RIIO-GD3 Draft Determination Consultation Response

GD Annex

Northern Gas Networks

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Outputs & Incentives: Infrastructure fit for a low-cost transition to net zero questions

Question 1. Do you have any views on our proposed approach for the GD-specific environmental commitments, costs and targets?

Costs and Commitments

We agree with the proposed approach.

Business Carbon Footprint (BCF) Targets Re-presentation

In Ofgem's RIIO-3 Draft Determination – Gas Distribution document it identified that Ofgem '*expect the GDNs to work together to apply a consistent methodology for setting BCF targets and to re-submit targets in their Draft Determination responses*'. Ofgem identified difficulties in comparing the targets as presented in the RIIO-GD3 business plan submissions due to varying base years and methodologies. We consider that our BCF reduction targets are clearly presented as requested within our RIIO-GD3 Environmental Action Plan (EAP) section 3.4.2, Table A6.15, document page 24). We do, however, recognise that there is some divergence in the methodologies used by the gas distribution networks which makes comparison of targets difficult.

In response to this requirement the four Gas Distribution Networks (GDNs) have worked together to revise our Scope 1 and 2 Business Carbon Footprint (BCF) targets, so they have a common baseline year, end year and methodology. These targets are presented in the Table 1, alongside their data coverage (Table 2) and assumptions, and supersede those presented in the individual GDN RIIO-GD3 business plan submissions. As shown in Table 1, NGN has set the most ambitious RIIO-GD3 BCF reduction target, being an order of magnitude greater than Cadent and WWU, and three times that of SGN.

Network	Baseline		Target		% Reduction over period	Market based or Location based methodology?
	Year	tCO2e	Year	tCO2e		
Cadent	2023/24	27,180	2030/31	25,833	5.0	Location based
NGN		5,736		2,021	64.8	
SGN		18,215		14,247	21.8	
WWU		12,691		11,905	6.2	

Table 1 - Revised GDN RIIO-GD3 Scope 1 and 2 BCF Reduction Targets

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Network	Included in baseline and target? Y/N						
	Scope 1 - Shrinkage	Scope 1 - stationary combustion (metered natural gas in premises/infrastructu	Scope 1 - mobile combustion (vehicles)	Scope 1 - mobile combustion	Scope 1 - F gases	Scope 2 - electricity use in premises	Scope 2 - electricity use in electric vehicles
Cadent	N	Y	Y	Y	Y	Y	Y
NGN	N	Y	Y	Y	Y	Y	Y
SGN	N	Y	Y	Y	Y	Y	Y
WWU	N	Y	Y	Y	N (de minimis)	Y	Y

Table 2 - Revised GDN RIIO-GD3 Scope 1 and 2 BCF Reduction Targets Data Coverage

Assumptions relating to presented BCF targets:

- BCF = Scope 1 and 2 emissions excluding gas shrinkage. The targets presented here cover all material Scope 1 and 2 emission sources for all GDNs.
- Each GDN presented bespoke BCF targets within their RIIO-GD3 Environmental Action Plan. Ofgem identified difficulties in comparing these targets due to varying base years and methodologies. The targets presented represent amended targets to aid comparative analysis by Ofgem.
- Targets are presented under the same assumptions as those presented in the RIIO-GD3 business plan submissions.
- 2023/24 has been selected as the common base year for all networks for the presented aligned RIIO-GD3 BCF targets to minimise any impacts of the COVID-19 period and align with the final data used for the RIIO-GD3 business plan submissions.
    - Variations in baseline emissions between different organisations reflect differences in operating business models and network characteristics.
- Baseline emissions and target emissions are presented on a location-based methodology for consistency.
- Baseline emissions are taken from Annual Environmental Report/ RRP submissions.

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How we established our BCF target

As detailed in our RIIO-GD3 EAP (Section 3.4.2), for RIIO-GD3 we have retained our existing RIIO-GD2 EAP ambition to achieve Net Zero BCF emissions by the end of the period (2030/31) on a market-based approach. As shown above, our location-based BCF emissions will not be zero in 2030/31 as we will have emissions associated with grid electricity consumption in vehicles and premises and natural gas consumption in premises which we have assumed with will have the same carbon emissions impact as in 2023/24 (in the absence of other information).

We recognise that our BCF reduction target is highly ambitious, very challenging for us to achieve (in particular with respect to decarbonising our vehicle fleet), and that our recent performance as is not on track to achieve this. Nevertheless, stakeholders (specifically future customers) have told us that the most responsible thing to do when falling behind on carbon targets is to keep the targets to maintain accountability and ambition, and to look at alternative ways to benefit the environment. We worked with our ISG to consider and develop our RIIO-GD3 Scope 1 and 2 BCF targets. They are supportive that the targets are appropriate, reflective of stakeholder requirements and in keeping with our long-term People and Planet Strategy. We will clearly report our Scope 1 and 2 BCF emissions and performance against our targets in our AER throughout RIIO-GD3 in accordance with the latest standards and guidance (including the GHG Protocol Corporate Accounting and Reporting Standard).

Stakeholders were also keen to tell us that we should not view our BCF emissions in isolation as it is the reduction of total emissions that is important. Instead, BCF emissions should be viewed in the round alongside all sources of our emissions, and that underachievement in BCF reductions can be compensated by our performance in reducing other emissions, such as leakage.

Carbon emissions materiality

Shrinkage typically makes up over 90% of GDN annual greenhouse gas ('carbon') emissions. The remainder is dominated by Scope 3 emissions and to a lesser extent Scope 1 and 2 BCF emissions. Whilst efforts should be made to reduce Scope 1 and 2 BCF emissions, where this can be done in a practicable and cost-effective manner without impact on customer service performance, the most material impact that GDNs can contribute to tackling climate change and delivering net zero is to reduce gas shrinkage (principally leakage). Ofgem should seek to keep focus on this by requiring total greenhouse gas emissions reporting in the RIIO-3 Annual Environmental Report as a KPI to aid stakeholders with understanding the total emissions from each network as this is currently missing in the RIIO-2 reporting framework.

We cannot be certain that we will achieve our BCF target during RIIO-GD3. However, stakeholders have clearly told us that it is important to be bold and ambitious with regard to carbon emissions reductions to deliver the step change that we need to achieve Net Zero. It is also important to view our BCF target as a contributor to our overall primary carbon reduction target of 45% total Scope 1 and 2 Emissions (including shrinkage) between 2018 and 2031.

Statement Regarding SBTi Certification of Carbon Reduction Targets

As gas network operators, we recognise the need for robust and responsible emissions targets.

Gas Distribution Network (GDN) greenhouse gas emissions are dominated by shrinkage (>90%) giving our company emissions a unique profile. The Science-Based Targets initiative (SBTi) have developed a series of standard methodologies for carbon reduction pathways to net zero for a range of industries. Such standards stipulate that targets must include all aspects of Scope 1 and 2 emissions, so for GDNs this would include Shrinkage and Business Carbon Footprint emissions.

SBTi's proposed Oil and Gas Standard aims to establish a responsible pathway to net zero for our sector and has been under development for a number of years. During preparation of the GDN's RIIO-GD3 Business Plans it was assumed that this Standard would become available in the near future and certification by GDNs could be sought. Subsequently, in April 2025 SBTi have stated that development of the Oil and Gas Standard has now been officially paused. This leaves the GDNs in the position of being unable to attain SBTi certification of carbon targets currently or in the near future. If the Oil and Gas Standard is developed and published during the RIIO-GD3 price control period, we will aim to seek validation against this standard, or a suitable alternative should it become available, subject to consideration of cost and value to stakeholders.

Biodiversity and natural capital

We welcome Ofgem's acceptance of our proposed RIIO-GD3 biodiversity targets, activities and costs.

Ofgem need to be clear in their understanding and communication that Biodiversity Net Gain, whilst a common concept relating to enhancing natural habitat, also has a specific definition in England placing duties on (specifically) land development projects. We rarely undertake projects of the scale which trigger the requirement for formal delivery of Biodiversity Net Gain under the planning regime and we will deliver on such obligations as and when they arise.

We note reference to the introduction of a financial incentive for biodiversity for the water sector in Ofwat's 2024 price review. We take this opportunity to remind Ofgem that the landholding of a GDN is several orders of magnitude smaller than a typical water network. In addition, most GDN land is operational and commonly subject to stringent vegetation management controls to ensure a safe environment in agreement with the Health and Safety Executive. This significantly limits opportunities for GDNs to positively enhance biodiversity on their land. As referenced in our RIIO-GD3 EAP, our customers have expressed that we should approach vegetation management by balancing opportunities for biodiversity with maintaining safe conditions, providing equal priority to each objective, and we have reflected this in our RIIO-GD3 biodiversity commitments.

Ofgem propose in their Draft Determination (DD) response that GDNs should collaborate with biodiversity experts, charities and consultants when preparing their AERs to '_provide valuable insights into local biodiversity priorities, ensure projects are ambitious and encourage GDNs to identify additional, impactful opportunities to enhance biodiversity within the communities they serve'._ Notwithstanding the constraints GDNs face with creating opportunities for biodiversity on their own land referenced above, we request that Ofgem identifies their expectations for this reporting within the RIIO-3 reporting guidance at the earliest opportunity to allow adequate time for GDNs to prepare.

Shrinkage

We agree with the proposed approach.

AER Reporting

We agree with the proposed approach. As discussed further in our response to GDQ2, we are supportive of application of proven Advanced Leakage Detection (ALD) technology to enable monitoring and reporting of observed levels of gas leakage whilst also delivering safety benefits.

Further discussion of our views regarding ALD and the Digital Platform for Leakage Analytics (DPLA) is provided in response to GDQ2.

Question 2. Do you have any views on our proposed funding for the DPLA and ALD?

We support Ofgem's DD position to fund the rollout of GDN's proposed ALD investment in RIIO-3 via baseline allowances. We note that additional ALD can be funded through the NZARD UIOLI allowance if necessary.

Our RIIO-GD3 investment proposal for ALD was prepared at a time when the understanding of both the potential scope and costs of ALD was limited, and the scale of further ALD technology requirements and costs for deployment of the DPLA was at a very early stage. As such, and in keeping with proposals from WWU and SGN, our RIIO-GD3 investment proposals focussed on deployment of vehicle mounted ALD technology only, at a level deemed suitable to meet Health and Safety Executive expectations, but not at the greater density required to enable the DPLA project. Cadent had a greater understanding of the ALD requirements to enable DPLA hence the disparity between their RIIO-3 ALD costs and those of the other networks. For clarity, our RIIO-GD3 EAP (page 20) identified that the total cost of full ALD and DPLA deployment for NGN was an estimated £20m, with £4.9m requested for baseline ALD funding and the balance (£14.3m) included within an Uncertainty Mechanism.

Confirmed RIIO-GD3 ALD Proposals

Since submission of our RIIO-GD3 business plan, we have undertaken a vehicle mounted ALD trial with Picarro covering 400km of our pipes which has provided us with insight into the technology, output data and associated costs. We are preparing to undertake a similar trial with Bohr shortly. We continue to engage with the Health and Safety Executive (HSE) regarding our ALD deployment plans.

Our scope of works for ALD in RIIO-GD3 is primarily aligned with HSE requirements, with the headline objective of surveying approximately 100% of our distribution network pipes present beneath highways over the course of the RIIO-GD3 period.

Final ALD technology selection will be subject to the outcomes of our on-going technology trials and appropriate procurement processes in accordance with NGN procedures commensurate for this type and scale of investment. Consequently at this stage we are not yet in a position to be able to confirm final technology type(s) or supplier(s) for vehicle mounted ALD, however we anticipate at this stage that it is likely to be Picarro, Bohr, or potentially a combination of both. Note this could change as RIIO-GD3 progresses as new technologies and/or providers come to market.

Pricing for ALD also varies depending on the chosen delivery model, options include:

- Option 1: an in-house approach whereby surveys are completed in NGN owned and operated vehicles fitted with third-party equipment, and

- Option 2: a service provision contract with the technology provider where costs are developed based on the number of kilometres surveyed by a third-party provider on behalf of NGN.

The RIIO-GD3 costs for Options 1 and 2 are presented in Table 3 in the format requested by Ofgem alongside the relevant information source. Option 1 was the basis of the costs presented in our RIIO-GD3 business plan (£4.903m) and remains our primary cost assessment. Option 2 is provided to illustrate potential savings which could be released by exploring an alternative procurement method. We consider the baseline allowance proposed in our RIIO-GD3 business plan is sufficient to support either approach.

It is noted that based on our ALD trials completed to date, it is anticipated that IT integration costs for ALD deployment will be negligible as we propose to utilise the proprietary data systems of the appointed provider for data interpretation.

	Option 1	Option 2
Technology / provider details	In-house approach - surveys are completed in three NGN owned and operated vehicles fitted with third-party ALD equipment from Picarro, Bohr or similar. Vehicle assumed to be similar type to that used by an NGN emergency response engineer currently.	Service provision contract with technology provider – Picarro, Bohr or similar.
Costs - £m in 2023/24 cumulative for RIIO-GD3		
Technology provider (Opex)	£2.61	£4.64
Vehicles: *Purchase (Capex)* *Maintenance (Opex)*	 £0.12 £0.05	 £0 £0
Personnel (Opex): *Drivers/survey teams* *Project managers* *Data analysts* *Administrative support*	 £0.81 £0.37 £0.65 £0.30	 £0 £0 £0 £0
IT integration (Opex)	£0	£0
Total	**£4.90**	**£4.64**

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Cost source information	Technology provider cost based on cost estimate information provided to NGN by Picarro. Vehicle and personnel costs are based on standard NGN cost rates as used in wider NGN RIIO-GD3 business plan. These costs were as included in our RIIO-GD3 business plan.	Cost estimated based on unit cost (£/km surveyed) of 400km ALD trial completed by NGN with Picarro in 2025 minus 20% to reflect commercial savings from multi-year service contract negotiation.

