

National Grid Gas Transmission's response to Ofgem's RIIO-2 sector-specific methodology consultation – Gas Transmission

Overview

National Grid Gas plc (NGG) is supportive of many of the proposals in the consultation document and the objectives that Ofgem is trying to achieve. **We welcome the appreciation that gas transmission will play a critical role during the energy transition.** We also welcome Ofgem's open acknowledgment of our ageing gas transmission assets and therefore the necessity to invest appropriately in the network to maintain and retain the right capability for gas transmission to deliver for consumers throughout the energy transition. Similarly, we welcome the recognition that the current commercial operation of the gas market does not provide the long-term signals that would provide clear basis for investment. However, **we have significant concerns with several of Ofgem's current proposals** and summarise our views on these below. We set out our answers to the thirty-nine Gas Annex questions in the appendix below.

RIIO principles

Ofgem clearly intends to ensure that the level of rewards available to high performing networks during RIIO-2 will be lower than ever before. We are concerned that the proposals continue to put greater emphasis on addressing the perceived problems of RIIO-1 and to limit and lower network returns in the short term, rather than enabling and incentivising the investment and innovation required to facilitate the continued transformation of the energy sector in RIIO-2 and beyond.

For gas transmission we are **particularly concerned by a move away from several the key RIIO principles** when the proposals are considered as a package. We see this most clearly in areas such as; a reduced role for incentives that offer value to stakeholders, allocation of risk, a weakening of incentives to explore meaningful long-term innovation and a preference for allowances set on inputs. We believe this direction of travel creates the risk of long-term unintended consequences that would not be in the public interest, making any bill reductions delivered by the RIIO-2 framework unsustainable in the long term with the impact felt by future consumers.

Incentives

Ofgem has confirmed that RIIO-2 will be based on the principles of incentive regulation where rewards and penalties are used to shape the behaviour of networks to promote the delivery of outputs that are in the public interest. We believe there are strong arguments to retain the package of incentives that have delivered for consumers over RIIO-1. **For RIIO-2 we propose to deliver additional consumer benefit by strengthening the incentive package** to include enhanced environmental incentives, introducing new linepack management incentives and exploring opportunities for incentives in the whole system space.

Many of the proposed changes to the output delivery incentives package assume that the performance achieved during RIIO-1 can be taken as a zero cost to achieve starting point for RIIO-2. We recognise that we need to work harder to be transparent about the behaviours that current incentives have encouraged and will continue to encourage in future. However, a simple ratcheting of incentive targets based on past performance cannot effectively incentivise our behaviour in the face of the new and different challenges we foresee during RIIO-2.

We welcome the ability for us to propose new and bespoke output delivery incentives linked to the needs of our stakeholders. We will continue to work with stakeholders over the coming

months to develop these incentives further, particularly as our work on Network Capability evolves. This will include working to evidence the value delivered through incentives.

Totex Incentive Mechanism sharing factors have strongly motivated our performance in RIIO-1. We believe that high totex sharing factors provide strong incentives for networks to effectively manage risk and deliver totex efficiencies, where savings will be shared with consumers in the period and be fully realised from 2026.

Allocation of risk

The RIIO handbook¹ states the principle; “risks to be allocated appropriately between companies and consumers depending on who is the best placed to manage them”. We feel the Sector Methodology proposals do not reflect this principle. Where changes are proposed allocation of risk does not always appear to be consistently allocated to the party best placed to manage that risk; seemingly as an unintended consequence of the perception of risks that have materialised, or not, during RIIO-1 and not through consideration of the underlying, ongoing risk nor the effort and cost of mitigating these risks.

For example, **we disagree with the proposal to remove the one-off asset health shock uncertainty mechanism**; which provides the ability to manage the continuous risk of a high impact, low probability fault or failure on the system without resorting to re-opening a price control. Our understanding is that no alternative arrangement or mechanism is proposed elsewhere within the overall RIIO-GT2 package that would allow us to react to such an event occurring.

Network Capability

We acknowledge Ofgem’s desire to ensure that we deliver appropriate physical capability on the network to efficiently meet the current and future needs of our customers. **We will be working closely with our stakeholders to develop proposals for Network Capability.**

We disagree with Ofgem’s assertion that there is “abundant spare capacity” on the network due to lower demand, lower supply and other factors mentioned. To make this statement based on a limited selection of measures does not account for the true complexity of how the physical network serves the requirements of the wholesale gas market.

For example, entry and exit flows are generally lower during the summer months. However, we are increasingly observing challenging operational conditions in these low demand periods. This can be seen in recent increases in annual compressor running hours. This is required to manage activities such as system access for maintenance, enabling the flexibility that the market requires and ensuring we can deliver for our customers. This is just one example where the value of the network is not sufficiently measured through end of day demand alone. We expect any conclusions made for metrics of Network Capability to be a suite of measures expressed as ranges.

Compressor investment programme

A key element of our business plan will be investment in our compressor fleet both to comply with emissions legislation and deliver the network capability our customers and stakeholders require now and into the future.

¹ Handbook for implementing the RIIO model – October 2010

We support Ofgem’s proposal to introduce a Compressor Emissions Compliance Strategy (CECS) document that lays out our strategy for meeting our environmental compliance obligations by 1 January 2030. We note Ofgem’s proposal for inclusion of site-specific solutions for each compressor site in the CECS. We propose, that as a minimum we identify the compliance strategy for each compressor site in the CECS and our business plan. By compliance strategy, we mean whether we intend to build new units, remove units from a site (without replacing them), make existing units compliant or whether they can be limited to 500 running hours per year.

In addition, for those compressor units to be addressed during RIIO-2, we will have certainty on the preferred solution (e.g. 2 x 15MW gas driven turbines) to deliver the compliance strategy and the network capability it will provide. This will be captured in our business plan, including the funding required to deliver this option. We believe the compressor PCDs for these sites should be set based on this information. These PCDs should be set in a way that allows some limited flexibility in the actual solution deployed, provided it delivers the long-term network capability requirement set out in the PCD. (Option 2A in the Ofgem consultation). An amount of flexibility in the PCD requirements avoids the need for additional regulatory intervention, that would create delays and additional costs to the overall programme. It would also incentivise NGG to seek efficient delivery methods which would be shared with customers through the totex incentive mechanism. **We do not see the need for the compressors delivered during RIIO-2 to be subject to a reopener mechanism.**

For those compressors being addressed in RIIO-3, some costs will be incurred during RIIO-2, for example to complete the Best Available Technique (BAT) assessment with environmental regulators or to start mobilisation. We will still provide a proposed compliance strategy in our business plan but recognise this could be later impacted by a major government policy change, or unexpected closure of major 3rd party assets. To allow us to deliver this preparatory work during RIIO-2 we propose that funding is provided ex-ante, with PCD’s set to achieve fixed deliverables on a site by site basis, such as achieving BAT. A reopener in year 2 of the price control and a further true up at RIIO-2 closeout could be set to trigger in the event of a major change along the lines of the examples provided above.

Integrated Transmission System Operator

As an integrated Transmission System Operator (TSO) serving all Great Britain we operate under a single licence and a single safety case with incentives that encourage us to deliver efficiently across all our activities; optimising cost and benefit for consumers. Integration as a TSO provides great value in allowing people and process to be brought together to optimise the operational delivery of our customer requirements. This ultimately delivers efficiencies that benefit end consumers. **We were surprised to hear Ofgem viewed a risk of “potentially harmful distortions”** existing in this ongoing work to deliver a gas transmission system in the public interest. We are not aware of any such issues but if they are perceived then evidence of such should be provided.

Whole System

We support Ofgem’s ambition around whole system solutions and accept that the narrow definition proposed is a reasonable and proportionate way to start making progress during RIIO-2. We expect we will work more collaboratively than ever with our colleagues in the gas distribution networks and that continuing to embed our customers in the decisions we make will be a key way in which we respond to the challenges set.

We believe that getting whole system approaches working well can bring significant value to existing and future consumers and so is a natural candidate for incentives that reward the achievement of that value. We propose that Ofgem keep this area open for the development of new incentives across sector boundaries where they can support delivery of consumer value.

Gas Transmission questions

Chapter 2 - Context

GTQ1. Do you have any feedback on our proposals for simplifying the RIIO-2 gas transmission price control package, or suggestions for further simplification?

We support the intent of simplifying the price control. Greater clarity around outputs and Price Control Deliverables will allow us to focus on delivering economically and efficiently in the public interest during RIIO-2; creating value for consumers.

Removal of some uncertainty mechanisms that add little value for consumers is a proportionate response to achieving simplicity. However, the proposed removal of other uncertainty mechanisms would move risk between consumers and ourselves in unintended ways. The result of this being that allocation of risk does not remain balanced or aligned with the RIIO principle of being placed with whom is best placed to manage the risk.

More detail can be found in specific responses to later questions.

GTQ2. Do you have any views on the extent to which the potential outputs discussed in this document:

- a) achieve the appropriate balance and focus on the areas that are of value to consumers and should be included as part of a RIIO-GT2 outputs package;**

Incentives

The current proposals reduce the size and scope of incentives compared to RIIO-1, including through the potential use of dynamic and/or relative incentives, use of downside only incentives, removal of existing incentives and reducing the financial size of incentives. It is not clear how this aligns with the aspiration of strong incentives to deliver value for consumers. Weakened, lower value incentives would reduce the direct costs of incentives to consumers during RIIO-2 but without the strong focus on these areas could result in missed performance improvements and cost savings for consumers in the short and longer term.

In terms of incentive design, dynamic incentives could also result in a weakened incentive to seek frontier performance as this could make future years more challenging and potentially shorten the payback on any initiatives to a single year. In terms of incentive scheme design we are unclear on where Ofgem may consider the use of dynamic or relative incentives for NGG and note that this has not been discussed at any of Ofgem's Policy Working Groups. With no other comparators in gas transmission we can't see how relative incentives would work for NGG.

