

RIIO-3 Sector Specific Methodology Consultation

Overview & GD annex - NGN Response

Response to consultation questions

Future of Gas

OVQ1. Do you agree with our proposal for how RIIO-3 should interact with the Hydrogen Transport Business Model?

NGN agrees. Ensuring consistency between RIIO-3 and the Hydrogen Transport Business Model (HTBM) will be vital as well as how the remuneration of costs to repurpose existing natural gas assets towards the transfer to HTBM will be undertaken. We note as regards the latter that Ofgem has referred to the use of hydrogen for heat as particularly uncertain, so clarity in relation to these costs will be needed if path-dependent or timely investments need to be undertaken in the RIIO-3 period to maintain options for the future of heating—including any investments to facilitate greater use of biomethane or hydrogen blending—towards 2030 and beyond.

OVQ2. Are there any additional activities relating to the development of hydrogen transport infrastructure, or repurposing of natural gas assets, that you think should be funded through RIIO-3, and if so, why do you think this is justified?

NGN considers there will be activities relating to ‘no regrets’ development of hydrogen transport infrastructure in the RIIO-3 period.

Other ‘no regrets’ investments that are agnostic of energy future scenarios (e.g. isolation valve installation), including other preparatory costs, market development costs, etc. should be funded through RIIO-3 supporting the creation of infrastructure fit for the net zero future.

An allowance in the region of £10-12m will be required to ensure NGN has the appropriate funding in place to support the National Energy System Operator (NESO) and the Regional Energy System Planner (RESP) framework.

NGN note, also, as a point of principle, that Ofgem may seek to evaluate the necessary expenditure in RIIO-3 (in relation to the natural gas network transition) by looking beyond a ‘no regrets’ framework, to better align with the evolution of its duties. This is particularly as regards Ofgem’s new net zero and economic growth duties. Specifically, a ‘no regrets’ evaluation framework may seek to postpone approval of expenditure on an incremental basis up to the point that a use-case is proven beyond reasonable doubt—and this may prove to be more costly to society in the long-term if it delays or reduces the effectiveness of the energy transition. A ‘no regrets’ criterion for approving expenditure in RIIO-GD3 may thereby not necessarily be ‘optimised’ or ‘least cost’ in the long-term if there is an adverse effect in delivering the UK’s decarbonisation targets and/or adverse effects on industrial growth strategy.

OVQ3. Do you agree with the proposal that network costs relating to hydrogen blending at both distribution and transmission level should be included in RIIO-3 net zero related UMs? If so, which mechanism do you think is most appropriate for these costs and why?

NGN disagrees. We note that on 14 December 2023, the UK Government confirmed its policy to support the blending of up to 20% hydrogen by volume into GB gas distribution networks.

The network costs relating to hydrogen blending should be included in the RIIO-3 base cost allowances. A Gas Distribution Network (GDN) can blend up to 5% hydrogen without impacting the billing regime, and encouraging this will stimulate the hydrogen market in line with government policy.

Hydrogen blending into the gas network will incur additional costs in the region of £3-4m per annum. during RIIO-3. The following activities will require funding in RIIO-3:

- Work to update to network standards (including codes and licences), policies and procedures (including network entry and exit agreements, changes to the Gas Safety Management Regulations (billing and settlement) to include for blended gas;
- Continued development and improvement of blend capable assets and equipment such as new telemetry specifications and requirements, detection, monitoring instruments, odourisation, and purging devices. Noting some aspect of innovation will be essential here.
- Identification of training needs, development of material and roll out and assessment to ensure workforce competency to undertake safe operations on a blended network.
- Development of new hydrogen injection technologies to manage the network connection effectively and provide the required control and information flows back to our control centre function. This linked to open data platforms where applicable.
- Investment in appropriate cyber security systems and practice (such as additional security testing / checking) to support secure data exchange with new third-party operators.
- Engagement with government, Health and Safety Executive (HSE) and customers.

As there is certainty of blending and investment is required to enable this it should be included in the base allowances. This will support the strategic role of blending, early development of the hydrogen economy and the transition to net zero.

OVQ4. What are your views on the proposal of using the GD specific Heat Policy re-opener, the RIIO-3 net zero related UMs, or a mixture of both to fund network costs incurred as a result of the government's 2026 decision on hydrogen for heating (where RIIO is deemed to be the most appropriate funding mechanism for these costs)?

NGN agrees. A mixture of both GD (Gas Distribution) specific re-opener's and net zero related UMs (Uncertainty Mechanisms) would be appropriate given the range of potential outcomes covering all aspects of future uncertainties.

These might include:

- Hydrogen blending
- Decommissioning
- East Coast Hydrogen detailed engineering costs
- Hydrogen for heat
- Repurposing to hydrogen if not covered by HTBM; and

NGN agrees that the suite of existing reopeners and UMs are suitable mechanisms to retain for GD3 to fund network costs resulting from any 2026 decision on hydrogen for heating, although NGN note that irrespective of this decision the need to develop repurposing of our transmission and intermediate pressure systems to convey hydrogen will be required to provide UK industry with the hydrogen they need to decarbonise. We stress the importance of any reopener mechanism containing the flexibility to allow for implications for network companies from a policy decision to enable networks to recover their costs and network investment consistent with the principles of effective regulation.

As NGN undertakes the business planning process towards the draft and final determinations for RIIO-GD3, we will also engage with Ofgem on specific areas of costs or risks in relation to the uncertainty around future of gas, where any specific adjustments (e.g. to the TOTEX baseline, sharing rates or financial ODIs) would be helpful in providing a more balanced risk and return environment for the RIIO-GD3 period

NGN notes the significant progress made by networks in collation of evidence to support 2026 heat policy decisions in GD2, which has included a decision on hydrogen blending into distribution networks. Where investment that can contribute to decarbonisation of heating is known and can be evidenced, NGN advocates the inclusion of costs within base allowances, particularly where low regrets costs can be brought forward to avoid increased costs on future bill payers. Indeed, NGN observes that to the extent that the user base for gas networks is expected to decline over time, Ofgem may consider that it promotes intergenerational equity for anticipated costs to be brought forward in current tariffs. This is because if the expected user base is declining over time, the bringing forward of allowed tariffs may promote the relative stability of the tariff per user over time

OVQ5. What are your views on our proposal to not enable funding for further evidence relating to repurposing the existing network for hydrogen heating ahead of government's decision on hydrogen heating in 2026?

NGN disagrees. Repurposing the existing network for hydrogen is cheaper, less disruptive and more sustainable than building new network infrastructure for the transport of hydrogen (reference – <https://www.energynetworks.org/work/gas-goes-green>), so there is a need to accelerate the creation of an evidence base to inform the 2026 heat policy decision for both gas and electricity.

In December 2023, DESNZ announced its decision not to proceed with the Redcar Hydrogen Village Trial which was to be a key piece of evidence informing the 2026 decision. This decision was taken by

the Government because the main source of hydrogen was not going to be available, rather than in connection with the design of the proposal. Since this decision NGN has been approached by DESNZ to and asked to propose further small-scale trials for domestic hydrogen use. NGN considers that this clearly demonstrates that further evidence is required to support this Government decision in 2026 and a funding mechanism in RII03 will be required.

NGN anticipate the need for investment in research, training, and provision to improve the overall case for hydrogen and develop lower cost pathways which enable rapid change and minimal impact on consumers. This ongoing evolution of best practise will, as was the case during the town gas to natural gas transition' continue throughout the pathway to net zero to firmly establish the UK as principal guiding force for consumer and safety best practice. It is therefore essential that funding continues through RII0-3 to maintain parity with European investment in this space and to present the UK as a good place to invest in low carbon technologies.

Funding must be provided to support smaller scale more rapid multi-vector heat trials that close out the remaining gaps in confidence for industry, regulators and importantly for consumers.

At this point in time, there is only the H100 trial proceeding to help build the evidence base for hydrogen for domestic heat in the UK. The H100 project involves building a new pipeline to transport hydrogen to 300 homes and is therefore limited in terms of the evidence it can contribute.

A major evidence gap currently exists with regards to repurposing gas network infrastructure for hydrogen for domestic and commercial use, at pace, and to scale to quantitatively inform the 2026 heat policy. Additional evidence would provide GDN's and policymakers with crucial information on customer choice, technical, operational and economic challenges involved in implementing the hydrogen heating plan efficiently. An expanded evidence base is necessary for making well-informed decisions that will affect long-term sustainability of the gas network and to de-risk future infrastructure investments through long range planning.

The H100 will be a smaller scale trial (i.e. 300 homes) than the Redcar Trial (i.e. 2000 homes) would have been. The H100 involves building a new hydrogen pipeline so there are currently no plans for a UK trial of any size to prove the conversion of an existing gas network to transport 100% hydrogen. By not converting the networks under trials, critical evidence will need to be sought elsewhere on the timescales, resource requirements, customer care and co-ordination of network and in-home work necessary during any future conversion.

It is also important to note that the H100 project will allow customer to choose to remain on natural gas. The H100 project allows customers to remain using natural gas, therefore it does not create a scenario which is compatible with net zero.

- NGN identifies the following gaps in the current evidence base of Hydrogen for Heat which must be adequately addressed to inform the 2026 Heat Decision:
- There are no trials planned to gather user evidence and public acceptance of hydrogen from a cross section of demographics and a cross section of housing types

- There are no trials planned to gathering user evidence from commercial properties
- There are no trials planned that will stimulate appliance manufacturers to continue developing commercial appliances that would be needed for non-domestic buildings
- There are no trials planned to show use of hydrogen at scale. If Town Pilot plans are implemented, the jump will be from 300 homes in Fife to potentially 10,000 homes and businesses.
- There are no trials planned to demonstrate the switch to electricity for energy at scale which is one of the biggest challenges if a decision is made not to use hydrogen for heat.

The European schemes which are using 100% hydrogen will be of limited value as an evidence base for the 2026 decision due to their scale and the different standards.

NGN are aware of initiatives to enable hydrogen across the European Union (EU) including establishing hydrogen standards and a common evidence base covering skills, technology and delivery pathways. This sustained investment in innovation and research presents a vibrant hydrogen economy for any investor wishing to develop hydrogen technologies in the EU. The UK may already be lagging behind in this space and any further brake on hydrogen development in the UK will send negative investment signals to those industries driving growth skills and the jobs of the future placing the UK, gas customers and the GB gas industry at significant disadvantage and ultimately driving up long term costs to the country.

On this basis Ofgem should ensure funding of activities where there is a clear business case in favour of providing the required evidence to inform the 2026 heat policy decision.

OVQ6. Should RIIO-3 help to manage future gas network decommissioning costs? If so, do you have views on what these costs could be and what mechanisms should be used, including for anticipatory funding?

The debate about managing future gas decommissioning costs is extremely important and NGN welcomes Ofgem's engagement with industry on this topic.

NGN considers there to be a need to ensure a technically and economically balanced evidence base to inform policy decisions to achieve net zero in the UK. This would include the technical and economic investigation into the assets that may potentially need to be decommissioned, the attendant timeframes for decommission and associated expenditure.

Whilst all credible decarbonisation scenarios currently indicate a reduction in natural gas consumption in the long term, it is extremely unlikely that any of the gas network will start to become de-energised and therefore decommissioned before the 2030s.

At present, the scale of decommissioning costs is unknown, which makes it difficult to determine the way in which those costs should be funded. First and foremost, Ofgem and GDNs need to better understand the likely magnitude of these costs to ensure that costs are funded in the most appropriate

way. RIIO-3 Net Zero uncertainty mechanisms are likely to provide a workable regulatory mechanism. However, this is clearly contingent on the upcoming UK Government decisions in this area.

Notwithstanding the fact that the likely longer-term costs are currently unknown, we consider it would most likely be challenging to attempt to recover significant decommissioning costs through customer bills and that doing so would risk consumer harm to the most vulnerable. Depending on the magnitude of these costs, it is possible that recovery could require a solution which is outside of the RIIO-3 framework, such as wider socialisation of these costs.

It is also important to note that understand and planning for any decommissioning of the gas network will need to be done as part of a whole systems solution, ideally coordinated through the RESP's. Any decommissioning of the existing gas network could only happen where electricity conversion for heat has already occurred. Therefore, subsequent time scales for any decommissioning require this infrastructure to be in place. The customer impact and willingness to participate in conversion from gas to electricity also needs to be considered when planning for decommissioning.

Role of Scenarios and Planning Pathways

OVQ7. Do you agree with the proposal to use the FES framework for selecting the RIIO-3 scenarios?

NGN disagree. NGN does not support the use of the Future Energy Scenarios (FES) for RIIO-3 business planning. As discussed at the Cross Sector Working Group on 15th February 2024, NGN and other GDNs support the use of common planning assumptions instead of FES scenarios.

The normalised FES approach, to outline strategies based on four views of future end states that provide boundary framing, alongside views of alternative consumer end states did offer information that could lightly inform direction without ever being considered a truly invaluable tool support future investment decisions. The Falling short scenario being the one NGN considered to be most closely aligned to the reality seen by the UK.

Early indications show that the development of NESO has introduced a significant shift in FES output for 2024 to move away from four scenarios to develop three pathways each of which are designed principally to satisfy the 6th and future carbon budgets. A counterfactual pathway is also proposed which will not hit the required 2050 net zero target for the UK. This new FES approach also moves to a two-year refresh cycle locking in these pathways until summer 2026, which given the significance of the heat policy decision that year could lead to exaggerated influence to policy process as a result. With some evidence gap for hydrogen still current, the NESO have discounted any use of hydrogen for heat in any pathway, an erroneous position in NGN's view, replacing hydrogen demand primarily with heat pump and district heating technologies. Equally they have determined there is no UK hydrogen backbone to convey hydrogen across the country, isolating hydrogen use to four industrial clusters. In effect this could be read as the NESO taking a heat policy decision ahead of any government position being established. This risks market reaction leading to inflated cost of capital and undermines investments that maintain or enhance system resilience and security from a whole system perspective.

The assumptions used to develop the pathways appear to be mostly drawn from electricity sourced information to prove the case for heat pump and other electricity net zero solutions, and as such holds little direct value to the gas industry. Consultation with the gas transporter industry has only recently commenced but time is against any changes given publication of FES 2024 has been brought forward to June this year. These new pathways appear not to have drawn upon existing real world gas industry innovation projects, such as project Union, East Coast Hydrogen or H100 which describe the medium and long-term evolution of the national transmission and distribution systems to convey hydrogen across GB and instead offer a bleak view of highly restricted capability focus on four industrial clusters. This view is at odds with the whole system view that persists within each of the five-gas transportation businesses. As such NGN do not see a role for FES in any forward planning and investment mechanism but do understand the value this offers to the electricity transportation and distribution networks.

The FES framework has significant limitations which makes them an unsuitable framework for RIIO-3:

- FES scenarios do not take into account whether infrastructure can be practically provided in the timescales to deliver the supply/demand assumed.
- FES scenarios do not take account of cost or consumer take up of different solutions.
- FES scenarios focus on overall volume rather than peak volumes and do not make assumptions around where demand may change or which consumers it will be.
- FES does not consider whole system energy trilemma.
- FES does not consider impact of network constraints or assess the impact of deviation from scenario assumptions.
- FES 2024 no longer uses scenarios and instead focuses on pathways which alters the approach and adds uncertainty at this time.
- FES 2024 assumes consumers only concern will be running costs for their heat solution and not significant capital outlay which is at odds with NGN's understanding of consumer concern.

OVQ8. Do you agree with the proposal to use FES Leading the Way as the planning scenario for ET in RIIO-3?

NGN disagree. We do not support this proposal.

NESO have abandoned the established FES approach and have moved to three pathways, these being:

- Holistic Development
- Extensive Electrification
- Strategic Hydrogen

As such it seems illogical to use FES leading the way for any future planning position.

Equally the Leading the Way scenario does not seem a fair reflection of the current GB position today and as such NGN feel any pathway to achieve this would be unobtainable given the significant funding, impact and cultural shift required by consumers to support such a position.

NGN would offer System Transformation as an alternative position which still requires Electricity Transmission (ET) to respond effectively to the requirements on the supply side to deliver the energy needed for both direct utilisation and production of green hydrogen.

OVQ9. Do you agree with the proposal to use two FES planning pathways for the gas networks, ie Leading the Way and Falling Short as the additional common conservative scenario?

NGN disagrees. NGN does not support this proposal.

Again, the use of FES scenarios which no longer apply from FES 2024 onwards seems unhelpful.

Majority of investment in the gas networks is non load related and focused on legislative safety requirements and asset health intervention to maintain a safe and resilient network and hence are largely invariant to supply/demand scenarios.

Not publicly declaring an assumed scenario would also avoid unintended consequences of the financial markets believing a particular pathway has been decided before 2026 Heat Decision is reached, increasing the cost of capital and subsequently risking whole system resilience. The demand related investments are largely confined to direct connection and disconnections and associated reinforcements and the cost benefit payback assumption for optional investments.

Instead, NGN proposed the use of common assumptions on the cost benefit payback for optional investments as well as a revenue driver on connection/disconnection assumptions which ensure optionality is maintained with low regrets of stranded investments.

OVQ10. Is Falling Short the most appropriate common conservative planning scenario to be used for the gas networks? Or is a common gas network developed scenario more appropriate?

NGN disagree. NGN do not consider Falling Short to be the most conservative planning scenario.

Using a common gas network developed scenario based on 'business as usual' assumptions would be most appropriate for RIIO-3 to ensure high quality consumer service, and adequate system resilience and asset maintenance.

As discussed at the Cross Sector Working Group on 15th February 2024, the gas networks are currently working together to develop the common planning assumption for RIIO-3.

OVQ11. Is it feasible for all network companies to initially plan against FES 2023 before updating business plans in line with FES 2024, as proposed?

NGN disagree. NGN does not support this.

NESO's current proposal of FES 2024 shows significant deviation from the FES 2023's scenario thinking. Instead of 4 scenarios used in FES 2023, 3 pathways and a counterfactual pathway are proposed in

FES 2024. Additionally, FES 2024 does not have an equivalent of FES 2023's Leading the Way scenario. The assumptions around FES 2024's Counterfactual pathway are not fully credible as no hydrogen uptake is assumed outside of industrial clusters (i.e. Humber and Teesside within the NGN boundary) which is not cognisant of national ambition of hydrogen economy or indeed the hydrogen ambitions being made real across in the EU, which will impact the GB system.

Largely, NGN does not support use of FES framework for RIIO-3 business planning as discussed in our response to OVQ7 and OVQ9.

Outputs and Incentives

OVQ12. Do you agree with our proposed approach on the role, scope and format of PCDs?

NGN generally agrees with Ofgem's proposed approach to PCDs (Price Control Deliverables). In particular, the concept of materiality thresholds for PCDs is logical and NGN considers that RIIO-2 PCDs below the materiality threshold should become part of base allowances on proportionality and simplification grounds. What the materiality threshold is set at is important and this should be carefully determined in collaboration with stakeholders to ensure it is appropriate.

NGN would support a preference for costs and workload to be captured in base allowances rather than PCDs where there is sufficient confidence in delivery and where the impact of deviations of from submitted forecasts on customers is low. Doing so will contribute to Ofgem's objectives of simplifying and streamlining the RIIO process and reducing ongoing reporting requirements, which NGN fully supports.

Where a PCD is deemed proportionate and necessary, there should be a preference to mechanistic PCDs to provide clarity to all stakeholders and to reduce the resource burden on all parties. Evaluative PCDs should be reserved for the most material and heterogeneous one-off circumstances. However, both mechanistic and evaluative PCDs should be structured such that they avoid unnecessarily constraining the flexibility available to networks to optimise investment to best meet customer priorities. PCDs should not incentivise a sub-optimal approach to adapting GDNs' plans to changing situations, or expose GDNs to additional, asymmetric risk if they take an approach to investment that best meets the consumer interest.

OVQ13. Do you agree with our proposed framework for setting financial incentives? Are there any additional considerations that we should take into account?

The elements set out by Ofgem in paragraph 6.66, which are considered when setting the strength of financial incentives, cover the most important factors in principle. However, in practice there has been a material weakening of incentives across the board between RIIO-1 and RIIO-2.