Table 3 – Summary of ALD technology method and cost options

Both ALD options require a thorough procurement programme due to the type and scale of investment. We anticipate this process will begin once confirmation of funding becomes available at Final Determination.

It is also of note that at this stage we are not anticipating a significant increase in gas leakage repair workload (and associated costs) during RIIO-GD3 (and beyond) as a consequence of our ALD programme. Should significant increases in workload and costs arise as a result of our ALD programme we will engage with Ofgem regarding means for recovery of these costs.

Confirmed RIIO-GD3 DPLA Proposals

We note that additional ALD funding can be accessed through the NZARD UIOLI allowance, capped at a maximum spend of £2m per project under this mechanism. The costs of the full rollout of DPLA and associated ALD technology are still being developed as part of the DPLA Strategic Innovation Fund (SIF) project. Given the scale of these costs (previously estimated at an additional c.£14m for NGN in RIIO-GD3), this will necessitate funding via the NZASP Reopener mechanism as per the DD position.

We continue to recognise the potential environmental and safety benefits that ALD can provide via proactive asset condition monitoring. The DPLA SIF project remains at a development stage - the costs for both the required level of ALD technology coverage and associated DPLA platform development and operation for full GDN roll out are uncertain but known to be very high (c.£250m lifetime). Similarly, the benefits to be delivered to customers from this substantial investment remain unclear.

We are supportive of the objectives of the DPLA however we consider the costs and benefits to customers of full deployment should be further examined in detail before commitment to full roll out by all GDNs to ensure they represent value for money. This starts with completion of the SIF project and could then be further examined via a detailed and documented trial by Cadent (as the leading network in this aspect) in the initial years of RIIO-GD3 to further establish the necessary scope of ALD technology and systems needed to deliver DPLA in the most efficient and effective manner.

If such a trial demonstrates appropriate value for money to customers, other GDNs will then have a confident basis (of technology and system scope and costs) on which to request funding via the NZASP Reopener to enable deployment in the later years of RIIO-GD3 as envisaged by Ofgem. As such we are currently unable to confidently provide a rollout programme for DPLA, but we propose to work closely

with the other GDNs following conclusion of the DPLA SIF project and confirmation of funding mechanisms at Final Determination. In the meantime, we recommend Ofgem maintain focus on ensuring networks are maximising their real-world leakage avoidance performance by ensuring all networks achieve their 1 and 2 hour emergency response and 7 and 28 day repair targets.

Question 3. Do you agree with our proposed design of the 7 and 28 Day Repair Standards ODI-F, including the proposed performance targets and incentive rate?

We support the regulator's objective to enhance accountability across GDNs for the timely repair of gas escapes, and we recognise the associated environmental and safety benefits, particularly in reducing methane emissions. We welcome the introduction of the new Output Delivery Incentive – Financial (ODI-F) for the 7- and 28-day repair standards but believe it could go further to improve network performance as identified below.

Support for Strengthened Performance Standards

We fully support the principle of raising performance standards and agree that timely completion of repairs should be a baseline expectation for all GDNs. The proposed targets, 75% of repairs completed within 7 days and 90% within 28 days, represent a positive step forward but a decline in service standards that GDN's stated they were delivering at the end of GD1. We would encourage Ofgem to consider whether these thresholds could be further strengthened to drive continuous improvement across the sector.

We draw Ofgem's attention to the recent performance levels of NGN for these metrics, as shown in Table 4a, which demonstrates consistent performance at substantially greater levels than the proposed RIIO-GD3 targets. In addition, Table 4b demonstrates that over the first three years of RIIO-GD2 50% of networks (all non-Cadent networks) have already performed, on average, at greater than the proposed RIIO-GD3 target for 7-day repair performances. We consider, with support from our stakeholders (see Insight 8 in our RIIO-GD3 business plan), that Ofgem should established a framework which drives all GDN performance to match our leading performance rather than settling for a lower level.

We also note that networks were typically performing substantially better than the proposed RIIO-GD3 performance levels at the end of RIIO-GD1 and there has been subsequent general decline in performance since the end of RIIO-GD1 for all networks except NGN. As discussed in our response to Q36 later in this document, this could reflect that other networks have prioritised cost reduction over quality-of-service delivery which is not beneficial for customers. This further strengthens the case for setting more stringent RIIO-GD3 performance targets.

	2020/21	2021/22	2022/23	2023/24	2025/26 Voluntary Target
Outstanding gas emergency repairs completed within 7 days (%)	86%	91%	90%	91%	>89%

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Outstanding gas emergency repairs completed within 28 days (%)	95%	98%	98%	98%	>98%

Table 4a – NGN RIIO-GD2 gas emergency repair performance

Outstanding gas emergency repairs completed within 7 days (%)	Three year average	2021/22	2022/23	2023/24
NGN	91%	91%	90%	91%
SCO	84%	88%	85%	79%
WWU	83%	85%	79%	85%
SO	76%	79%	76%	73%
NW	70%	79%	59%	71%
WM	68%	78%	59%	69%
EOE	69%	77%	54%	72%
LON	63%	67%	56%	68%

Table 4b – Comparative GDN RIIO-GD2 7-day gas emergency repair performance

Scale of Potential Incentive

The proposed RIIO-GD3 incentive is penalty only, applied linearly below the minimum performance target, up to 0.17% of Return on Regulated Equity (RoRE), split equally across the two metrics.

We urge Ofgem to consider whether given the current levels of GDN performance on these metrics this provides sufficient penalty / deterrent compared to the scale of costs that underperforming GDNs would face to achieve acceptable performance levels. In short, it cannot be cheaper to pay the fine than deliver the required service level. We suggest that the level of penalty should be increased.

Support for Potential Reward

The increasing social unacceptability of emissions from our network underscores the urgency for rapid and effective repair interventions. As societal and regulatory expectations evolve, it is imperative that GDNs are incentivised to accelerate their response to emissions-related incidents.

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Currently, in the absence of defined performance targets, there is limited monitoring of repair timeliness. This presents a clear opportunity to introduce an incentivised output that not only drives performance improvements but also aligns with broader environmental objectives.

Our RIIO-GD3 business plans advocated for an asymmetric incentive-based repair performance output linked to carbon savings to encourage GDNs to surpass the proposed target. We proposed that for every percentage point above the 7 day target for repairs GDNs would receive a share of the carbon monetary value from Totex Incentive Mechanism (TIM). Conversely, if a GDN falls below the minimum threshold it would incur a penalty equivalent of its TIM share of the carbon monetary value. For detailed calculations regarding incentive value based on an RIIO-GD2 performance, please refer to NGN CVP1 –gas escapes within 7 and 28 day in our RIIO-GD3 business plan.

An asymmetric penalty and reward based mechanism remains the best approach to drive positive performance change for this important aspect and we recommend that Ofgem reconsider the proposals in our business plan.

Question 4. Do you agree with our proposal to enable the GDNs to submit RESP coordination and engagement activities through NZARD and NZASP?

Yes, we support the use of the NZARD and NZASP for the RESP coordination and engagement activities.

Outputs & Incentives: Secure and resilient supplies questions

Question 5. Do you have any feedback on our approach to assessing non-mandatory repex workloads?

We do not agree with the strict 11-year CBA payback cut-off that has been applied to non-mandatory workload, which is considered a crude and arbitrary decision rule.

Overall, NGN are pleased that Ofgem have accepted the engineering need to continue the non-mandatory repex programme on safety, security of supply and emissions reductions grounds. The Pipelines Safety Regulations 1996 (PSR) and the HSE's Iron Mains Risk Reduction Programme (IMRRP) represent the core regulatory framework for the management of gas mains infrastructure. These regulations require gas distribution network operators to ensure the safety, reliability, and integrity of their pipeline assets, focusing especially on the proactive replacement of older, higher-risk iron mains to mitigate the risk of asset failure, safeguard public safety, and maintain network resilience. The HSE's Iron Mains Enforcement Policy adopts the 'three-tier approach' to allow GDN's some flexibility to separately assess larger mains and exercise engineering judgement on a case-by-case basis, rather than a blanket replacement requirement applicable to iron mains <=8in, less than 30m away from a property. We consider that the continuation of our non-mandatory programme in RIIO-GD3 is an essential part of the responsible management of our network and necessary to manage the cumulative risk of our remaining metallic mains population at acceptable levels.

Under all feasible energy futures, NGN consider that the gas network has a significant role to play for decades as we transition to Net Zero and as the resilient backbone of the UK energy system. It is disappointing to see our entire Tier 3 proposal being disallowed at DD based on a 12-year payback

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specifically; and despite our entire non-mandatory programme, including Tier 3, paying back within 10 years. No individual tier grouping should be taken in isolation and our overall programme represents a balanced approach that is a continuation of our track record of delivery of non-mandatory workload. We provide further engineering justification for our Tier 3 programme in NGN RIIO-GD3 Engineering Justification Annex provided with this response.

With just a 5% reduction in costs or 5% increase in benefits, NGN's Tier 3 programme would pay back within 11 years. This is within the acceptable uncertainty range of both our cost and NARM modelling. Given that our overall non-mandatory programme is within the Ofgem decision rule parameters, we consider that this workload and cost is justified and compatible with that. We do not consider the wholesale disallowance of Tier 3 to be acceptable given the risk these assets pose to safety, security of supply and emissions; and also given this tier is comprised of trunk mains that feed significant numbers of customers.

Question 6. Do you have any comments on the proposed design of the Tier 1 Mains Decommissioned PCD, including the position to retain the 3% cap on the upwards Allowance Adjustment Mechanism?

We support the retention of the PCD design as per RIIO-GD2, if Tier 1 mains allowances are appropriately and efficiently funded at Final Determination (FD). However, we recommend that Ofgem increase the cap to 5% to allow greater flexibility in volume delivery in period and to ensure the IMRRP is completed ahead of the 2031 deadline, and to reward over delivery if it is achieved by any network. This would not result in overall greater costs for customers given the fixed workload that remains in the IMRRP.

Question 7. Do you have any comments on the proposed design of the Tier 1 Services PCD, including the position to retain the 10% cap on the upwards Allowance Adjustment Mechanism?

We support the retention of the PCD design as per RIIO-GD2, if Tier 1 mains allowances are appropriately and efficiently funded at FD. However, we recommend that Ofgem increase the cap to 5% to allow greater flexibility in volume delivery in period and to ensure the IMRRP is completed ahead of the 2031 deadline, and to reward over delivery if it is achieved by any network. This would not result in overall greater costs for customers given the fixed workload that remains in the IMRRP.

Question 8. Do you agree with the proposed design of the Tier 1 Iron Stubs PCD?

Yes, we support the proposed design for the Tier 1 Iron Stubs PCD, provided the unit rates set at FD represents the true cost of undertaking the works associated with this PCD. We note that Ofgem highlights in paragraph 3.96 that there is uncertainty and inconsistency in costs provided by GDNs as part of their Business Plan submissions. To ensure fairness, Ofgem should ensure that GDNs are providing information, which is consistent in terms of the assumptions made, the definitions used, and intervention types utilised. We would suggest that benchmarking unit rates would be a sensible solution in this area.

Our RIIO-GD3 Business Plan for Tier 1 Iron Stubs was based on historical data from RIIO-GD2 reporting. After options appraisal, the optimal solution in terms of cost and risk was agreed for RIIO-GD2 which

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involved a desktop-based approach to filter out any stubs that do not require physical works followed by removal by either:

     1. Removing additional stub length to comply with NGN policy

     2. Foam bag

Where the above solutions are not practical or will not ensure compliance with Policy, the full tee cut out technique can be utilised.

We have continued to work with our partners to tackle stubs more efficiently. These short length projects adjoining larger pipes are relatively expensive to replace and there are various techniques for doing so. We have worked with an external organisation (Steve Vick International) to develop an innovative remote foam bagging system, which they now commercially market as E- SEAL. Where circumstances permit, this allows a Tier 1 stub to be remotely and permanently isolated and abandoned without having to cut out the parent main, resulting in smaller excavations, less disruption and reduced costs.

DNV GL conducted a risk assessment into stubs, which has since been approved by the HSE. The risk assessment demonstrated that Cast Iron stubs below a length determined by the diameter of the stub and whether it is capped off or connected to a live pipe at the other end presented a similar level of risk to the smallest diameter Tier 2 main (9"). This means that Tier 1 stubs can be left in situ providing they meet certain criteria, further reducing excavations, disruption and cost.

During RIIO-GD2 we have reported on average c.90% of our Tier 1 iron stub volumes under the "no stub found" category. We did trial the desktop-based approach outlined above, however found that the asset data was not granular enough, so to categorically state we were compliant with the IMRRP we needed to dig down and trial hole every single potential stub. This is a process we continue at present. Of the 90% of stub volumes we report in the "no stub found" category, 30% of the time we find a stub that requires no further action, which other networks appear to be classing under 'Other Techniques' for the purposes of reporting.

We also note Ofgem's request for further information to help understand cost variances between companies. Please find our supporting information below:

Additional cost breakdown

We are not able to provide a further cost breakdown to that provided in CV6.11 Iron Stubs. However, for NGN the unit rate for 'stub not found' is equivalent to 'stub found but no further action required', given it is essentially the same intervention to drill a hole to check the status of the stub. We welcome further engagement with Ofgem and industry on this ahead of FD to ensure a consistent approach and appropriate benchmarking across the sector.

Activities falling under 'other techniques' and when these might be used

We have included any stubs replace by the Steve Vick Foambag Operation on Stubs (FBOS) technique in 'other techniques'.

The process used to identify where Tier 1 iron stubs are located and how the forecasted number of 'stubs not found' is estimated

Our GIS system is used to identify locations where Tier 1 pipes intersect with non-mandatory mains. However, an intersection does not necessarily mean that the pipes are connected, which is why further investigation on site is needed. The forecasted number of stubs not found is based on how frequently these investigations lead to no stub being found, assuming a flatline of 500 service investigations per year until we have completed the workbasket.