We do not agree with the inconsistency of Ofgem using upside environmental incentives in other sectors (e.g. ET and GDN's) but restricting NGG to downside only environmental incentives. We believe improved environmental performance is of equal value to consumers from each of the sectors.

We recognise the need for continual stretch in performance as part of an effective ongoing incentive regime. However, this stretch needs to be considered in the context of the wider developments, which will make meeting even our existing incentives more challenging. As we have discussed in our ongoing engagement on Network Capability, the way in which the NTS is being used is changing rapidly and is likely to continue to change more in the future. Fundamentally, the network

dynamics are becoming more complex due to changing demand/supply patterns, which mean the targets (whilst static) have become more challenging over time and are likely to become more challenging to meet in future. We expect that some incentives (e.g. constraint management) are likely to be influenced by our ongoing work to define NTS capability.

In this challenging environment, it is also important to explore how to enhance the package of incentives to deliver consumer value in new areas. There is significant scope for new incentives related to whole-system coordination and capability, to better align our interests with those of consumers and our customers. This is true for all types of energy network companies. We also believe there is scope to deliver additional value through introducing a new incentive(s) for linepack management and further improve our package of environmental incentives. Finally, the overall incentive package of needs to be considered in the round. Decisions taken on existing and potential new incentives are clearly interlinked.

Other Outputs

In terms of outputs that are not incentives, comments on these are covered under the specific questions relating to them.

b) align with our overarching outputs framework as described in the Core Document;

The incentives do align with the general outputs framework, noting that in some areas outputs could map to more than one of Ofgem's proposed output categories. We have worked with stakeholders to create a set of eight key stakeholder priorities, and will build our plan based on these.

c) we also welcome views on whether there are any alternative outputs and/ or mechanisms not identified here which we should be considering.

We believe there are potential areas where it would be in consumer interest for new outputs to be developed, and we have highlighted these in the relevant sections of our response below. We will be engaging the industry and consumers on these during 2019 as we build our business plan.

Chapter 3 questions – Meet the needs of consumers and network users

General output questions

GTQ3. What are your views on the overall outputs package considered for this output category?

We have set out views under the relevant questions and included our new incentive proposal areas that we will be developing with consumers and stakeholders.

GTQ4. 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? (e.g. should these be relative/absolute).**
- c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance).**

Please treat this as a combined response to questions GTQ3 and GTQ4. Please also note that our overarching comments on the approach to outputs and incentives can be found in the overview of this response.

Stakeholder Satisfaction Output

Please refer to our detailed answers to GTQ7-9

Quality of Demand Forecasts

Please refer to our detailed answers to GTQ10 & 11

Maintenance Incentives- Use of Days and Changes schemes

These schemes encourage us to carry out our essential maintenance in a way that causes as little disruption as possible to connected consumers and stakeholders. We support retention of both maintenance incentives (the 'Changes Scheme' and the 'Use of Days Scheme') but do not support moving these to penalty or reputational only arrangements.

We believe that targets should be set based on workload expected in the RIIO-2 period and that an upside would continue to drive value. This is a key area of interaction across the TSO. There are hidden costs to achieve that sit in the GTO for example, 24/7 working which we recognise that we could do more to make transparent to stakeholders. We are keen to work with stakeholders to see how the Maintenance Incentives could be used to deliver further value for end consumers.

Changes Scheme

Under the Changes Scheme, the target number of Maintenance Days or Advice Notice Days, subject to change initiated by NGG (excluding changes made by NGG pursuant to customers' request), is equal to 7.25% of the total number of Maintenance plan days within the year. Stakeholders continue to express support for discouraging change to maintenance dates (once they have been agreed) to allow optimal operational planning including other site maintenance requirements. The incentive to reduce this has significant value to NTS users (e.g. Energy UK said that "*changes at short notice can be costly*") and in turn have a direct value impact for consumers.

Use of Days Scheme

For Maintenance Use of Days, the value to all connected customers being able to operate rather than being disrupted by maintenance is important. In recognition of the value added by the incentive, some NTS users have suggested it could be expanded in scope to include maintenance activities in addition to Routine Valve Operations. As part of our industry wide SO shallow incentive consultation in 2017, most stakeholders responding supported the intention to extend the incentive to include more maintenance activities.

The increasingly flexible and unpredictable use of our network is likely to make the maintenance incentives more challenging to achieve. More varied usage of our assets may make asset usage and wear (and therefore maintenance schedules) more challenging to predict. As an example, for an interconnector with bi-directional flow, the maintenance schedule would change depending on the proportion of time that the interconnector is flowing in either direction.

A further reason why this target is likely to become more challenging to meet relates to our asset health. Our assets are ageing which is correlated with increased condition related issues: by the start of RIIO-2, about 70% of our NTS assets will be beyond their original design life of 40 years, and about 50% of our pipeline assets will be beyond the original design life of 50 years. Our increasingly older assets are likely to require more maintenance actions in the future.

Connections

We support the proposal to retain an output relating to connections – specifically to comply with the connections process requirements of the UNC. In our view the requirements upon NGG are already clearly set out in the UNC and are working well. It is not necessary to introduce or replicate these requirements into a Licence Obligation. We agree that performance can be monitored through the information published by NGG in line with its obligations under the UNC.

We also support keeping open the consideration of additional outputs relating to connections and access. This is an area where customers have identified that improved customer service and/or alternative services could provide additional value to consumers.

Capacity Constraint Management (CCM)

We agree with Ofgem's comment "...that the CCM incentive still provides a strong incentive to efficiently manage the cost of constraints" and support the proposal for the retention of a CCM scheme. The current incentive benefits consumers through minimisation of the costs incurred through both operational and investment constraint management decisions, and maximisation of system access.

We believe the design of a CCM scheme for RIIO-2 will be dependent on the outcomes of our Network Capability work and any resultant proposals regarding capacity baselines. As such we are not commenting on the incentive parameters in this response. We do however want to highlight that we have undertaken significant activity and costs during RIIO-2 to manage constraints. These have been outside of the buyback costs captured under the CCM and hence the absence of buyback costs since 2006/7.

Background to the CCM Incentive

The GB gas market is a virtual balancing point market that allows buyers and sellers of gas to assume entry and offtake of gas at any point on the network. This has enabled the existence of a large and liquid gas market, which produces significant value for GB consumers.

However, in practice, the capability of the network is such that, on some occasions, the desired pattern of entry and offtake is not consistent with the physical characteristics of the network. In these cases, it is necessary for us to intervene by changing flows of gas on the network to that originally intended by gas shippers.

The two key rationales for the Constraint Management (CCM) incentive are:

- **CCM cost optimisation.** The cost of our CCM actions are passed on to network users, and ultimately consumers. Commercial arrangements surrounding NTS entry capacity buy-backs are included in the Licence and Network Code and have evolved since 1999. The current form of these arrangements helps to ensure that our interests are aligned with consumers' interests as far as possible – that is, to minimise the cost of CCM actions.
- **Facilitating a level playing field with investment.** The CCM incentive encourages us to take on risk by providing a cost allowance for constraint management actions in lieu of potential network reinforcement. In other words, the CCM incentive provides a crucial tool to consider the balance between investment in the NTS and commercial tools that can be used to compensate users for lack of network access at certain times. This can reduce overall cost for consumers.

CCM Value to consumers

The incentive acts in two ways to add value to consumers. Firstly, the target of the incentive is the net cost of constraint management, and any reduction in this will benefit consumers. Also, constraint management has a significant impact on the entire gas value chain; the December consultation describes stakeholders as viewing this as a “vital service”. Crucially, constraint management allows the NTS to facilitate an efficient and orderly GB gas market. It allows demand to be met, in the main, by the cheapest gas supplies, in turn lowering wholesale prices for consumers.

We understand from our ongoing stakeholder engagement that many stakeholders are unaware of the actions we take and the costs we incur to perform against the CCM incentive target. We understand the need to do a better job of capturing, recording and communicating these actions so stakeholders can have a more complete understanding of the work we undertake to manage the NTS under the scheme.

CCM RIIO-1 performance

Our outperformance on this target, far from representing a ‘windfall’ gain, is in fact the culmination of concerted effort and expenditure. For example, costs include more than buyback. The actions that we take to meet system constraints include a suite of different actions. Capacity buyback is one of the ‘last resorts’ since it is one of the costlier interventions that we would have to make to manage system constraints. As noted by Ofgem, capacity buyback costs were last incurred in 2006/07 and this demonstrates that the incentive has worked to minimise costs to consumers since we have optimised our actions accordingly. Optimisation of actions undertaken to avoid buyback costs (and therefore provide value for money for consumers) includes locational actions such as in Wales in

September 2016 where we executed a locational energy sell to assist with the management of an entry constraint at Milford Haven. Where possible, we apply certain actions (such as interruptible and/or off-peak capacity scalebacks) to customers that have expressed a willingness to provide such flexibility by, for example purchasing interruptible and/or off-peak capacity. We have used 134 exit capacity scalebacks and 33 entry capacity scalebacks since the start of the RIIO-1 price control period. Crucially, use of these scalebacks have varied widely, depending on the network constraints that are largely out of our control. For example, due to unusually cold weather conditions, we used 78 exit capacity scalebacks in March 2018 alone.

More broadly, there are significant costs we incur that are not formally constraint management actions but are nonetheless costs that we incur to manage constraints to avoid greater substantial costs that would otherwise be imposed on consumers. For example, we have carried out significant maintenance activities in the Bacton area throughout RIIO-1. To date have aligned these activities to meet customer needs and avoid network constraints. We believe this means we have incurred additional contractor costs of an estimated £15m. Throughout RIIO-1 the gas system operator has worked closely with the gas transmission owner, to manage the risk of potential constraints, for example manning compressor sites 24/7 during times of system stress.