As outlined in our responses to questions OVQ32-OVQ34, it is NGN's view that the strength of incentives has been weakened in RIIO-2 to the point where it is detrimental to customers; as the link between rewards and frontier performance, or conversely laggard delivery and penalty, has been broken.

This should be remedied in RIIO-3 as a priority. Outputs that are important to stakeholders, such as shrinkage, customer service and interruptions, should continue to be incentivised and strengthened for both penalty and reward to encourage laggards to catch-up to leading performance. Ensuring incentives are sufficiently high-powered is essential to drive innovation and efficiency improvements in the sector—as without commensurate returns GDNs will be unable to make the required investments and take the necessary risks.

New common outputs and licence based automatic rewards and penalties should be considered for areas that have a significant impact on safety and emissions, such as 1- and 2-hour emergency response standards and repair times for outstanding escapes. This does not necessarily require higher minimum standards in these areas, but a mechanism to adjust returns for exceeding targets or missing targets that scale with degree of out/underperformance. NGN consider that there is risk that in some areas some networks could be funded for deliverables and minimum standards of service in RIIO-3 that should have already been met and have already been funded in RIIO-2.

OVQ14. Do you agree with our approach to setting reputational incentives? Are there any additional considerations that we should take into account?

NGN agree reputational incentives are crucial to this form of regulation, if a company volunteers itself and takes ownership of the success or failure rather than having a forced financial penalty.

It has been evident for some time that managers, employees and investors care about the reputations of the company they are responsible for. Managers also put great store on their own personal reputations within their industry or profession. Showing a company trust and asking it to demonstrate that trust is not misplaced can therefore be as powerful a motivator as more traditional regulatory targets and incentives, in that the reputational rewards for good behaviour and the reputational penalties for bad behaviour tend to weigh heavily in the thought processes of those who sit in decision-making positions.

OVQ15. Do you agree with our proposals for bespoke outputs? Are there any additional considerations that we should take into account?

Yes, NGN considers there is definitely a place for bespoke outputs that are tailored to meet consumer needs. By incorporating stakeholder feedback into the process, businesses can ensure that the bespoke outputs align with the unique expectations and requirements of their customers. This feedback-driven approach helps to create value and drive performance.

Moreover, having a robust business model is crucial to ensure that the bespoke outputs are economically viable and sustainable. It allows businesses to allocate resources effectively and deliver the desired outcomes to customers.

Bespoke outputs also provide an opportunity to measure, incentivise, and demonstrate areas of differentiation between GDN's.

Incorporating bespoke outputs into a business strategy, considering consumer needs, stakeholder feedback, and a robust business model, can help businesses create value, differentiate themselves, and meet the diverse requirements of their customers.

OVQ16. Do you agree with our proposal to retain the EAPs and AERs in RIIO-3? Please provide reasonings for your position.

NGN agree. Stakeholders have told us that they value transparency and accountability with regard to setting and reporting progress against company environmental commitments and targets. Environmental Action Plans (EAPs) and Annual Environmental Reports (AERs) create a regulatory framework which appropriately meets this requirement.

OVQ17. What are your views on the new proposed AER format with Commentary and KPIs?

NGN agree with the objective of standardising the AER reporting format to enable greater transparency across the sector. However, the proposed RIIO-3 AER format of a commentary and separate KPI table would not maximise the accessibility of data to stakeholders, would be a regression from current reporting standards, and therefore it is not supported by NGN.

NGN note that there is currently very detailed RIIO-2 Environmental Reporting Guidance (https://www.ofgem.gov.uk/sites/default/files/docs/2021/03/riio2_environmental_reporting_guidance_v_1_final.pdf) which networks are required to follow in preparation of their AERs as part of the AER Licence Obligation. This guidance was developed by Ofgem in collaboration with the networks to drive transparent and consistent reporting during RIIO-2. If Ofgem consider that the current RIIO-2 reporting guidance is not being consistently adhered to by networks, they should consider what further regulatory mechanisms should be applied during RIIO-3 to ensure that prevailing reporting guidance is universally complied with to avoid repetition of RIIO-2 issues.

During RIIO-2, networks are required to prepare a publicly available, comprehensive, single AER document which provides KPI performance data, performance commentary/narrative, illustrative case studies, data methodologies, and data quality statement. For NGN our AER is typically 45 pages (excluding appendices) and 15,000 words in length. The AER is also supplemented by submission of numerous RRP (Regulatory Reporting Packs) data table submissions containing environmental data to Ofgem, for example Tables 4.06, 4.07, 11.06 and 11.07 of the most recent AER.

Whilst the existing AER report is lengthy in order to be fully compliant, it provides both quantitative performance data and narrative in a single document. In order to fully and effectively communicate company environmental performance in a format accessible to all stakeholders, it is critical that quantitative data and performance narrative can be viewed together in a single document. Furthermore, stakeholders have told us that illustrative case studies are highly valued by them to demonstrate the actions that NGN are actually taking to reduce our environmental impact and makes the quantitative data more relatable and understandable. The proposed RIIO-3 AER format of a commentary and separate KPI table would not maximise the accessibility of data to stakeholders, would be a regression from current reporting standards, and therefore it is not supported by NGN.

NGN recommend the RIIO-2 concept of the AER is retained, but reformed to focus on environmental impacts which are most material to network sectors and their stakeholders (see OVQ19 response for further details), with consideration of further reinforcement of the requirement to comply with the reporting guidance (or demonstrably explain why full compliance is not possible).

OVQ18. Do you agree with our minded-to position of retaining the reputational incentive on TOs and GDNs for reducing their BCF?

NGN agrees. Achievement of net zero emissions requires action to reduce all sources of greenhouse gas (GHG) emissions.

For gas distribution networks gas shrinkage typically contributes approximately 90% of total GHG emissions, see page 29 here:

https://www.northerngasnetworks.co.uk/wp-content/uploads/2024/02/Sustainability-Report-2023_FINAL.pdf).

Non-shrinkage emissions, such as from company vehicles and energy use in premises (commonly referred to as business carbon footprint (BCF)), are substantially smaller than shrinkage emissions but nonetheless present potential opportunities for achievable, valuable emissions reductions. Retaining the reputational incentive for BCF encourages network companies to continue to focus on reducing all sources of emissions, which might otherwise be diminished if the incentive was removed.

OVQ19. Are there any other suggestions you would like to make regarding reporting standards?

Further to our response to OVQ17 above, NGN recognise and support the desire to create a common set of environmental KPIs to provide stakeholders with greater transparency with respect to each network's environmental performance.

Our review of the RIIO-2 EAPs for all GDNs identifies that each network has between 19 and 31 EAP commitments (27 for NGN). These commitments are typically quantitative, with some qualitative, and cover a range of environmental impacts, including gas leakage, waste, material use etc. By assigning each commitment as an EAP commitment they are de facto assigned an equal significance in reporting terms, regardless of their environmental materiality. For example, for NGN this means if taken at face value our commitment to reduce our gas leakage by 24% over the RIIO-2 period is provided the same significance as our commitment to halve our paper usage over the same period. Both are environmentally beneficial, but distinctly different in their materiality.

NGN consider that RIIO-3 EAPs and AERs should focus on reporting against a relatively small number of primary KPIs for environmental impacts that are material to the network sector, in network operator's direct control and thus reflective of their actions/behaviours, and demonstrably important to stakeholders. KPI performance reporting should be normalised wherever possible to allow for differences in network characteristics and enable fair comparison (tCO₂e/GWh gas transported or £m turnover). This approach would provide stakeholders with consistent, transparent reporting for networks' most material environmental impacts. This set of primary environmental KPIs could be supplemented by a set of secondary KPIs which are of lower materiality and/or of moderate

stakeholder interest, or are leading indicators of environmental performance by networks (such as environmental training and awareness completed).

Based on NGN's most significant environment impacts please refer to the following report, <https://www.northerngasnetworks.co.uk/wp-content/uploads/2017/12/Significant-Environmental-Aspects-Risks-and-Opportunities.pdf>

As well as what stakeholders have told us about their priorities for environmental reporting are please refer to page 25 of the following report, [PowerPoint Presentation \(northerngasnetworks.co.uk\)](#)

Based on this, potential primary environmental KPIs could include the following.

Primary environmental KPI's could include:

Category	Descriptor	Units
Waste	Total waste	Tonnes per £m turnover
	Excavation spoil	% to landfill
	Office and depot (other) waste	% to landfill
Greenhouse Gas Emissions	Total emissions	tCO2e per £m turnover
	Gas leakage	tCO2e/Gwh gas transported
	Business Carbon Footprint: Scope 1 and 2 emissions	tCO2e/£m turnover
	Business Carbon Footprint: Scope 3 emissions reporting data coverage	%
Material Use	Use of primary (virgin) aggregate in excavation reinstatement	%
Environmental Management	Environmental incidents in year (direct and contract labour)	Number
Sustainable Procurement	Expenditure with suppliers compliant with network's own Supplier Code of Conduct	%

Secondary environmental KPIs could include:

Category	Descriptor	Units
Greenhouse Gas Emissions	Vehicle fleet carbon intensity	tCO2e/mile driven
	Energy intensity of office and depot premises	Kwh/m2
Land management	Land contamination remediation projects completed	Number
Low carbon energy	Low carbon gas production plants connected to network	Number
	Low carbon gas injection	% (low carbon gas injection as % of total gas throughput)
Environmental training and awareness	Provision of environmental training and awareness	Hours delivered per full time equivalent employee

In relation to reporting of biodiversity performance, NGN do not regularly undertake projects which require planning consent and thereby trigger the requirement for biodiversity net gain. The vast majority of our expenditure is on the replacement and repair of gas mains in the urban environment, typically in roads and pavements operated by the local authority, and as such formal consideration of biodiversity net gain is not relevant. NGN do have our own commitments to promote and enhance biodiversity on our own landholding, but these commitments are bespoke to NGN and thus not easily conveyed in a primary KPI performance table. Performance against such commitments would be best discussed by means of a narrative within the AER.

Reporting of embodied carbon is best suited for large scale, discrete capital projects where embodied carbon can be evaluated at the design stage. This can be considered alongside options to reduce the embodied carbon and a post-completion review of embodied carbon performance against design stage estimates. As discussed above for biodiversity net gain, NGN rarely complete capital projects of the scale typically associated with embodied carbon assessment, however during RIIO-2 NGN developed a bespoke methodology to measure the embodied carbon of our main work types and has included this in our AERs. NGN has shared this with the other GDNs. NGN propose to continue this reporting in RIIO-3 accompanied with a commentary, however it is noted that achieving consistency of reporting across the GDNs on this evolving subject will be difficult and hence it is not appropriate as a primary environment KPI.

OVQ20. Do you agree with our minded-to position to withdraw the Environmental Scorecard and incentivise improvements in environmental impacts through the Annual Environmental Report (AER)? Please explain your reasoning.

No comment.

OVQ21. Do you consider that there are other areas which require financial incentives which cannot be captured by the AER? Please explain your reasoning.

No comment.

OVQ22. Do you have any views on our proposals for the NARM framework?

NGN welcome that Ofgem wants to work with network companies on the Network Asset Risk Metric (NARM) Funding Adjustment and Penalty Mechanism for RIIO-3 to review whether these arrangements remain fit for purpose. We consider that it would be beneficial for Ofgem to revisit the objectives and principles of NARM with stakeholders to determine if it still adds sufficient value in its current form to justify the effort and resources required to meet requirements. Monetised risk is one of several inputs to GDN decision making, such as engineering expertise, legislative requirements and obsolescence. It is a useful metric in supporting decision making through risk-based CBAs, but simpler workload volume targets for areas such as Repex may be more appropriate once a programme has been agreed through the price control setting process. This should be considered as GDNs come to the end of the Iron Mains Risk Reduction Programme (IMRRP) and the scope for choice reduces.

It is our view that the current RIIO-2 NARM incentive regime is yet to be finalised and further collaborative work is urgently needed to update the RIIO-2 NARM Handbook and to update Network Asset Risk Workbooks for closeout of RIIO-1. For example, Ofgem still need to clarify and consult on rules for clearly identifiable over- and under-delivery and the exact calculations for the NARM Funding Adjustment and Penalty Mechanism. NGN would be happy to support and work with Ofgem and the other networks on this through working groups throughout 2024. Prioritising this as soon as possible would help inform if the NARM incentive regime is fit for purpose in RIIO-3. It is essential to have clear rules and robust testing of outcomes to ensure that the risk of penalty and allowance adjustments are calibrated correctly and reflect how well networks have managed their assets. This will protect both customers and networks from windfall gains and losses.

NGN notes Ofgem's *'ambition to expand the coverage of the NARM methodology, and where appropriate increase the proportion of expenditure linked to outputs'* (para 6.148). It is NGN's view that there is not enough time nor capacity for Ofgem and the GDNs to extend the coverage of NARM to additional asset classes between now and the start of RIIO-3 due to the requirement to develop new risk models. This would require significant effort, testing and consultation and would be more appropriate as an ambition for implementation in the price control that follows RIIO-3. It is our view that finalising the NARM Funding Adjustment and Penalty Mechanism is a higher priority, as well as implementing Long Term Risk in GD specifically.

However, what is in and out of scope of A1 NARM funding from the existing modelled asset classes for RIIO-3 should be collaboratively reviewed through working groups. NGN considers there are some inconsistencies between GDNs in what interventions are included in RIIO-2 NARM targets and in some cases networks may not have direct control over delivery, such as public reported escape driven service replacements. In addition, it may be justified to remove certain categories of interventions from A1 where the risk impacts modelled are not currently reflective of the true benefit of interventions, such as Local Transmission System (LTS) pipelines where we do not let assets fail due to their criticality and therefore there is a lack of data to inform risk modelling. NARM is not a driver of decision making for LTS.

Another priority of Ofgem and the networks should be the simplification of NARM reporting requirements to reduce the significant burden on the resources of all parties. The complexity and granularity of the data provided is difficult for stakeholders to understand and requires significant effort and the application of assumptions in some cases to provide the requested detail. It is not clear what Ofgem use all the NARM RRP information for and there are opportunities to remove sections of the tables without reducing the opportunity for Ofgem and stakeholders to assess networks' NARM delivery. NGN would be happy to work with Ofgem and the other networks to agree mutually beneficial changes.

OVQ23. Do you have any views on our proposed long-term approach to embedding climate resilience, including the principles for embedding climate resilience?

NGN is supportive of Ofgem's general principles and objectives of embedding climate resilience, and is supportive of the resilience work which we have already undertaken. Customers have consistently told us that the provision of a safe and reliable gas supply is their top priority alongside minimising costs (see pages 12 and 13 here: [PowerPoint Presentation \(northerngasnetworks.co.uk\)](https://www.northerngasnetworks.co.uk/PowerPointPresentation)).

To deliver optimum outcomes for improving climate resilience, climate resilience should not be considered in isolation and instead it should be considered:

- As one aspect of wider business resilience;
- Collaboratively with stakeholders and customers, potentially including consideration of the level of resilience customer's are willing to pay for; and
- Cognisant of the bespoke risks posed to network sectors based on their individual characteristics, attributes and interdependencies with other infrastructure. For example, there are distinct physical differences between electricity networks which have extensive above ground assets whilst gas networks assets are substantially below ground which results in different climate change risks.

OVQ24. Are there any early learnings we should be aware of/incorporate to make progress on this in RIIO-3 or beyond?

In the spirit of collaboration, the DNOs (Distribution Network Operators) kindly invited GDNs, ET and GT (Gas Transmission) networks to participate in the ED-2 Climate Resilience Working Group facilitated via the Energy Networks Association (ENA). NGN has been an active member of this group since the start. Valuable lessons have been learnt to date, including:

- Energy network infrastructure climate resilience is a developing area, in particular with respect to climate science and forward projections, and how such climate information should be interpreted to understand potential risks to infrastructure;
- Collaboration is key for the sharing of knowledge and developing a consistent approach to risk identification and association;
- Gas and electricity networks have different characteristics and resultant different climate change risk profiles, which is further complicated by gas and electricity networks having different long-term certainties regarding their futures; and
- Development of a universal climate resilience metric is proving to be difficult due to the differences in network attributes and geographies, and uncertainties regarding how to appropriately value the benefits of climate resilience investments to protect against the occurrence of inherently uncertain events.

It is recommended that climate resilience is approached in RIIO-3 as an evolving area tailored to the individual risks posed by network sectors.

The energy networks of the UK already participate in regular climate change adaptation and resilience reporting under the Reporting Power. Networks submitted a collaborative report and individual reports in [2021](#) and will do so again in 2024, so it is not recommended that Ofgem mandate further climate resilience reporting as part of RIIO-3.

OVQ25. Do you agree with our suggested approach for embedding climate resilience into RIIO-3, namely: introducing resilience strategies; developing forward-looking resilience metrics; and introducing climate resilience working groups?

Resilience strategies

NGN agrees with the approach but thinks that it could be improved by ensuring these strategies are holistic and include climate change alongside other pertinent elements of resilience, for example workforce, cyber security and supply chain.

Forward-looking resilience metrics

NGN disagrees and are not supportive of the desire to establish specific climate resilience metric(s). NGN consider that climate resilience is inherently too complex and variable to be reflected in an individual metric(s). Resilience can be increased in many ways, including high cost capital investment and low cost organisational operational preparedness. Any metric(s) created should be holistic of all elements of resilience, not just those based on capital expenditure, to drive the right investment behaviours to deliver optimised resilience with value for money for customers. Based on our experience from RIIO-2, as discussed in the response to OVQ25 above, we would also suggest that this objective would be difficult to achieve. Instead, NGN consider that focus should be directed to utilising existing regulatory metrics which are appropriately aligned to asset performance resilience and customer service, for example unplanned interruptions. Such metrics can be analysed to better understand and review the level of service resilience provided to customers and used alongside climate projections to develop resilience strategies and action plans. That is to say, while Ofgem is correct to highlight that there are forward-looking risks to resilience relating to changes in climate that will require additional investment and adaption of existing incentive and performance mechanisms, these considerations should be integrated and reflected within the existing frameworks rather than be introduced as a new, standalone metric in isolation.

Climate resilience working groups

NGN agrees and is supportive of this and already participate in the RIIO-2 group established by the DNOs.

OVQ26. Do you agree with the proposals that we have set out around the resilience metric?

As detailed in our response to OVQ25, NGN are not supportive of the desire to establish new specific climate resilience metric(s).

OVQ27. Do you agree with our proposals on workforce resilience?

NGN agree and are supportive of working collaboratively to develop reporting metrics that are relevant and material to all networks, meaningful to stakeholders, and readily measurable. NGN propose that the reporting methodology and interval is discussed and agreed as part of the collaborative development process.

OVQ28. Do you agree with our proposed key objectives for truth telling and efficiency incentives?

NGN agrees with the stated objectives. As outlined in our response to OVQ32, if the truth telling and efficiency incentives set at RIIO-2 were to be applied in RIIO-3, there would not be sufficient incentivisation to achieve the objective of ambition in costs and outputs.

As NGN noted in GD2, the purpose of the BPI is to “encourage network companies to submit ambitious and high-quality Business Plans... to drive benefits for consumers by rewarding companies that offer consumers additional benefits and value for money... [and is] specifically designed to reward companies that submit efficient costs.” (para 60, NGN NoA. See: [Northern Gas Networks Limited notice of appeal.pdf \(publishing.service.gov.uk\)](#)). The link between the objectives of truth telling / efficiency incentives and customer outcomes is clear and must be supported by sufficient incentives for GDNs.

NGN commissioned analysis (appended to this response) demonstrates that the current calibration of incentives is insufficient to overcome information asymmetries and the revealing of true efficient costs. Notably, the current calibration of the RIIO-GD2 framework could reward networks for submitting a less ambitious business plan, and penalise NGN for revealing the scope for productivity improvements. Therefore, the current framework would benefit from stronger upfront incentives to encourage GDNs to submit ambitious business plans (i.e. the truth telling incentive), and enhanced mechanisms to deliver efficient outcomes over the course of the price control period (i.e. the efficiency incentive). If not remedied, this would be to the detriment of customers of all networks, as they would face materially higher bills than necessary.