The total remaining population of Tier 1 iron stubs

At present, there are just over 1800 'assumed' stubs projects remaining. However, a portion of these will move to the 'stub not found' category upon further investigation.

Question 9. Do you agree with our proposal to update the Emergency Response Time LO to prevent the downward reclassification of gas escapes?

Yes, we support Ofgem's proposal to amend the Emergency Response Time Licence Obligation (ERTLO) to prevent the reclassification of gas escapes from 'uncontrolled' to 'controlled'. We consider this a proportionate and necessary change that will enhance public safety, ensure consistency in regulatory standards, and maintain consumer confidence.

The ability to retrospectively reclassify incidents introduces the risk of delayed responses to potentially hazardous situations. Removing this option ensures that all uncontrolled escapes are treated with the urgency they require, reinforcing the importance of the one-hour response standard.

This amendment will also improve the accuracy and integrity of performance reporting, ensuring a level playing field across all GDNs. It eliminates the potential for performance metrics to be artificially improved through reclassification, thereby supporting transparency and accountability.

Importantly, this change also offers greater protection for vulnerable customers, who may not be able to accurately assess or communicate the severity of a gas escape. Upholding the original classification ensures that safety is prioritised, regardless of a customer's ability to convey risk.

In summary, we consider this a proportionate and necessary update that strengthens the regulatory framework and supports the delivery of a safe, reliable service to all customers.

Question 10. Do you agree with our proposed design of the ERTLO ODI-R?

Yes, we support the proposed design of the ERTLO Output Delivery Incentive (ODI-R). We consider it to be a proportionate and effective addition to the regulatory framework that will benefit consumers, strengthen trust in the sector, enhance transparency and drive performance improvement.

The proposed ODI-R will improve visibility of emergency response performance by requiring GDNs to publish detailed data on ERTLO failures, including breakdowns by cause, duration, and impact on vulnerable customers. This will support greater transparency, accountability and enable stakeholders to monitor service quality more effectively.

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We particularly welcome the focus on vulnerable consumers and agree that separate reporting for Priority Services Register (PSR) customers is essential. This will help ensure that those most at risk receive timely and appropriate support during emergency situations.

Sections 3.107 and 3.113

While we are supportive of the proposed reporting requirements, we would like to highlight a current limitation in the data available to GDNs. At present, GDNs are only able to identify vulnerability status (i.e. PSR) where a Meter Point Reference Number (MPRN) is included in the work order issued by the National Gas Emergency Service (NGES), which is operated by Cadent.

Where the address of the public reported escape (PRE) is successfully matched to a valid and recognised address on our network, and an MPRN is provided, vulnerability identification is possible. However, in cases where the address is associated with a non-NGN network—such as those on Independent Gas Transporter (IGT) networks—the NGES currently does not include the MPRN in the work order, despite having visibility of it and with agreement from the IGT community for it to be shared.

As a result, for a significant proportion of PREs (approximately 20%), GDNs are unable to identify vulnerability status. Consequently, these cases cannot be included in the proposed reporting.

We encourage Ofgem to acknowledge this data gap and would welcome its support in addressing the issue to enable more complete reporting in future.

Outputs & Incentives: High quality of service from regulated firms questions

Question 11. Do you agree with our proposed design of the VCMA UIOLI mechanism?

Yes, in principle we agree with the proposed design of the VCMA UIOLI mechanism.

With respect of the overall vulnerability package, there is work to be done to make sure that the BAU activities can be captured effectively, especially where partner organisations are delivering holistic services that span across UIOLI and BAU funding. Through RIIO-GD2 we have encouraged our partners to deliver a one-stop shop approach to support, and it is essential that we make reporting straightforward for our partner organisations.

With respect to the level of funding, we are supportive of the level that has been set, but stakeholders are feeding back that demand for services has never been higher and are questioning whether more should be allocated into VCMA.

Question 12. Do you agree with our proposed design of the Customer Satisfaction ODI-F?

We do not agree with the proposed design for the connections element of the Customer Satisfaction ODI-F and we provide further comment below.

We do agree with the proposed design for the E&R and Planned work elements of the Customer Satisfaction ODI-F.

Connections

In SSMD Ofgem have acknowledged there could be changes in customer expectations due to the removal of the DLCA but considered these effects are difficult to quantify and include target recalibration. Ofgem still considers this to be the case. Ofgem does not consider the research presented by the GDNs to be methodologically robust and associated potential drop in customer satisfaction scores.

The provisional targets for connections (like planned and unplanned) have been set using RIIO-GD2 average scores and will be updated in FDs following review of the 2024/25 Regulatory Reporting Packs (RRPs). Given that Ofgem have acknowledged there could be changes in customer expectations due to removal of DLCA, and it is our view that this may lead to a drop in customer satisfaction, we would like Ofgem to consider if there is any other evidence/research that they would like the GDNs to conduct.

Also, we are requesting that Ofgem:

a) consider recalibrating Connections targets based on RIIO-GD3 Year 1 data, over the first 6 months. This would allow the GDNs and Ofgem opportunity to understand the impact of the removal of DLCA and have sufficient data to look to recalibrate the targets.

b) Lower the penalty threshold for RIIO-GD3 Yr1, to ensure that the GDNs aren't unnecessarily penalised for the impact that removal of the DLCA might have on customer satisfaction

We are committed to deliver exceptional service to our customers but request further consideration about the impact of the DLCA removal.

Question 13. Do you agree with our proposed design of the Disconnections Customer Satisfaction ODI-R?

Yes, we agree with the proposed design for the Disconnections Customer Satisfaction ODI-R. For safety-driven disconnections, as the meter is likely to have been removed before we are instructed to the work, it might prove difficult to measure the results by PSR.

The networks are currently conducting a pilot survey on both paid-for and safety driven disconnections. The networks will be proposing bringing this trial to a close at the end of September 2025, to restart in April 2026. This is due to a good level of data being gathered, and an understanding of how the survey process will work. We do not think there is any additional benefit to carrying out these surveys for the remainder of RIIO-GD2.

Question 14. Do you agree with our proposed design of the PSR Customer Satisfaction ODI-R?

Yes, we agree with the proposed design for the PSR Customer Satisfaction ODI-R.

Question 15. Do you agree with our proposed design of the Complaints Metric ODI-F?

Yes, we agree with the proposed design for the Complaints Metric ODI-F.

Question 16. Do you agree with our proposed design of the PSR Customer Complaints ODI-R?

Yes, we agree with the proposed design of the PSR Customer Complaints ODI-R

Question 17. Do you have any views on the proposed approach to setting unplanned interruption targets for both non-MOBs and MOBs through the Unplanned Interruptions ODI-F?

We agreed with the proposed approach for non-MOBs but recommend that Ofgem consider strengthening the proposed thresholds over time to drive performance, as discussed below. We disagree with the proposed approach for MOBs as elaborated below.

Non-MOBs

We appreciate Ofgem's proposal to implement a unified non-Multiple Occupancy Buildings (non-MOBs) unplanned interruptions target across all GDNs. The introduction of consistent standards throughout the sector promotes transparency, comparability, and fairness in performance expectations.

We are fully supportive of Ofgem's decision to establish a common target, recognising that it provides a clear and equitable benchmark for all GDNs. This approach is in line with stakeholder expectations for uniform service levels, irrespective of geographic differences.

Nevertheless, we recommend that Ofgem consider the potential for strengthening the proposed thresholds over time. While the current targets, based on the industry average during RIIO-GD2, serve as a reasonable starting point, we believe that instituting a trajectory of progressive improvement would foster continuous enhancement of sector performance, reflecting the evolving expectations of both consumers and stakeholders, especially regarding reliability and resilience of service.

Our organisation has demonstrated strong performance in this area historically and remains committed to sustaining and improving these standards. We welcome ongoing engagement with Ofgem and industry stakeholders to discuss how future targets may be calibrated to balance ambition with feasibility, ensuring consumer outcomes continue to be prioritised within the regulatory framework.

MOBs

We disagree with the proposed methodology for establishing individual network-level targets for unplanned interruptions in Multiple Occupancy Buildings (MOBs). Upon reviewing the current framework for setting interruption-related targets in MOBs, we recommend aligning these benchmarks with those used for unplanned events in non-MOB contexts.

We recommend adjusting NGN's performance target to match our initial proposal or setting it at a standard level using all network failure data, scaled according to the number of risers.

- Minimum Performance Level: 504 hours
- Enhanced Delivery Level (EDL): 756 hours

This approach supports a fair, risk-adjusted, and performance-sensitive framework for RIIO-GD3.

Rationale for proposed MOB targets

All GDNs function under a unified regulatory structure and encounter similar technical and logistical obstacles when restoring gas supplies. Whether disruptions occur within MOB or non-MOB environments, the restoration process presents comparable challenges. Accordingly, implementing uniform targets ensures that performance standards are both consistent and achievable nationwide.

It is essential that customers residing in high-rise buildings do not experience varying levels of service restoration based purely on their location. A national standard would guarantee equitable treatment and service commitments for all customers, an especially important consideration in densely populated urban centres where the impact of service loss may be more pronounced.

Due to the comparatively low incidence of unplanned interruptions affecting MOBs in our region, we are unable to establish a statistically valid Mean Performance Level (MPL) from our internal data alone. Therefore, we propose utilising a comprehensive dataset inclusive of all GDNs to set a national target, ensuring a representative and fair approach for performance measurement. While our region contains a smaller proportion of MOBs—resulting in fewer incidents and potentially less favourable averages at a national level—this should not adversely affect our metrics, considering the diminished operational exposure.

Case Study 1 – ▮▮▮▮▮▮▮▮

Where interruptions have occurred, we have conducted thorough reviews to assess their impacts and refine future strategies. For instance, the ▮▮▮▮▮▮▮ riser failure at ▮▮▮▮▮▮▮—a 15-storey residential building—exemplifies the complexities inherent in high-rise incident management. In this situation, a single riser failure disrupted supply to 29 apartments. The prior installation of scaffolding by the building owner, though uncommon, helped expedite the response. Still, the period from leak detection on ▮▮▮▮▮▮▮ to complete reinstatement on ▮▮▮▮▮▮▮ totalled 15 days (360 hours).

This case highlights how even isolated failures can result in extended outages, particularly when external factors such as infrastructure access are beyond the GDN's control. Affected customers were compensated according to the Guaranteed Standards of Service, amounting to £28,420—underscoring that financial restitution mechanisms already exist independently of specific performance targets.

Case Study 2 - ▮▮▮▮▮▮▮

High-rise properties typically comprise between four and six risers. In another ▮▮▮▮▮▮▮ incident, a main failure had the potential to affect all 72 apartments in the building, demonstrating the significant scale possible in high-rise interruptions and reinforcing the importance of practical, scalable targets.

Case Study 3 – ▮▮▮▮▮▮▮

Restoration efforts are regularly complicated by planning and regulatory considerations. For example, ▮▮▮▮▮▮▮—a Grade II listed, six-storey property in ▮▮▮▮▮▮▮—would require planning consent for external relays following a riser failure, potentially delaying restoration by several months. In such

cases, a relatively small number of affected customers (e.g., 23 in ███████) could trigger the maximum penalty under the proposed system.

A parallel issue has emerged in ████████, where planned replacement work in a locally listed building has been delayed since December due to limited engagement from the planning authority. Legal proceedings are now underway, further illustrating the complexity of certain reinstatement scenarios.

MOBs Customer Base in Our Region

Survey data shows that 0.25% of the customer base (6,352 out of 2,560,559) live in buildings with six storeys or more. The needs of these residents are important and should be considered when assessing the fairness and proportionality of penalty structures.

Given this small population segment, the current penalty structure may be stringent. A single event—particularly one involving planning or access challenges—could result in the maximum penalty, even though it affects only a small group of customers. This raises the question of whether rare and complex incidents should be treated equivalently to broader service failures.

It is recommended that the proposed targets be reviewed collaboratively and modified as needed based on evidence. Uniform standards across GDNs could help streamline performance monitoring, enhance transparency, and promote consistency in the industry.

Funding Constraints

Our business plan relied on the Innovation UIOLI allowance to advance net zero goals and improve MOB resident experience. With funding now reduced and riser replacement support still under review, our ability to prevent unplanned events is limited.

Setting a consistent national target for unplanned interruptions across all MOB classifications ensures fairness and accountability among GDNs and reflects the complexities of restoring supply to high-rise properties. This approach also helps avoid penalties that do not match the actual scale or frequency of incidents.

NGN remains committed to safe, efficient service restoration and will continue to provide support and compensation to affected customers as per Guaranteed Standards.

Sensitivity Analysis – Number of Risers

During recent workgroup discussions, it was identified that networks with smaller riser populations, such as NGN, face disproportionate challenges in maintaining performance targets. A single incident can significantly impact average performance, making uniform targets across networks inequitable and operationally unrealistic.

Table 5 provides a comparative analysis of riser population and performance targets across each network, with particular emphasis on the comparison between NGN and SGN (Southern). This analysis is intended to highlight the rationale for establishing an increased target for NGN, given its heightened sensitivity to individual incidents and diminished recovery capability.

We have excluded London from this analysis due to its uniquely high riser density.

Operator	3–6 Risers	6–9 Risers	10+ Risers	Total Risers	Set Target (hrs)	Scaling Factor	Scaled Target (hrs)
NGN	865	360	173	1,398	–	15.39*	3,263*
WWU	6,907	291	159	7,357	–	1.54	584
SGN (SO)	16,712	3,687	1,118	21,517	212	1.00 (baseline)	212
SCO	9,133	531	234	9,898	549	1.14	434
EoE	18,426	775	334	19,535	410	0.58	220
NW	10,402	138	206	10,746	342	1.05	400
WM	7,527	629	533	8,689	388	1.30	495

Table 5 - Comparative Riser Data and Scaling Factors. NGN scaling factor and scaled target (*) based on ration of total risers in NGN and SGN (SO).

Rationale for Scaling NGN's Target

Smaller Asset Base: NGN has 1,398 risers compared to SGN's 21,517. This means each incident has a much larger impact on NGN's performance metrics.