Considerations in setting a CCM target for RIIO-2

Whilst we believe that the CCM incentive parameters should not be set until after the completion of the work on Network Capability and consideration of potential changes to baseline capacities there are a few areas that we believe should form part of the considerations when setting the incentive:

- For a low probability, high impact area, non-crystallisation of downside risks in RIIO-1 does not imply mis-calibration of the incentive, and
- During RIIO-1 we have been able to substitute capacity to meet customer needs without resorting to asset investment. This has benefits – in terms of allowing cheaper sources of gas – but imposes system management costs. By its nature, substitution accommodates additional flows in the existing NTS. This means capability of the NTS becomes more constrained and therefore introduces additional risk.

Non-crystallisation of downside risk does not imply mis-calibration

As the consultation acknowledges, “the current target was set at the start of RIIO-1 to manage the risk that NGG may incur low-probability/high-impact constraint management costs, such that rewards in a typical year would be offset by larger penalties during atypical years.”

Setting an incentive against asymmetric outcomes is challenging. The fundamental nature of constraint management is such that circumstances could arise in which the overall costs to manage the constraint become very high. Under the current incentive structure, NGG is heavily exposed to this downside risk, by virtue of a very low floor (-£60m) (subject to RPI).

The fact that the downside risk did not crystallise does not mean the incentive was not calibrated correctly. We have been exposed to this risk for the duration of the RIIO-1 period.

Meeting the (current) target is likely to become more challenging in RIIO-2

Our view is that the scope for further opportunity from substitution is generally becoming more limited. Substitution allows us to manage changing customer requirements without investing in new

capacity. Substitutions are used to fulfil demand for incremental capacity – by substituting capacity between different locations.

Within the RIIO-1 period we have received many requests and expressions of interest for incremental capacity. In tandem with this, the need for substitutions are rising. For example, aggregated substituted quantity (entry and exit) nearly tripled between 2015 and 2018.

This amounts to us receiving signals that the pattern of usage of the existing NTS network is changing over time as shippers seek to enter greater volumes of gas at different entry points in response to commercial signals provided by the gas market. In turn, this is likely to exert downward pressure on prices in the gas market – to the benefit of consumers.

To date, within the RIIO-1 period, incremental capacity demand has been satisfied via substitution of capacity from other locations with zero spend on incremental capacity-triggered NTS investment to maximise use of existing assets. However, the scope for further opportunity to substitute capacity in this way is becoming more limited. We are currently progressing Planning and Advanced Reservation of Capacity Agreement (PARCA) applications for both Entry and Exit Capacity that cannot be met through substitution.

In terms of substitution, we are always seeking ways to optimise the availability of the NTS for users of our network and we are always open to new ideas to “swap” capacity between locations. To this extent, we are happy to engage with stakeholders to consider code modifications that facilitate this. However, in terms of substitutions, there is a risk that changes to the commercial arrangements regarding capacity could increase constraint risk.

Residual Balancing

The two parts of the incentive work together to ensure efficient residual balancing whilst encouraging shippers to balance their portfolios over a gas day and delivering targeted imbalance costs.

- The Price Performance Measure (PPM), intended to ensure our actions to balance minimise price disruption.
- The Linepack Performance Measure (LPM), intended to ensure that the system remains balanced on a day-to-day basis.

For market balancing actions the net daily cost or benefit is ‘smeared’ (via neutrality) back to the shippers that used the system on the day the action was taken. The residual balancing incentive ensures that when NGG enters the market in its residual balancing role, it does so in a measured way to avoid incurring unnecessary costs for consumers.

We support retention of the Price Performance Measure but also recognise that there is merit in working with Stakeholders to consider improvements to the Linepack Performance Measure and the overall incentive parameters.

As the two measures in this scheme work in tandem, we do not support removal of the Linepack Performance Measure. Removal of this measure would weaken the incentive on NGG to undertake residual balancing actions and therefore could consequently weaken the incentive on shippers to

balance their own portfolio's.

As this incentive is about NGG's behaviours in undertaking the residual balancing activity, we do not believe any form of dynamic incentives should be considered.

Price Performance Measure

The PPM incentivises us to execute any residual balancing trades at prices that are in a small range compared to the System Average Price (SAP) for the day. The PPM is defined as the difference between the highest and lowest prices at which National Grid trades, divided by SAP. The target is a price spread of 1.5% of SAP.

The PPM incentive ensures that our interests are aligned with those of customers and consumers, so that we carry out our residual balancing trades with as little disruption as possible. You have stated "We propose to maintain the current incentives on residual balancing as an Output Delivery Incentive (ODI), which places a target on the price spread for residual balancing and a target volume difference between the starting and closing daily linepack." If this means maintaining the current parameters, we would agree this is an appropriate approach. This is because the increasing volatility of the network is likely to make this target more challenging in the future. Indeed, in 2017/18, we underperformed on the PPM target. Additionally, there are decreasing marginal returns to PPM performance and it becomes exponentially more challenging to reach a hypothetical target of 0%.

Linepack Performance Measure

We agree with you that the LPM element potentially incentivises inefficient behaviour in certain circumstances, thereby not adding value for stakeholders and consumers. This is because the LPM is a rigid incentive which incentivises us to ensure the closing daily linepack is equal to the starting daily linepack each day.

However, in many circumstances, this would not be the most efficient linepack strategy, for example, the existing scheme does not reflect the operational need to change linepack levels between summer and winter periods.

Emergency response and enquiry service

We support the proposal to amend the licence requirements to make it clear that the emergency response phone line should always be operational to receive calls.

GTQ5. What other outputs should we be considering, if any?

Providing higher flexibility through linepack

We propose that consideration should be given to formally recognising linepack as a valuable commodity to NTS users. This could be achieved via a new incentive for us to maximise the availability of this scarce resource and/or revised commercial frameworks and products. We also consider the completion of the Network Capability work is important to help inform the benefits of a flexibility through linepack output. We look forward to working with stakeholders and Ofgem to develop these ideas in further detail.

We expect that the demands for flexible gas deliveries and offtakes on the network may increase as:

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- Gas is used as a flexible energy source for an increasingly electrified energy system, relying on enhanced gas-to-power flexibility and as an enabler of power-to-gas developments in the future.
- Gas is increasingly produced locally from renewable sources (e.g. biomethane tariffs were confirmed in May 2018), which are connected to the distribution grid.

These developments suggest that we should be working towards increased linepack availability on the transmission network to accommodate higher swings in power station and distribution network demand and an increasingly diverse supply and demand mix. However, even at current levels, stakeholders have expressed that allocation of flexibility should be considered.

Without such developments, there is a risk that new flexible behaviours will be faced by high-cost or administrative constraints that may deter the drive towards, for example, power plants with much higher frequency ramp-up/down rates. Incremental developments of linepack availability is expected to be a cost-effective solution to support the higher flexibility gas network required by the low carbon energy transition and should be incentivised.

GTQ6. What are your views on the RIIO-1 outputs that we propose to remove?

In addition to the above questions, where relevant, please see the supplementary output specific questions below.

Not applicable: no outputs have been identified for removal in this part of the GT Annex.

Supplementary output specific questions

Stakeholder Engagement Incentive

GTQ7. We welcome views from stakeholders on the above options.

Option 1: no ODI for stakeholder engagement

Option 2: Reputational incentive (report annually on performance)

Option 3: Financial incentive (reward or penalise for performance)

The introduction of the Stakeholder Engagement Incentive in RIIO-1 has driven a change in behaviour across our business, bringing benefits to customers, stakeholders and consumers. We continue to be on a journey with regards to fully embedding stakeholder in our business, and maintaining this incentive into the RIIO-2 period will ensure we remain on track to meet our stakeholder ambition. We believe enhancements proposed to the existing incentive will deliver tangible benefits during the RIO2 period.

One of the benefits of the Stakeholder Engagement Incentive is that it operates on a continual improvement basis – requiring demonstration of improvement each year. Having felt we were making good progress with embedding stakeholder engagement in our business, our performance in 2017/18 gave a clear message to the contrary. This has led us to undertake a full-scale review. From this we identified a clear strategy for improvement, including expanding the scope of our strategic Customer team to cover Stakeholder to ensure we drive the right action across our business.

The Stakeholder Engagement Incentive should be reported on an annual basis, to support the continued incremental improvements. This will drive much greater value than an end of period review, where you miss the opportunity to understand, and improve on, performance at regular intervals. As outlined in the consultation, we support that the existing Stakeholder Engagement Incentive can be enhanced with the independent User Group in both setting up front commitments, and measuring us against these commitments on an ongoing basis. Through using an established User Group the measure would be based on a deeper understanding of our performance than can be gathered through the existing panel approach.

With regards to whether the incentive should be financial or reputation, it is important that for RIIO-2 a financial incentive is in place to support our focus on the continual improvement that will deliver the experience our customers and stakeholders tell us they need. The importance of this will be even more pronounced during the RIIO-2 period given that we exist in a market that is evolving quickly due to the demands around decentralisation, decarbonisation and digitisation, and we need to be more agile and innovative to meet the needs of our stakeholders as they too evolve. The financial incentive will allow us to meet and respond to the changing stakeholder base and stakeholder requirements we are seeing now and into the future.

We do not support the introduction of relative reward for this incentive. If we are to ensure maximum benefit to consumers through our engagement activities, then across the industry collaboration and best practice sharing must be encouraged. The introduction of a relative incentive would have an

adverse impact on this. Moreover, for NGG there is no corresponding party with the same set of stakeholders against which we could be compared.

GTQ8. Do you think it would be possible to establish clear and appropriate KPIs and deliverables in this area?

We believe it is possible to establish clear and appropriate commitments for stakeholder engagement. We would seek the input from the existing independent RIIO-2 User Group to formulate these commitments.

One of the first activities undertaken by the independent User Group was to establish principles for good engagement, against which they will measure our RIIO-2 business plan development. We understand they will establish an assessment criteria against which they will measure our performance. We would take these principles as a starting point for developing stakeholder engagement commitments for RIIO-2, and look to work with the independent RIIO-2 User Group to establish an appropriate set for RIIO-2.