OVQ29. What are your thoughts on our proposals relating to minimum requirements under an evolved BPI approach?

NGN welcomes any moves to make the BPI approach simpler, more transparent, and less resource intensive. NGN support reducing the number of requirements and improving clarity in guidance. For incentives to be effective, they need to be clear, well-defined, strong enough and predictable by all parties to encourage the intended behaviour. As set out in our response to OVQ32, NGN consider that this was not the case for RIIO-2 and this should be remedied at RIIO-3 as a priority.

NGN support the retention of stage 1 and removal of stage 2. If stage 3 and 4 were to be replaced with an ‘in the round’ assessment, then the criteria for this needs to be clear and detailed enough to influence GDN submissions, as set out in our response to OVQ30.

However, the detail of implementation matters and so does the strength of the BPI to incentivise ambitious plans, truth telling and efficiency. The BPI should sufficiently reward frontier performance and ambitious plans and encourage laggards to catch-up with greater differentiation in outcomes than was seen at RIIO-2.

OVQ30. What are your thoughts on an 'in the round' assessment of cost forecasts as opposed to a high/lower confidence breakdown and assessment?

For incentives to be effective, they need to be transparent, predictable and aligned to the objectives of the process. NGN support Ofgem's objectives of encouraging truth telling, ambition and efficiency. NGN do not think this was sufficiently achieved at RIIO-2, as set out in our response to OVQ32.

NGN was penalised with a lower TOTEX Incentive Mechanism rate for high/lower confidence breakdown specifically at RIIO-2, as Ofgem judged an element of our costs as low confidence despite our track record of frontier delivery and efficiency. It was not clear on what basis this assessment was made and in NGN's view it did not reflect the ambition and quality of our plan, nor the value we drove for customers across GB, as set out in our response to OVQ32.

An 'in the round' assessment risks making the outcomes of price control process even less clear and more subjective. Therefore, any move away from mechanistic adjustments needs to be compensated with clear guidance and criteria from Ofgem as to the basis of any assessment. Stability and clarity are key pillars of an effective incentive framework and for the continued delivery of customer value. NGN consider that the framework in RIIO-2 was weakened too much and to the detriment of customers and that this should be remedied in GD3.

OVQ31. What are your thoughts on an 'in the round' assessment of business plan ambition as opposed to requiring and assessing CVPs?

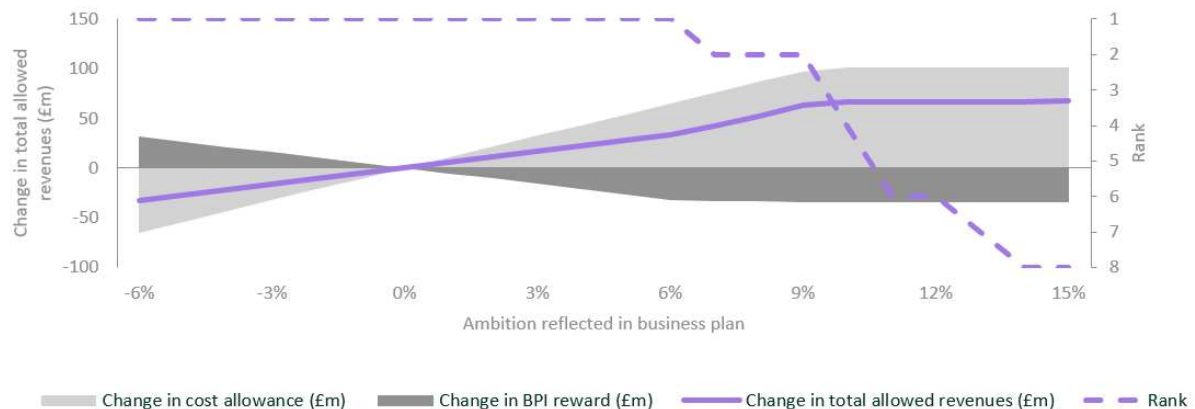
NGN support the removal of Customer Value Propositions (CVPs) as a requirement as they were costly and onerous at RIIO-2 and it's not clear what benefit they drove. However, as per our response to OVQ30, there needs to be clear guidance and criteria from Ofgem as to the basis of any assessment in order for it to be clear and predictable enough to encourage ambition. In particular, guidance on what output proposals and / or enhanced levels of service may be considered by Ofgem at RIIO-3 and the criteria on which they will be assessed should ensure more focussed proposals that add the most value for customers.

OVQ32. What are your thoughts on the size and strength of any truth telling incentive?

NGN has commissioned analysis of the size and strength of the truth telling incentive at GD2 and the value and cost of being the frontier company in the sector, using RRP data and Ofgem RIIO-GD2 models (appended to this response). The work undertaken shows that the size and strength of the truth telling incentive is not commensurate with the value that NGN, as the frontier company in RIIO-2, delivers to customers across GB through a more stringent cost challenge for the other networks.

The analysis, as summarised with the graph below, indicates that NGN's total allowed revenues would have been greater in RIIO-GD2 if it had submitted a less ambitious plan (i.e. if it had submitted larger TOTEX forecasts). For example, NGN could have increased its TOTEX by up to 6% and still maintain its frontier position and earn (reduced) BPI payments. The reduction in BPI payments would be more than offset by the increase in NGN cost allowance, equating to higher revenues.

Incentives facing NGN



Note: The change in total allowed revenues is indicated by the solid purple line, and is defined as the sum of the change in the cost allowance and the change in the BPI reward.

Source: Oxera analysis.

No network knows ex-ante either what costs other networks will submit or how Ofgem will adjust them in order to calibrate their outcomes; and this is a key feature of the RIIO framework. NGN will continue to aim to lead the sector in cost and delivery and submit an ambitious plan in the interests of all stakeholders, because it is the right thing to do. Ofgem should, however, revisit as a priority the size and strength of any truth telling incentive, alongside the wider package of incentives, to ensure that all networks are appropriately induced to catch-up to frontier costs and delivery.

NGN considers that other networks have benefited from the current calibration of the incentive framework in RIIO-GD2, despite submitting higher costs claims leading to an increase in bills for customers across GB and missing key minimum standards, such as 1 and 2 our emergency response times. They are more readily able to earn a return through TOTEX outperformance than NGN. For example, another network's GD2 Tier 1 Repex allowed unit rate is 30% higher than NGN's, which they are forecasting to outperform as of RRP 2022/23, whereas NGN is forecasting to overspend allowances on that element specifically over RIIO-2. NGN do not consider this difference is proportionate due to the socio-economic and geographic similarities between the two regions in question; rather it reflects the additional challenge to NGN of operating at the efficiency frontier.

If the current size and strength of truth telling incentives are retained for RIIO-GD3, there is a significant risk that customers across GB will end up paying for materially higher allowances through bills than they otherwise would need to, as the current calibration is too weak and may even encourage the opposite behaviour from GDNs to what is intended.

The overall BPI value cap at $\pm 2\%$ could be increased to strengthen the incentive. Another amendment to the RIIO-2 BPI approach could be to adjust submitted costs for disallowed workload for the purposes of BPI reward calculation, but to still allow full submitted costs if they are less than efficient modelled costs for the reduced deliverables, as was the case for NGN at RIIO-2. In addition, there could be a larger rate applied for the reward, instead of the approximate RIIO-GD2 50%, to strengthen the incentive further and encourage all networks to submit more efficient plans.

We observe that this was a considerable decline relative to the RIIO-GD1 period; specifically, Ofgem notes as part of its RIIO-GD2 Final Determination:

“We are reducing the Totex sharing factor from an average of 63% in RIIO-GD1 to an average 49% in RIIO-GD2”

It is NGN’s view that frontier performance, efficiency and ambition, and the value it delivers for customers, should be appropriately incentivised. Conversely, laggards should be encouraged to catch up through the framework and reveal the true efficient costs they are able to deliver at the outset. Overall, NGN consider that this wasn’t achieved at RIIO-2 and that it should be remedied as a priority at RIIO-3. It is also important that networks aren’t funded again for work that should have been delivered in previous price controls or to meet minimum standards of service already being delivered efficiently by frontier performers like NGN.

OVQ33. What are your thoughts on any alternative approaches that could be used instead of an evolved BPI?

It is NGN’s view that the BPI is still a valuable element of the overall incentives package and should be retained and strengthened as set out in previous answers. The purpose of the BPI is to encourage ambitious plans that reveal true possible cost efficiencies. Any evolution or alternative approach should meet the principles and objectives of the incentive framework. It would be challenging to implement an alternative approach to BPI in the time available and doing so risks unintended consequences and mixed incentive signals.

NGN’s analysis assessed how a range of well-established incentive mechanisms used by economic regulators, including Ofgem, could be applied in RIIO-GD3 to better reward frontier performance to the ultimate benefit of all GB network customers. This includes:

- **Enhanced revenues:** efficient companies should have revenues set above their current (or expected) performance, through a higher cost allowance, an upfront reward, or an enhanced weighted average cost of capital (WACC). Enhanced revenues can alleviate some of the costs associated with operating at the frontier, thereby strengthening the truth-telling incentive.
- **Favourable cost-sharing:** The cost-sharing rate for efficient companies can be calibrated to allow companies to retain more of the outperformance for a longer period of time, and bear less of the underperformance. This will incentivise companies to submit efficient business plans in order to benefit from favourable cost-sharing rates (the truth-telling incentive) and improve performance during the regulatory period, given that they can retain a greater proportion of the outperformance (the efficiency incentive).

- **Procedural benefits:** Reducing the regulatory burden for efficient companies can alleviate some regulatory costs. A reduced burden can take several forms, including a lighter-touch assessment of certain investments, fast-tracking, reduced commitments such as on ongoing efficiency, and strengthening support for innovative activities. If the efficient company fails to meet targets or deliver on commitments, the regulator could return to stronger scrutiny.
- **Yardstick benchmarking:** Yardstick benchmarking allows for the delinking of a company's efficient cost allowances from their own performance. Yardstick benchmarking is a complementary approach to upfront rewards, as upfront reward for efficient companies can be determined through yardstick benchmarking to mitigate the risk that an efficient company will reduce its own allowance by improving performance.

NGN considers that the overall framework would benefit from strengthening, greater transparency and predictability in order to be as effective as possible and to achieve Ofgem's objectives. Looking at the BPI in isolation is not sufficient and should be considered in the context of any changes to the Totex Incentive Mechanism and outputs linked incentives such as shrinkage and customer service.

It is NGN's view that the BPI should be retained as a valuable element of the overall incentive package and Ofgem should consider penalties for inefficient plans based on converse calculations used for BPI. This should be supplemented with strengthening of incentives in other elements of the RIIO framework, especially to encourage laggard companies to catch-up to frontier performance.

OVQ34. What are your thoughts on the options for calculating the sharing factors and do you see strong reasons for changing the overall strength of the sharing factors relative to RIIO-2?

Ofgem is consulting on the distinction between high-confidence and low-confidence costs. At GD2, NGN was penalised under this assessment with a lower TOTEX Incentive Mechanism (TIM) sharing factor, as Ofgem deemed more of its costs to be low-confidence when compared to other GDNs. NGN consider that the process in GD2 was overly subjective, and the outcome did not reflect our strong track record of delivery or frontier performance. NGN would welcome working with Ofgem on a transparent process for low and high confidence cost distinction for GD3.

NGN urge Ofgem to look at GD2 delivery to date and forecasts across the networks, alongside performance against key standards, such as 1 and 2 hour emergency response times, when considering confidence in network cost and delivery of service forecasts in GD3. Ofgem should be aware of step changes for some networks in certain areas of workload and spend (e.g. Repex) where deliverability is questionable given track records. As we come to the end of IMRRP, Ofgem should assess confidence in the delivery of the programme across networks and be careful not to award allowances for costs and work that should have already been completed or to meet minimum standards or service that are already been efficiently delivered by frontier companies.

The use of a more differentiated TIM between frontier and laggard efficiency, and/or where there is low confidence in costs, is one of the strongest tools available to Ofgem to incentivise ambitious plans and the revealing of efficient costs.

It also means that companies benefit only when they outperform, which ultimately reduces costs for customers. The spread of TIMs at RIIO-2 was neither sufficient nor reflective of the relative performance or value to customers that each network delivers. This should be remedied in RIIO-3 as a priority.

Managing Uncertainty

OVQ35. Do you agree with our proposal to retain the Net Zero Re-opener with its current scope and parameters for RIIO-3?

NGN agree with the principle of retaining the Net Zero Re-opener due to the significant uncertainties in this policy area. However, it would be prudent to review the scope and parameters collaboratively with stakeholders to ensure all potential situations are covered, especially if Ofgem is considering merging Net Zero related re-openers.

Overall, the experience of re-openers in RIIO-2 has been onerous for all parties and they have been difficult to administer with delays in windows and decisions. While re-openers play a valuable role in managing uncertainty and should be retained in RIIO-3, they should be reserved for material areas only and NGN support the merging of re-openers and expanding of criteria accordingly to simplify and streamline the process. As a principle, as much funding as possible should be included in baseline allowances to across all spend areas to prevent the need for the onerous re-opener process apart from cases of significant unforeseen changes to cost bases.

OVQ36. What are your views on our proposal, in principle, to retain the Net Zero and Re-opener Development Fund UIOLI for RIIO-3? What are your views on the types of projects it could fund and how it would interact with other sector specific price control mechanisms?

NGN agree with the principle of retaining the Net Zero and Re-opener Development Fund UIOLI (Use it or Lose it Incentive) for RIIO-3, due to the significant uncertainties in this policy area. However, NGN disagrees that this may no longer be needed following the creation of the HTBM and prior to government decisions on hydrogen heating in 2026. It is NGN's view that this re-opener could still have a role for gas projects and the optionality should remain.

OVQ37. Do you think we should retain the NZASP for GD and GT? What should its scope be and what kind of projects would you expect to be funded through this re-opener in RIIO-3?

NGN agree that the Net Zero Pre-construction Work and Small Net Zero Projects Re-opener (NZASP) should be retained for GD and GT. Stages for projects such as East Coast Hydrogen could be funded through this mechanism, and it provides the flexibility and opportunity for well justified material design and pre-construction work that will allow the UK to meet Net Zero targets at least cost.

OVQ38. Do you have any views on consolidating the net zero related re-openers and the UIOLI allowance?

NGN agree with the principle of consolidating the net zero related re-openers and the UIOLI allowance. However, it would be prudent to review the scope and parameters collaboratively with stakeholders to ensure all potential situations are covered, as Ofgem has stated.

OVQ39. Do you agree with our proposed position to retain the Coordinated Adjustment Mechanism for RIIO-3? If it were to be retained, what design and incentive considerations could we implement to enhance the utilisation and value of this mechanism?

NGN agree with the principle of retaining the Coordinated Adjustment Mechanism for RIIO-3. However, it is NGN's view that it is unlikely to be utilised in the RIIO-3 period based on current government policy and a lack of incentivisation and guidance to utilise it. The mechanism requires much clearer criteria and governance to ensure the networks are sufficiently compensated through a clear agreed framework for carrying out activities on behalf of another network and / or a change to customers and the associated revenues.

OVQ40. Do you agree with our proposal to allow physical security costs to be submitted through a broader resilience re-opener?

NGN agree with the principle of allowing physical security costs to be submitted through a broader resilience re-opener. However, it would be prudent to review the scope and parameters collaboratively with stakeholders to ensure all potential situations are covered. However, a significant proportion of physical security requirements are known and BAU (Business as Usual) and should be included in base allowances as part of a balanced capex and maintenance programme. This should be funded at the outset of RIIO-3 to avoid the need for unnecessary and burdensome re-openers.

OVQ41. Do you agree with our proposed approach to introduce a resilience re-opener?

NGN see the merit in a broader resilience re-opener but would need to ensure the criteria are broad enough to cover all potential requirements under its remit. However, as a principle, resilience expenditure (whether that be climate, cyber or network reliability) should be funded upfront where it is justified and there is a demonstrated need. These need to be considered collectively however, delineation between the different area/ risks to resilience need to be better defined. An overarching resilience strategy should provide this framework and inform the resilience re-opener. This will avoid unnecessary and onerous re-opener applications and allow networks to get on with providing a safe and secure high-quality service. Only material unforeseen or highly uncertain expenditure should be subject to a re-opener.

OVQ42. Do you have any views on whether the opex escalator should be retained and if so, how we could evolve the opex escalator for RIIO-3?

No comment.

OVQ43. Do you have any views on how we should effectively monitor the delivery of UMs?

In the majority of cases, UMs can effectively be monitored through appropriate guidance and tracking through RRP rather than burdensome standalone reporting requirements. The priority should be quantitative deliverables that can be measured where possible. Only in significantly material and complex instances should anything further be required where it is proportionate, such as evaluative PCDs above the materiality threshold.

Cost of Service

OVQ44. Do you have any views on whether to evolve the RIIO-2 methodologies for RPEs and ongoing efficiency for RIIO-3, and if so, how?

NGN see a continued need for Real Price Effect (RPE) adjustments beyond CPIH, with cost pressures due to macroeconomic factors and competition for limited specialist resources. For example, the pool of contractors available to deliver large capex projects is limited and able to work across GB and across sectors, with other utilities also procuring these resources at the same time for their own extensive capital projects programmes. In addition, NGN operates an efficient Direct Service Provider (DSP) model for Repex that has significantly contributed to our frontier efficiency. There are increasing pressures for these providers to work in adjacent regions and sectors for higher rates and NGN are having to increasingly offer above inflation premiums on historic rates to retain this specialist resource. This will only increase as other sectors ramp up investment over the same period and as we come to the end of the IMRRP programme.

During GD2, all networks have seen relatively large swings in real term allowances year to year due to RPE and inflation volatility. NGN would welcome stakeholder collaboration to explore ways to smooth this out without fundamentally changing the principles or approach. There may be a case to review specific indices and forecasts used in the RPE modelling so they better reflect the cost drivers of networks than the current mix and weightings of indices.

Ofgem is proposing to index revenues to RPEs at GD3, similar to how RPEs were treated GD2. In principle, the indexation of revenues to RPEs limits GDNs' exposure to exogenous input price fluctuations and mitigates the risk of windfall gains and losses.

The concerns with Ofgem's RPE analyses primarily relate to the choice of index for each input, and the 'notional structure' used to calculate a GD-specific RPE index. In particular, NGN understand that the price indices used to construct the RPEs have not accurately reflected the prices facing GDNs in recent years (e.g. the wage indices used to construct the labour RPE may not reflect the wage pressures facing GDNs).

The gas networks have recently commissioned KPMG to look at the RPE methodology. This work is ongoing at the time of SSMC submission and will be provided to Ofgem as part of RIIO-3 Business Plan submissions. Emerging findings support that the current mix and weightings of indices could be adjusted to better reflect costs facing networks.

In addition, the use of long term average growth assumptions for forecasting RPEs and therefore allowances could be refined and replaced with more up to date moving averages, for example, to ensure that the gap between forecasts and outturn true-ups are minimised.

The ongoing efficiency challenge is a key building block of the RIIO framework and it should reflect the rate of improvement achievable by the frontier company, as well as the rate of productivity in the UK economy. This is to ensure the Ongoing Efficiency (OE) challenge is achievable for all network companies, with additional efficiency catch-up expected for laggard companies.

The gas networks have recently commissioned Economic Insight to develop an independent report on the setting of OE, which will be provided to Ofgem and stakeholders in due course. Initial analysis has confirmed persistent near-zero UK productivity since 2008 and divergence of the OE challenge set by regulators and the rate of productivity change in the economy. The productivity slowdown is widespread across industries and regulator OE targets are set above the productivity growth levels of most industries (e.g. 1.2% at RIIO-GD2 vs. 0.15% Total Factor Productivity (TFP) growth across total industries).

As the frontier GDN, NGN has been able to deliver leading continuous efficiency improvements throughout the RIIO controls, resulting in benefits to both NGN's consumers and GB consumers more widely, as set out in OVQ32. NGN implemented modern labour terms and conditions (T&Cs) for the majority of its operational workforce. This reduced the costs of legacy staff by c. 25% and amounted to a cost saving of over c. £9m p.a. in RIIO-GD1. Second, NGN implemented a DSP model, where NGN now uses small local engineering firms to deliver its replacement programme rather than the 'tier 1' companies that have been the industry default. This has delivered c. £15m p.a. in efficiency savings over RIIO-GD1. Third, NGN has used outperformance to invest heavily in its IT systems through the SAP4 Hana investment and 'Future Ways of Working' programme improve the customer experience and control costs.