Higher Sensitivity: A single incident in NGN affects ~0.07% of its risers, while in SGN it affects only ~0.005%.

Reduced Recovery Capacity: With fewer risers, NGN has limited ability to absorb performance dips or recover through volume efficiencies.

Equity in Target Setting: Applying the same target across networks with vastly different asset profiles does not reflect operational realities.

Figure 1, below, shows **average incident hours per riser** for NGN and SGN (Southern), based on:

One **major incident of 744 hours**

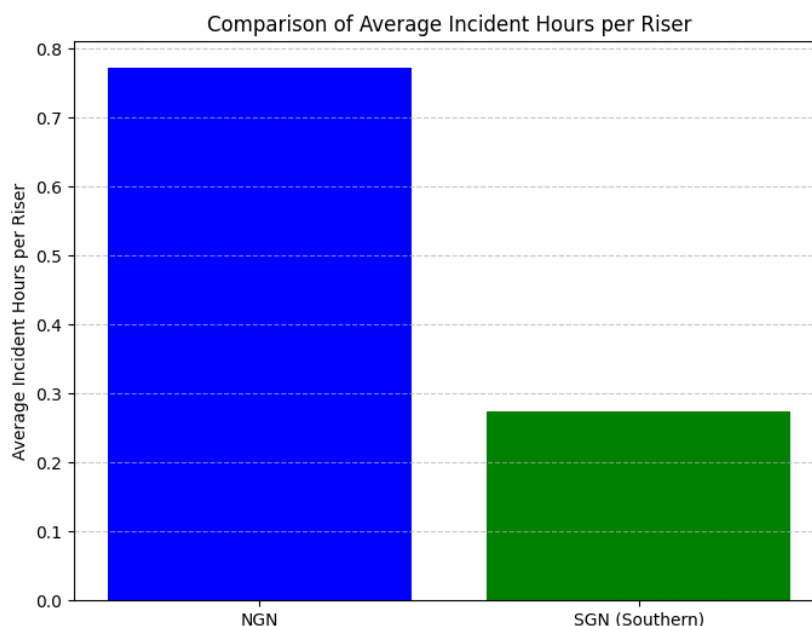Additional incidents affecting **6% of risers at 4 hours each**

Figure 1 – Scenario analysis of average incident hours per riser for NGN and SGN (Southern)

Our recommendations for RIIO-GD3 are:
- **Minimum Performance Level**: 504 hours
- **Enhanced Delivery Level** (EDL): 756 hours

Question 18. Do you have any views on the proposed expansion of the Collaborative Streetworks ODI-F across GB?

Yes, we welcome the decision to expand the Streetworks ODI-F across Great Britain (GB) given the customer benefits that are delivered when utilities work collaboratively to coordinate works. Not only can this produce efficiencies in terms of cost savings, which has a clear link back to consumer bills, but it also helps reduce disruption for consumers and businesses in those local areas. However, we understand that collaboration can be difficult to achieve at times, particularly when it comes to issues around cost sharing and liability responsibility.

The likely potential barrier to NGN being able to engage in this ODI-F is whether a central coordinator, as set out in paragraph 3.207 of the GD Annex, would be willing and able to engage with this initiative. Should Ofgem be looking to maximise efficiencies in this area, it could be beneficial to look into a centralised UK wide hub that utilities could utilise to coordinate their projects, rather than relying on local authorities to act as the central coordinator.

Question 19. Do you have any views on the proposed minimum threshold, the methodology used to set it, and the incentive reward rate for the Collaborative Streetworks ODI-F?

We have no specific comments to make on the incentive rates and methodology. It is important that the incentive rates cover the additional costs incurred when managing collaborative projects and it appears that this would be the case with the rates set out.

Managing Uncertainty: Infrastructure fit for a low-cost transition to net zero questions

Question 20. Do you agree with the introduction of the proposed Biomethane Connections UIOLI, including with the proposed scope and funding caps?

Yes, we acknowledge the intent behind the proposed Biomethane Connections Use It or Lose It (UIOLI) allowance and welcome Ofgem's efforts to support biomethane development. However, based on recent discussions with other GDNs we consider further refinement of the proposal is necessary to ensure its effectiveness and relevance.

Key considerations include:

- Limited Applicability Due to Green Gas Support Scheme (GGSS): The current scope restricts funding to projects not receiving support from the GGSS or other government subsidies. Given that GGSS is open until 31 March 2028 and provides a guaranteed revenue stream, the vast majority of biomethane projects opt into it. As such, the number of eligible projects for UIOLI funding may be extremely limited, particularly if the GGSS revenue significantly outweighs the £1 million connection cost offered under UIOLI.
- Following review and assessment, the GDNs have proposed to Ofgem a refocus of the fund, aimed at reinforcement and works that support the continued connection of biomethane sites. The introduction of a UIOLI allowance, alongside updates to the existing framework, has the potential to address known challenges around entry reinforcement, a key concern for biomethane customers, particularly where capacity constraints make it difficult to connect to the existing network.
- Funding Cap Validation: The proposed funding figures require confirmation from Ofgem to ensure they are aligned with actual cost profiles and do not inadvertently disadvantage certain projects or networks.

Question 21. Do you have any views on our proposed design of the Heat Policy Re-opener?

NGN agrees in principle that the Heat Policy reopener is appropriate to fund network costs resulting from any decision on hydrogen for heating although we note that, irrespective of this decision, the need to repurpose transmission and intermediate pressure systems to convey hydrogen will be required to provide UK industry with the hydrogen they need to decarbonise. Funding has been agreed for the East Coast Hydrogen FEED study and this work will help to determine what this repurposing, and any associated investment in new network assets, may look like going forward.

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the network

We stress that any reopener mechanism should contain sufficient flexibility to allow network companies to plan based on a number of potential post-consultation scenarios – from a complete ruling out of hydrogen as a home heating vector through to a regional or network-wide hydrogen repurposing.

Whatever the policy outcome, networks must be to recover their costs and network investment consistent with the principles of effective regulation.

Managing Uncertainty: Secure and resilient supplies questions

Question 22. Do you agree with our proposed scope of the HSE Policy Re-opener?

No, we consider that the scope of the HSE Policy Re-opener should be widened to enable in period changes mandated by the HSE to fall within scope.

On 18th August 2025 the HSE wrote to all gas networks with respect to action required to the use of Heat Shrink Sleeves (HSS) for repairs on internal risers within buildings. This correspondence confirmed that the testing carried out on HSS confirmed that these products do not perform to the relevant standards. As a result, the HSE expects networks to devise a risk-based approach for managing their existing population of heat shrink sleeve repairs. This risk assessment would then lead to mitigation measures being applied such as suitable fire protection application or equally effective measures. It is essential that the HSE Policy Re-opener would allow for the costs incurred as part of this, or any other HSE imposed safety requirements, to be recovered. This is one example of many that networks deal with on an ongoing basis and avenues for additional funding, with due assessment and consideration must be available. A broad scope under the HSE policy reopener would allow each option to be assessed on their merit via Ofgem's regulatory framework.

We also note that Ofgem is proposing to remove the second trigger relating to changes in HSE policy for fatigue management for shift workers. With just one trigger to be retained in RIIO-GD3, it is important that the scope of this is sufficiently wide enough to capture any further HSE driven changes that may be required during the upcoming regulatory period as the Repex programme draws to a close.

Question 23. Do you agree with our proposed design of the Tier 2A Volume Driver?

Yes, we agree with the proposed design of the Tier 2A Volume Driver given the uncertainties that exist in this area. The unit costs set at Final Determinations should be based on efficient unit cost rates which consider the changing cost profile as we reach the end of the IMRRP.

We welcome Ofgem's intention to review workload and cost forecasts reflecting HSE's updated enforcement policy, and we look forward to engaging further in this area.

Question 24. Do you agree with the scope of our Diversions Re-opener?

Yes, we support the scope of the Diversions and Loss of Development Claims Re-opener set out at DD. Given the exogenous nature of potential third party and environmental incidents, which could occur at any time, we welcome this Re-opener being retained throughout RIIO-3.

Managing Uncertainty: High quality of service from regulated firms questions

Question 25. Do you agree with our proposed design and unit rates for the Safety Disconnections Volume Driver?

We note that paragraph 4.50 states that the unit rates would include labour and materials. We also incur costs relating to Traffic Management Act (TMA) permits and road closures, which we consider should be included in the unit rates.

Question 26. Do you agree with the proposed design of the New Large Load Connections Re-opener, including our proposal to include general reinforcement projects in its scope?

Yes, we support keeping large load connections in scope but oppose funding general reinforcement works via this re-opener.

We set out our proposals for general reinforcement works within our Business Plan[1] which was subsequently considered unjustified by Ofgem for an ex-ante allowance, instead proposing funding through this re-opener. We disagree that a reopener is a more appropriate funding mechanism. General reinforcement works are essential to an efficient Repex programme and therefore go hand-in-hand with the scope of our IMRRP. We therefore consider that it would be more appropriate to fund these works ex ante through base allowances, rather than introduce uncertainty and unnecessary regulatory burden for both Ofgem and networks through requiring funding requests to be submitted through a re-opener. Furthermore, NGN consider it highly unlikely that individual projects would reach the materiality threshold of a re-opener, meaning any submission would have to be of a bundled programme much like the RIIO-GD3 submission itself.

We also consider our general reinforcement works to be a key part of maintaining adherence to our obligations under Standard Special Condition (SSC) A9, as per the below:

The gas security standard referred to in paragraph 1 is that the pipe-line system to which this licence relates (taking account of such operational measures as are available to the licensee including, in particular, the making available of stored gas) meets the peak aggregate daily demand, including, but not limited to, within day gas flow variations on that day, for the conveyance of gas for supply to premises which the licensee expects to be supplied with gas conveyed by it –

(a) which might reasonably be expected if the supply of gas to such premises were interrupted or reduced as mentioned in paragraph 1(c); and

(b) which, (subject as hereinafter provided) having regard to historical weather data derived from at least the previous 50 years and other relevant factors, is likely to be exceeded (whether on one or more days) only in 1 year out of 20 years

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[1] See A22.i https://www.northerngasnetworks.co.uk/wp-content/uploads/2024/12/A22.i-NGN-RIIO-GD3-Investment-Decision-Pack-Reinforcements-Governors-Mains-EJP-REDACTED.pdf

However, should Ofgem retain the view that funding via an uncertainty mechanism is the appropriate route, we consider a volume driver to be a more suitable solution than a re-opener. Ofgem could determine an efficient unit rate for reinforcement work and the volume driver would flex allowances with workload to ensure customers only pay for what is delivered. This could apply to both mains reinforcement and growth governor units.

Please refer to NGNQ6 for a complete analysis and additional justification for funding general reinforcement works on an ex-ante basis.

Question 27. Do you agree with our proposal to retain the RIIO-GD2 scope of the Specified Streetworks Costs Re-opener?

Yes, we are in agreement with the proposals set out for the Specified Streetworks Costs Re-opener. There is a clear need to retain this re-opener to avoid issues associated with in-period changes to legislation or policy which can impact upon the costs associated with Streetworks.

In terms of the scope of the re-opener, experience from use of this re-opener during the RIIO-GD2 regulatory period has shown that the RIIO-GD3 re-opener needs to accommodate changes or schemes which are introduced during the final year of the RIIO-GD2 regulatory period.

We also consider it important that the scope of this reopener should allow for the costs of managing hazardous waste to be recovered.

GD specific pass-through costs questions

Question 28. Do you agree with our proposal to reject Cadent's proposed pass-through to facilitate biomethane connections?

NGN acknowledge the intent behind the proposed Biomethane Connections UIOLI allowance and welcome Ofgem's efforts to support biomethane development. However, there are advantages to a pass-through over UIOLI in that the allowance flexes to uncertain workload in this area, which is key to facilitating decarbonisation of the gas network. Therefore, the UIOLI needs to be sufficiently funded and broad in scope to not hamper biomethane development. Please see NGN's response to question 20 above for further detail.

Question 29. Do you agree with our proposal to reject SGN's proposed pass-through for Joint Office of Gas Transporters services?

NGN does not support the proposal to reject SGN's pass-through request for Joint Office of Gas Transporters (JO) services. As the code administrator for the Uniform Network Code (UNC), the JO is mandated under Gas Transporter Licence Condition A12 and fully funded by gas transporters. Unlike other energy codes, where costs are shared across all parties, JO costs are borne solely by transporters. These costs are expected to rise due to preparatory work for the new code manager, including the

integration of the IGTUNC into the UNC. Allowing pass-through would enable this work to proceed without unfair financial impact on gas transporters.

NGN acknowledge the intent behind the proposed pass-through for National Underground Asset Register (NUAR) maintenance. Our main concern is that instances such as these are treated consistently across networks regardless of Ofgem decisions and would welcome further industry discussion on this to ensure consistency.

UMs proposed to reject question

We do not support the proposal for Complex Distribution Systems (CDS) to move into Network Asset Risk Metric (NARM) at this time. There is no suitable risk model available within the NARM framework to adequately capture the unique risks associated with CDS. The Risers NARM model is built based on the statistical variables and risks associated with this population. The variables and risk factors of CDS are significantly different to the Risers population and would not be able to be put through this NARM model.

NGN do not anticipate a CDS workload during RIIO-GD3, but in the event that this changes materially in period, we would support addressing this through the MOBs re-opener mechanism. Therefore, without a robust risk model in place and in the absence of anticipated workload, transitioning CDS into NARM would not be appropriate from our point of view.

Cost of Service question

In principle the proposed use of a top-down model as per RIIO-GD2 is suitable but there are critical improvements that must be made for Final determinations as outlined below and in this response.