We also believe the enduring use of the User Group will allow the commitments to be reviewed during the RIIO-2 period, to ensure they remain up to date and relevant based on changing stakeholder requirements, evolving best practice etc.

Satisfaction Surveys

GTQ9. We welcome views from stakeholders on the above options.

Option 1: include customer survey as element within overall stakeholder engagement measure. Delivering better quality service for customers would form part of overall SES, and performance contribute to overall stakeholder engagement

Option 2: separate incentive scheme for customer sat. build on existing survey, more challenging targets that deliver tangible improvements to service quality

We recognise the different relationship we have with our customers compared to the broader stakeholder community. By focusing the survey on customers, it recognises and emphasises the importance of this transactional relationship. We support maintaining this as a separate incentive to the Stakeholder Engagement Incentive, given it is clear and objective. It is also measuring how we undertake our engagement activities, whilst the Stakeholder Engagement Incentive is designed to measure what we do.

The current incentive has driven an accelerated customer programme that has delivered (amongst other things): a central customer experience set of principles and standards – generated through customer insight to drive consistent best practice performance – from capability, to journey redesign; a customer experience governance board and Net Promoter Score programme to drive cultural changes at all levels of our organisation; and the development of a customer relationship management system that, moving forward, will enable a consistent experience, drive efficiency and support our goal of delivering a personalised customer experience. These, along with our many other initiatives both strategic and tactical, are collectively having a positive impact on our customer satisfaction trajectory. An example through Project CLoCC heard us listening to customers who told us the connection application fees for lower-flow gas customers deterred them from connecting to

our network. We created a suite of standard designs and gas connections on our new online portal developed as part of Project CLoCC which results in the new application fee for standard design customers being reduced by at least 80%.

We support targeting of the survey based on specific interactions – this is in line with our current trigger-based approach. As proposed in the consultation, the independent User Group could have a role in reviewing the targeted customers, including for instance ensuring we undertake appropriate measures to reach customers who interact with us less regularly.

We support retention of a single survey question as this allows a clear and objective measure of satisfaction. We also support the intent to re-baseline the target for RIIO2. However, the target set whilst stretching, must be realistic, particularly given the continued evolution of customer expectations and customer base.

As with the Stakeholder Engagement Incentive, a financial incentive provides us with the means to continually invest in improving the customer experience. Any investment in our service that does not deliver its intended outcome of improving customer satisfaction, would not deliver NGG an incentive return and so the cost would have to be covered through existing budgets thus increasing our efficiency challenge. This ensures that we produce high quality business cases and track the delivery and outcomes of those investments in order to drive better consumer value. Through focusing on an upside incentive, we are incentivised to deliver beyond the minimum.

As with the Stakeholder Engagement Incentive, we do not support the introduction of relative reward for this incentive. If we are to ensure maximum benefit to consumers through our engagement activities, then across the industry collaboration and best practice sharing must be encouraged. The introduction of a relative incentive would have an adverse impact on this. Moreover, for NGG there is no corresponding party with the same set of customers against which we could be compared. If the measure was comparative, a business case based on improving satisfaction could not be progressed as the risk would be too high of it not improving experience by more than our peers, as we have no visibility of the activity that they are undertaking and thus limiting our investments.

Quality of demand forecasts

GTQ10. Does NGG's forecasts of demand provide a service that is valued by consumers and network users? Please explain why.

The quality of demand forecasts incentive ensures that our interests are fully aligned to those of our customers to produce accurate forecasts. It is also efficient for a single central party to undertake such forecasting and make these forecasts available to all.

Stakeholders of all sizes gain value from this incentive. There are several reasons why there is significant value from our forecasts.

Crucially, the existence of universally-available demand forecasts reduces the barriers to entry for smaller parties that would otherwise not be able to produce their own in-house forecasts at a reasonable cost, which means they would be disadvantaged. This means that we help to 'level the playing field' of structural advantages which larger firms benefit from, leading to greater market

dynamism and competition. We have heard that small customers value the forecasts especially during winter months and at times of market stress.

However, even larger firms, which are more likely to have their own demand forecast modelling tools, value our forecasts. Our understanding is that they would typically use our forecasts to cross-check against their own forecasts and to proxy the ‘consensus view’ for their own trading strategies. For example, Centrica has stated “We do use this forecast and strongly wish for it to continue”.

Through our stakeholder engagement processes, we have heard no stakeholder expressing a desire for the forecasts to no longer be available. This implies that, for firms that produce their own forecasts, the value of our forecast outweighs any relative dis-benefits from the fact that it is available to all firms. Where some users may not use this service directly, we expect it is for commercial reasons and not due to a lack of utility of our forecasts.

Finally, we are mindful of the importance of whole system considerations. We believe that universal ‘benchmark’ demand forecasts (and especially short-term forecasts) will become increasingly important to engender better whole-system coordination.

GTQ11. Should gas consumers pay for NGG to produce accurate demand forecasts? What is the value for consumers from increased accuracy?

We are well-placed to provide market demand forecasts, and it is common practice across Europe for network SOs to provide these (e.g. for Ten Year Network Development Plan forecasts). Whilst the forecasts are valuable to NTS users, they are provided ‘free at the point of use’ (i.e. paid for through a generalised charge on NTS users).

Our Demand Forecast accuracy has improved as a direct result of this incentive. We have responded to the demand forecasting accuracy incentive by bolstering our processes and have incurred costs to deliver this. For example, in Forecast Modelling, we have invested in the development of additional mathematical forecasting techniques, as part of the Gas Control System implementation and additionally investigated potential further opportunities as we retender the meteorology services. Similarly, in Business Processes, we have embedded processes within the Control Room to assess wider market signals to adapt the model and improved commercial intelligence, to enable us to factor in industry changes that impact supply and demand forecasting. Changes like this have resulted in improvements to our demand forecast accuracy. We believe there is value to consumers in retaining this incentive to drive performance in RII0-2 as the environment in which we will deliver will become more challenging. There are several change drivers that may affect our ability to further reduce forecasting errors. We are already experiencing greater volatility and uncertainty in both demand and supply, especially from components of NTS demand that are more price responsive. These drivers include:

- Continued growth in ‘fast-cycle’ storage, and the cessation of the Rough storage site, is changing behaviours across the fast cycle sites.
- Increased flexibility across fuel types and markets, including increasing utilisation of European interconnectors responding to spreads in European prices, as trading at other European hubs becomes more liquid.

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- Changes to the fuel type mix, and increasingly dynamic operation of CCGTs to balance against the increase in volume of intermittent renewable energy, such as wind and solar.
- Increased uncertainty over global LNG supply and demand which directly impacts UK supply and therefore demand.
- Expected increases in the supply of gas from unconventional sources such as shale gas and biogas, which are more volatile. This is likely to impact Distribution Network demand. There is increasing DN reliance on the NTS linepack to provide flexibility as local LDZ facilities are decommissioned. The volatility of the gas demanded from the NTS, both day to day and within day is expected to increase.
- Significant uncertainties arising from the UK's exit from the European Union.

These factors are likely to make demand forecast modelling more challenging in the RIIO-2 period than the RIIO-1 period. Therefore, retaining the incentive target is likely to have the effect of further stretching our efforts. Energy UK agree with this position, having stated: “we consider the target should remain at the current level along with the other parameters.”

Chapter 4 questions – Deliver an environmentally sustainable network

General output questions

GTQ12. What are your views on the overall outputs package considered for this output category?

- a. For each potential output considered (where relevant):**
- b. Is it of benefit to consumers, and why?**
- c. How, and at what level should we set targets? (e.g. should these be relative/absolute).**
- d. What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance).**

Please also note that our overarching comments on the approach to outputs and incentives can be found in the covering letter to this response.

Compressor emissions (IED and MCP Directives)

We support Ofgem's proposal to introduce a Compressor Emissions Compliance Strategy (CECS) document that lays out our strategy for meeting our environmental compliance obligations by 1st January 2030. We note Ofgem's proposal for inclusion of site-specific solutions for each compressor site in the CECS. We propose, that as a minimum we identify the compliance strategy for each compressor site in the CECS and our business plan. By compliance strategy, we mean whether we intend to build new units, remove units from a site (without replacing them), make existing units compliant (e.g. abatement options) or whether they can be limited to 500 running hours per year.

In addition, for those compressor units to be addressed during RIIO-2, we will have certainty on the preferred solution (e.g. 2 x 15MW gas driven turbines) to deliver the compliance strategy and the network capability it will provide (e.g. flow capability of 50 mcm/d or higher). This will be captured in our business plan, including the funding required to deliver this option. We believe the compressor PCDs for these sites should be set based on this information. These PCDs should be set in a way that allows some limited flexibility in the actual solution deployed, provided it delivers the long-term network capability requirement set out in the PCD (Option 2A in the Ofgem consultation). An amount of flexibility in the PCD requirements avoids the need for additional regulatory intervention, that would create delays and additional costs to the overall programme. It would also incentivise NGG to seek efficient delivery methods which would be shared with customers through the totex incentive mechanism. We do not see the need for the compressors delivered during RIIO-2 to be subject to a reopener mechanism.

For those compressors being addressed in RIIO-3, some costs will be incurred during RIIO-2, for example to complete the Best Available Technique (BAT) assessment with environmental regulators or to start mobilisation. We will still provide a proposed compliance strategy in our business plan but recognise this could be later impacted by a major government policy change (e.g. on heat or wider energy policy) or unexpected closure of 3rd party assets. To allow us to deliver this preparatory work during RIIO-2 we propose that funding is provided ex-ante, with PCDs set to achieve fixed deliverables on a site by site basis, such as achieving BAT. A reopener in year 2 of the price control and a further true up at RIIO-2 closeout could be set to trigger in the event of a major change along the lines of the examples provided above.