While these investments have enabled NGN to extend and maintain its frontier position for both delivery and efficiency, they are not replicable in the future and marginal gains as the frontier company are more difficult to achieve. However, other networks should be able adopt some of the good practice that NGN has implemented to catch-up, which will benefit all GB customers. Further frontier efficiency improvements are more difficult to make, require risky innovation and are less impactful. This should be considered by Ofgem when setting the OE challenge in the GD sector and a differential OE challenge should be considered for the frontier company as part of the overall incentive package to recognise the value the frontier performance drives for all customers.

OVQ45. Do you have any views on the potential application of RPEs and ongoing efficiency to re-opener applications?

In principle, the re-opener application should include a network's best estimate of allowances required to meet the needs and changes in scope of the re-opener in real terms (i.e. in the price base of the price control). Based on the evidence and justification provided, Ofgem should approve the allowances or modify them to reflect the regulator's view of possible efficient delivery.

Therefore, there would be no need to apply ongoing efficiency in addition to Ofgem's determined efficient allowances for the elements in scope of the re-opener. These should be added to the Totex base allowances and have RPEs applied as with any other part of the allowance.

Cyber Security

OVQ46. Do you agree with our proposed approach to cyber resilience in RIIO-3?

NGN agree. Ofgem have proposed a number of changes to the cyber resilience regulatory approach in GD3. The majority of these changes are supported by NGN, there are some additional considerations which are important to highlight - to ensure that future changes can be adopted effectively by NGN. The feedback below is structured against the points raised during the working group sessions, as requested by Ofgem:

Cyber Resilience Submission Overview Document

- The alignment between dates for RIIO-3 and Regulatory Deadlines would make it difficult for NGN to complete business planning, re-opener submissions and PCDs to the requisite level of quality and detail.
- There is the potential for multiple re-openers occurring in a reasonably short period of time. This is something that NGN has already experienced in the past 18 months - submitting two re-openers, 12 months apart. Whilst this was necessary at the time, it could potentially be avoided for RIIO-3.
- It also took a significant portion of the year to agree a final decision, so there is little appetite to repeat another back-to-back round of re-openers within NGN. It is too disruptive to the delivery of improvement plan projects.
- It appears that the proposal to remove the year 1 re-opener will address this, however this creates a separate challenge for NGN. There is the potential for a lot to change in the gap between GD3 business plan submission and the proposed year 2 re-opener, which is compounded by upcoming regulatory deadlines.
- Re-openers are a vital mechanism for operators to review the existing cyber resilience improvement plan and funding allocations, but they are also very disruptive and consume a significant amount of internal resource. Combining this with our regulatory reporting commitments and existing project portfolio, it's a challenge for teams to complete.
- As a GDN community, we do not have the people and resources available to complete the re-opener process to the level of detail required by the guidance, without affecting the delivery of projects and/or regulatory reporting.
- This is often overlooked, but it's important to note that GDN security teams operate with a much a smaller headcount in comparison to transmission operators. At NGN headcount is proportionate to the nature of the sub-sector, but this makes sector-wide consultations like this difficult. Transmission organisations operate on a different scale, with a completely different risk profile – it's difficult to compare all parties equally.

- It often feels like transmission input during regulatory interactions holds more value than the wider GDN community, because they have more resources available to contribute towards the discussions and influence the outcome.
- There are no changes proposed by Ofgem regarding the level of materiality applied to cyber resilience plans and finances. When this is compared to the wider business, there is a discrepancy in the approach applied by Ofgem during business planning and re-opener periods.
- The total cyber allowance is highly unlikely to represent a significant portion of the overall GD3 allowance, however the level of granularity and scrutiny placed on business plans does not appear to align.

Use of NIS Reporting Templates

- NGN supports the proposal to utilise existing Network and Information Systems (NIS) Reporting templates where possible, and where necessary adapt these templates to satisfy more reporting requirements with less documents.
- This is a useful approach from a management perspective too, as it will allow operators to structure the delivery of improvement projects against Cyber Assessment Framework (CAF) principles, providing the 'golden-thread' between risk, CAF compliance position and improvement activities.
- This works well for improvement initiatives, as funding and projects can be tied directly to CAF principles, or the most appropriate CAF principle (where multiple apply), however it is less effective for business-as-usual planning.
- The costs associated with BAU activities and ongoing costs for licences, tools, subscriptions and service are often challenging to tie to one specific CAF principle. The costs can be easily categorised (people, hardware, software etc), but adding an additional mapping to CAF principles has the potential to force operators to split costs which can become convoluted and confusing to complete, leading to increased risk of inaccuracies and misreporting.

RIO-3 Specific Templates

- The templates proposed appear to be well structured and easily understood. However, they were not provided with enough time to test in detail, including any formula testing.
- The level of detail included in templates appeared to be disproportionate to the risks that are being addressed by improvement activities.
- This links to a point above regarding the level of materiality and granularity of review applied to cyber resilience submissions.
- For some projects, in the time it will take to complete the draft templates, to the level of detail suggested, significant progress could have been made against delivering the PCD.

- The project templates proposed are useful guides, but there are already long-established project governance process within NGN. In the event that the templates being proposed were mandated, it would cause a significant amount of operational disruption to convert and update existing project documents – with little to no tangible benefits.

Focus on NIS Assets

- This is something that NGN does not support based on the current guidance – which is currently not clear. The language in the main body of the document suggests that only NIS assets will be supported by funding in GD3, but the appendix notes that operators can apply to obtain funding for security projects on non-NIS assets.
- NGN's NIS Scope does not cover all technology, it is specifically focused on the technology that is critical to the operation of the essential service.
- There is technology used by the business that, if disrupted, could cause significant business disruption, but it would have no effect on NGN's ability to deliver the essential service – and therefore, no impact on compliance with NIS Regulations. However, it could carry wider regulatory implications, that would sit outside of NIS compliance but remain a breach of broader regulatory commitments to Ofgem.
- To exclude this technology is challenging but it also has the potential to create a large variance in the maturity of cyber resilience controls applied throughout the business.
- The inclusion of all technology is more aligned to industry guidance, to approach security holistically throughout the business.
- By limiting submissions to assets included in the NIS scope, it also creates a specific challenge relating to funding for process improvements – where projects are not necessarily tied to assets and focus on organisational processes instead.
- To be clear, structuring business plans and re-openers against the CAF is something that NGN supports. However, limiting funding to NIS-only assets is not supported by NGN, it has the potential to do more damage than good – as more time will be taken splitting project costs, determining what can and cannot be funded through GD3 and non-NIS assets could potentially be overlooked.
- This also applies to how resilience is defined in the context of NIS, including how environmental measures are funded and delivered. There needs to be clearer definitions – however this needs to be addressed beyond RIIO-3 planning, the regulatory guidance in this area is also unclear.

Project Categories

- NGN supports the proposal to move towards a combined cyber resilience plan and the removal of separate Information Technology (IT) and Operational Technology (OT) plans. There is also support for the proposed to move towards a UIOLI (use-it-or-lose-it) allowance for all GD3 funding.

- NGN supports updates to guidance which suggest that security measures for business-as-usual should form part of more general IT investment plans.
- NGN supports the triggered risk mechanism; however, it is not reasonable to expect the same level of detail to be included in plans for work that will be triggered in response to changing risks – which is inherently more uncertain and cannot be easily predicted, in terms of timelines and cost.
- NGN supports industry benchmarking to be completed by Ofgem, however it's crucial that appropriately anonymised benchmarking data is published in a format which can be used effectively by operators. This would provide useful insights and allow NGN to plan project work more effectively, hopefully speeding up planning and re-opener processes.
- During the working group, an additional consideration regarding the legal constraints of benchmarking was raised. This is a legitimate concern as it would have the potential to damage supplier relations, but if managed appropriately this risk can be avoided.

Definitions

- There are no material comments on the definitions set out by Ofgem in the draft guidance document.
- The guidance outlines what is and is not covered is useful, but it needs further development and consultation with industry ahead of plan submissions. Without more detail, it is hard to draw comparisons and provide more comprehensive feedback.
- It also links to the point above on clarifying the scope of cyber resilience, this includes defining clear demarcations between areas that are related, such as broader resilience topics.

PCDs

- The preference is for annual reporting, there are established internal project management processes - the preparation, review, assurance and approval of regulatory reports consumes a lot of resources and could not be sustained more frequently than annually.
- Alongside frequency of reporting, the suggestion to align PCDs to the CAF is something that NGN supports. However, it is important that alignment is established at the right level.
- Aligning PCDs to the 16 CAF Principles is helpful. It allows operators to align improvement activities and compliance gaps effectively, this helps justify the needs case for investment more clearly.
- This provides operators with the freedom and flexibility to define and report against projects in a way that works for internal teams whilst demonstrating alignment to our regulatory obligations.
- This alignment is not what was suggested in templates, instead PCDs were tied to the 41 CAF Contributing Outcomes. This creates a rigid structure, which does not align with the working practices of the operator. It is too granular and would make it unnecessarily complex to report against progress.

Innovation

OVQ47. Do you have any views on our proposal to retain a flexible allowance, providing evidence for why you think that it should, or should not be, retained?

NGN consider the existing flexible allowance is an effective way of maintaining the quality and volume of project delivery, whilst providing a reliable mechanism to support networks engagement with third-party innovators to explore and develop innovative solutions. The current mechanism allows networks to adapt their approach exploring solutions through the ideation phase, with suitable capacity to scale ideas depending on risk and technology readiness level.

The existing allowance allows for the scale of project phasing/staging to be varied. This allows networks to explore quick wins, taking a “fail fast” approach to lower technology level solutions, whilst also commissioning more strategic projects which require investigation and involvement over longer time periods, committing sustained investment to secure positive outcomes and networks.

Flexibility of the allowance also allows for suitable agility across the duration of project delivery, enabling projects to take account of updated policy & technical directions.

The proposal to build in a rapid review process is welcomed, on the premise that there are clear service level agreements and accountability built into the review process, ensuring the flexibility of the fund remains. NGN have some concerns this change would introduce undue levels of bureaucracy which may frustrate progress, disadvantage smaller organisations by adding increased delay and cost and ultimately put at risk, the pace of change desired, alongside benefits and outcomes of the work.

Network Innovation Allowance (NIA) self-governance enables networks to manage a rapidly evolving landscape and give customers support at times when they need it the most. This level of flexibility is not achievable through other funding sources currently available.

The NIA mechanism is now a well-established and well understood process across the SME community, academia, and larger organisations. As such, replacement of this agile system of innovation should not be undertaken unless the incoming solution affords industry and customers a more advanced, rapid and agile system with minimum bureaucracy to accelerate the innovation and deliver much needed change enabling net zero.

This funding approach holds particular value to the SME and indeed academic communities given the procurement approach is simpler to navigate, rapid and reduces their effort and risk which is not the case with other funding opportunities that often see large corporations more actively involved.

The non-competitive framework and requirement to share learnings provided by NIA funding encourages networks to work together to deliver better results and learn from one another in a constructive and open way. This also avoids duplication by providing a forum for open discussions about innovation projects that address common issues between networks.

Due to NIA funding being non-competitive and driven by network priorities rather than achieving specific impacts, NIA funding is fulfilling a unique role in enabling trials of innovative but untested solutions to key goals, a critical step in the development of modern technologies and approaches.

NIA funded projects can lay the groundwork for follow up projects funded through other mechanisms and can be used to fund larger projects alongside other funding sources. This is due to the ability of NIA funded projects to support low TRL solutions and because the outputs are not required to be quantified in terms of certain impacts. Because of this, the benefits of NIA funding are not limited to projects solely funded through the NIA, but also extend to supporting projects funded by other mechanisms.

As NIA funding is self-governed by networks and can apply to small projects, it allows for a different approach to innovation than longer, single projects, allowing rapid dissemination of ideas and enabling the quick development of solutions. This incremental approach means that although related projects may appear similar, they build on previous work and enhance shared networks' understanding.

NIA funding benefits from having both an energy transition and Customer Vulnerability (CV) themes. This contrasts with the Strategic Innovation fund which leans more towards electricity innovation themes with gas related topic areas often in the minority, but which seldom offers funding opportunities in and around CV – NGN consider an adjustment to this perception would be positive.

Considering our points above we note comments from Mr. James Perry at Egnida, one of many SME organisations NGN collaborate with to deliver CV and wider innovation in relation to the importance of the NIA;

“Network Innovation Allowance funding is the best funding source for SMEs like me to fund innovation projects. The projects I have been involved with and have led simply would not be possible in the same way through more traditional sources such as Innovate UK or venture capital. The ability for SMEs to focus on what is possible over and above what VC or similar funding requires from a project allows us to go further and make bigger impacts than any sector I have been involved in.”

OVQ48. Do you have any views on our proposal to retain a competitive network innovation funding pot, that continues to focus on key challenges facing the energy sector, with phases to de-risk the pot?

Competitive network funding has been beneficial for networks. It has enabled partners to engage new and existing stakeholders under the agreed framework, allowing for consistency and de-risking investment/contributions by networks and third parties.

We agree that some element of phasing the funding is appropriate to de-risk the fund, as this aligns with the associated uncertainties with tackling significant strategic challenges. NGN propose greater flexibility be introduced into process to allow programmes of innovation to develop around a theme that migrate back and forth between discovery and alpha phases to build a bedrock of evidence, providing a stronger base to progress larger (Beta phase) schemes and further de-risk the process, reducing cost and improving final delivery pace.

Fundamentally, the challenge setting mechanism for the competitive fund requires change. NGN considers that the strategic nature of the challenges should be broader ranging, inclusive of customer vulnerability, and equally balanced across gas and electricity applications. A consistent set of core themes that underpin a broad range of innovation will remove uncertainty to enable longer term programmes of work to be developed.

Regular changes in themes are disruptive to the innovation programme development lifecycle and should be removed in RIIO-3. Throughout RIIO-2 the transient nature of the challenge themes has resulted in a high volume of innovative proposals being received and reviewed which are either no longer applicable for funding or are highly speculative.

We have seen a significant reduction in engagement from third party vendors due to the changing nature of match funding requirements. Given the high risk associated with innovation the match required is often difficult for networks and third-party sectors such as academia to meet. If the primary aim is to deliver UK based frontier innovation, then alternative approaches must be given the unlock the true value of this fund and accelerate progress to net zero.

NGN would welcome further relaxation of the rules to support development and leadership of innovation work by none network organisations. There is no clear value in restricting these innovation rounds to network led only proposals. This current mechanism is restricting innovation growth which by its very nature must rely on network resource to manage the project. It would improve the pace of innovation if this mechanism allowed third parties to initiate the work discuss and gain support from networks but not require networks to take a leadership role.

This removes the barriers created through limited network resource and empowers innovators to drive delivery of new project work.

OVQ49. Do you have any views on how the structure of the price control innovation funding could be adapted to better focus on whole systems problems, and ensure strategic alignment with other public sector initiatives?

NGN considers that the existing price control funding structure allows for flexibility with regards to partnering to deliver whole systems focussed projects, however, we agree that further work is required to drive a consistent whole systems approach across the programme.

The existing structure could be improved to promote a consistent approach by applying similar governance to the flexible funding as is currently required within the SIF, for example by requiring differing licensees to collaborate on projects to enable eligibility for funding. Although it must be considered that this may impact the speed and agility of such funding.

Ofgem must consider how to develop a running programme of innovation, rather than the annual snapshot approach for NIA projects. Removing submission windows and moving to an anytime submission process for NIA projects would allow projects outputs to feed into SIF proposal, which gains funding in a seamless transition and thus reduces overall cost (minimises mobilisation costs etc.) whilst maintaining momentum.

The existing mechanism is positioned to promote transmission scale solutions and for Beta phase projects, a significant match funding requirement sourced from networks. The reliance on NGN to provide match funding and resource is a barrier to the number of concurrent projects. The level of shareholder commitment required also leads to a significant increase in risk averse proposals, which is counterintuitive to true innovation. A further challenge exists with matched funding for projects which may have national significance but less impact at a local, distribution level.

These barriers must be removed in any new competitive process to increase the number of projects completed and fully utilise the significant funding being made available by Ofgem.

OVQ50. Do you agree with our proposal to continue with a similar level of innovation funding, and if not, could you provide evidence for why a different amount is required, including consumer research you are aware of into their willingness to pay for network innovation?

NGN agree that a similar level of innovation funding is required to enable continued exploration of the future role of gas in a decarbonised system, in addition to focussing on whole systems solutions and delivering customer centric innovations.

NGN recognise there is a wider opportunity to drive innovation at a local and regional level to support communities and unlock net zero and vulnerability outcomes in line with the work the Regional Energy System Planning (RESP) team will focus on. Aligning innovation and RESP could be a new and positive development, the distinction being RESP would be another input vector for themes and concepts to explore whilst networks collaborate with partners to deliver those and wider schemes of innovation.

Having directly engaged with our Young Innovators Council initiative throughout RIIO2, we have received feedback that our current approach to utilising our existing funding allowances is appropriate and should continue to heavily focus on decarbonisation, de-commissioning, and whole energy systems solutions.

OVQ51. Do you agree there is a need to expand the scope of innovation funding to be more inclusive of third parties?

NGN agree that whilst networks retain control of NIA based innovation providing a consistent approach that is known to innovators, new funding mechanisms or alterations to the existing SIF process would be welcome to unlock the capability of third-party innovators and deliver benefit, growth and impact.

Ofgem should consider every opportunity to remove barriers to innovation and reduce the bureaucratic efforts required by simplifying processes for vendors to work with and support the development of innovation beyond TRL 8 to product stage and roll out. This approach would significantly improve outcomes, de-risk implementation and provide continued support for the SME community to establish technologies into industry more effectively and with higher levels of success.

OVQ52. What are your views on us establishing an accelerator to support early-stage innovators?

NGN welcome the suggestion of an accelerator fund to support with development of proposals, as this will reduce the impact on network resources associated with triaging and developing early-stage proposals.

Accelerator funding should be delivered through a tiered approach with base funding to provide general support to develop proposals and collaborate with networks and other vendors followed by high order support once a proposal is secured to aid development and delivery.

This provides enhanced support to any innovator from both network input (resource and expertise) and the accelerator. Existing and previous flexible funding are catalysts for innovation allowing innovators and SMEs to develop their own capabilities associated with proposal development, and to form supply chains to self-support innovation development without the need for network innovation funding. This is demonstrated by the pipeline of market ready products currently being presented by SMEs to support networks with operational and maintenance activities.

NGN recognise there is an implementation gap between development of good innovative solutions and then driving these through existing procurement, assessment, and implementation. Smaller SME's often fail at this final hurdle, and it is our recommendation that the existing funding mechanism be modified to provide support to establish products and enable deployment across industry.

There are currently other bodies set up who provide a similar function to an accelerator fund, specifically Cambridge University & Imperial College have a form of accelerator funding.

OVQ53. What are your views on our proposal for this to be a smaller part of a future challenge fund and to be sponsored by networks?

NGN consider there to be more value in running separate discrete funding routes to ensure the widest possible reach and therefore do not support this approach.

Some innovators will be attracted to the NIA funding route whilst others will be better suited to the SIF process. Combining several funding routes into one process is not likely to deliver more benefit but introduce blockers and reduce overall flexibility.

The principal opportunity and focus should be to afford third party innovators more opportunity to develop and lead proposals and to reduce the input in terms of authority, resource and match needed from networks.

OVQ54. Do you have evidence of potential innovation projects that have not been implemented or sought funding due to the five-year structure of the price control? How could this issue be addressed?

NGN have no specific examples, although the challenge of managing strategic projects that cross price control boundaries has been considered as a potential delivery risk.

Towards the end of any given price control period, proposals of a duration (or value) beyond the end of that period would be held until the start of a new round of funding. This adds delays, increases cost and results in ideas drying up beyond the mid-price control period.