The current modelling approach is broadly fit for purpose—for example, the current model performs comparably to the RIIO-GD2 Draft Determination model which was further enhanced at Final Determination. As outlined in this response, with some targeted amendments, the model could be used to set the final Totex allowances in the round. Critically, it is essential that Ofgem ensure consistency in application of cost exclusions across networks so that costs within the benchmarking are compared on a like-for-like basis and are therefore fair. We do not consider these exclusions to be correctly applied at DD, particularly in the areas of Streetworks and IT & Telecoms, resulting in

material bias in the benchmarking and the rewarding of inefficient costs via the Business Plan Incentive due to cost allocation choices.

In addition, the current benchmarking approach does not account for quality of service and track record of delivery, and places too much weight on untested cost forecasts. As such we do not agree with Ofgem's approach as the standalone basis for the Stage B assessment. Ofgem's assessment does not account for whether GDNs that propose low-cost plans also have a track record of delivering these plans at a low cost while maintaining high quality of service. We specifically note our appended document developed with Oxera - *BPI Incentives at the RIIO-3 DD* which presents analysis of historic cost and service performance of GDNs versus the DD assessment. Section 4.1, 5.1 and 5.2 of this report provide compelling evidence of how previous performance on cost efficiency service performance have not been duly considered in the cost assessment and poorer performing networks are potentially being rewarded at RIIO-GD3 due to anticipated performance. This is summarised briefly below.

Ofgem revised cost benchmarking benchmarks West Midland (WM) and East of England (EoE) as the most and second most efficient companies for RIIO-GD3 based on their forecast cost profiles. Figure 2 shows Totex Over/Underspend against RIIO-GD3 DD efficiency and evaluate how GDNs have performed in RIIO-GD2 relative to their proposed efficiency positions in RIIO-GD3. Companies now proposing plans near the RIIO-GD3 efficiency frontier would typically be expected to have demonstrated strong cost outperformance in RIIO-GD2, particularly if previously assessed as inefficient. The analysis highlights a clear alignment for West Midlands, Northern Gas Networks (NGN), and SGN – Scotland (Sc), which occupy the top-right quadrant — combining high efficiency rankings in RIIO-GD3 with material underspend in RIIO-GD2. This positioning reflects both robust delivery and credible forward planning.
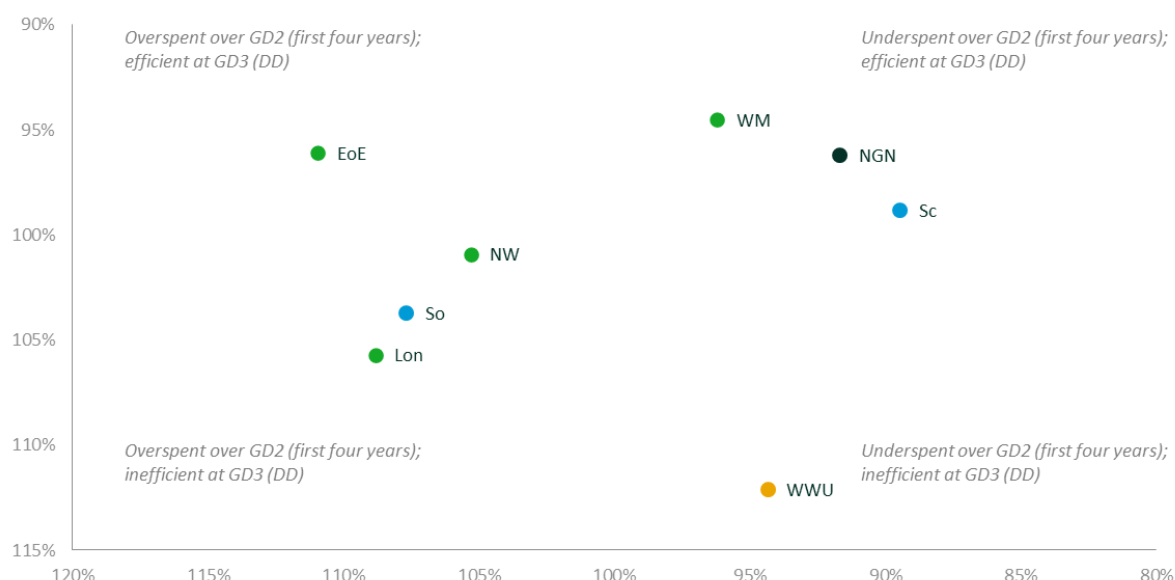

Figure 2: RIIO-GD2 TOTEX over/underspend against RIIO-GD3 DD efficiency position

Low cost, or "underspend" on its own, is not an appropriate measure of efficiency. Of paramount importance is the delivery of outputs, represented for GDNs as Service performance. Efficiency cost delivery and high service performance is the pinnacle of the RIIO framework and clearly in the consumer interest. Our analysis, extended to assess 8 core service metrics common across GDNs[2] is presented in Figure 3 and shows that among the four GDNs assessed as most cost-efficient in RIIO-GD3, NGN stands out with top rankings on 7 of 8 performance metrics, placing 3rd only in customer satisfaction. In contrast, Cadent's WM and EoE networks, while included in the most cost-efficient group post-DD, consistently rank below the top two across all metrics. EoE shows stable mid-tier performance, while WM's rankings vary more widely. No other network outside this group matches NGN's consistency in top-two service performance across metrics.

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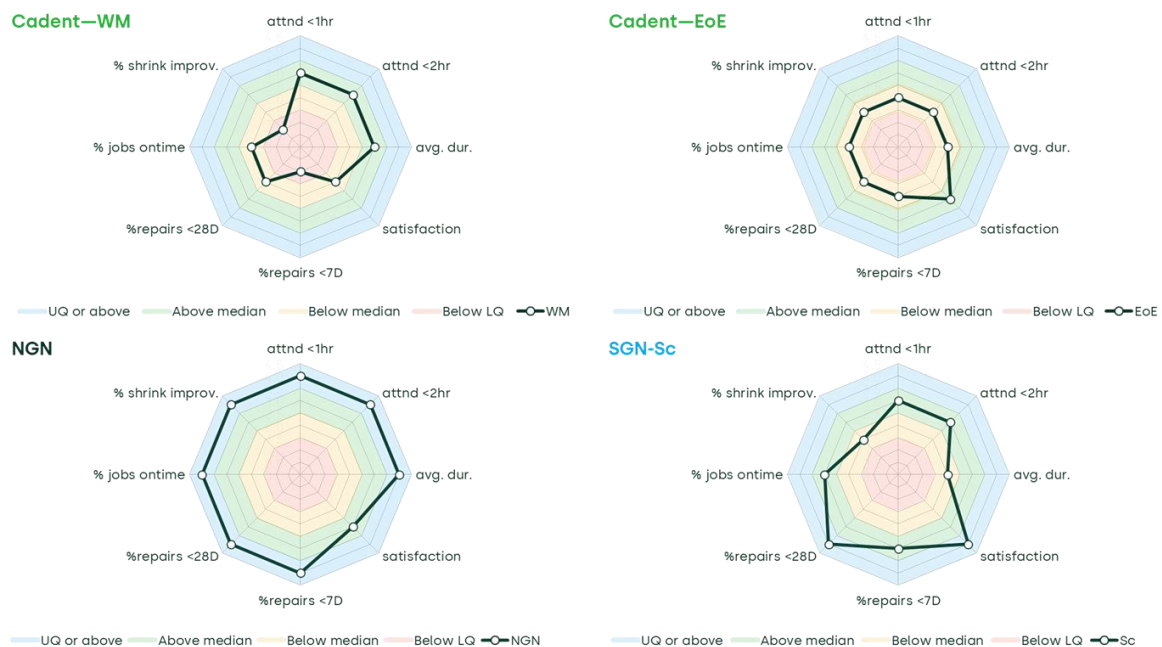
[2] * Core Service metrics included, unplanned escapes attended in under an hour (%); planned escapes attended in under two hours (%); average duration of an unplanned supply interruption; customer satisfaction; percentage of repairs carried out within 7 days; percentage of repairs carried out within 28 days; % jobs substantially completed by the date agreed with the customer; reduction in shrinkage, percentage improvement as outlined in Section 4.2 of Oxera's report – BPI Incentives at the RIIO-GD3 DD.
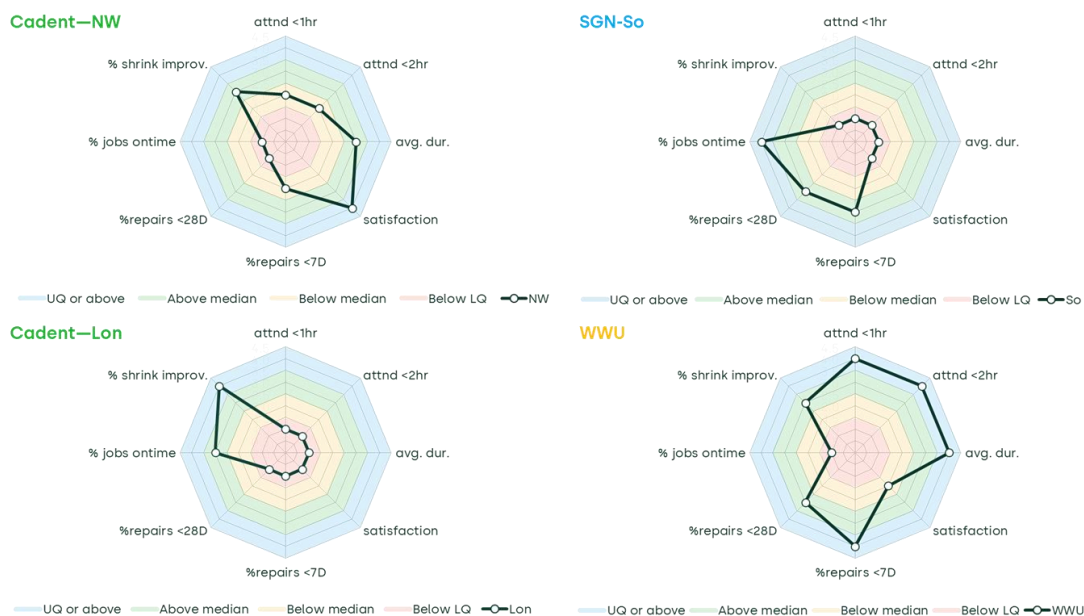
Figure 3 Service quality of the less cost efficient GDNs (2021/22–24/25)

Combining, service and cost metrics as shown in Figure 4 presents a quadrant analysis comparing GDNs' average service quality rankings in RIIO-GD2 with their assessed cost efficiency in RIIO-GD3. It is noticeable that NGN and SGN – Scotland occupy the top-right quadrant, demonstrating both high service quality delivery to date and strong forward-looking cost efficiency. In contrast, WM and EoE, while assessed as most cost-efficient in RIIO-GD3, rank significantly lower across service quality metrics.
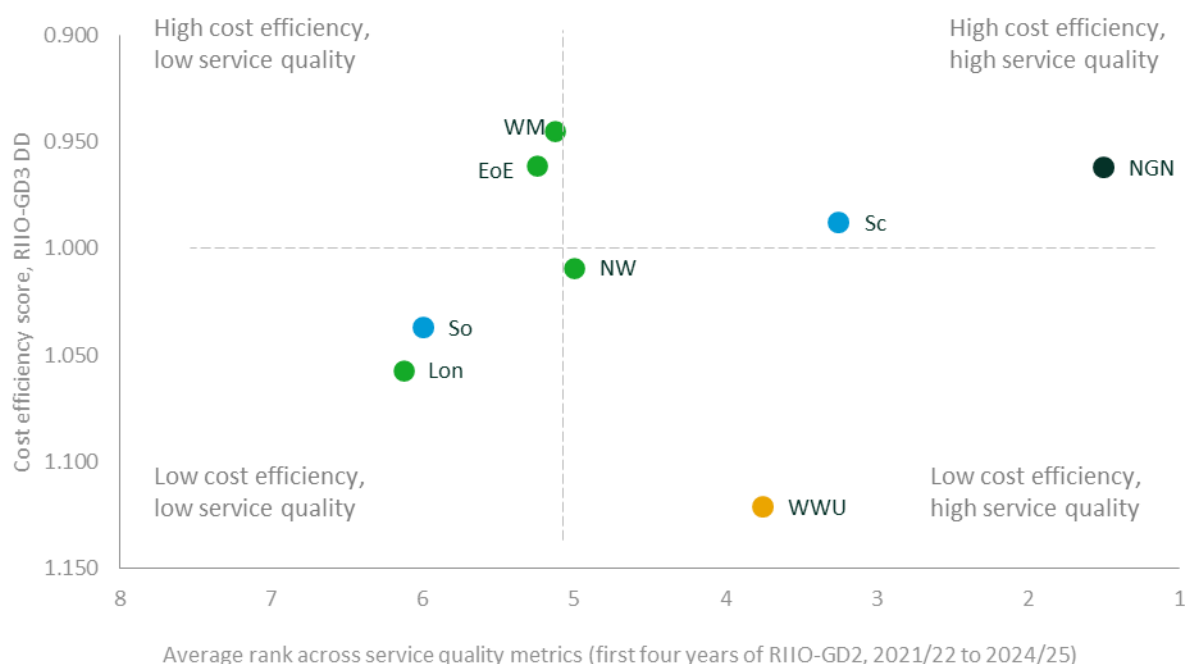
Figure 4 RIIO-GD3 modelled cost efficiency, against service quality track record for RIIO GD2 to date

This analysis demonstrates that **NGN** uniquely combines a consistent track record of cost-efficient delivery with sector-leading service quality that is not captured by the regression model. Initially, this multi-dimensional performance aligned with a relatively high BPI reward. However, following Ofgem's correction of modelling errors in its Draft Determination, NGN's Stage B BPI reward will reduce by **£21.1m**, while **Cadent's WM and EoE networks** will see an increase of **£22.8m**.

As a result, **97% of Stage B BPI rewards** will accrue to networks that, despite proposing cost-efficient plans for RIIO-GD3, have either overspent in RIIO-GD2 (EoE) or underperformed on service quality (EoE and WM). This outcome risks misalignment between appropriate rewards and sustained performance in both cost efficiency and service quality.