Making these approaches work would require further upfront development with Ofgem but this would result in a set of arrangements that added legitimacy to the arrangements whilst minimising the risk of delays and costs that additional regulatory interventions would bring. For the compressors delivered during RIIO-2 this would include agreeing a way of defining how the long-term network capability would be set out in the PCD and ultimately assessed on completion of the solution. For those compressors being delivered in RIIO-3, this would include defining the suitable PCD milestones for the advance work undertaken during RIIO-2.

GHG emissions

Whilst we support having an incentive in this area, we do not support the proposed downside incentive in its current form. Greenhouse gases (GHGs) from venting emissions are externalities that we would, in the absence of an incentive, not incur a cost for. Fundamentally, the aim of the GHG incentive is to internalise these externalities, so that our decisions appropriately reflect the cost to the environment. Consumer value is driven by a reduced level of carbon emissions, which are a socialised 'cost'.

There was some improvement in performance in the initial years of this incentive being set. However, underperformance against this incentive shows how challenging the target is. There have recently been years where due to changes in network use, we transported gas longer distances, which required greater compressor use.

We believe there may be opportunities to improve this incentive, including how best to set targets and we are exploring options with stakeholders. We consider it would be appropriate to apply an upside incentive on emissions – as, for example, is the case for GDNs. A more symmetrical incentive as described in Option 2 in Ofgem's strawman would align our interests better with customers, thus increasing management focus and leading to outcomes that matter to consumers. We note that in other sectors Ofgem and stakeholders are comfortable with upside incentives on other aspects of environmental performance. Where network companies are delivering common objectives in environmental performance they should be incentivised under a consistent approach for RIIO-2.

NTS Shrinkage

We welcome the proposal to retain a shrinkage incentive. Consumers have benefitted from sharing the reward for our outperformance of our RIIO-1 incentive and there will continue to be value in focusing the business to minimise shrinkage costs in RIIO-2. We are currently considering whether there are any opportunities to further enhance the scheme to deliver further value for consumers (for example, by allowing revision of the shrinkage volume forecast to avoid inefficient procurement or by making the shrinkage factor dynamic).

The shrinkage incentive sets a target for the cost of shrinkage (across several different elements), and we receive a reward or penalty depending on how we perform relative to the target. Shrinkage represents a 'cost' which is borne by consumers and the incentive provides for a closer alignment of our interests with consumers since we are exposed to a proportion of the costs. In turn, this allows us to focus on outcomes which matter to consumers.

The components that make up this target are all based on historical analysis. The price is based on what we could achieve if we effectively undertook price hedging; and the volume of shrinkage is

based on historic trends and relationships with measurable factors (e.g. supply at St Fergus). Volume is adjusted for on an ex-post basis, but the adjustment does not fully account for differences against the ex-ante expectation. Therefore, whilst we primarily take risk on price, we also take some risk on volume. Shrinkage costs based on imbalances prices – which would be an alternative, absent our optimisation, would have increased costs in the range of c. £2m to £12m in 2017/18 compared to target.

In terms of appropriateness of target, this is set by estimating target prices and volumes, based on a method that has been reviewed and consulted upon (Shrinkage Incentive Methodology Statement Review, March 2016). One characteristic of the shrinkage target is that the energy procurement target varies annually, driven by a combination of expected and actual volumes and a price target. This means that our performance is essentially 'benchmarked' against a reference market price – and our key challenge is to buy below that reference price. We would, welcome dialogue on whether there are any alternative reference prices which we could incorporate into the methodology. However, we consider that the reference prices we are using are the most appropriate proxy for a 'passive' strategy. In our view, an arbitrary threshold applied to the target would not be justifiable. For volume, since this is based on historic trends and relationships between measurable factors and shrinkage, this implies that our outperformance on the volume component is caused by improvements over time. As noted above, we have some control over the overall volume, and so it is appropriate that the target methodology reflects this.

We support retaining an incentive in RIIO-2 to continue to drive performance in this area for the benefit of end consumers. Whilst we performed well during RIIO-1 against this incentive we have undertaken additional costs to do so. We use Triad avoidance to reduce shrinkage prices costs. We look for opportunities to shift use of electric compressors away from peak hours, to reduce the price of the electricity to run them. We also actively procure gas, electricity (and emissions) to spread the price risk. We can also influence the Compressor Fuel Use (CFU) to some extent, which is the largest component of shrinkage volume, through more efficient use of compressors. Compressor operation can be managed to reduce the volume of CFU, but this is subject to managing pressures and constraint risk on the network.

BCF reporting

We will work with stakeholders on this to consider the value added to them by retaining this incentive.

Low carbon energy systems and decarbonisation of heat

Please see our response to GTQ18.

GTQ13. Where we set out options, what are your views on them and please explain whether there are further options we should consider.

Compressor emissions (IED and MCP Directives)

We support Option 2A. This allows a small, but appropriate level of flexibility in the solution deployed to deliver an agreed level of long term network capability. It also prevents the need for regulatory interventions that would increase cost and timescales to achieve compliance. Further explanation of our views on compressor outputs are contained in question 12.

GTQ14. What other outputs should we be considering, if any?

We believe there are potential areas that may lend themselves to consideration as a specific output. An example of this is in the space of redundant assets. We highlighted in our Playback consultation that we aim to develop a programme to address redundant assets during RIIO-2. Given this is a significant area of spend within our Business Plan proposals, we would like to explore options with Ofgem for taking this forward as a RIIO-2 output.

In terms of incentives, as the coordinator of the gas system we hold levers to minimise the environmental impact of the gas industry. Beyond our current Green House Gas incentive, it would be in the interests of consumers to be further incentivised on other environmental impacts such as the other pollutants and total energy use. Such widened incentives would support a focus on environmental outcomes in all aspects of system operation.

Regarding enabling whole system solutions, developments of new inflows from renewable production and higher demand side response through smart metering suggests the development of new ways of working between us and gas distribution networks. As flexibility on the distribution network increases, the current independent optimisation of the transmission and distribution grids in silos is unlikely to provide the system-wide optimum benefits for consumers. It would therefore be in consumers' interest for us and GDNs to be incentivised to collaborate operationally and minimise total system costs.

GTQ15. What are your views on the RIIO-1 outputs that we propose to remove?

Not applicable: no outputs have been identified for removal in this part of the Gas Transmission Annex.

GTQ16. We welcome views on whether further regulatory mechanisms are needed to drive NGG to be more proactive in reducing its impact on the environment and contributing to the transition to the low carbon energy system.

We welcome the opportunity to consider all our activities that have an impact on the environment within our business plan submission. The current maturity and innovative nature of some of these means that they may be more amenable to ex-ante funding rather than an incentive based regime e.g. Installing renewables on our sites for own use electricity, methane emissions monitoring of our site leakage. We believe there should be a fund/mechanism similar in design to the current NIC which would allow the necessary testing of approaches to either drive down energy usage and/or seek low carbon methods.

In addition to the above questions, where relevant, please see the supplementary output specific questions below.

Supplementary output specific questions

NTS Shrinkage

GTQ17. Do you think that the ‘compressor fuel use’ element of the shrinkage incentive should be included within NGG’s baseline Totex allowance? To what extent do you think elements of shrinkage are within the control of National Grid Gas

We do not agree that the ‘compressor fuel use’ element of shrinkage should be included in our baseline totex allowance. Inclusion in an allowance would result in cost exposure, related to uncertainty in volume and price over an extended five-year period. The quantity of own use gas, used to run compressors, is largely influenced by the supply and demand patterns on the network for the prevailing network conditions. The requirement to run compressors to transfer gas around the network meets the day to day needs of the gas market. There is a high degree of uncertainty on quantity and so by the RIIO principles it makes it unsuitable for inclusion in baseline allowances. If shrinkage costs were included within our baseline totex allowance (without a revenue driver attached) then it would obviously be in our interest to reduce overall shrinkage costs. However, if this were to take place the gain/loss on shrinkage would be absorbed into a much larger gain/loss totex ‘sum’. It would be a less powerful incentive in sharpening our management focus on shrinkage and could result in unintended consequences. As a general principle, if we were (say) significantly outperforming or underperforming against an overall totex target, then the performance on a small element of that overall totex target may not make a difference to our return (that is, if we were significantly above a cap or below a floor).

In terms of our views on the Shrinkage incentive more generally, please see our responses to GTQ12 & GTQ13.

Low carbon energy systems and decarbonisation of heat

GTQ18. Do you have any views on how NGG’s can make a contribution to the transition to a low carbon energy system and support the decarbonisation of heat?

We believe that this should be linked into the wider whole energy system area. We currently chair an ENA whole system working group that looks at the challenges ahead and how networks should enable the energy transition. We recognise we have a role to play in moving to a low carbon energy system, and that there will be a need to provide evidence of the solutions that should be deployed across GB. To enable this, trials of different solutions for the various future pathways by networks should be undertaken. The best approach to achieve this, we believe is for an innovation allowance to encourage all networks to progress solutions and help inform policy.

We believe our role in the energy transition should be to facilitate the changes that happen in the gas industry. As an example, from 2016 – 2018, we ran the Future of Gas’ programme, to develop a deeper understanding of the role of gas in supporting a low carbon future, working with our customers and stakeholders. In March 2018, we published the conclusions from the programme, setting out our view on the role of gas out to 2050, the actions we will be taking and supporting recommendations.

We identified 6 key themes for the future of gas: decarbonising heat; decarbonising transport; decarbonising industry; Whole Energy System; Future Networks & Markets and Carbon Capture & Storage. We committed to agree a long-term gas market change plan with industry and Ofgem to ensure we are developing the markets appropriately, so that we can facilitate change in light of these themes. We are now taking this forward as the Gas Markets Plan, and proactively considering how the gas NTS frameworks may need to evolve to facilitate change over the 2020's. Policy on heat is not due until the mid-2020's, and policy development on CCUS is currently ongoing. It is therefore, important to have mechanisms in place to act on this policy should it be required during RIIO-2. Overall, for RIIO-2 it is about ensuring the right framework is put in place to enable cross-sector working and collaboration. This will enable the development of information from projects such as decarbonisation of heat innovation project, which will help policy makers make an informed decision on future energy transition issues.