The uncertainty over what funding mechanisms will be retained or lost also leads to innovators questioning whether they commit resource to develop a proposal beyond the latter stages of any given price control period. All of this is unhelpful and could be avoided through long term commitment and stability of funding mechanisms that are design to span several price control periods. This would allow innovators and networks to collaborate on broader, more ambitious programmes of innovation and would invigorate confidence across the supply chain.

OVQ55. Do you agree with our proposal to run FRS trials with an explicit focus on informing changes to the rules governing energy network activities – incentivised through SIF or other price control mechanisms?

NGN agrees with this proposal. Testing changes in a controlled arena prior to wider implementation may avoid unnecessary shocks to the process, providing opportunity for richer consultation and an expectation of better outcomes.

OVQ56. What topics could FRS trials usefully focus on and why?

NGN suggest the following focus areas and welcome further discussions to refine work area priorities:

1. Storage and production of hydrogen - whilst work to evidence gas network conversion to hydrogen has made great progress, more work is required to develop production and storage at a national scale to support GB's green economy, exploring the impact on transmission and distribution networks and likely future requirements of customers across industrial, commercial, transport and domestic.
2. Customer capability and needs case – a focus on the capability of industrial and commercial customers to decarbonise and how this would impact them both operationally and financially. This may include an analysis of the current industrial and commercial equipment deployed across GB and an assessment of how this could be decarbonised. Further research into the role Biomethane can play in the transition to Net Zero would also be welcome, looking at how these assets be redeployed and where there are the opportunities to remove cost and complexity from their processes.
3. Repurposing of assets for non-energy use such as Carbon capture, data system conduit etc.
4. Low carbon transportation & refuelling infrastructure

OVQ57. Do you have any feedback on the view that not enough network innovation funded projects have been rolled out, and can you share any evidence you have to support your position?

NGN's view is that the ability to fully rollout solutions developed by the RIIO-2 flexible fund has been limited because of portfolios focussing on future energy system transition areas, which may require policy decisions to take hold before benefits can truly be realised through implementation.

OVQ58. What are your views on the design of potential new mechanisms to address this?

NGN's view is that a specific fund, or expansion of the scope of the flexible fund, that includes positive value benefit assessment, could be utilised to provide clarity and consistency for innovators and networks to fully deploy solutions.

Expanding funding to further support innovators through the difficult transition from innovation to commercial product and roll out could fundamentally improve the long-term benefit case as this further de-risks utilisation for networks, enabling a commercial / BAU business partnership to be developed.

Data and digitalisation

OVQ59. Do you have any views on the timelines for modernising regulatory reporting?

NGN agrees with the broad milestones and associated timelines set out in the SSMC, and we look forward to the opportunity to work with Ofgem to develop a more granular plan incorporating key deliverables around data management, data & technology standards, security and testing.

The proposals for modernising regulatory reporting represent an incredibly important test case for how data and digitalisation will be a powerful catalyst in the future energy system, and the lessons learnt around data governance, interoperability and portability will be invaluable in the work we do together during GD3. It is important that this programme should also cover the Price Control Financial Model (PCFM) as well, in order to reduce the scope for error and to reduce the resource burden on all parties of the PCFM Annual Iteration Process. NGN offer our full support to Ofgem in this digital change workstream.

OVQ60. Do you have any initial views on opportunities for improving efficiency in providing the data that Ofgem receives as part of regulatory instructions and guidance?

NGN would welcome the opportunity to work in partnership with Ofgem to explore improvements to the provision of regulatory data and information, that would benefit all parties. NGN considers that there are opportunities for efficiency improvements in how the data is presented/visualised.

For example, if the data submitted by a network company in a regulatory table is then extracted, transformed, and loaded into a different modelling solution by Ofgem, there may be opportunities to provide the data in a different way to facilitate that process.

Enhanced modelling and visualisation at the point of transfer would enable an 'Anytime, Anywhere' approach to regulatory monitoring of delivery and performance, giving both Ofgem and the network companies the capability for an increasingly proactive, lean and collaborative approach to both the management of our regulatory contract, to the benefit of end-consumers, and the challenges that together we face in ensuring the safe and secure transition to a net zero energy sector.

Under-pinning this should be a 'lighter-touch' regulatory reporting framework, promoting fast-but-informed decision-making, and the flexibility to adapt to new and changing challenges and opportunities. NGN would welcome the opportunity to work with Ofgem to map out the data and information requirements, and the options around a rejuvenated reporting framework, which could be a key enabler to unlocking the full benefits of the proposed Data Sharing Infrastructure.

The RRP process for GD2 is overly burdensome and resource intensive for all parties with around 100 excel tables submitted annually alongside several supplementary documents and tables.

Firstly, there should be a collaborative review to streamline required data and information for RIIO-3 reporting, so that Ofgem only receives the key information to monitor network delivery on behalf of customers without unnecessary and immaterial granularity.

Secondly, opportunities should be explored to use digitisation and open data portals to remove or reduce the need for the transfer of data to excel tables, with the manual effort and checking this entails. It will never be possible or desirable to remove the need for validation and checking of data being submitted to Ofgem, but there are ways to use software and automation to materially improve process for all parties.

OVQ61. Are there areas of regulatory reporting that would be most beneficial to start with in modernising the project?

NGN would welcome the opportunity to work with Ofgem and other network companies to modernise the process of regulatory reporting. Given the scope of this project and the potential complexities that may be encountered, it would be beneficial to start with areas of regulatory reporting that are well defined and understood, with data that can be easily traced and validated.

With this in mind NGN recommends that the project starts with data relating to operational performance, with the outputs from Table 11.11 (Public Reported Escapes (PRE) Reports & Repairs) being the best candidate. This would have the following advantages: -

- Data management processes are well-established and designed to facilitate real-time reporting with maximum accuracy.
- There is minimum transformation to provide the regulatory information required.
- The majority of data items should be consistent between all GDNs, facilitating interoperability.

Starting with this area would be the quickest route to a minimum viable product and would provide valuable learning around any technical, data and governance complexities.

GD Annex Section

Proposed RIIO-GD3 specific outputs and uncertainty mechanisms.

GDQ1. What are your views on our proposal to remove the shrinkage ODI-R as a separate output?

NGN agree with the approach, and it would remove duplication between the current ODI-R and the AER, which in turn would consolidate the GDNs' reporting requirements.

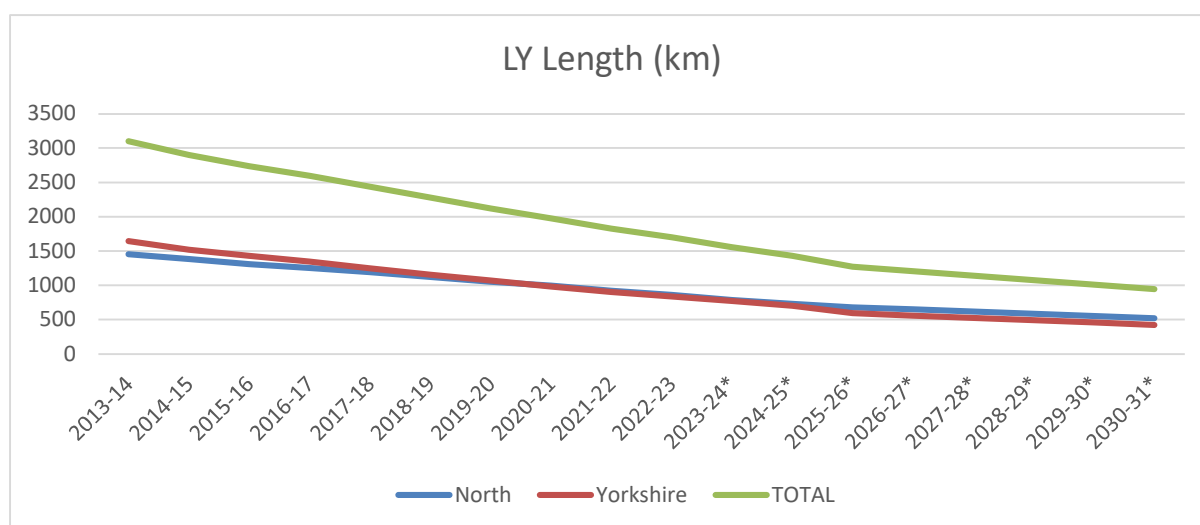
GDQ2. What are your thoughts on the options we have set out for the shrinkage ODI-F and on the design of this incentive?

NGN considers that the current ODI-F incentive for shrinkage should be retained. In line with our response to OVQ13, outputs that are important to stakeholders, such as shrinkage, should continue to be incentivised and strengthened for both penalty and reward to encourage laggards to catch-up to the leading performance. Strong incentives around Shrinkage result in huge reduction in leakage and consequently the environment.

The decision Ofgem made to weaken these at GD2 for bill reduction has had a worse outcome on customers and the environment. If GDN's have a strong enough incentive, GDN's would be driven to find more ways to reduce our leakage. Given where we are on the net zero journey Ofgem need to be pushing this agenda.

There is still an opportunity to make a material impact on shrinkage with the Average System Pressure (ASP) and the output should be more strongly incentivised encouraging GDNs to continue to focus on these aspects of shrinkage, which already have a measurable and significant impacts on network emissions. Several projects outlined in GDQ3 would support the delivery of our forecasted targets to reduce shrinkage.

NGN would remove the monoethylene glycol from the forecast/proposal because as the impact of the activity is being reduced as we continue to replace iron mains in the Repex programme. The graph below shows how the impact would significantly reduce as we move into the GD3 period.



It will be important to set the correct baseline measurements for the GDNs and the caps and collars to ensure value to both the consumer and the environment emissions.

If a penalty only ODI-F, or penalty only ODI-F and UIOLI was implemented, this discourages any outperformance of targets within our current shrinkage model. It's important to carefully consider the potential impact and effectiveness of these proposed changes, as they will not drive performance in this area. Evaluating the benefits and drawbacks of removing an incentive from the proposal, as well as assessing the feasibility and expected outcomes of the suggested projects, will be crucial in making informed decisions.

If a UIOLI was to replace an ODI, another mechanism would need to be developed to capture the shrinkage/impact of the work carried out. NGN appreciates the more flexible nature of this approach to reducing leakage and how it might widen the scope, and how this could be another option to consider in conjunction with the current ODI-F. Projects identified for ASP should be included in baseline allowances. Whereas new technology projects would use the UIOLI allowance to capture other initiatives.

Overall, it seems that Ofgem's initial position is to maintain the current ODI-F incentive to align with the forecasted targets and prioritise a reduction in shrinkage. Continuing to focus on key outputs and implementing projects that support the desired outcomes will be essential in achieving the forecasted net zero targets.

GDQ3. If we provide baseline funding or a UIOLI allowance for shrinkage, can you provide examples of initiatives that could be funded, indicative cost, and why these activities would not go ahead without specific price control funding?

The following projects have been identified as opportunities for shrinkage projects, the costs provided are indicative and the scope and value of the projects would not naturally sit within the current UIOLI allowances or re-openers. NGN in line with the above response would like to see these project sit within base allowances.

Validation

In RIIO GD1 NGN invested in the complete renewal of validation loggers from 'Fit on demand Manual Download' types to remote 'Fit and forget' loggers which gave us data daily from across the network regardless of validation requirements. This has been incredibly useful when investigating network issues such as water ingress and has in-fact been used to predict water ingress in some cases.

In GD2, NGN worked to maintain the fleet of remote loggers either by replacing them or replenishing batteries to extend the life, but this has become increasingly difficult.

Also, as the networks developed through replacement and growth, some of the validation points are no longer in optimal positions.

So, in GD3 NGN is proposing to replace any devices which haven't been renewed already in GD2. Rather than like-for like replacement, our ambition is to utilise the latest technology to capture real time data. This would provide us with greater visibility of what our networks are doing now, rather than what they did yesterday.

To get the best value, NGN will carry out a review of the current logger positions and carry out works to remove, renew, install or relocate posts as required.

Finally, to make the best use of the real time data from these network points and governors, NGN will consult with a data science provider to produce a data driven system to alert us to any anomalies in the network when they happen, to minimise the effect on customers. This system will also make use of the real-time data we are already receiving from district governor sites.

Validation loggers	Units	Unit Cost	Total
Replace old validation loggers	2000	£1,100	£2,200,000
Install / replace posts	200	£1,500	£300,000

Pressure control

Pressure control remains the most effective method of leakage reduction. NGN currently have 36 Networks with profiling fitted which is around 900 district governor sites. In GD3 some of these systems will be reaching end of life, so after a site-by-site assessment of the continued benefit, we will propose to replace some of the aging fleet with modern controllers.

There will be occasion where it is not viable to replace a profiler which has reached end of life, for this we would need to replace the profiler with a datalogger.

Pressure control material costs	Units	Unit Cost	Total
Remove profiling and make logging only	100	£1,430	£143,000
Replacement of parts (refurb)	400	£1,500	£600,000
Full replacement	400	£7,000	£2,800,000

Governor Dataloggers

In GD2, NGN replaced all our aging datalogger fleet. Throughout, the best equipment available was used. Some of the loggers fitted in years 1 and 2 will be beyond their expected lifespan by the end of GD3 and there will be a need to replace some devices. Where possible, these dataloggers will be replaced with modern loggers which can report data in real time and have a lifespan of 10 years or more.

In addition to this, we hope to enrich our monitoring on some of our more strategic sites to include data such as access monitoring, slam-shut or relief sensing and possibly flow sensors as the technology becomes available.

Governor logger material costs	Units	Unit Cost	Total
Enhanced monitoring upgrades	400	£750	£150,000
Real time data upgrades	400	£1,430	£572,000

Real time data monitoring

Finally, in the remaining years of GD2, NGN will trial systems which are able to provide richer presentation of real time data combining all pressure tiers; a full end to end monitoring system. NGN plan to integrate our low-pressure data with our existing SCADA data with all the advanced alarm and alert management that brings. Rolling in the models produced by the current SIF.

The combination of real time monitoring and additional sensors will validate the distribution of gas throughout our system from offtake to distribution.

Future Proofed Network Monitoring Solution Project **£780,000.**

GDQ4. If the Digital Platform for Leakage Analytics is rolled out to all GDNs in RIIO-GD3, what would be the indicative cost and timescales for this?

NGN is a partner on the Digital Platform for Leakage Analytics (DPLA) project and is supportive of the work being carried out. However, there is a need for maturity and the DPLA is not sufficiently developed at this stage to provide indicative costs and timescales. Therefore, there is a need for a plan to ensure consistency among GDNs in using the same methodology and processes for shrinkage reporting, as there is a license requirement to do so.

Flexibility in the funding mechanisms needs to be considered in GD3. If, part way through the GD3 price control the DPLA technology becomes available and ready for deployment the allowances would need to be revisited to enable the change. Implementation of the technology could potentially cost c£25m this excludes costs for how the business would need to adapt the workforce and operations to manage any leakage.

Overall, this highlights the importance of a well-defined plan for the development and implementation of the DPLA, ensuring consistency among GDNs, and need for flexibility in funding mechanisms to leverage technology advancements.

GDQ5. If up to 20% hydrogen is blended into the distribution network, what would be the impact on operational practices and shrinkage?

Operational Readiness: Operational changes and additional processes will be required to facilitate blending, including updates to Network Entry and Exit Agreements, interconnector and storage agreements, staff training and equipment, additional system monitoring and controls, updates to network procedures (and IGEM standards), and updates to Networks' Safety Cases. Networks must update their individual safety cases and licenses, and implement operational readiness action plans, including the upskilling of staff, making system upgrades, and engage with impacted customers and market participants.

Changes will be required to networks' operational procedures, including upskilling of staff to be familiar with processes and impacts of blended gas-flows, updates to existing Network Entry and Exit Agreements, network upgrades to install additional monitoring capability, and modifications to control room processes. The following key operational areas have been identified as being impacted by blending:

- The skills and competencies of engineers, FCOs (First Call Operatives) and control room staff, including reviewing and updating relevant operational procedures
- The connections process
- Stakeholder engagement

Safety Cases must also be updated submitted to the HSE for acceptance where there is any material change. Key requiring substantive updates include: 4b - Procedures for Operation and Maintenance. 5 - Risk Assessment. 16 - Minimising the risk of a supply emergency.

Estimated costs for operational readiness are forecasted at c£18.5m, this is based on several assumptions and does not include a £20m in costs for industry/GDNs to determine weld quality or costs for any changes to billing.

The shrinkage impact would see a reduction of save 6-7% greenhouse gas emissions if we were to blend 20% hydrogen.

GDQ6. What are your views on the options we have laid out for the heat policy re-opener, including whether this should be combined with other RIIO-3 net zero mechanisms?

NGN supports the option to combine the heat policy and net zero re-opener, it is crucial to review and update the guidance requirements to encompass all aspects of the heat policy re-opener. This will enable continued support for new initiatives and ensure alignment with the overall objectives of achieving net zero.

GDQ7. What are you views on our proposed approach for managing uncertain costs relating to regional energy strategic planning?

NGN agrees.

RIIO-GD2 outputs and UMs proposed for removal.

GDQ8. What are your views on our proposal to remove the Commercial fleet electric vehicle PCD in RIIO-GD3?

NGN does not object to the removal of the Commercial fleet electric vehicle PCD in RIIO-GD3, as costs can be included within the GDNs baseline for any changes to the fleet.

GDQ9. What are your views on our proposal to remove SGN's bespoke Biomethane improved access rollout PCD in RIIO-GD3?

If NGN were to include any biomethane technology, we agree that it should be included within the baseline allowance and not a PCD.

GDQ10. What are your views on our proposal to remove SGN's bespoke remote pressure management PCD in RIIO-GD3?

NGN agree that any proposed pressure management equipment should be included within our business plan with justification and be included in baseline allowances.

GDQ11. What are your views on our proposal to remove SGN's bespoke Gas escape reduction PCD in RIIO-GD3

NGN agree that any proposed high volume gas escape toolkit and stent bags should be included within our business plan with justification and be included in baseline allowances.

GDQ12. What are your views on our proposal to remove SGN's bespoke Intermediate pressure reconfigurations PCD in RIIO-GD3?

If NGN were looking to replace or reconfigure and services of steel mains connected to intermediate pressure gas main, these cost should be included in business plans.

GDQ13. What are your views on our proposal to remove Cadent's bespoke HyNet Front End Engineering Design PCD in RIIO-GD3?

No comment.

Proposed RIIO-GD3 specific outputs and uncertainty mechanisms.

GDQ14. What are your views on the benefits of Repex that we have identified, how well the Repex programme is currently working, and what evidence we should consider as part of the joint Repex review?

NGN agrees with the benefits identified. The Repex programme is working well and is reducing the risk associated with iron mains as is shown by the long-term trend downward in safety incidents data reported through RRP. However, there are growing risks associated with non-mandatory mains and there is a potential for increased workload in this area, especially larger diameter mains not within 30m of customer properties. These act as trunk mains and carry significant supply risk, as well as safety and environmental risk associated with all mains.

It is NGN's view that the IMRRP requirements should remain as-is and all other Repex should be justified on a cost-benefit analysis basis at the individual network level. Recent work by Baringa and DNV, that has been shared with Ofgem, DESNZ and HSE, supports this position.

However, it is important that networks aren't funded again for work that should have been delivered in previous price controls or at inefficient unit rates. NGN consider that the differences in allowed Repex unit rates in adjacent regions operated by different GDNs aren't commensurate with geographic and socio-economic similarities, as set out in the response to GDQ57. NGN has been able to deliver continuous efficiency improvements throughout the RIIO controls, resulting in benefits to both NGN's consumers and GB consumers more widely.

The following examples from the Competition and Markets Authority RIIO-2 appeals process provide some insight as to how this was achieved. First, NGN implemented modern labour terms and conditions (T&Cs) for the majority of its operational workforce. This reduced the costs of legacy staff by c. 25%, with NGN expecting c. 500 new operational staff to work under the new T&Cs. This amounted to a cost saving of over c. £9m p.a. in RIIO-GD1. Second, NGN implemented an efficient DSP model, where NGN now uses small local engineering firms to deliver its replacement programme rather than the 'tier 1' companies that have been the industry default. This has delivered c. £15m p.a. in efficiency savings over RIIO-GD1 and has also delivered significant local economic benefits to the communities NGN operate in. Regional specific considerations and approaches should be considered in Ofgem determinations on Repex.