Please see responses to GDQ33-46 below for specific comments on areas of the cost assessment which would correct errors and result in iterative improvements.

Pre-modelling normalisations and adjustments questions

Question 33. Do you agree with our assessment approach for IT&T?

No, we do not agree with Ofgem's assessment approach for IT & Telecoms. Please see RIIO-GD3 IT and Telecoms Draft Determination - Consultation Response, which has been confidentially shared with Ofgem and provides detailed analysis in rebuttal of Ofgem's assessment.

Question 34. Do you think we should make any amendments to the assessment framework or the thresholds employed?

Yes, we do not consider that the current cost assessment framework fully accounts for the impact of efficiency benefits generated through being part of a group. Networks which belong to a larger group benefit from economies of scale. For example, indirect costs (such as business support costs) can be spread over a larger output if a GDN belongs to a larger group, resulting in lower average costs. There are also potential cost allocation issues when such costs are modelled at the GDN and not at the group level. Meanwhile, as discussed in Section 4.1 of our Workforce and Supply Chain Resilience Strategy,[3] we also face additional challenges as a small company with respect to direct costs (such as reduced buyer power and reduced willingness of suppliers to work with a comparatively smaller utilities network, which reduces our pool of available resources). This and other forms of direct expenditure impact (such as more limited scope to bulk purchase) result in different economic positioning, which needs to be taken into account.

Ofgem's models do not adequately capture group-level economies of scale, as they are estimated at the GDN-level and do not include group-level cost drivers.

Group level scale effects should be accounted for in the cost assessment framework to avoid GDNs which belong to a larger group being overfunded but not accounting for scale efficiencies they can benefit from in the modelling. This has a clear link back to customer bills. Additionally, it also results in smaller GDNs being considered equally able to benefit from group level efficiencies, which places them at a disadvantage when undertaking comparative benchmarking.

We are aware that there is precedent for adjusting modelling to account for group level scale effects, most recently in RIIO-ED2 for example.[4]

We have undertaken an assessment for group-level scale effects on both Totex and indirect expenditure and how this can be accounted for in benchmarking, which is set out in the following sections.

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[3] https://www.northerngasnetworks.co.uk/wp-content/uploads/2024/12/A7-Workforce-and-Supply-Chain-Resilience-Strategy.pdf

[4] For example, Ofgem modelled business support costs at the group-level rather than at the DNO-level. See Ofgem (2022), 'RIIO-ED2 Final Determinations Core Methodology Document', November, para. 7.511, https://www.ofgem.gov.uk/sites/default/files/2022-11/RIIO-ED2%20Final%20Determinations%20Core%20Methodology.pdf, accessed 19 August 2025.

Suggested proposal for assessing group level scale effects

We consider that there are two possible ways to model and assess this issue:

1. including a 'group-level CSV' alongside a GDN-level CSV in Ofgem's Totex model;
2. estimating Ofgem's Totex model at the ownership level, rather than at the GDN level.[5]

Furthermore, the correct econometric estimation of the impact of group-level scale effects may require additional changes to Ofgem's proposed modelling approach, so as to account for differences in companies' performances, relevant time period and, consequently, sample size. In particular, a step-change in industry-wide expenditure and individual GDN performance is expected in RIIO-GD3, as shown in Figure 5 below. To account for this, we have first explored estimating group-level scale effects using RIIO-GD3 data only, so as to remove any impact arising from differences between regulatory periods.
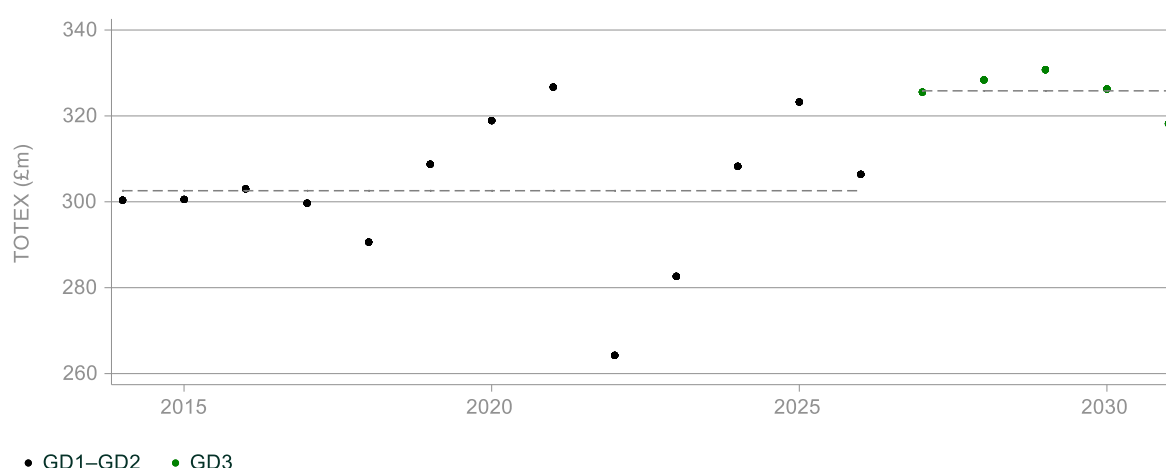

● GD1–GD2   ● GD3

**Figure 5 – Industry average submitted Totex, by year (£m)**

    i.   **Indirect costs group-level scale effects (GD3 years)**

While group-level scale effects can affect both direct and indirect costs, they are likely to be most prevalent within indirect costs, due to the larger share of fixed costs (e.g. in the case of IT and Telecoms).

Moreover, modelling at the Group level can also account for inconsistencies in reporting and accounting-based allocations of such costs between networks belonging to the same group.

If these economies of scale or reporting anomalies are not robustly accounted for (directly or indirectly) in Ofgem's cost assessment framework, the resulting cost allowances could be biased against small

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[5] As well as accounting for group-level economies of scale, modelling at the group level can also correct for potential cost allocation issues for GDNs within a particular group (e.g. the allocation of indirect costs).

GDNs, such as NGN. Indeed, Ofgem explicitly modelled group-level scale effects when setting allowances for business support costs (BSCs) for DNOs at RIIO-ED2.

Table 6 shows the degree of group-level scale effects in indirect costs by estimating the model at the ownership level. Note that the model is estimated over GD3 only.

	Total Business Support	Total Business Support + Total Work Execution
Group-level MEAV	0.925*** (0.000)	0.965*** (0.000)
Time trend (t1)	0.010 (0.819)	0.001 (0.948)
Constant	-5.231*** (0.001)	-4.5*** (0.000)
Adjusted R-squared	0.785	0.989

Table 6   Indirect cost modelling

Overall, the econometric results provide supporting evidence of group-level scale effects, consistent with both the economic rationale and operational considerations recognised by Ofgem in its recent RIIO-ED2 determinations.

For clarity, we are not recommending that Ofgem adopts middle-up modelling for RIIO-GD3 (see Q. 38). Rather, the modelling outlined above shows that there are group-level scale effects for indirect costs in particular, which should be accounted for when determining Totex allowances (e.g. through pre-modelling adjustments).

ii.   **Totex Group-level scale effects (RIIO-GD3 years)**

Following a similar approach, column 1 in Table 7 replicates Ofgem's Totex model restricted to RIIO-GD3 years (estimated without clustered standard errors)[6] and column 2 augments the specification by including a group-level CSV as an additional driver.

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[6] We have not applied clustered standard errors in this analysis due to reduced degrees of freedom by limiting the data to the RIIO-GD3 period, which could undermine the robustness and reliability of the estimated standard errors.

	Baseline regression (1)	Group-level CSV (2)
GDN-level CSV	0.917*** (0.000)	0.910*** (0.000)
Group-level CSV		-0.034* (0.052)
Time trend (t1)	0.014** (0.043)	0.014** (0.043)
Constant	-1.195*** (0.000)	-0.853** (0.012)
Adjusted R-squared	0.947	0.951

Table 7 - Group-level scale effects (RIIO-GD3 only)

Table 8 reports the efficiency scores from the models specified above. When controlling for Group-level scale effects over RIIO-GD3 alone, we again observe a material change in assessed efficiency across all GDNs.

The consistency of results across alternative model specifications provides further evidence of the importance of accounting for economies of scale achieved at group level.

	Baseline regression (1)	Rank	Including Group-level CSV (2)	Rank
EoE	95.5%	3	97.5%	3
Lon	106.0%	4	107.8%	5
NGN	96.0%	2	93.6%	1
NW	101.0%	5	102.8%	6
Sc	103.7%	7	103.1%	7
So	103.1%	6	103.0%	4
WM	94.9%	1	96.4%	2

WWU	112.0%	8	108.9%	8

Table 8 Group-level scale effects (GD3 only): efficiency

Further analysis can be developed by considering alternative specifications, for example concerning time period specifications. However, we also note that the inclusion of NGN within the modelling skews the relationship between group size and expenditure in the results, due to NGN consistently appearing as the most efficient GDN, despite its comparatively small size. This risks distorting the observed relationship between group size and expenditure. To avoid this conflation of effects, the simplest solution is to exclude NGN from the estimation, just as Ofgem or any regulator would typically do when treating 'outliers'.

Question 35. Should any cost categories be included or excluded from the assessment?

NGN have significant concerns relating to the application of cost exclusions at DD and consider that they are inconsistently applied across networks, resulting in material biases in the benchmarking. Our assessment of the Business Plan Data Tables (BPDTs) and Ofgem's normalisation files has highlighted significant inconsistencies in the application of cost exclusion across companies, which has resulted in the benchmarked Totex not being carried out on a like-for-like basis. Companies excluding more of their self-reported costs under these categories are considered more 'efficient' as a higher proportion and monetary value of their costs are being excluded from the benchmarking, which improves GDN performance by reducing the level of normalised costs.

This approach risks rewarding or penalising companies based on their internal cost allocation practices rather than genuine efficiency, potentially creating incentives for regulatory gaming. Furthermore, the artificial reduction of some GDNs' costs can also result in an infeasible benchmark for other GDNs. Inefficient networks can capture the Business Plan Incentive reward and secure higher allowances where adjustments to non-regressed costs are smaller than if more of those costs were in the benchmarking, which is detrimental to customers.

Para 9.6 of the Business Plan Guidance states: *"Stage B - we will assess whether the costs submitted as part of the business plan are adequately justified and efficient. We will use two separate assessment methodologies, one for costs which are assessed comparatively, and one for more bespoke costs".* We are concerned that the current approach to excluding certain costs, particularly Streetworks and IT & Telecoms, undermines Ofgem's ability to accurately benchmark cost efficiency across the GDNs as Ofgem relies on company-reported forecast data. This introduces inherent uncertainties associated with such information.

As a result, we consider that the manner of excluding costs in these categories should be further assessed by Ofgem with companies providing robust justification and evidence, thus ensuring the integrity of the benchmarking process. Where these costs are not deemed justifiable for exclusion, they should be included in the normalised costs for benchmarking purposes.

Streetworks cost exclusions

In our review of Ofgem's modelling files, we identified several material errors regarding the exclusion of Streetworks costs. These issues were resolved as part of the Issues Corrected Model, which was

provided to networks on Tuesday 12 August 2025, which resulted in a material impact on the benchmarking of all networks.

Given the late stage at which these changes have been introduced, and the potential for further modelling updates ahead of the FD, Ofgem should ensure that there are additional opportunities for engagement after the DD consultation closes. The significant movement in benchmarking scores resulting from this error correction (and others) highlights the importance and materiality of getting cost exclusions correct and on a fair and consistent basis across the networks.

As per paragraph 5.136 of the GD Annex, costs associated with Streetworks were excluded from the Totex regression modelling for RIIO-GD2 and the proposal is to continue to exclude these costs in RIIO-GD3. Comparative analysis of the Streetworks costs submitted by GDNs highlights significant discrepancies in the figures requested by companies in their Business Plans (ranging from £19.0m to £222.3m) and the percentage of Totex that these Streetworks figures represents (ranging from 1.1% of totex to 7.4%) in RIIO-GD3.