Opportunity to propose bespoke outputs

GTQ19. Do you think we should consider proposals from NGG for additional outputs and incentives to support our environmental objectives?

In terms of incentives, as the owner and operator of the gas transmission system, we hold levers to minimise the environmental impact of the gas industry. Beyond our current GHG incentive, it would be in consumers' interest for us to be further incentivised on other environmental impacts, such as other pollutants and total energy use. Such widened incentives would support a focus on environmental conservation in all aspects of the system operations.

Chapter 5 questions – Maintain a safe and resilient network

General output questions

GTQ20. What are your views on the overall outputs package considered for this output category?

Please note that our overarching comments on the approach to outputs and incentives can be found in the overview section of our response and question 2 of this response. Comments on specific incentive areas are included in the answers to questions 21-24.

We are currently obligated under our licence to ensure the gas transmission network can meet a 1 in 20 peak demand level event. We support Ofgem's proposal to retain this obligation which represents the primary security of supply standard that we must meet as the operator of the NTS. However, this requirement doesn't address the increased operability challenges outside 1 in 20 conditions. The ongoing work on Network Capability may inform how to address these challenges from a security of supply standard perspective in the future.

We do not support the proposal for a Licence Obligation to deliver a target level of network capability by the end of the RIIO-2 period.

The Sector Methodology states that failure to meet minimum standards set out in Licence Obligations could lead to enforcement action and/or penalties. The Gas Transmission Annex mentions that if we fail to deliver the network capability licence obligations output that Ofgem may make appropriate reductions to NGG's allowance to account for this non-delivery.

Our view is informed by the following two points:

1. Ofgem is already planning to put in place Price Control Deliverables for areas of significant spend, including to cover the asset health and compressor programmes. It is these programmes that will deliver the required level of network capability. Failure to deliver these programmes to the defined output would already be treated under the relevant Price Control Deliverable and hence a further penalty over the network capability target would be a double penalty mechanism.
2. There are several reasons that despite best efforts and intentions we fail to deliver the required level of network capability at a fixed point in time, these could range from issues in the supply chain, extreme weather/environmental events through to accidental or deliberate acts from third parties. It would seem inappropriate that under such a wide range of causes we would be in breach of a Licence Obligation to have a target level of network capability at a single point in time.

Ofgem are also proposing a new Licence Obligation which creates a new Annual Network Capability Assessment. It is not clear what this additional new report would add or how its content would be used. If it is intended to be used to track delivery against our plan, this is not required as delivery of our business plan will already be tracked through existing regulatory reporting and

tracked under the proposed PCDs for asset health and compressor emissions. If this assessment is to be retained as a new obligation or as an additional item for existing regulatory reporting, then the requirements from the report and its purpose need to be clearly set out.

GTQ21. 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.

Asset Resilience / Network Asset Risk Metrics

Please see our cross-sector response.

Safety

Please see response to GTQ24.

Network Capability Assessment

Please see response to GTQ25-27.

Maintain 1:20 demand capacity

We support retaining this output as it is the primary security of supply standard to protect GB gas consumers.

Cyber Resilience

We support Ofgem's proposal to introduce new RIIO-2 outputs related to cyber resilience. We agree the form of output is likely to include bespoke PCD(s). We expect the target for the PCD(s) to be confidential and to result from detailed engagement between the company and the Competent Authority for the NIS Regulations. Given national security and confidentiality considerations, we do not expect the cyber PCD(s) to be in the remit of the Customer Engagement Group/User Group or the Ofgem Challenge Group.

In addition, please refer to our separate response to Chapter 6 of the RIIO-2 Sector Specific Methodology core document for our further views in relation to cyber resilience.

Physical Security

We support Ofgem's proposal to introduce a new RIIO-2 output related to physical security. We agree the form of output is likely to include bespoke PCD(s). We expect the target for the PCD(s) to be confidential and to result from detailed engagement between the company and the responsible Government Department i.e. the Department for Business, Energy and Industrial Strategy. Given national security and confidentiality considerations, we do not expect the physical security PCD(s) to be in the remit of the Customer Engagement Group/User Group or the Ofgem Challenge Group.

In addition, please refer to our separate response to Chapter 6 of the RIIO-2 Sector Specific Methodology core document for our further views in relation to physical security.

GTQ22. What other outputs should we be considering, if any?

We welcome the opportunity to propose additional outputs and incentives to support a safe and resilient network. At this stage we believe Ofgem should remain open to considering proposals for additional outputs and incentives in line with this approach and where they add value to stakeholders and end consumers.

We believe the potential new opportunity around linepack would help support a safe and resilient network. We have outlined our thinking in GTQ5.

GTQ23. What are your views on the RIIO-1 outputs that we propose to remove?

In addition to the above questions, where relevant, please see the supplementary output specific questions below.

Not applicable: no outputs have been identified for removal in this part of the Gas Transmission Annex.

Supplementary output specific questions

Safety

GTQ24. Do you have views on whether the proposed approach on safety is appropriate for RIIO-GT2?

We support Ofgem's proposed approach on safety for RIIO-2, i.e. to retain the existing obligation to comply with health and safety legislation and not to attach any formal price control output or delivery incentive to this requirement. We agree this approach complements, rather than duplicates, the Health and Safety Executive's role in monitoring and enforcement

Network capability

GTQ25. Do you agree with our assessment of the problems with the current arrangements, and how these problems can lead to consumer detriment?

Given the time since baselines were last reviewed and in the absence of a framework to measure "Network Capability", we agree that it is sensible for these areas to be considered as part of RIIO-2, ensuring we develop plans that meet the current and future needs of consumers and the parties that use the network.

However, we do not agree with the narrow baselines only assessment of the current arrangements. Ofgem acknowledge the change in predictability of supply patterns and the connection of new supplies (imports and medium-range storage). These new supplies along with CCGT's are now acting in a much more dynamic way in response to the commercial opportunities presented in energy markets. As such we are operating in a much less predictable environment where the

existing assets are allowing parties the opportunity to profile flows and continually change their mind about their planned gas flows in real time and to seek the cheapest source of supply at any given time (which also increases security of supply for GB consumers). We do not support a conclusion of there being “abundant spare capacity” on the network, if this only considers end of day flows against baseline capacities and does not reflect parties being able to profile, and change their mind about location, volumes and profile within day.

Ofgem state that the current arrangements mean that we “must plan for credible maximum flows up to the level of obligated capacity”. This is not the case as we use historic flow information, forecast flow information and liaison with the various operators to understand their planned operation.

Ofgem are also seeking closer alignment of physical capability and the baseline capacity products. The regime to date has evolved to encourage us to take a risk-based approach, optimising network investment and use of commercial tools. This actively incentivises us to manage the risk of higher gas flows on behalf of consumers. The direction of travel appears to encourage more physical than commercial solutions due to the link to physical capability, which we do not believe is in the best interest of consumers. In developing their thinking on Network Capability we, would encourage Ofgem to be clear on how any commercial solutions would be treated in any framework around, or assessment of the physical capability of the network.

In considering changes to baseline capacities, Ofgem mention including a “reasonable level of headroom” that doesn’t “materially exceed” forecast peak flows. We would welcome clarity on what Ofgem views as “reasonable” and “material” in the way these definitions will be applied.

GTQ26. Do you agree with our proposal to require NGG to carry out an initial network capability assessment and submit the results as part of its Business Plan?

We agree that it is appropriate to define network capability and to engage stakeholders on this definition and the levels of this required. This will be a complex task and we expect that there will need to be multiple metrics of network capability and these will need to be communicated in meaningful way to stakeholders.

We are supportive of developing a business plan that delivers the required network capability but given the complexity of the task and the requirement for a draft July business plan, we will seek to work iteratively with Ofgem and Stakeholders to agree the scope and timescales of this work for the draft business plans and the final version in December 2019.

GTQ27. Do you agree that if baseline obligated entry or exit capacities are found to be at inappropriately high levels, we should consider revising them downwards in line with NGG’s proposals?

In principle, yes but we need to first understand the full range of network capabilities and there needs to be a justification for any change and this should not be an assumed outcome before this work has been completed and stakeholder input captured.

Any changes need to be mindful of unintended consequences, which could include reduced capacity for substitution processes, charging impacts and the availability of capacity products to customers.

Arrangements for accessing unsold capacity

GTQ28. Do you agree with our proposal to require NGG to review the arrangements for accessing unsold capacity?

Stakeholders have told us that there are elements of the access regime that could be reviewed but that the scope of this could be wide and it could take years to complete in full.

We support a review of the access regime but this should be separate from the RIIO-2 process and part of any normal industry review process. Linking them together unnecessarily complicates the RIIO-2 business plan and forces any access review to be driven by RIIO-2 timescales which could limit the scope, delay progress of some elements, or cause other elements to be unduly rushed through.

GTQ29. Do you agree with our proposed scope for the review? Are there other aspects of access that should be reviewed at the same time?

As with our answer to question 28, we believe a review of access arrangements should be separated from the RIIO process. Outside of RIIO we are working with industry to understand appropriate problem statements or opportunities with regards to the access regime. This would allow the scope of the review to avoid being constrained by working to RIIO-2 timescales.

Chapter 6 questions – Cost assessment

GTQ30. Do you agree with our intention to evolve the RIIO-GT1 approach for RIIO-GT2?

Evolution of the approach to cost assessment is an appropriate approach given that there were no fundamental errors or omissions with the RIIO-GT1 methods.

It should support central principles of the RIIO-2 framework such as simplification and a focus on outputs and output delivery.

