and capacity strategy would have to be set using the indicative prices. The charging methodology is currently under review (Urgent UNC Mod 0678) and it is hoped that price volatility will be minimised as a result of changes to the NTS charging model. This would reduce the level of concern around this.

GDQ43: Do you consider that an output(s) is necessary: a) for MOBs record keeping (in the form of a bespoke Price Control Deliverable)? b) for other specific areas of GDN record keeping (if so which areas)? c) to cover GDN record keeping requirements as a whole?

NGN supports Ofgem's consideration of including a GDN record keeping output because we recognise the benefits of accurate data records not only for asset management purposes but also for our customer operations. Stakeholders have also told that the availability of accurate up-to-date data records is important to them.

In order to achieve a consistent for MOB record keeping Ofgem needs to provide networks with a clear definition of MOBs which is realistic and measurable.

GDQ44: Do you agree with our intention to evolve the RIIO-GD1 approach for RIIO-GD2?

Yes. We have consistently supported the general Toolkit Approach developed at RIIO-GD1 as being a good starting point for consideration. Good base starting point. This addresses the key point in this type of analysis that there is no obvious single answer. But also comes with the issue of the approach leading to the creation of a 'perfect GDN' and not recognising the genuine trade-offs that exist between cost categories and the different operational approaches taken. Within this overall approach we would support the following principles being foremost in the methodology:

- Continue with the broad Toolkit approach.
- Methodology continues to consider both historic and forecast expenditure
- Continued use of the upper quartile at the gross Totex level not at cost line
- Effective comparison between Top Down and Bottom up approaches to ensure Cherry Picking is avoided.

GDQ45: Do you have any comments on our initial views for cost assessment, including appropriate cost categories, cost drivers, analysis toolkit and how we combine the analysis?

Whilst agree with Toolkit. There is room for further refinement of individual cost drivers to be more accurate. We have previously shared our thoughts on more accurate cost categorisations i.e. grouping activities where there are known inconsistencies in reporting and where it is an end to end process e.g. E&R and Ops Mgt brought together.

Our detailed views on these issues have been presented to Ofgem and the CAWG.

GDQ46: Do you have any views on our proposed options for loss of metering work?

In assessing the historic efficiency of GDNs it must be recognised that the level of company costs associated with metering work will be different. NGN lost its metering contracts in 2008. RIIO-GD1 analysis employed sensible adjustments made to the benchmarks for efficient costs of metering work this needs to continue to reflect the genuine differences in historic costs that individual companies will face. NGN received no allowance for loss of metering in RIIO-GD1.

GDQ47: Do you agree with our proposal for implementing symmetrical adjustments or regional or company specific factors?

The case for regional and company specific factors needs to be considered in detail following the submission of Business Plans to effectively deal with any issues presented.

GDQ48: What are your views on the proposed uncertainty mechanisms and their design?

In general terms NGN has no specific issues with the proposals.

GDQ49: Are there any additional uncertainty mechanisms that we should consider across the sector and if so, how should these be designed?

No. However it remains important framework leaves scope for company specific issues.

GDQ50: What are your views on the RIIO-GD1 uncertainty mechanisms we propose to remove?

We have no issues with your proposals in this area.

GDQ51: What do you think is the most appropriate approach for funding the GTs' expenditure for Xoserve in RIIO-2 and why?

The FGO arrangements are now firmly embedded and GD2 should recognise that xoserve is now a stand-alone business. GDNs have only 2 seats on the Board and do not exercise significant control. The arrangements should move to a pass through basis. There are still incentives on all parties including GDNs to minimise xoserve costs.

The other consideration is Ofgem's ability to set an accurate price control for an IS services company. Given the significant movements that occur in technology, forecasting for a 7 year period out to 2026 will always be inherently difficult. A pass through arrangement would avoid any windfall gains or losses based on how technology costs and industry requirements move over time. Neither of which the GDNs are able to control.

GDQ52: If Xoserve takes on any services beyond its core Central Data Service Provider role, how should we treat the costs and risks associated with these additional services through the price control?

Additional costs and risks associated with services outside the central data service should be outside of the price control.