GDQ15. Do you consider there to be alternative approaches that could deliver mandatory Repex at least cost to the consumer whilst maintaining the legislative safety standards?

It is NGN's view that the current approach is working and continuing to deliver environmental, reliability and safety benefits to consumers. Alternative approaches will be dependent on factors noted in para 3.16 of the SSMC GD Annex and would need HSE / stakeholder agreement.

GDQ16. What are your views on our proposal to keep the HSE policy re-opener, but to reduce its use to a single trigger?

NGN supports the retention of the HSE policy re-opener, but reducing its use to a single trigger may be overly restrictive. There is a benefit in retaining flexible trigger to account for unforeseen legislative requirements throughout GD3.

GDQ17. What are your views on the design of the Tier 1 mains decommissioned PCD?

The PCD design works as is and any changes should have a demonstrable benefit before being implemented. The unit rates applied for the volume driver may need to take account of the profile of those unit rates over the period as the industry come to the end of the IMRRP.

It is important that networks aren't funded again for work that should have been delivered in previous price controls or at inefficient unit rates. NGN consider that the differences in allowed Repex unit rates in adjacent regions operated by different GDNs aren't commensurate with geographic and socio-economic similarities. Any unit rates utilised in PCDs should not conflate inefficiency with regional differences and this should be appropriately dealt with through amendments to the cost benchmarking process.

GDQ18. What are your views on the proposed design of the Tier 1 services PCD?

The PCD design works as-is and any changes should have a demonstrable benefit. The unit rates applied for the volume driver may need to take account of the profile of those unit rates over the period as we come to the end of the IMRRP. Any unit rates utilised in PCDs should not conflate inefficiency with regional differences and this should be appropriately dealt with through amendments to the cost benchmarking process.

GDQ19. What are your views on the design of the Tier 2A mains and services replacement volume driver?

The PCD design works as-is and any changes should have a demonstrable benefit. The unit rates applied for the volume driver may need to take account of the profile of those unit rates over the period as we come to the end of the IMRRP.

For Tier 2A, Ofgem should consider its lower materiality and it may be worth including funding for this workload in base allowances instead of a PCD in the interests of streamlining and simplification.

GDQ20. What are your views on the design of the London medium pressure PCD (Cadent North London only)?

No comment.

GDQ21. What are your views on our proposal to retain the diversions and loss of development claims re-opener in RIIO-GD3, and whether all the cost areas are still uncertain in RIIO-GD3?

NGN supports retention of the diversions and loss of development claims re-opener in RIIO-GD3. Third party and environmental incidents could occur at any time and so this cost area remains uncertain and out of networks' control.

GDQ22. What are your thoughts on our proposal to continue the emergency response time LO and whether the target should be set monthly, quarterly or annually?

NGN strongly disagrees with setting monthly or quarterly targets for emergency response time. The 97% performance is a minimum target set for the GDN's to ensure there is resilience across the year, a monthly target would weaken the target. The emergency response time LO is a core deliverable and GDN's are funded to ensure we hit this minimum standard and there is no excuse for failure.

In all months throughout the regulatory year 2022/23, NGN maintained the 1- and 2-hour emergency standards. NGN's performance is greater than 99.7% in all months apart from December 2022, which saw a relative spike in PREs due colder weather (although this wasn't particularly severe by historical standards). Despite this, a greater than 97% standard was still maintained in this month for both uncontrolled and controlled escapes. The reason we were able to continue to perform above the standard is because we temporarily redeployed a purge and relight DSP onto emergency work and brought in an additional provider to cover their original work. This is part of our longstanding resource resilience strategy.

This emphasises the importance and focus NGN places on this crucial safety standard and reflects the approach we take to resourcing to ensure it is met. In addition, NGN has expended significant effort to reduce outstanding repairs beyond 28 days to historically low levels, which has significant environmental and safety benefits. This significantly reduces the D2, D4 and D7 recheck workloads which FCO's complete and therefore frees up resources to respond to new gas escapes within the standards, and at a level higher than the other GDNs.

Instead, NGN propose retaining the annual targets while sharing monthly or quarterly performance data through RRP. This approach would provide the regulator with information on any disparities in performance on a month-to-month basis, allowing them to ask questions and seek clarification on any performance drops below the average of 97%.

NGN emphasise that weather conditions and spikes in workload, especially during winter months, are the main drivers of potential performance variations. Even though NGN has achieved the standards monthly, the likelihood of failure would become considerable if monthly targets were set. This is evident in our statistics, which show months with a 100% response rate and months with just over 97%. It is also worth noting that mild winters have been experienced recently but this will not always be the case going forward.

When considering moving to monthly or quarterly targets the substantial extra resources required to consistently meet monthly targets would need to be fully modelled. An initial view would see an increased expenditure in baseline Opex of £1.2m per year.

NGN's view is that retaining annual targets while providing monthly or quarterly performance data would strike a balance between transparency and resilience.

RIIO-GD2 outputs and uncertainty mechanisms proposed for removal.

GDQ23. What are your views on our proposal to remove the Tier 1 iron stubs re-opener in RIIO-GD3 and our approach for the costs to be included in the baseline allowances?

NGN has no objection to the removal of the Tier 1 iron stubs re-opener in RIIO-GD3 and agree costs should be included in the baseline costs.

GDQ24. What are your views on our proposal to remove the Capital projects PCD in RIIO-GD3?

NGN has no objections to removing the Capital projects PCD in RIIO-GD3. All costs should be included within capital expenditure within baseline Totex.

GDQ25. What are your views on our proposal to remove the Gas holder demolitions PCD in RIIO-GD3?

NGN has no objection to the removal of the Gas holder demolitions PCD as NGN will have completed all remaining demolitions by the end of GD2. Maintenance and remediation of land and any remediation and removal of remaining secondary infrastructure on sites will be included in the baseline costs.

GDQ26. What are your views on our proposal to remove the Multiple Occupancy Buildings safety re-opener in RIIO-GD3?

NGN disagrees with removing the Multiple Occupancy Buildings safety re-opener in RIIO-GD3. The Phase 2 Grenfell report is still pending and until there is clear understanding of what obligations may be placed on GDN's, NGN's view is that the re-opener should be available.

GDQ27. What are your views on our proposal to remove NGN's bespoke job completion lead-time including re-instatement ODI-R in RIIO-GD3?

NGN agree that the output can be removed from reporting, as the process is now embedded in BAU. NGN will continue to provide the service at no additional cost to the customer.

Proposed RIIO-GD3 specific outputs and uncertainty mechanisms

GDQ28. What are your views on our proposed position on the role of GDNs in relation to vulnerability, and how can they support a just transition to net zero?

Through Vulnerability and Carbon Monoxide Allowance (VCMA) projects, NGN are already ensuring provision of trusted, quality energy efficiency advice, and would see GD3 as a continuation of this work. NGN are committed to ensuring that this advice is available to all customers across our network, inclusive of those in vulnerable situations.

Through non-VCMA activities, NGN is enabling access to measures that allow futureproofing for vulnerable customers at risk of being left behind during the energy transition. Our Customer Support Fund supports a small number of the most vulnerable households to install gas central heating to a specification that it can be converted easily to a heat pump system in future, should this be suitable and required in years to come.

This ensures that customers who would benefit most from a gas fuelled system now can have minimal upheaval to convert to a heat pump system in future.

In line with supporting the transition to net zero, NGN support advice organisations to provide quality energy advice according to specific customer need. This includes the ability to provide crisis interventions, as well as longer term support and, where necessary, advice regarding Lower Carbon Technologies (LCT). NGN are aware that there may be a gap in knowledge regarding the LCTs from a consumer advice perspective and will seek to support the upskilling of advisors where necessary to ensure holistic advice provision. NGN will continue to work closely with DNOs and other partners across our network to refer for support with the energy transition when gas is no longer required. This includes ensuring that access to advice enables consumers to understand the implications of an alternative energy source for home heating and associated behaviour change.

GDQ29. What are your views on our proposal for GDNs to develop individual and joint-GDN vulnerability strategies?

GDNs already have in place robust vulnerability strategies, reviewed regularly to ensure a response to the changing landscape faced by our customers. It is NGN's view that with the minimum license conditions, Guaranteed Standards and a joint collaborative VCMA strategy in place, a joint overall strategy may not necessarily be needed.

There are several activities that specifically require GDNs to work collaboratively, for example, a move to one Priority Services Register (PSR), but there is an industry wide approach to this already. It is imperative that the distinctive characteristics and needs of customers within each network are acknowledged and addressed. A joint strategy may restrict our ability to do so. Therefore, any further collaborative strategy would need to have the flexibility to take this into account and respond to the varying needs within each network.

It is NGN's view that having a further collaborative vulnerability strategy is not consistent with the lighter touch approach we are hoping to see through the GD3 business plan mechanism. We feel that what is in place currently is enough to ensure that customers are well supported.

GDQ30. Do you agree with our proposal to retain the RIIO-GD2 vulnerability minimum standards is sufficient to ensure customers in vulnerable situations are protected and treated fairly?

NGN agree that the existing vulnerability minimum standards are appropriate and fair to address the needs of customers in vulnerable situations.

GDQ31. What are your views on our proposal to retain the use of the VCMA UIOLI allowance, on the alternative option to incentivise vulnerability through an ODI-F, and on which activities to support vulnerability could be funded through baseline allowances?

NGN supports the proposal to retain the VCMA as a UIOLI allowance. The current activities delivered within VCMA are reaching the right people and the UIOLI mechanism allows us to be collaborative and innovative in the creation of projects.

Delivery through GD2 has demonstrated the value of the UIOLI allowance and we do not consider the alternative option to incentivise vulnerability through and ODI-F, to offer any additional benefit to the development of impactful projects.

UIOLI enables us to support large projects that deliver at scale as well as the development of localised projects at a grassroots level. NGN's view is that the incentivised model would be restrictive and would limit the projects that could be delivered by smaller, localised partners who have established, trusted relationships with some of the hardest to reach vulnerable groups within the communities they serve.

NGN works closely with DNOs within our network. We are already collaborating with Northern Powergrid (NPg) on jointly funded projects to ensure that the combination of UIOLI (GDN) and incentivised funding (DNO) can achieve more impactful outcomes for vulnerable communities. This enables the two funding mechanisms to complement each other, reduces duplication, and therefore supports a more efficient and effective offering to partners and customers.

In our recent Customers in Vulnerable Situations (CIVS) workshop we heard from partners funded through DNOs that reporting requirements are stringent and frequent, which creates a challenge in terms of organisational capacity. Through our engagement with NPg, we have also heard that in some cases, this may hamper the establishment of new projects where partners do not feel it is appropriate for their service users to be contacted for a follow up survey. We've heard from partners that the increase in reporting requirements has significantly increased DNOs demand on resource. Whilst we recognise the benefits of some of this additional reporting, we do not see the additional benefit for those customers supported. It is our preference that funding mechanisms remain the same for GDNs as in GD2.

To enable more efficient use of the allowance, NGN propose to move a number of current VCMA funded activities in baseline allowances in GD3. This includes several activities that we have embedded within the business function and could include:

- Vulnerability training
- In house referral triage service (known as Make Every Contact Count)
- 'Services Beyond the Meter' activities including community support vans
- Potential to include the 'Centres for Warmth' programme which we are looking to embed within NGN following the Cadent model

The above activities ensure that NGN can provide community support all year round to reach customers across the network and improves the customer journey for those most vulnerable.

GDQ32. At what level should VCMA funding be set to ensure its effectiveness and sustainability, and what percentage should be ringfenced for collaborative projects?

Proposing to revert back to the funding level as it was at the start of GD2 is not sufficient to meet the needs of customers in vulnerable situations throughout the entirety of the GD3 period. NGN's preference would be for the level of funding to be closer to what it is now, with the repurposed Fuel Poor Network Extension Scheme (FPNES) allowance, than what it was at the start of GD2.

Since the beginning of GD2, the landscape has changed significantly, with the level of need being more widespread and complex in nature. Partners such as Citizens Advice are experiencing their highest ever levels of demand as a result of the cost of living crisis and a rise in demand from new households that were previously just about managing but are now struggling with essential costs. The cost of living crisis is not a discreet moment in time and within the remit of what GDNs can contribute to, there is an ever-increasing need.

NGN consider there is strong evidence to support the need for higher levels of funding to help customers in vulnerable situations throughout the GD3 period. Details within the following reports have highlighted this need.

“People on the lowest incomes have already been the hardest hit by the cost-of-living crisis. Record levels of inflation (which have been even higher for essential goods such as food) have made it even more difficult for many people in deep and very deep poverty to afford basic essentials for their families, and prices continue to rise. Without more support to help low-income families to cover these essential costs, we may see a growing number of people becoming destitute.” (Joseph Rowntree Foundation, UK Poverty 2024 <https://www.jrf.org.uk/pdf/15211>)

“Yet as we enter the third year of this crisis, the households still feeling the worst of its effects seem increasingly forgotten.... prices predicted to fall somewhat from April - but this won’t be enough to fix the crisis. Bills will still be 40% higher than they were in 2021... wholesale prices remain volatile, and some changes in the energy system are likely to put upward pressure on bills in the coming years. We risk an annual winter crisis unless action is taken to help those struggling most.” (Citizens Advice, January 2024 <https://www.citizensadvice.org.uk/policy/publications/shock-proof-breaking-the-cycle-of-winter-energy-crises/>)

Support for customers experiencing financial hardship has been a key focus through VCMA funding during GD2, and feedback from partners and stakeholders suggests that this problem may still be worsening. This means that we will likely see increasing numbers of customers in vulnerable situations requiring access to good quality advice in order to address their needs. At our recent NGN CIVS workshop, one partner told us “Funding needs to be increased, potentially issues we are seeing now are not at the peak yet. Fuel Poverty issues are complex, and it will take many years to stabilise.”

Ofgem’s own figures have recently evidenced that energy debt has reached historic levels at £3 billion, with a growing risk of ‘bad debt’ (Ofgem December 2023 <https://www.ofgem.gov.uk/publications/energy-regulator-sets-out-proposals-help-ensure-customers-risk-getting-debt-are-better-supported>).

Citizens Advice express concerns that “repayment plans for electricity debts by prepay customers already last an average of 5 years” (Citizens Advice, January 2024 <https://www.citizensadvice.org.uk/policy/publications/shock-proof-breaking-the-cycle-of-winter-energy-crises/>).

NGN do not currently expect bills to return to pre-2020 levels before the end of the decade at the earliest. (Cornwall Insight, May 2023 <https://www.cornwall-insight.com/press/cornwall-insight-release-final-forecast-for-july-price-cap/>)

It is therefore unreasonable to expect that financial hardship linked to energy costs will be solved in the short term.

NGN also have concerns about particular groups who may experience higher levels of vulnerability and risk as a result of the ongoing issues associated with cost of living and higher energy costs. This includes people using prepayment meters, people with mental health problems and people with typically higher energy costs (including people of pensionable age and those with additional health or support needs).

“People with mental health problems are more likely to be on lower incomes and are nearly four times as likely to be behind on their energy bills, so the rise in bills will likely be hitting many hard.” (Money and Mental Health Institute March 2022 <https://www.moneyandmentalhealth.org/energy-crisis-mental-health-problems/>)

GDN’s collaborative spend has varied across the four networks during GD2. NGN feels that a minimum collaborative allowance of 25% is suitable to allow for impactful collaborative projects to be delivered, whilst offering flexibility for a higher collaborative spend where required.

NGN acknowledge that some collaborative projects are able to demonstrate specific measurable outcomes at a network level. It may therefore be appropriate to reconsider the definition of a collaborative project to ensure greater clarity and transparency. For example, where a project involves sharing of best practice between more than one network, but the scope of delivery differs from one network to the next, this could be considered to be a company specific project rather than collaborative.

Examples of this would be the high value ‘One Number’ and ‘Fuel Poverty Partner Ecosystem’ projects involving NGN and Cadent. These projects share best practice and learnings to address a national need in a common and consistent way but involve individual contracts with delivery partners and can evidence a measurable direct impact for customers in our own network areas. Under the current governance, these projects are categorised as collaborative, although we feel that it would be more appropriate to consider these as company specific projects.

Through our CIVS workshop engagement, stakeholders have indicated that they do not have a preference over the level of collaborative spend, as long as it is proportionate to the customers in our network area.

GDQ33. How should VCMA funding be allocated to ensure maximum impact for consumers in vulnerable situations

It is NGN’s view that continuation of funding allocation on the basis of customer base is the most consistent and fair method. NGN has explored the potential to use different metrics to inform allocation, including consideration of NGN’s own vulnerability mapping and research, as well as vulnerability characteristics defined by Ofgem, Ofwat and others. This exercise demonstrated that measuring and acknowledging the multi-faceted elements that contribute towards vulnerability is complex and varied. It would be extremely challenging to quantify any one factor or combination of factors which would ensure inclusivity of all consumers in vulnerable situations.

This is compounded by the ever-changing political, economic and environmental landscape which has the potential to change significantly over the five-year period of the price control.

NGN therefore supports the continued allocation of VCMA funding based on the number of domestic gas customers that they serve; this is a fair and consistent method for allocation. This method reduces the risk of unequal provision of services and places the responsibility and accountability on GDNs to ensure that allocated funding reaches those who need it.

NGN are confident that through our research, alongside stakeholder engagement, that we are able to understand and evidence the variation of needs within our network area. This enables us to respond accordingly to ensure that this is reflected in the projects that we support through VCMA over the entirety of the price control period.

NGN understand that where GDNs have responsibility for more than one network, there may be greater need to consider how the distribution of their overall allowance may be allocated across their respective networks where significant variation of needs can be evidenced. We would like Ofgem to consider flexibility around the movement of funds within GDNs, for example, where there is a forecasted underspend for one GDN, that this could be moved to another GDN if the need is greater.

GDQ34. How can learnings from VCMA projects better inform the GDNs' organisational approaches to consumer vulnerability?

Throughout GD2, NGN has supported VCMA funded partners to collaborate and share best practices to achieve greater impact for the customers that they serve across our network. We have facilitated regular engagement and networking opportunities including our quarterly CIVS workshops, as well as face to face open day events, and have more recently developed a monthly partner-led networking session.

Where projects have proved to be impactful for customers, NGN has used research to establish where partners can work together to extend initiatives to a wider geographical area according to need. An example of this is the 'Warm Homes, Healthy Children' project which brought together Yorkshire Energy Doctor and Middlesbrough Environment City to extend the reach and capacity of services for customers in vulnerable circumstances (NGN VCMA Annual Report 22/23 p.24).

Linking partners together in this way has helped to broaden and strengthen the impact of VCMA across our network. We have also established a group of strategic partners aligned to the specific needs of our network, who meet on a regular basis to offer critique and challenge to our strategic objectives around vulnerability.

Partnering with community-based services, who are experts in their field has allowed us as a GDN to widen our knowledge and responses to the vulnerabilities that affect our customers. Their insights have ensured that NGN is well informed about the ever-changing landscape and subsequent needs. Our relationships with partners have matured constructively, and as a business, we hugely value these insights and continue to work with VCMA partners to build our knowledge base and inform our strategic direction.

Our VCMA projects have helped to support the reporting of BAU metrics including carbon monoxide awareness and PSR registrations which have become a standard offering for any partners delivering VCMA activities.

Through VCMA, we have also expanded our vulnerability training framework, embedding our commitment to vulnerability across the network supported by a VCMA funded role (NGN VCMA Annual Report 22/23 p.28). The training framework and colleague awareness has further developed through our collaborative project with NSPCC, and the roll out of safeguarding awareness training. This partnership, and others such as the collaborative 'Scope' project (pg. 26 of GDN Collaborative VCMA Report, see: [VCMA-GDN-Collaborative-Annual-Report-2023.pdf \(sgn.co.uk\)](https://sgn.co.uk/vcma-gdn-collaborative-annual-report-2023.pdf)), have influenced policy changes within NGN and reinforced our responses to accessibility to support the achievement of ISO 22458 Kitemark-Consumer Vulnerability.