GTQ31. Do you have any comments on appropriate cost categories or approaches to cost assessment?

Cost categories should be informed by or closely linked to the outputs that the cost contributes towards delivering. This will have a positive effect on the transparency of outputs, allowances and cost for all stakeholders and is likely to make monitoring of performance simpler. This principle should be considered when defining additional categories that will sit underneath the proposed three of load related, non-load related and indirect and non-operational expenditure.

The cost assessment approach must tread a careful line between absolute accuracy and pragmatic practicality. The strengths and limitation of the various techniques in the toolkit must be acknowledged and then used appropriately during cost assessment. Use of benchmarking is a technique which requires careful consideration of its use as we discuss in GTQ34. We are keen to continue working constructively with Ofgem on cost assessment approaches to ensure outcomes that are in the public interest.

GTQ32. Do you agree with our proposed approach to cost categorisation? Please provide an explanation to your answer.

We support the proposed change to load related, non-load related and indirect and non-operational expenditure. This is a reasonable change to propose in line with the objective to simplify the price control. We agree that the approach is better aligned with totex principles and so has the potential to improve linking of outputs, allowances and cost.

The proposed change does create a requirement to agree and define where direct opex costs are allocated within the new categories to ensure they are transparently captured.

GTQ33. Do you support our view of the need for greater granularity and transparency in cost reporting to further develop our cost assessment capability?

We acknowledge Ofgem's desire for greater granularity and have been working constructively through the cost assessment working group on relevant points. We believe that it is important to have defined the principles of cost reporting and that appropriate level of granularity be considered against that. It is also right to consider that greater levels of transparency and granularity may be prohibitive in the short term because of our core systems which were sized and developed to deliver RIIO-1 reporting requirements.

We would caution the value of and our ability to provide high granularity on project expenditure within the business plan submission when such projects, incurring cost between 2021 and 2026, will be at generally immature stages of development.

We will continue to work together with Ofgem when it comes to defining the RIIO-2 annual regulatory reporting, in line with principles as mentioned. We believe that further granularity becomes of value and is possible to be reported once projects are in progress or complete and costs are actual.

GTQ34. We invite views on whether the proposed toolkit is appropriate or there are there other assessment techniques we should consider for our cost assessment toolkit in RIIO-GT2.

We believe the proposed toolkit provides an appropriate selection of options for Ofgem to assess our cost.

We share Ofgem's view that historical analysis is an important base of evidence. We expect to show how our track record of past performance and delivery has been a key, major factor in our future cost forecasts.

We acknowledge the usefulness of benchmarking for appropriate elements of our cost base; such as business support cost as suggested by Ofgem. However, we believe it is incumbent on Ofgem to exercise caution when considering the use of benchmarking on activities that are unique to Gas Transmission. Establishing benchmarking within the relatively homogeneous UK gas distribution, electricity distribution networks and water sectors has not been a simple exercise with approaches evolving between price control periods. To undertake a one-off exercise utilising international comparators would be an order of magnitude more complex, the value and usefulness of which could not be guaranteed.

Chapter 7 questions – Uncertainty mechanisms

General uncertainty mechanism questions

GTQ35. What are your views on the proposed uncertainty mechanisms and their design? For uncertainty mechanisms that are proposed to apply in the same way across RIIO-GT2, ET2 and ED2 controls, please see our response to the RIIO-2 Sector Specific Methodology consultation.

Our views on the proposed new or revised RIIO-2 uncertainty mechanisms are summarised below:

Incremental capacity

We support a continued need for a form of mechanism to adjust remuneration for release of incremental entry and exit capacity. This is appropriate because of the considerable uncertainty regarding whether such incremental needs will arise in response to changing customer requirements, and if they do arise, what scope of work and costs may be entailed.

We also support the proposed move to a case by case approach to assessing funding (and the appropriate timing of that funding – see comments above) for incremental capacity, provided an appropriate timebound process can be put in place to meet customer and NGG requirements.

This process should address the timing and interaction of (i) determination of allowances, (ii) commitment to release incremental capacity, and (iii) financial underwriting that indemnifies NGG for the costs/risks around pre-planning approval work and long lead time items.

In the first instance, we continue to believe that it is in the end consumers interest for NGG to be incentivised to maximise utilisation of the existing network by accommodating changing customer requirements where possible without recourse to investment in new capacity. NGG does this by using substitution of capacity where possible. To date under RIIO-1 substitution has been utilised to meet the majority of customer driven incremental capacity signals. The capability risk associated to further substitution is increasing as, by its nature, substitution is likely to result in increased flows onto and/or off from the current and future network. We believe this should be considered in RIIO-2 incentive arrangements. We note that if as a result of Network Capability proposals, the physical capability of the network were to be reduced, this would in turn further reduce the possibility for substitution and make recourse to “build” solutions more likely. This could result in delays to meeting customer requirements and may not be in the best interests of consumers.

Under current arrangements NGG may take on the commercial risk of not building in return for 80% of the revenue driver allowance or alternatively, through the release of non-obligated capacity where NGG share the revenue received from non-obligated sales with our customers. For RIIO-2 we propose that these incentives to maximise use of the existing network are retained. It is in customer and consumer interests to avoid the time, costs and environmental impacts of new build, in circumstances where better customer and consumer value can be obtained by incentivising NGG to take on commercial risk through non-build solutions.

Going forward, we support Ofgem’s sentiment that in any review of access arrangements for unsold capacity, consideration is given to simplification of the regulatory governance around the

substitution process. We think there is an opportunity for simplification in that each individual substitution may not need to be approved by Ofgem discretely.

Given the primary objective of maximising utilisation of the existing network, then recourse to the proposed incremental capacity re-opener mechanism would only arise where all other alternatives have already been exhausted. i.e. investment in new assets is the most economic and efficient option for the end consumer. Since there is no other means within RIIO to remunerate such incremental investment, we do not think a materiality threshold should be applied to this mechanism.

EU rules around incremental release require “estimated increase in allowed revenue” to be utilised to determine the appropriate level of user commitment and this needs to be considered in any revised approach to incremental funding.

Consistent with the move to a case by case treatment, we support the principle of removal of the current obligation on NGG to maintain the Generic Revenue Driver Methodology. We think this approach has the potential to remove some of the limitations inherent in the use of the generic methodology as a proxy for specific project cost estimation; namely that (i) the unit cost library (even if updated) may not cover all the specific assets required for a given scheme, and (ii) there is a high variability in pipeline route cost dependent upon site specific characteristics such as ground conditions, population density, road/rail/river crossings etc.

We note that irrespective of whether there exists a formal requirement for NGG to maintain the Generic Revenue Driver Methodology, a basis of project cost estimation will nevertheless be needed for application of the NPV test as part of the incremental capacity release processes. We are currently reviewing the current NPV test because of changes anticipated from the Charging Review and considering customer experience.

Compressor Emissions costs

Please see our response to GSQ12 for further context on the response below.

For those compressors being addressed in RIIO-2 we expect our business plan to include the compliance strategy, the preferred solution to deliver the compliance strategy, funding required and the definition of what long term network capability is being delivered. Assuming this information is used to set the PCD and Ofgem’s Option 2A is adopted, we do not see the need for a reopener on these compressors during the RIIO-2 period.

For those compressors being delivered in RIIO-3, we would support a limited reopener in year 2 of the price control and a further true up at RIIO-2 closeout. The reopener would be used if the event of a major change in government policy change (e.g. on heat or wider energy policy) or unexpected closure of 3rd party assets that impacted on the PCD’s due for delivery in RIIO-2.

Pipeline diversions

We support the retention of a re-opener to the extent that these costs cannot be reasonably recovered from the relevant party requesting the diversion. In implementing the proposed revision, we suggest that experience from RIIO-1 is considered and appropriate licence wording is adopted to ensure that all relevant circumstances giving rise to non-customer funded diversions are captured.

Network Capability

We do not currently see the need for a reopener around the required level of network capability during the RIIO-2 period. With stakeholders, we will be building our business plan based on required levels of Network Capability, which are robust against a range of future energy scenarios. Ofgem highlight one of the benefits of a shorter price control in RIIO-2 is a reduction in risk exposure due to shorter forecasting timeframes. In this case and during the five year RIIO-2 period we are not expecting any fundamental changes to the range of energy futures (e.g. decisions on heat policy are not expected until mid 2020's and are expected to take decades to implement). This means that there would be little change expected to Network Capability requirements during these timeframes.

In developing our final Business Plan for submission in December 2019, we will be testing our business plan with stakeholders. If stakeholders are comfortable that we have built a plan that caters for an acceptable range of energy futures and levels of required network capability, then we see no requirement for a reopener which would only create uncertainty and administrative burden for all stakeholders.

Policing cost associated with Counter-Terrorism Act 2008

We support the proposal to retain the current pass-through mechanism for policing costs. These costs are both outside our control and difficult to predict.

Independent Systems

We support the proposal to retain the current pass-through mechanism. These costs relate to the implementation of government policy and are outside our control.

GTQ36. Are there any additional mechanisms that we should be considering across the sector? If so, how should these be designed

We do not believe there to be any additional mechanisms that should be considered. However, there are some Uncertainty Mechanisms from the RIIO-1 period that we believe there is value in retaining, please see our response to GTQ37 below.

GTQ37. What are your views on the RIIO-GT1 uncertainty mechanisms we propose to remove?

Our views on the proposed removal of RIIO-GT1 uncertainty mechanisms are summarised below:

One off Asset Health Costs

We disagree with the proposal to remove this uncertainty mechanism. The reason given for removal is that Ofgem is "not aware of any similar circumstances requiring such a mechanism – that is a high value project with uncertain solution/cost and subject to planning uncertainty." We disagree with Ofgem's premise that the only purpose of having this mechanism is to provide a remuneration pathway for such known projects with uncertain solutions/cost/planning. We disagree with the inference that the only reason for inclusion of the mechanism in the first instance was to deal with the remedial work to the Feeder 9 pipeline under the Humber estuary.