Whilst the specific regional factors are likely to have some impact upon the costs incurred, we are concerned that there appears to be discrepancies in the way in which companies are allocating streetworks costs. For example, while differences in streetworks costs can be expected for companies operating in materially different environments (e.g. London and Scotland), there is no clear operational reason why the Streetworks allocation should differ significantly between broadly comparable regions such as West Midlands, East of England, North West, Wales and West Utilities and NGN. However, as shown in Figures 6 and 7 below, these GDNs' streetworks costs are three to four times as high as NGN's as a percentage of Totex and five to seven times for Repex.
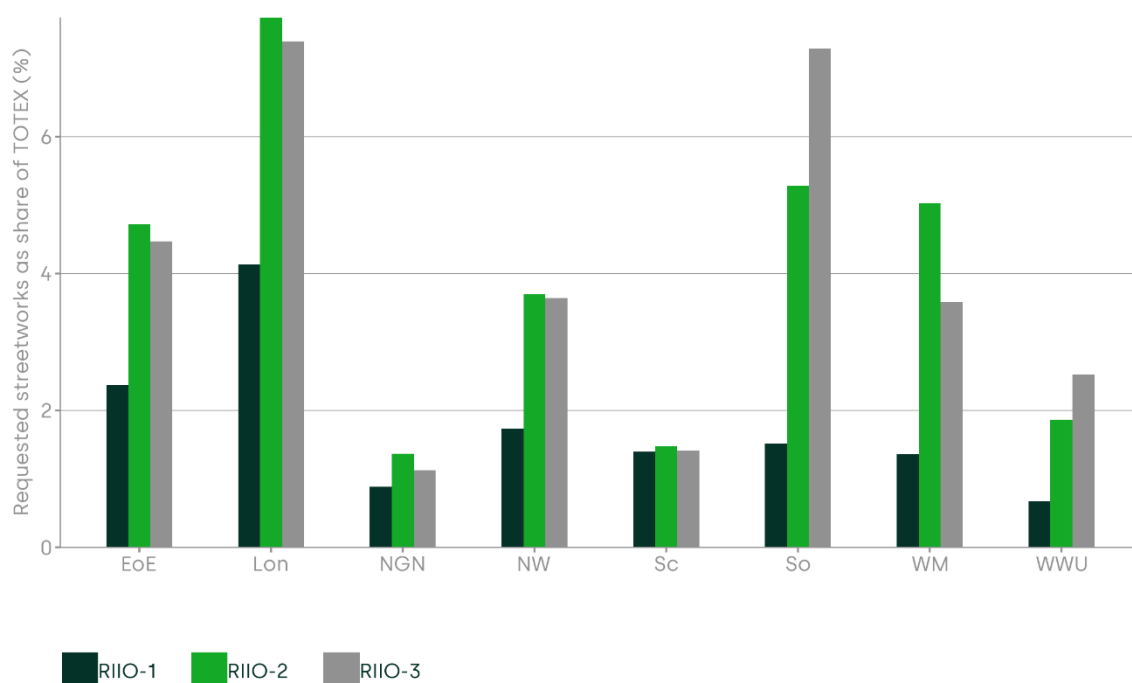

Figure 6 - Requested Streetworks as a share of Totex (%)
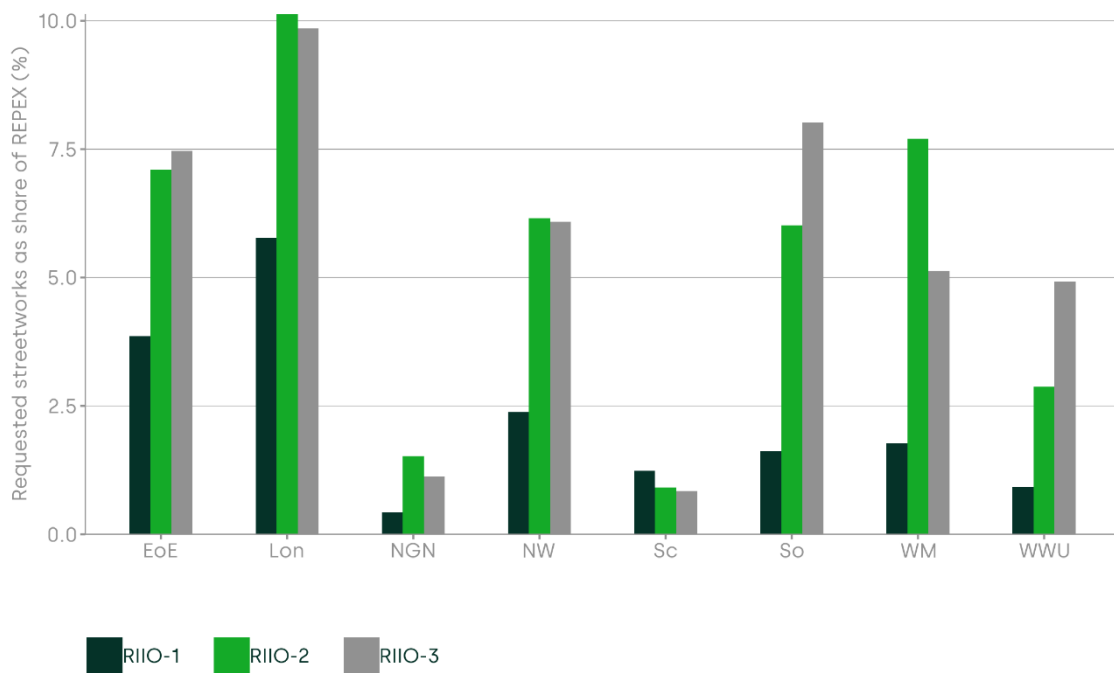
Figure 7 - Requested Repex Streetworks as share of Repex (%)

In addition to the significant increase in Streetworks costs reported by most companies since the start of RIIO-GD2, there has also been a substantial rise in the variance of these costs (both as a percentage of Totex and Repex), as shown in the Figures 8 and 9.
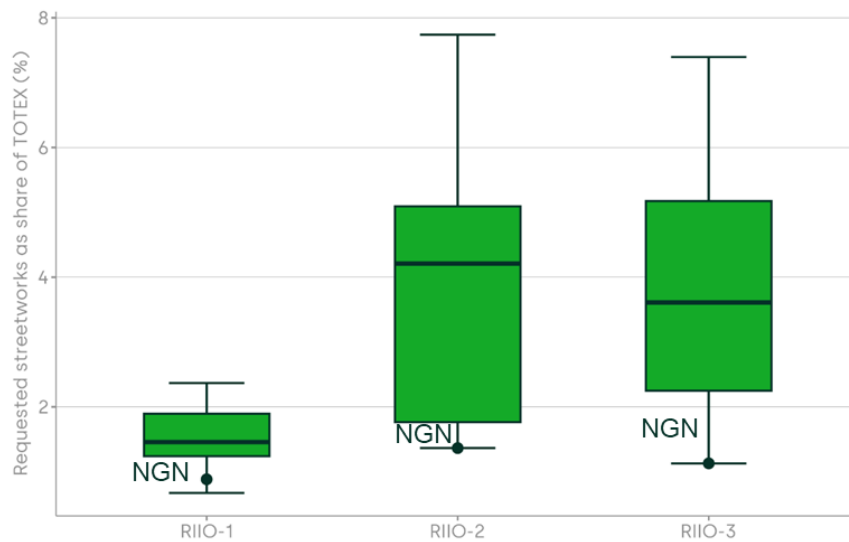

Figure 8 - Industry distribution for requested Streetworks as share of Totex (%)
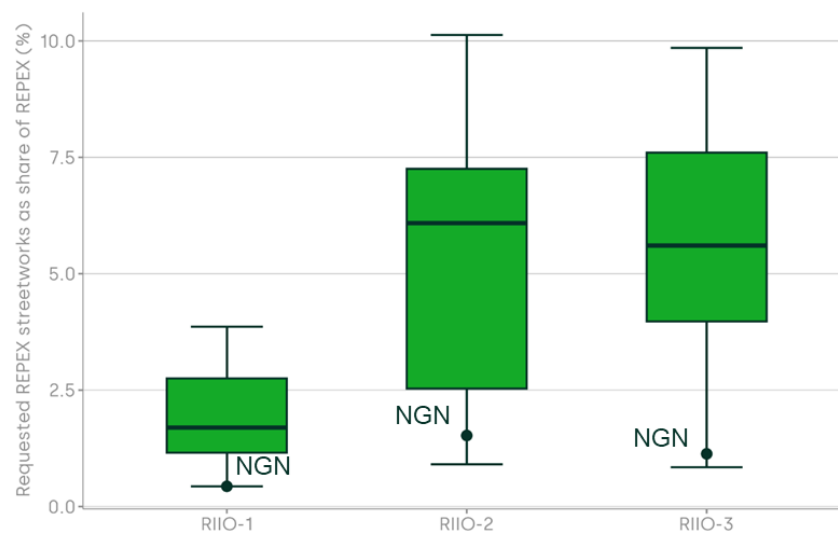
Figure 9 - Industry distribution for requested Streetworks as share of Repex (%)

In this context, NGN is a clear statistical outlier at the lower end of the industry cost range. This material increase in cost variance and exclusions may be partly attributable to the continued reliance on company-reported and forecast data, without adequate standardisation or robust scrutiny.

Additionally, the fact that the methodology for treating Streetworks costs was established during RIIO-GD1 may have contributed to the observed increase. Companies are aware that such costs are excluded from benchmarking and are typically treated with minimal amendments, which may influence how they allocate and report these costs. In this context, alternative approaches to controlling for exclusions could include, for example, ex-post adjustments, especially in cases in which noise and inconsistencies are observed in the pre-modelling exclusions.

Indeed, the sensitivity presented below in Table 9 shows that cost modelling outcomes are highly sensitive to whether Streetworks costs are included, significantly affecting GDNs' efficiency scores and changing the efficiency ranking of companies for all but two GDNs.

Network	Ofgem DD model	Rank	Including Streetworks	Rank
EoE	96.1%	2	96.2%	3
Lon	105.7%	7	110.9%	8
NGN	96.2%	3	92.8%	1
NW	100.9%	4	100.5%	5

Sc	103.1%	5	100.3%	4
So	103.7%	6	106.8%	6
WM	94.5%	1	94.1%	2
WWU	112.1%	8	110.2%	7

Table 9 – Impact of including streetworks in the Totex regression analysis

Despite this, the regression model including streetworks costs remains statistically robust, as shown in Table 10 below, with the coefficients and model fit changing only marginally.

Model metric	**Ofgem DD model**	**With Streetworks**
TOTEX CSV coefficient	0.902***	0.911***
t1	0.004	0.007**
t2	0.019**	0.016**
Constant	-1.018**	-1.078**
RESET (built-in)	0.898	0.518
RESET (manual)	0.92	0.794
Heteroskedasticity	0.805	0.502
Normality	0.204	0.065
Pooling	0.999	0.999
Adjusted R-squared	0.927	0.911

Table 10 – Model performance of including streetworks in the Totex regression analysis

We observe a positive correlation between the value of Streetworks cost exclusions proposed by GDNs and Ofgem's estimated efficiency scores over RIIO-GD2 and RIIO-GD3 (see Figure 10). Specifically, GDNs that are assessed as relatively *inefficient* tend to request higher values of Streetworks exclusions. This can be observed in Figure 10. This trend may be linked to the fact that cost exclusions reduce submitted costs, thereby improving a company's estimated performance in benchmarking. As noted,

it highlights the potential for misreporting and the inherent uncertainty associated with relying on company-reported and forecasted data without sufficient standardisation or scrutiny.
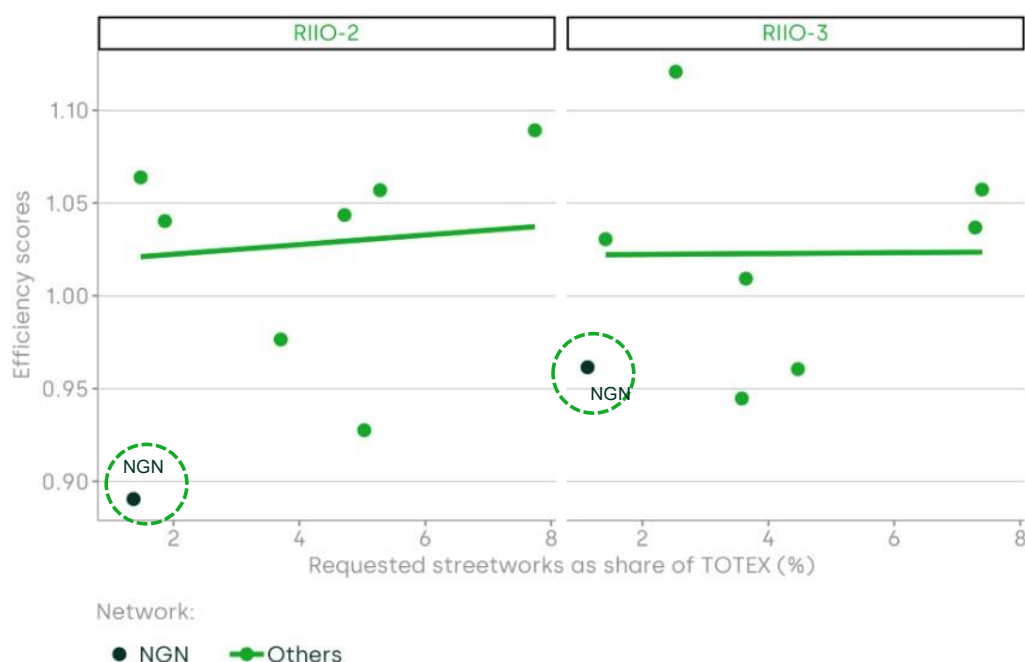

Figure 10 - Requested Streetworks as a share of Totex (%) vs. efficiency scores

As shown in Figure 10, we are a clear outlier to this trend. While consistently maintaining a strong efficiency position in the industry, we have requested considerably smaller Streetworks exclusions compared to our peers. This further supports the case for careful review of exclusion requests and reinforces the need for consistent treatment and validation of such adjustments across all GDNs.

In addition to the above, we note that Cadent has included entries in its cost exclusion for 'loss of productivity'. We understand from the Cost Assessment Working Groups that SGN Southern's 'Other' entry is also representative of an exclusion for loss of productivity. NGN and WWU have not included these elements in their streetworks costs, as shown in Figure 11.
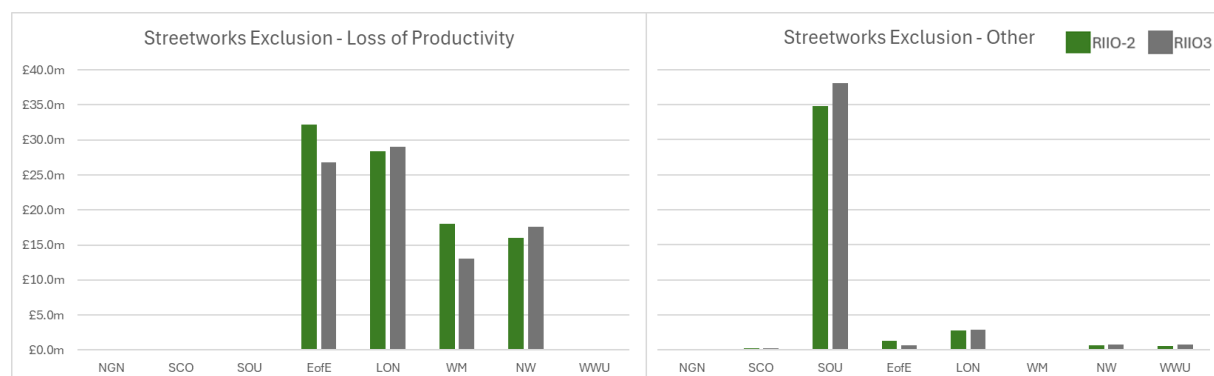

Figure 11 – Streetworks exclusions related to 'Loss of Productivity' and 'Other'

Importantly, there is no clear guidance or consensus in either the Regulatory Instructions and Guidance (RIGs) or BPDT guidance on the inclusion of productivity elements and how to calculate these, meaning they are highly subjective and open to interpretation.