Working closely with innovation colleagues we have strengthened our offer to customers by utilising the NIA to support our VCMA work. An example of this is the NGN Vulnerability Visualisation Tool which has supported targeted mapping of VCMA projects. This work continues to progress and strengthen our knowledge around the highest risk communities across our network area. It has also provided an opportunity to onboard other utility partners including Cadent, Northumbrian Water, Yorkshire Water, Northern Powergrid and SSEN.

The two remaining GDNs have also expressed an interest in joining this collaboration.

GDQ35. What are your views on the options we've set out to incentivise customer satisfaction during RIIO-GD2?

NGN agrees that Option 1 maintain RIIO-2 incentive design should be the preferred option in order to encourage consolidating and maintaining improvements, whilst encouraging convergence across the networks.

The networks have an established Customer Best Practice group, which meets regularly to discuss topics surrounding CSAT, complaints and Guaranteed Standards of Performance (GSOP) and collaborating on projects benefitting all customers. If Option 2 or Option 3 were to be adopted, any existing collaboration is likely to fall away, with GDNs less likely to share best practices with penalty only options driving competition.

In particular, we note that Option 3 carries the greatest opportunity to drive competition between the networks, which would likely result in little to no collaboration if lower performing networks were to receive a performance-based penalty. NGN's view is that this is not in the best interest of customers overall and that we should continue to share ideas that allow for service improvements for everyone.

Please see the separate document already provided to Ofgem on GDN collaboration activities, including the example of the adoption of Vintelligence technology following an NIA project. GDNs shared details of the technology application and its benefits to customers, leading other networks to uptake for supporting customers during the connection application process.

GDQ36. What are your views on how the complaints metric can ensure customers' complaints are resolved quickly and effectively?

NGN agrees that the metric has continued to improve networks' overall performance in handling complaints throughout RIIO-GD2, which again is a clear benefit to the customer. The current metric supports complaints being resolved quickly and effectively in conjunction with the associated GSOP standard. Any adverse effect of not handling complaints effectively would be reflected in any received repeat complaints.

As the volume of complaints reduces, it becomes more challenging to improve the complaint metric score. On this basis, our preferred option is to maintain the current target of 5 and would be comfortable with adding/amending metrics of unresolved timescales to demonstrate that customer complaints receive quality resolutions in an appropriate timescale. We are also comfortable with the reporting the volume of complaints as a percentage overall number of customers served.

The addition of a dynamic target or setting the target to lower than a score of 5, is likely to lead to a reduction in collaboration amongst the networks and openness of the current complaint process.

Please see the separate document already provided to Ofgem on GDN complaint performance which details each networks performance, including the addition performance at alternate timescales and the provision total complaints as a percentage of customers served.

GDQ37. What changes, if any, are required to the GSOPs?

NGN Agree that the GSOPs in place are set at a level that ensures consistently high performance and the best value for consumers. Following a comprehensive review in GD2, the payment levels were indexed ensuring the consumer is fairly compensated for any underperformance.

GDQ38. What are your views on our proposed options for the unplanned interruption ODI-F?

All GDNs should be measured on the same metric. NGN considers the removal of Multiple Occupancy Buildings (MOBs) unplanned interruptions from the overall target to be the preferred option. NGN would be exposed to the same risk as SGN saw if a corroded riser on a large MOB required replacement. This repair could take weeks or months to resolve and potentially impact the average response time target.

If Ofgem were to ask NGN to rebase targets following the removal of MOBs, NGN would want to keep the same target as GD2. NGN has carried out some analysis by modelling a severe winter and any further reduction could be unachievable.

In GD1, NGN drove efficiencies and service levels for our consumers and reduced unplanned interruption times. As a result of this excellent performance NGN received a much more stringent target compared to other GDNs. In GD3 NGN would like Ofgem to set a level whereby all customers receive the same level of service across the country and ensure consistent value money.

NGN has the lowest target across the GDNs in GD2 and would welcome further discussions on the disparity of performance across the other networks. By performing at the frontier for GD1, NGN has delivered significant benefits to its customers, and should be appropriately rewarded / incentivised to maintain this performance. In circumstances where a high level of performance leads to tougher targets that provide little scope for more movement, GDNs will be disincentivised from increasing efficiency and performance in this area.

As set out in our response to OVQ33, Oxera's analysis assessed how a range of well-established incentive mechanisms used by economic regulators, including Ofgem, could be applied in RIIO-GD3 to better reward frontier performance to the ultimate benefit of all GB network customers.

GDQ39. What are your views on the options we have set out for the Collaborative Streetworks ODI-F?

NGN supports the extension of the Collaborative Streetworks ODI-F and prefers the introduction of a static incentive at this stage in the process. The reason for this preference is that there is clear guidance on what activities would generate a collaborative piece of work. Given the current stage of NGN's Repex programme, introducing a dynamic measure may require significant time and resources that are needed for the price control process.

To ensure the success of this Operational Gas Incentive-F (OGI-F), it is crucial to have a third party or Local Authority oversee the coordination. This oversight will help facilitate the collaboration between different stakeholders and ensure that the objectives of the ODI-F are achieved.

GDQ40. What are your views on whether the new, large load connections re-opener is still needed in RIIO-GD3?

NGN's view on the new, large load connections re-opener is that it should still be made available. There is no way to ascertain the level of large load connections required during GD3 as this is customer driven and influenced by policy decisions.

Overall, the experience of re-openers in RIIO-2 has been onerous for all parties and they have been difficult to administer with delays in windows and decisions. While re-openers play a valuable role in managing uncertainty and should be retained in RIIO-3, they should be reserved for material areas only and NGN support the merging of re-openers and expanding of criteria accordingly to simplify and streamline the process. As a principle, as much funding as possible should be included in baseline allowances to across all spend areas to prevent the need for the onerous re-opener process apart from cases of significant unforeseen changes to cost bases.

GDQ41. What are your views on whether the specified Streetworks costs re-opener is still needed in RIIO-GD3?

NGN's view is to keep the specific Streetworks costs re-opener for GD3. This decision is based on the recognition that legislation and policy changes can introduce uncertainties in the costs associated with Streetworks. By keeping the re-opener, NGN can address any potential cost fluctuations that may arise due to changes in regulations or policies during the GD3 period.

This approach allows NGN to adapt to any unforeseen circumstances or changes in the Streetworks landscape effectively. By having the flexibility to revisit and adjust the specific Streetworks costs as needed, NGN can ensure a fair and accurate representation of the actual costs incurred during GD3.

By keeping the re-opener, NGN can mitigate the risks associated with uncertainties and maintain a transparent and responsive approach in managing Streetworks costs within the GD3 framework.

RIIO-GD2 outputs and uncertainty mechanisms proposed for removal.

GDQ42. What are your views on our proposal to remove the Fuel Poor Network Extension Scheme in RIIO-GD3?

NGN support the proposal to remove the Fuel Poor Network Extension Scheme (FPNES) in RIIO-GD3. However, we consider it is vital to have the flexibility to support a small number of fuel poor connections for vulnerable households where needed, under the VCMA allowance.

Although fuel poor connections have reduced significantly, there are still a small number of people benefiting from the scheme, and for those supported, this mechanism is extremely important to ensuring affordable warmth. This year to date, NGN has completed 86 connections under FPNES (1125 in GD2 YTD), which evidences this need. NGN undertook an analysis of FPNES in April/May 2022 to explore the impact of its removal. This piece of work highlighted the benefits for those who are eligible to access the scheme, and highlighted that, even at a reduced level, gas is still the best or only suitable heating option for some households.

To support a just transition to net zero, NGN consider it is imperative to be able to support the highest risk, low-income households to continue to access a gas connection and central heating where this is deemed to be the best solution for their current needs. We know through our Customer Support Fund work (shareholder funded) that future proofing for these households is possible and can provide an immediate solution to address fuel poverty and associated health risks. This involves the installation of pipework and radiators that are suitable for a gas heating system now but can enable a heat pump conversion in future with minimal disruption to the household. We consider that this a feasible solution to meeting the needs of those most vulnerable, whilst putting steps in place to ease the transition to a cleaner, lower carbon solution in future.

GDQ43. What are your views on our proposal to remove the consumer vulnerability ODI-R in RIIO-GD3?

NGN agrees with this proposal in the interests of reducing duplication in reporting.

GDQ44. How can the annual VCMA event be improved?

The Annual VCMA Showcase event enables stakeholders an inclusive opportunity to gain a high-level insight into a range of VCMA projects and the impact of VCMA funding overall. However, an event of this format allows limited opportunity to fully critique all individual projects.

NGN would support the potential to include additional detail within the VCMA reports, to evidence the changes that have been made to projects, as a result of stakeholder feedback and critique.

NGN's view is that this approach allows for greater transparency and accountability, rather than seeking to encompass this as part of the annual showcase event.

NGN feel that the following structure of regular engagement sessions allows for timely, robust challenge and review of VCMA initiatives at all levels (from grassroots to national level).

GDNs have a number of collaborative monthly working groups including the following:

- GDN Consumer Vulnerability Group
- GDN Carbon Monoxide Collaboration Group, which is also attended by the All-Party Parliamentary Carbon Monoxide Group
- GDN Fuel Poverty and Energy Efficiency Group, which has a focus on Fuel Poor Network Extension Scheme.

The first two groups detailed above enable presentation of new collaborative VCMA initiatives and updates on projects in progress. They also provide an opportunity for any potential partners to showcase project proposals. This includes new national projects or scaling up of regional GDN projects.

Additionally, a 6 weekly GDN Consumer Vulnerability and Carbon Monoxide Steering Group meeting is held, to consolidate feedback from the three groups detailed above. This meeting is also attended by policy colleagues from National Energy Action and Citizens Advice. These key external stakeholders provide independent oversight of the decisions made around collaborative VCMA projects.

NGN facilitate numerous stakeholder engagement opportunities in order to gain insights to inform, develop and execute new VCMA projects. This includes:

- CIVS Annual Strategic workshop - review of previous year's performance; key hot topics identified and prioritised through stakeholder feedback to inform quarterly workshops (see below)
- CIVS Topic workshops – quarterly engagement, including updates to regional stakeholders and discussion focused on priority themes*
- NGN VCMA Governance Group – monthly meeting to review and approve new VCMA project proposals for NGN specific projects. Panel consists of several external stakeholders from a vulnerability background.
- NGN Strategic Partner Roundtable – monthly meetings with appointed strategic partners to seek feedback regarding NGN's performance and direction with regards to customers in vulnerable situations
- NGN Partner Networking call – monthly meeting led by partners to enable sharing of best practice, collaboration and fostering of new relationships.
- NGN & Partners – Supporting Communities Together – annual open day and face to face networking opportunity for NGN colleagues and partners.

*Additional workshops can be arranged to address any emerging issues identified by our stakeholder groups

GDQ45. What are your views on our proposal to remove the DLCA, and do you see any challenges that might arise if it were to be removed?

NGN strongly disagrees with the removal of the DLCA. Removing the allowance would lead to an increase in costs for consumers and make gas connections unaffordable for vulnerable customers who are in need of a solution. There is currently no legislation or policy decision in place regarding natural gas, so removing the allowance would be considered premature.

NGN acknowledges the ongoing movement towards low carbon energy but highlights that a decision on heat has not been made yet. Therefore, removing the allowance at this stage would not be appropriate and consumers should not be disincentivised to connect to gas. The rationale behind removing the allowance, which is to show the full cost of a connection compared to other energy sources, may be misleading because some reinforcement work by DNOs is already covered by the bill payer.

In summary, NGN's view is that removing the DLCA would lead to increased costs for consumers, especially vulnerable customers, and that it is premature to do so without clear legislation or policy decisions on natural gas.

GDQ46. What are your views on our proposal to remove the domestic connections volume driver? If you think it should be retained, what changes do you recommend for its design?

NGN's view on the domestic connections volume driver is that certain elements, such as overheads, would fall under the baseline allowance. There is still uncertainty in this area and the ability to forecast demand would rely on two to three years of actual data in GD2 and does not account for potential policy and legislative changes. Therefore, certain elements should continue to sit within an uncertainty mechanism.

While there may be challenges in accurately forecasting demand for domestic connections. By utilising the mechanism of measuring connection volumes through the domestic connections volume driver, NGN can continue to track and assess the demand for domestic connections, thereby enabling effective allocation to consumer bills. With overhead being accounted for in the baseline allowance NGN could continue to provide the level of service expected by our consumer. Accordingly, we consider it should be retained.

GDQ47. What are your views on our proposal to remove the smart metering rollout costs re-opener in RIIO-GD3

NGN has no objection to the removal of the smart metering rollout costs re-opener.

GDQ48. Should personalising welfare services continue to be supported under RIIO-3 and, if so, how should it be funded?

NGN's view is to have the welfare services provision in GD3 and for this to be part of baseline costs. NGN propose to follow the Cadent model to ensure provision of priority items for customers in vulnerable situations, identified through the course of our interactions with these customers.

NGN understand that this model has been successful in supporting customers in Cadent's networks and has improved the impact and quality of customer interventions. This ensures that interactions between customers and GDNs are maximised, where this could be a 'once in a lifetime' opportunity.

GDQ49. What are your views on our proposal to remove Cadents' bespoke High-rise building plans ODI-R from RIIO-GD3?

No comment.

Options for evolving our cost assessment approach for RIIO-GD3

GDQ50. What are your views on the potential advantages of using multiple totex regression models in RIIO-GD3?

In principle, there are advantages to using multiple TOTEX models at GD3, assuming that alternative models perform well from economic, operational and statistical perspectives. These alternatives could differ with respect to the selection of cost drivers, the construction of Composite Scale Variable (CSV), the estimation approach, the use and magnitude of pre-modelling adjustments, the time period of analysis and other relevant factors.

However, any methodological changes from the GD2 approach should have demonstrable benefits and improve the statistical performance of the econometric models as a minimum. The addition of models increases the resource burden of all parties and the potential for error and unintended consequences. Ofgem's objectives of simplification and streamlining should be considered as part of the evaluation of their inclusion.

In general, the cost assessment approach for RIIO-2 worked well and the models performed strongly with statistical tests. The value add from the additional models need to be sufficient to justify their inclusion and the current RIIO-2 approach for GD should be the default. As there are only eight networks across four Licensees, the modelling is sensitive to changes and increased granularity may not necessarily improve predictive performance.

NGN support Ofgem's cost assessment framework and Toolkit approach to benchmarking, as it provides a practical and robust approach to assessing relative efficiency between gas networks. At RIIO-2, a top-down regression model was used after a review of various models with different levels of aggregation and over different time periods, with different CSV make ups. Ultimately the outcome was similar across all models; hence the Totex model was used, rather than a mixture of top down / bottom-up models in RIIO-1. This should be re-examined for RIIO-3, but it is NGN's view that the current approach should be retained unless there are material improvements from deviating from it.

GDQ51. What alternative cost drivers and model specifications would you propose for early testing?

Ofgem would need to ensure that cost-pressures in GD3 are (to the extent possible) captured in the selection of cost drivers. This should be developed collaboratively with stakeholders through the working group process and tested iteratively to ensure that changes from the status quo are genuine statistical improvements.

It is important to consider the outputs, workload delivery and quality of service in model specifications. NGN is investigating additional quality and output measures such as customer service, 1- and 2-hour standards, shrinkage and outstanding repairs for use in the CSV calibration to better capture what networks deliver for their expenditure. NGN consider that these important deliverables aren't explicitly or fully accounted for in the cost assessment framework. In theory, two networks could have similar costs in certain areas but materially different performance in these outputs. Conversely, networks could have significantly different costs for the same levels of service. This should be accounted for in the benchmarking process to ensure the frontier networks are rewarded for the value they deliver and so that laggard companies catch-up in efficiency and standards.

GDQ52. What are your views on the potential of middle-up modelling in RIIO-GD3?

Middle-up models may have some advantages over TOTEX models if they can capture activity specific cost drivers. Moreover, middle-up models may suffer less from cost allocation inconsistencies than disaggregated models. In principle, middle up models could form part of the evidence base at GD3, providing that the models perform well in comparison to the TOTEX and (if pursued) disaggregated models.

Ofgem would need to work with stakeholders to explore which activities could be grouped together in a middle up model, and which are the most operationally relevant cost drivers for each activity. As set out in our response to GD50, any methodological changes from the GD2 approach should have demonstrable benefits and improve the statistical performance of the econometric models. The addition of models increases the resource burden of all parties and the potential for error and unintended consequences. Ofgem's objectives of simplification and streamlining should be considered as part of the evaluation of their inclusion.

GDQ53. What are your views on the potential of disaggregated modelling in RIIO-GD3?

Disaggregated models may form part of the evidence base at GD3 if key concerns relating to cost allocation can be rectified. When undertaking disaggregated modelling, it will be important to ensure that trade-offs are appropriately captured, such that the overall TOTEX allowance is achievable. The correspondence in GDNs' performance across the different suite of models considered should be carefully examined prior to triangulation.

Any methodological changes from the GD2 approach should have demonstrable benefits and improve the statistical performance of the econometric models.

As stated in our response to GDQ50, the cost assessment approach for RIIO-2 worked well and the models performed strongly with statistical tests. Multiple models add the potential for additional complexity, unforeseen consequences, and increased potential for error. The value add from the additional models need to be sufficient to justify their inclusion and the current RIIO-2 approach for GD should be the default.

GDQ54. In your view, what is the most suitable configuration of cost activities for middle-up or disaggregated modelling, that once combined, could form a complete bottom-up assessment of totex?

This is something that will require further analysis and collaboration with stakeholders through the working group process. As a starting point, the most logical split for middle up modelling is the components of totex – capex, repex and opex (which may be split into direct and indirect). However, it may make sense to disaggregate these broad categories further and for the merits of this to be tested statistically and only if doing so adds value.

GDQ55. What do you think would be appropriate criteria for determining cost exclusions for RIIO-GD3?

This is something that will require further analysis and collaboration with stakeholders through the working group process. The principles of the RIIO-2 approach should be retained – exclusions from cost benchmarking should only be for areas of spend that are heterogeneous and not comparable between networks. This is likely to relate to large scale, one off, projects that are third party driven or difficult to compare areas such as cyber expenditure.

As a principle, as many areas of spend as possible should be included in cost assessment modelling directly. If an area of spend was included in benchmarking in RIIO-2, it should have a high bar for removal for exclusion in RIIO-3 as it risks reducing performance of benchmarking models and have inefficiencies hidden by the exclusions. Conversely, exclusions at RIIO-2 should be reviewed and considered for inclusion in cost assessment models in RIIO-3 where there is increased confidence and history of delivery. For example, some aspects of cyber security and IT could be explored collaboratively for inclusion in modelling in RIIO-3 through the working group process.

Disaggregating data into specific sub-sets can be a useful way for networks to justify costs and explain differences in costs from one period to the next. For example, a change in repex unit rates over time may be explained mostly by the requirement to utilise a greater proportion of a more costly technique, such as open cut trenches vs. insertion, due to the population remaining. However, this does not necessarily mean that those newly broken out costs should be excluded from the cost benchmarking regression analysis as the issues are likely to be common to all networks.

GDQ56. What are your views on the modelling treatment of workload adjustments for RIIO-GD3?

Workload adjustments made by Ofgem in their determinations should be accounted for in the benchmarking and allowance setting process, so networks are fairly funded for the deliverables they have committed to. However, as with RIIO-2, networks who submitted costs below the modelled efficient costs (accounting for workload adjustments) should be allowed submitted costs (pre-workload adjustments) to incentivise and reward the submission of ambitious plans and the value this delivers for customers.

GDQ57. What are your views on the approach to regional factors for RIIO-GD3?

The regional factors applied at GD2 were material for some GDNs and were dominated by labour costs for London and the South East. It is important that the adjustments for regional factors are appropriately validated through a combination of top-down and bottom-up evidence, to ensure that they are not conflated with managerial inefficiency or noise. In the case that the pre-modelling adjustments are not (or cannot be suitably) validated, alternatives should be pursued, or removal of adjustments should be considered as per the Ofwat approach for PR24.