An important reason for introduction of the mechanism, which remains equally relevant now, is to provide a remuneration pathway for remedial work relating to low frequency, high impact events on our network that could become required in the forthcoming regulatory period. The mechanism addresses completely unknown circumstances which are outside the control of the network company, but should they occur (and require material expenditure), it would be in consumers interests that the network company delivers the remedial work without delay (and it would be reasonable that the network company has a pathway to be remunerated for doing so).

Ofgem acknowledged the character of these circumstances in its RIIO-1 final proposals document (table 4.7, page 47) where it described the context for the Asset Health Shock reopener: “Provides for funding in the event of a low probability, high impact unexpected event such as a material safety notice from the original equipment manufacturer.” We think this context is unchanged and therefore we propose that the Asset Health Shock reopener should be continued for RIIO-2.

An example of the type of high impact low probability event contemplated could be a major uncontrollable environmental event causing significant asset impacts – e.g. Floating pipelines or landslide in land containing a pipeline. This could cause significant cost to re-stabilise or re-route pipelines in very short timescales, and as they are low frequency and high impact would not be covered by NARMS. Environmental incidents are becoming more severe and the likelihood of these type of incidents could increase. Another example is the discovery of type faults, which as a business we try to mitigate by using a diverse range of suppliers. However, in areas where there are a small number of suppliers or where replacing assets is costly and complex (e.g. the compressor fleet) the impact is more significant.

The gas transmission network is more likely to be impacted by such scenarios compared to gas distribution or the electricity transmission networks. This is due to a number of factors;

- (i) there is less redundancy in the gas transmission pipeline network whereas gas distribution networks are more interconnected,
- (ii) buried transmission assets can be more challenging to access than overhead or above ground assets lines, and
- (iii) a gas transmission network failure potentially impacts a larger number of customers and the consequences of failure in terms of security of supply and public safety could be much greater.

Network flexibility

We agree with Ofgem’s proposal to remove this uncertainty mechanism for RIIO-2. However, we don’t support the arguments put forward to justify this removal.

In RIIO-1, this uncertainty mechanism was included to reflect the potential requirement to meet changing 1 in 20 peak day requirement obligations. Triggering of the mechanism was subject to a threshold level to ensure it was only triggered when material change occurred. Ofgem’s proposal to remove this uncertainty mechanism is based around two arguments, that the mechanism has not been triggered in RIIO-1 and falling 1 in 20 demand levels. We do not agree with either of these arguments for the following reasons.

- Failure to trigger an uncertainty mechanism in RIIO-1 should not be used as a justification for removing a similar mechanism for RIIO-2.

- This mechanism is designed to adjust funding in response to changing requirements from the network as customer needs change. Falling demand levels are potentially one such trigger, rather than a reason that it is no longer required. As flows and pressures on the network change, this may require changes to investment plans to ensure continued safe operation of the network.

Our support for the removal of this uncertainty mechanism is based on the work we are undertaking on Network Capability, which considers a wide range of future network requirements combined with the shortening of the price control period, which reduces uncertainty over future network use.

Quarry and Loss Development

We support the principle of moving stable elements of cost relating to quarry and loss development into baseline ex-ante allowances. However, loss of development costs relating to legacy contracts are unpredictable and unforecastable. Therefore, including these elements solely in ex-ante funding would expose either National Grid or the end consumer to a risk they are not well placed to manage. We would therefore favour retaining a re-opener in relation to specific loss of development costs relating to legacy contracts. We believe that any uncertainty mechanism in this area should include the options for financial payments as alternatives to diversions where they demonstrate an overall cost saving for the end consumer. For example, in some cases we would have the choice between paying compensation and diverting a pipeline. Unless financial alternatives were included in such an uncertainty mechanism, there would be an asymmetry in the decision-making process on how to treat the claim.

Agency (Xoserve) costs

Please see our response to GTQ38 and GTQ39 below

Innovation Rollout Mechanism

Please see our response to Chapter 8 of the RIIO-2 Sector Specific Methodology Consultation

In addition to the above questions, where relevant, please see the supplementary uncertainty mechanisms questions below.

Supplementary uncertainty mechanism specific questions

Review of Agency (Xoserve) costs

GTQ38. What do you think is the most appropriate approach for funding the Gas Transporters' expenditure for Xoserve in RIIO-2? In particular, which approach do you think is in the best interest of consumers?

In comparison to other Gas Transporters, NGG is in a unique position by having three categories of expenditure in relation to Xoserve activities within RIIO-2;

1. A share of costs for provision of non-Gemini Central Data Services Provider (CDSP) services
2. Sole funding of Gemini system and service provision – including ongoing asset health and replacement for that system during RIIO-2
3. Sole funding of Gemini system implementation of regulatory change

We set out our view on the appropriate regulatory treatment for these three activities as follows:

1. Shared costs for non-Gemini CDSP services:

In terms of costs for provision of core, non-Gemini CDSP services, we propose that costs should follow the pass-through funding mechanism, recognising the changes implemented within RIIO-1 to the way Xoserve is funded and governed. This approach would likely give Xoserve greater flexibility to propose and implement new services or new ways of providing existing services for the benefit of the industry. The course of action taken will be subject to the agreement of the relevant Data Services Contract (DSC) committees, where all constituents have representation and exercise collective and shared control over these services.

CDSP service provision needs to be more agile and responsive to customer feedback, developing new services or amending existing service provision where required by industry to drive greater benefits for consumers. This capability will be particularly vital in the future as the gas industry transforms itself to meet the challenges of the next decade. Development of new services or amendment of existing services will increase the efficiency of Xoserve's customer's businesses and therefore translate into consumer benefits. A pass-through mechanism which facilitates this level of agility towards development of systems and services, rather than an allowance model which may give Gas Transporter's a disincentive to implement change if operating close to allowances, will enable benefits experienced by Xoserve's customers to be passed onto end consumers. A pass-through mechanism for these shared costs will prevent development of new services and innovations being halted by concerns over sources of funding rather than focussing on the case for change and end consumer benefits.

Xoserve's costs, in relation to core CDSP services, face a high degree of scrutiny through their annual business planning process and ultimately, by the Xoserve Board. As part of that scrutiny the value of those services is assessed and challenged where appropriate. Following FGO, there is a range of representatives on the Xoserve Board (4 shipper nominated Directors and four Gas Transporter nominated Directors, including one Independent Gas Transporter nominated Director). We believe that this would mean shippers and IGTs would in fact have greater ability to apply pressure to control costs under a pass-through model than under an allowance model, due to their majority position on the Xoserve Board.

Furthermore, there are other methods by which Gas Transporters would be held to account. Firstly, the Licence condition to be "economic and efficient" in their activities would oblige Gas Transporters to exert influence over Xoserve's costs. Secondly, if shippers felt Gas Transporters were not exerting sufficient control over Xoserve's costs, this could be reflected in their customer satisfaction feedback. Such feedback could detrimentally impact company performance against customer satisfaction incentive arrangements in RIIO-2.

2 & 3 Sole NGG funded Gemini service and system provision & Gemini implementation of regulatory change:

As implemented through the Xoserve Funding, Governance and Ownership (FGO) review, NGG solely funds Gemini service and system provision (including ongoing asset health work) and Gemini

system costs to implement regulatory change². This is a unique position which does not apply to any other areas of CDSP services. Due to this position, NGG is the key decision maker in this area at the DSC committee level and has sole, direct control over these costs. We think that this direct control means it would be most appropriate for regulatory funding to be provided by way of an NGG ex-ante allowance. In its decision on Gas Transporter agency (Xoserve) in RIIO-GD1 and RIIO-T1 as part of FGO, Ofgem stated “costs which are not usually in companies control and therefore it is deemed appropriate to pass such costs to the consumers directly. All other costs that are in the regulated companies control are treated as part of the price control to incentivise the companies to keep these costs efficient”³. Costs around Gemini service and system provision and implementation of regulatory change are within NGG’s control as there are options around service and system provision and we can influence the development of regulatory change accordingly.

An allowance for Gemini related system and services will provide greater freedom and incentive for NGG to explore other competitive options for their provision. This will ensure that these services are efficient, fit for purpose for the future, and agile to change which will benefit the industry and end consumers. We believe that NGG is best placed to manage the risks of Gemini service provision and as such should be strongly incentivised to do so on behalf of consumers.

Over previous years there has been a steady flow of regulatory change. An allowance based funding mechanism to implement this change is most appropriate to drive innovative ways of implementing this regulatory change. Due to NGG being the sole funding party of Gemini related costs, development of new services would not risk being delayed due to differing views between funding parties as to allocation of costs.

We propose that the concept of “User Pays” for change costs should be implemented. This would ensure that shippers have an avenue to have functionality change implemented which they believe is cost efficient and furthers consumer benefit.

GTQ39. 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?

For provision of services which sit outside of the role as CDSP, costs and associated risk should be borne by the party who benefits from the service with appropriate remuneration for parties who have provided and funded the capability of the service being delivered. For example, should Xoserve be successful in the current Central Switching Services process, Gas Transporters should remain insulated from any costs and risks associated with the bid for, and if successful, the operation of, the CSS provision. Whilst shippers are paying the costs of CSS they are also recipients of any benefit or risk. However, in this example, to provide CSS services a portion of the UK Link system will be repurposed to carry out this role. Any benefits, or reduction in costs derived from this, should be shared appropriately to reflect that Gas Transporters (and gas consumers via the RIIO-1 allowance) provided the funding for the original system.

² This is the case for costs which sit within the CDSP service provision and is obligated by the UNC. Any services which sit outside of this (e.g. Central Switching Services which is a supplier centric service) should be paid for by the party receiving the benefit.

³ https://www.ofgem.gov.uk/system/files/docs/2016/09/xoserve_funding_decision_final.pdf