The pre-modelling adjustments should not benefit companies disproportionately and modelling outcomes need to be fair and reflective of regional differences and not be conflated with inefficiency. For example, another networks' GD2 Tier 1 iron allowed unit rate is 30% higher than NGN's, which they are forecasting to outperform as of RRP 2022/23, whereas NGN are forecasting to overspend allowances on that element specifically. NGN don't think this difference is proportionate due to the socio-economic and geographic similarities between our regions. The table below shows our forecast outturn RIIO-2 unit rate is 14% less than the 2nd most efficient network, but our allowance is 28% less; allowing them to outperform by more than 10% over RIIO-2 according to RRP 2022/23 figures.

Tier 1 Iron	Total				Licence / Allowance Target			
2018/19 Prices	Length km Forecast	Average km Forecast	£/m	Efficiency Rank	Total	Annual	Allowance / Forecast km	Out / (Under) Performance
NGN	2,186.8	437.4	£124.2	1	2,144.3	428.9	116.07	-7.0%
Network 2	2,774.3	554.9	£148.5	6	2,773.9	554.8	127.83	-16.2%
Network 3	1,568.0	313.6	£148.5	5	1,568.0	313.6	132.09	-12.4%
Network 4	3,001.4	600.3	£158.2	7	3,001.3	600.3	147.15	-7.5%
Network 5	1,919.1	383.8	£148.0	4	1,918.3	383.7	150.68	1.8%
Network 6	1,531.8	306.4	£230.2	8	1,531.4	306.3	160.55	-43.4%
Network 7	1,468.9	293.8	£144.6	2	1,468.5	293.7	161.54	10.5%
Network 8	1,036.0	207.2	£145.0	3	1,020.6	204.1	161.97	10.5%

Ahead of RIIO-ED2, Oxera explored the impact of alternatives to the pre-modelling adjustments applied at RIIO-ED1 as part of a broader investigation on cost modelling for the ENA1 and found that:

- reversing the pre-modelling adjustment for regional wages improved model fit, indicating that the pre-modelling adjustment may be adding noise;
- the coefficient on regional wages was negative when included as a separate cost driver, indicating that companies that operated in high-wage regions actually had lower costs;

¹ See Oxera (2021), 'Assessment of cost drivers for RIIO-ED2 benchmarking', May.

- population density was not a material driver of costs on its own, it was only significant when a Gini index (representing the unequal distribution of a density within a region) was also incorporated.

This analysis provided some high-level evidence that the pre-modelling adjustments applied at RIIO-ED1 may have overstated the impact of regional factors on efficient costs and possibly conflated with managerial inefficiency. NGN consider that a similar analysis applied to the GD sector could be used to move away from unvalidated pre-modelling adjustments.

It is possible that there are regional cost pressures, such as urbanity and sparsity, that are inadequately captured in Ofgem's cost assessment models such that some form of adjustment may be necessary. However, the regional adjustments as applied at RIIO-GD2 were highly material for some GDNs, and dominated by the regional wage adjustment for London and the South East of England.

NGN consider that Ofgem did not address the following issues adequately as part of its company-specific adjustments at RIIO-GD2:

- whether such cost pressures were implicitly captured in Ofgem's cost models through the modelled relationship;
- the correlation between the regional factors considered;
- validation of the magnitude of the adjustments;
- assessing whether the adjustments were conflated with managerial inefficiency.

NGN note that any of the above issues could result in an over-compensation for regional differences. Moreover, the construction of some of the regional factors and the magnitude of the adjustments applied at RIIO-GD2 were somewhat arbitrary. Indeed, the performances of some GDNs were highly sensitive to the inclusion of the pre-modelling adjustments. Such material impacts raise concerns over the value of such adjustments and whether they may be conflating genuine differences in operating characteristics with inefficiency.

The regional wage index gave weight to occupations for which the regional wage adjustment was not applied. For example, Ofgem did not apply a regional wage adjustment for Business Support Costs (BSCs) at RIIO-GD2, arguing that such costs need not be undertaken locally. However, the regional wage index took into account differences in wages for occupations that may be considered 'indirect', such as 'Corporate managers and directors', 'Business, media and public service professionals' and 'Administrative occupations'. Therefore, the regional wage index is not capturing differences in costs that must be undertaken locally.

NGN note that the regional wage adjustment must also be re-assessed in light of the changing macro-environment in which the network companies are operating. It may be the case that labour has become more mobile in response to COVID-19 (e.g. through hybrid working environments) such that the heterogeneity in wages across regions for GDNs' employees has become less material. For

example, the London region had the slowest full-time earnings growth across the UK between April 2022 and April 2023,² indicating labour costs in other regions may indeed be converging.³

NGN consider that Ofgem should develop a robust methodology for establishing the need, quantification and validation of pre-modelling adjustments for regional wages (and, indeed, other regional factors). This methodology would contain a combination of top-down and bottom-up evidence to ensure that the pre-modelling adjustments are robust and appropriate. This could include the following:

- Exploring how the regional factors perform ‘within modelling’ i.e., including the regional factor as an additional cost driver. If the coefficient on the regional factor is not aligned with operational expectations, then this may cast doubt on whether the regional factor is picking up just the intended effects. For example, the coefficient on the regional wage index should be approximately equal to the share of costs affected by regional wages: a coefficient significantly higher than this would indicate that the regional wage index is capturing other factors (e.g. managerial inefficiency); meanwhile, a coefficient of close to zero would suggest that regional wages are not a material driver of cost differences between GDNs.
- Undertaking suitable robustness checks on indices used to construct the pre-modelling adjustments to ensure that they are not sensitive to the choices made. For example, the construction of the regional wage index makes several assumptions regarding the mapping of indices to costs and the degree to which costs for certain activities must be undertaken locally. Therefore, it is important to test the performance of the regional wage index against reasonable alternatives (such as adjusting the degree to which activities could be undertaken locally, or selecting different indices) to ensure that companies’ performances are not too sensitive to somewhat arbitrary assumptions.

The calculation of the sparsity index assumes that higher costs associated with sparsity begin to manifest if a local authority (LA) is more sparsely populated than the GB average. However, it is not clear whether this threshold is appropriate—costs associated with population sparsity may begin to manifest at a higher or lower level of sparsity, and the appropriate threshold should be investigated.

The sparsity index was also only applied to Emergency and Repair costs at RIIO-GD2. However, the conceptual argument to support the adjustment to this cost category (i.e. reduced labour productivity due to increased travel time) are applicable to other cost categories, such as Maintenance and REPEX. NGN note that regulators have applied adjustments for sparsity to a wider category of costs than simply Emergency and Repairs. For example, Ofwat modelled a U-shaped relationship between density and base costs at PR19, and base costs included OPEX, capital maintenance expenditure and some other CAPEX (e.g. growth).

NGN consider that Ofgem should re-assess which cost activities are subject to an adjustment for sparsity, and therefore warrant a regional adjustment. This can be achieved via the use of empirical

² ONS (2023), ‘Employee earnings in the UK: 2023’, 1 November, <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/bulletins/annualsurveyofhoursandearnings/2023>, accessed 1 March 2024.

³ Note that these trends in earnings reflect average wages across the economy and, as such, do not perfectly capture the trends in costs for the specific types of labour that GDNs employ. Nonetheless, it provides indicative evidence of a general trend in labour mobility that warrants further exploration.

analysis such as individual cost activity modelling or disaggregated cost modelling, supported by engineering or operational expertise.

At RIIO-GD2, Ofgem made a pre-modelling adjustment in relation to urban productivity, arguing that GDNs may face additional costs associated with operating in urban areas (i.e. the other end of the U-shape outlined above). We note that there is a strong correlation between Ofgem's urban productivity adjustment and its adjustment for regional wages (wages are typically higher in urban regions). Therefore, there is a risk that the impact of 'urbanity' is double-counted in Ofgem's assessment: once through the regional wage adjustment and again through the urban productivity adjustment. NGN consider that Ofgem should appropriately explore this potential double-count.

As per the sparsity adjustment, Ofgem may also need to re-assess which cost activities are subject to the adjustment.

GDQ58. What are your views on the approach to company-specific factors for RIIO-GD3?

It is appropriate to explore company-specific factors. For example, NGN is a single-licensee and cannot benefit from the same group-level economies of scale as Licensees with multiple networks, yet group-level economies of scale are not accounted for in Ofgem's cost assessment. Indirect Opex costs related to business support have a significant fixed element that should be able to be shared across multiple-licensee networks. It would be worth exploring this factor and others that could be scale related.

There is heterogeneity across the GDN industry with respect to ownership structure which can influence their efficient level of costs. In particular, GDNs face several costs that could benefit from group-level economies of scale and the ability to share certain costs across networks under common ownership, where the average cost of an activity falls as the level of output increases at the group level. For example, indirect expenditure items such as Business Support Costs (BCSs, e.g. finance and regulation costs) are unlikely to vary materially across GDN groups of different sizes — that is, a large GDN group might not require a substantially larger corporate finance and regulation team than a small GDN group. As such, the same indirect expenditure can be spread across a larger volume of output for GDNs in large GDN groups, leading to lower average costs. As a small GDN group, NGN cannot benefit from such scale economies.

Similarly, direct expenditure items (such as asset replacement) can also benefit from economies of scale by 'bulk purchasing' of assets or 'bulk commissioning' of work. This is where a larger company can benefit from its market power to achieve lower prices for its inputs, or competitive suppliers pass on their own cost savings from economies of scale to large orders. As such, NGN cannot make the same economies of scale savings on direct expenditure as larger GDN groups can.

Therefore, there is a strong conceptual case for the existence of group-level economies of scale. The assessment of fixed costs, the associated economies of scale and ownership-related sharing of costs, is a general modelling issue that economic regulators look to address carefully in their assessment to ensure relevant efficiencies are identified and consumer welfare is maximised. Indeed, the presence of group-level effects have been accepted in previous price controls in the GB energy sector, specifically in relation to indirect costs.

For example, in RIIO-GD2, ECA (Ofgem's consultant) found that there were statistically significant group-level economies of scale for BSCs when using a BSC-specific composite scale variable.⁴ At RIIO-ED2, Ofgem modelled BSC costs at the group level, and detected statistically significant group-level economies of scale.⁵ Similarly, at DPCR5, Ofgem explicitly modelled the impact of group-level economies of scale on indirect expenditure.⁶ Ofgem also accounted for the possibility of cost allocation issues and cost sharing through group-level modelling at previous price controls. For example, it modelled BSCs at the group-level in RIIO-ED1⁷ and in RIIO-GD1.^{8,9}

The case for accounting for group-level economies of scale is strengthened in light of the proposed merger guidance for energy networks.¹⁰ This guidance from the Competition and Markets Authority (CMA) emphasises the importance of independent comparators (i.e. separate GDN groups) in Ofgem's regulatory framework. Given that having multiple (and, by definition, smaller) GDN groups in the industry improves Ofgem's ability to set challenging benchmarks, it would be inappropriate to penalise smaller GDN groups in the cost assessment framework by omitting group-level scale effects in the cost models.

Ofgem's modelling approach at RIIO-GD2 did not account for group-level economies of scale and, therefore, a pre-modelling adjustment may be required to reflect the additional costs that NGN faces. Thus, as part of the RIIO-GD3 cost assessment framework, Ofgem should carefully consider how certain costs are modelled to ensure that group-level scale effects are appropriately captured.¹¹

NGN note that there are only four companies operating the eight GDNs. It is therefore likely that group-level scale effects may be conflated with companies' (in)efficiency. Therefore, the exploration of group-level scale effects may require careful analysis rather than naïve examinations of correlations or ratios, for example, involving group size, expenditure, and estimated efficiency. This may necessitate the use of appropriate model specification, sophisticated modelling approaches, or restricting the dataset to exclude time periods or observations where inefficiency is known to affect the observed relationship between group-size and expenditure.

⁴ ECA (2020), 'RIIO-GD2 and T2: BSC and CAI assessment methodology', May, Table 9.

⁵ Ofgem (2022), 'RIIO-ED2 Final Determinations Core Methodology Document', November, Table 69.

⁶ Specifically, Ofgem modelled Network Policy, HR & Non-operational Training, Finance & Regulation, CEO, IT & property expenditure collectively (called the 'group 3' cost group). Ofgem's regression model estimated significant economies of scale at the group level. See Ofgem (2009), 'Electricity Distribution Price Control Review Final Proposals - Allowed revenue - Cost assessment appendix', December, Table 3 and Table 7.

⁷ See Ofgem (2014), 'RIIO-ED1 Draft determinations - business plan expenditure assessment', November, p. 130.

⁸ See Ofgem (2012), 'RIIO-GD1: Final Proposals - Supporting document - Cost efficiency', December, appendix 6.

⁹ It should be noted that in these controls, despite modelling at the group level, Ofgem employed ratio benchmarking (which assumes constant returns to scale) to assess BSCs, thereby not accounting for group-level economies of scale correctly.

¹⁰ See CMA (2023), 'Energy network mergers: Draft guidance on the CMA's procedure and assessment', December.

¹¹ For example, this could include, but limited to, modelling some costs—particularly indirect Costs—at the group level and accounting for scale economies at that level, and reflecting any adjustment made for these costs in the aggregate level modelling.

GDQ59. In your view, which cost areas will require separate technical assessment in RIIO-GD3?

This is something that will require further analysis and collaboration with stakeholders through the working group process. The principles of the RIIO-2 approach should be retained – technical assessment should only be for areas of spend that are heterogeneous and not comparable between networks. This is likely to relate to large scale, one off, projects that are third party driven or difficult to compare areas such as cyber expenditure.

As per our response to GDQ55, as many areas of spend as possible should be included in cost assessment modelling directly. If an area of spend was included in benchmarking in RIIO-2, it should have a high bar for removal for exclusion for technical assessment in RIIO-3, as it risks reducing performance of benchmarking models and having inefficiencies hidden by the exclusions. Conversely, exclusions at RIIO-2 should be reviewed and considered for inclusion in cost assessment models in RIIO-3 where there is increased confidence and history of delivery. Some aspects of cyber security and IT could be explored collaboratively through the working group process for inclusion in cost benchmarking, given an increased history of delivery since RIIO-2 started.

GDQ60. What are your views on alternative technical assessment approaches for RIIO-GD3?

The statistical techniques (non-regression) used in determining unmodelled cost drivers require further discussion through the working group process. A combination of qualitative and quantitative technical assessment approaches, including an expert and engineering review, should be retained unless there are demonstrable benefits for changing the approach. This combined approach has broadly worked in RIIO-2 for those areas where exclusion for technical assessment is justified.

GDQ61. In your view, which cost areas will require separate non-regression analysis and benchmarking in RIIO-GD3?

The principles of the RIIO-2 approach should be retained – separate non-regression analysis should only be for areas of spend that are heterogeneous and not comparable between networks. This is likely to relate to large scale, one off, projects that are third party driven or difficult to compare areas such as cyber expenditure.

GDQ62. Which separately assessed cost activities from RIIO-GD2 could potentially be included in totex benchmarking in RIIO-GD3?

Stubs expenditure should be considered for inclusion as part of baseline Repex costs for the purposes of Totex benchmarking, as well as areas such as overcrossings and other BAU capex spend previously separately assessed. As per our response to GDQ55, as many areas of spend as possible should be included in cost assessment modelling directly.

If an area of spend was included in benchmarking in RIIO-2, it should have a high bar for removal for exclusion in RIIO-3 as it risks reducing performance of benchmarking models and have inefficiencies hidden by the exclusions. Conversely, exclusions at RIIO-2 should be reviewed and considered for inclusion in cost assessment models in RIIO-3 where there is increased confidence and history of delivery.

Including as much spend as possible in benchmark modelling reduces the resource burden and potential for subjectivity in assessment for Ofgem and ensures that, in the round, the most efficient networks are benchmarked appropriately and the converse is true for laggard companies.

Networks may wish to isolate and identify cost activities, such as stubs, for the purposes of explaining and justifying changes in costs from one period to the next. This will inform Ofgem in its determinations as to whether expenditure is justified and should be allowed. However, that does not necessarily mean that such costs should be excluded from benchmarking as, in the round, the increase in complexity and burden this adds does not add sufficient value and across all cost activities the benchmarking process produces acceptable and fair results.

GDQ63. What are your views on retaining the RIIO-GD2 pass-through cost items for RIIO-GD3?

NGN support retaining the RIIO-GD2 pass-through cost items for RIIO-GD3.

GDQ64. What are your views on suitable approaches to the disaggregation of totex allowances for RIIO-GD3?

While Ofgem uses cost modelling to set an overall TOTEX allowance, the allowance is allocated to individual activities for the purposes of uncertainty mechanisms and tracking delivery against targets. In previous price controls, Ofgem has simply apportioned the TOTEX allowance on the basis of the proportion of expenditure in each activity in the companies' business plans. However, at RIIO-2, one company successfully appealed this decision, arguing that the adjustments made for work volumes (and other aspects) meant that its business plan proportions were no longer an accurate reflection of the type of work that it would undertake in the upcoming price control (amounting to an input data error in Ofgem's approach).

Ofgem is consulting on whether alternative approaches are possible. Of course, the method of apportioning the TOTEX allowance into different activities may be somewhat arbitrary and will depend on the choice of cost assessment method. The RIIO-2 appeal was based primarily on the uncertain uptake of low carbon technologies for the energy transition for ED, it would be helpful to identify specific activities or factors that may be similarly uncertain and where GDNs' proposals could differ in terms of ambition and solutions.

If Ofgem does not make any specific workload adjustments or does not assume a materially different operating environment in GD3 compared to what companies assume in their business plans, it could be appropriate to use the companies' proportions of submitted TOTEX as a starting point. If Ofgem does make these adjustments or assumptions, then there could be much greater scope to deviate from their submitted cost proportions.

In RIIO-2, there are discrepancies between disaggregation of allowances and naming convention between cost assessment modelling outputs, Price Control Financial Model and RRP. This has caused issues and errors in disaggregation of allowances in RIIO and the application of apportioning assumptions to provide greater disaggregation in RRP. This could and should be avoided at RIIO-3 by having consistent disaggregation at the level required and naming convention across the board.

Proposals for Business Plan Data Templates (BPDTs)

GDQ65. In your view what are the high-priority areas of reporting inconsistency between GDNs within the RIIO-GD2 BPDTs and RRP, and how can these be addressed for RIIO-GD3?

In general, RIIO-2 RRP maps quite well to RIIO-2 BPDTs as the RRP tables were developed from those BPDTs. There are some opportunities for streamlining and simplification, which have been fed into the Cost Assessment Working Group process. In particular, the level of information and disaggregation required in the RIIO-2 BPDTs for Cyber, Environment and vehicles was disproportionate and onerous; and it's not clear what value this added or how this information was used.

It is important to keep the objectives of simplification and reducing burden in mind when agreeing any changes, as well as maximising the consistency between RRP and BPDTs in RIIO-3. Both changes to the tables and more clear guidance on reporting will be required to achieve this. Where RIIO-2 RRP detail and disaggregation is less than RIIO-2 BPDTs, consideration should be given as to simplifying BPDTs to align with RRP and vice versa in instances where BPDT detail is less than RRP. Additional granularity and detail should only be requested where it is useful to Ofgem and other stakeholders and adds sufficient value.

NARM BPDTs and reporting requirements should be reviewed as a matter of priority, and this is an area where there are significant opportunities for simplification and streamlining without jeopardising the objectives or principles of the NARM mechanism.

GDQ66. We invite views on current reporting requirements and reporting structure at the cost activity level and how this may be adapted to better suit RIIO-GD3 and related development of BPDTs.

Overall, reporting requirements and structure are overly burdensome and resource intensive for all parties in RIIO-2. It is unclear whether the level of granularity required (e.g., in diameters, materials and pressures for Repex) is necessary and adds sufficient value to justify the effort required to populate the information. As stated previously, this is especially true of the NARM reporting requirements.

Digitisation provides an opportunity to facilitate transparency and reduce the reporting burden. NGN would be happy to work with Ofgem and the rest of industry to explore the possibilities for this and act as a test case prior to wider rollout if that would support progress in this area.