Given the evidence concerning manifest inconsistencies in the allocation of Streetworks costs reported, we have identified the following options to address the issue:

i. **Retaining the Streetworks pre-modelling adjustment but strengthening the review of submitted values**. This would require engagement with all GDNs, and GDNs should be given the opportunity to resubmit Streetworks data to ensure comparability. Particular scrutiny should be placed on cost lines where there is currently no guidance on reporting, such as the productivity elements and 'other' categories.

ii. **Replacing the pre-modelling adjustment with a post-modelling adjustment**. Under this approach, Streetworks costs would be *included* in the modelled cost base. However, a post-modelling adjustment would be applied to ensure that all the GDNs recover their proposed Streetworks costs. Such treatments are common in other sectors (e.g. in UK water, where Ofwat predominantly considers post-modelling adjustments). This would require developing an appropriate mechanism (building on regulatory precedent) and consulting with the industry.

NGN recommend option i. above to remedy the manifest inconsistencies in the benchmarking as applied at DD, in particular by allowing NGN and WWU to resubmit their proposed exclusions, so as to align them with the values presented by Cadent and SGN. This would require adjusting the values of only two networks based on updated CV4.14 Street Works. We have appended our equivalent view of productivity impacts of Streetworks with this response and would be happy to engage Ofgem further on this in the period between DD and FD.

Other exclusions

We observe similar material inconsistencies across other areas of exclusions that require careful scrutiny from Ofgem to ensure fairness in the benchmarking. Figure 12 shows extreme variation in IT & Telecom Business Support exclusions, removing those related to the DPLA, which shows that NGN is a clear outlier with minimal exclusions in this area.
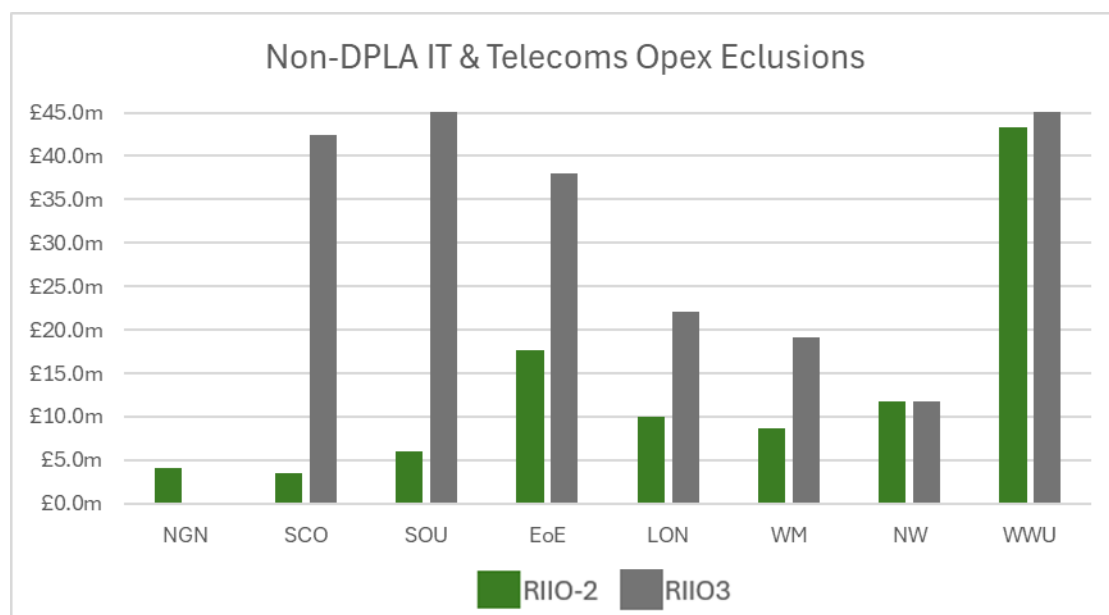
Figure 12 – Non-DPLA IT & Telecoms Business Support Exclusions

Some of the differences highlighted above will be explained by classification of costs between opex and capex in M8.18 NIS-R Cyber Resilience tables, which have been redacted across GDNs due to their sensitive subject matter. There appear to be material differences in what has been allocated to the NIS-R tables between networks. Ofgem should carefully scrutinise that the scope of costs included in these is consistent and make adjustments back into the benchmarking if not due to certain costs being most appropriately considered business-as-usual (BAU).

In addition, NGN considers that not all material differences are explainable by the NIS table and that Ofgem should carefully consider if other Business Support IT & Telecoms exclusion are appropriate and being consistently applied across networks. For example, Cadent networks have highlighted 'Modernisation of Field Service Management', 'Network Infrastructure for Supervisory Control and Data Acquisition (SCADA) Operational Technology' and 'Energy Control Centre Applications Rationalisation' in M8.14 Bespoke, Uncertain and Separate Activities as projects for separate assessment.

However, NGN have similar projects that are included in our IT & Telecoms costs that are in our benchmarked figures as we considered these BAU in our original submission. SGN and WWU networks have redacted and aggregated IT & Telecoms costs and so there may be similar instances with them. This again biases the benchmarking and Ofgem should either exclude all networks IT & Telecoms costs on the same basis or put them all in the benchmarking on the same basis. NGN have consistently invested in IT & Telecoms since RIIO-GD1 and do not require a material step change in investment in this area in RIIO-GD3. Ofgem should be careful not to reward insufficient historical investment and backloading of costs through exclusions.

Figure 13 – Non-DPLA (ALD) & non-Streetworks Other Capex Exclusions

There are also large variances in Other Capex exclusions (not including those related to DPLA / ALD and Streetworks) across networks as summarised in Figure 13. Given redactions, it is not clear to NGN what these relate to for each network. However, the majority of the exclusions (£19m) for RIIO-GD3 in Figure 13 relate to the M8.18 NIS-R Cyber Resilience table. As with IT& Telecoms in Opex, not all material differences above are explainable by the NIS table and Ofgem should carefully consider if Other Capex IT & Telecoms exclusions are appropriate and being consistently applied across networks.

Ofgem should carefully scrutinise that the scope of costs included in other exclusions is consistent and make adjustments back into the benchmarking if not and certain costs are most appropriately considered BAU. Otherwise, additional IT & Telecom elements included for exclusions for some networks, but not others, should be added to the M8.14 BUS tables of those networks that haven't separated them out to ensure the benchmarking is fair and robust. Give the scale of the discrepancies highlighted above, other exclusions adjustments will have a material impact on the benchmarking of a scale similar to that of streetworks highlighted in the previous section and should receive careful attention from Ofgem.

NGN have appended an updated M8.14 BUS table with IT & Telcom projects similar to those provided by Cadent (and possibly SGN & WWU) for Ofgem to consider for comparable exclusions. We are happy to engage further on this and provide additional detail if required.

Question 36. Do you agree with our proposed approach to pre-modelling normalisations and adjustments?

No, we consider Ofgem is not aligning cost modelling efficiency benchmarks with previous GDN service standards as established in RIIO-GD1 and RIIO-GD2. Furthermore, we believe that the pre-modelling sparsity adjustment should also be extended to Repex costs.

i.   Correlation between sparsity and Repex

Ofgem applies a pre-modelling sparsity adjustment for Repair and Emergency costs. This was supported by bottom-up evidence cited at RIIO-GD1, on the additional cost pressures incurred by strategically located 'First Call Operatives' for emergency and repair costs. For example, operating in more sparse regions implies:

- More local depots, each staffed and stocked with specialist equipment.
- Greater travel costs of transporting materials to/from depots and to/from quarries and waste management facilities.
- Greater wear-and-tear costs.
- Difficult topography (e.g. valleys) and local ground conditions result in longer time to complete works.

The same sparsity-related cost pressures also apply to Repex, as well as maintenance and property management. Our analysis demonstrates a positive correlation between companies' average Repex unit costs and the sparsity index, which is not accounted for in the Repex synthetic unit costs, or through any of the pre-modelling adjustments.

Given our high Repex efficiency, despite operating in a relatively sparse region, we also tested for correlation with and without NGN. In both cases, we found the correlation to be positive.

Figure 14 demonstrates that the correlation between the sparsity index and Repex unit costs is *comparable* to that between regional cost indices and (non-normalised) unit costs in other cost areas to which Ofgem applies adjustments for – e.g. Urbanity adjustment for Repex and Sparsity adjustment for Repairs and Emergency costs.
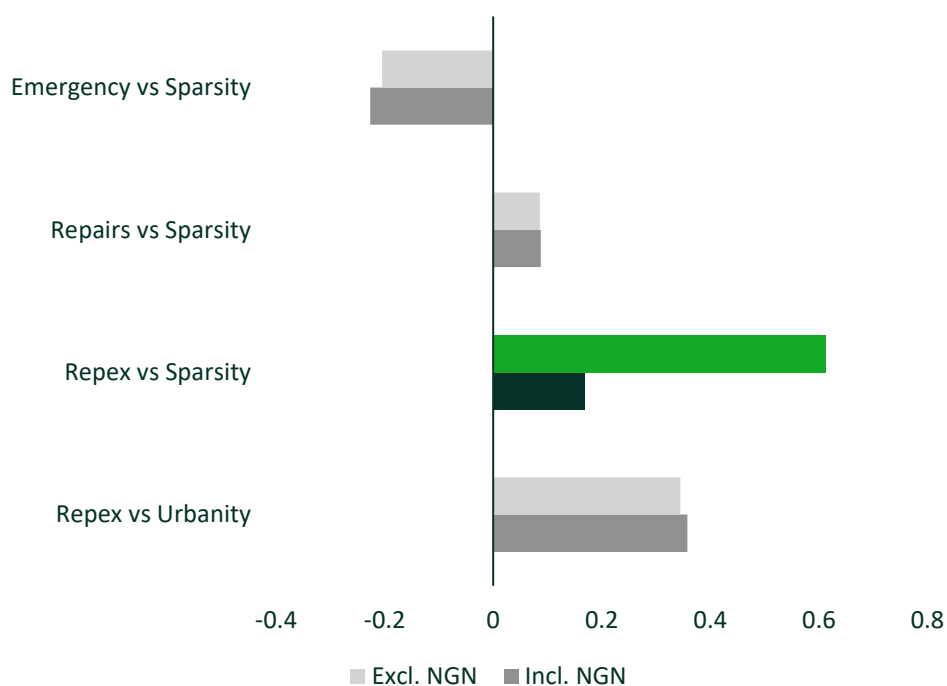
Figure 14 Strength of correlation between unit costs and regional cost indices

Overall, the top-down statistical evidence in favour of expanding the sparsity adjustment is consistent with the currently implemented adjustments, with model robustness remaining high.

ii. Disconnect between cost and service performance

Many companies are currently performing below the core service standard thresholds in RIIO-GD2. Companies are overspending Totex, not meeting cost allowances for RIIO-GD2. We do not consider it realistic that the cost forecasts submitted for RIIO-GD3 account for the necessary expenditure required to bring service levels up to or above the required minimum standards. For example, Figure 15 and Figure 16 highlight the past 3 years standards for closing gas escapes within 7 or 28 days.
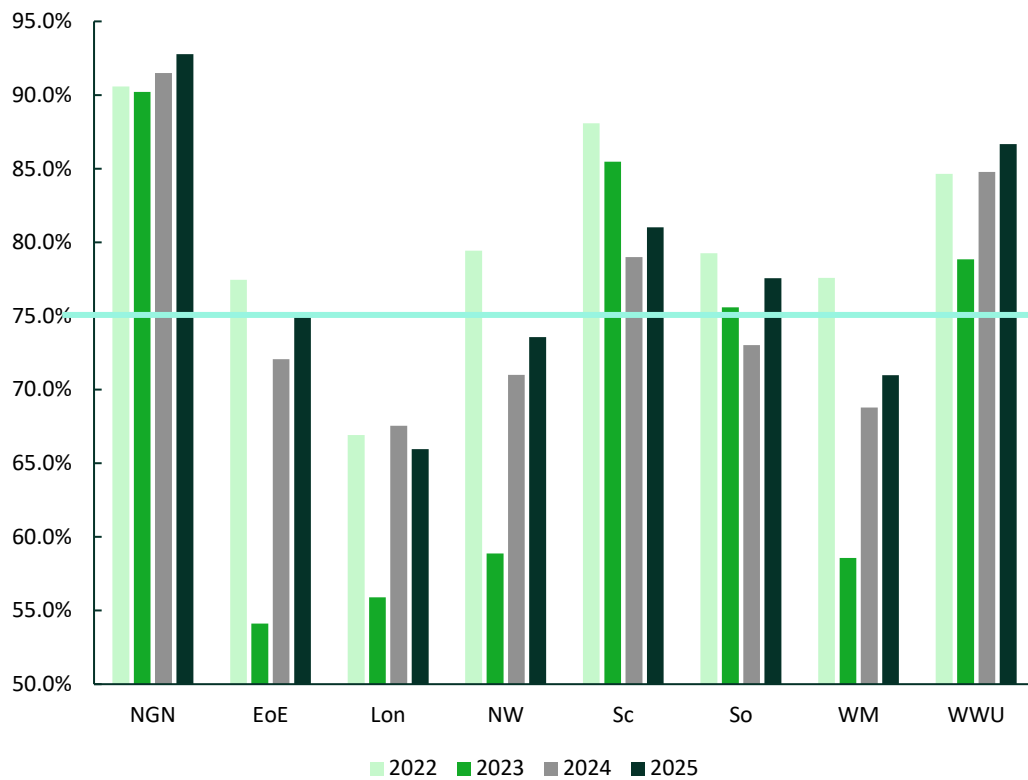
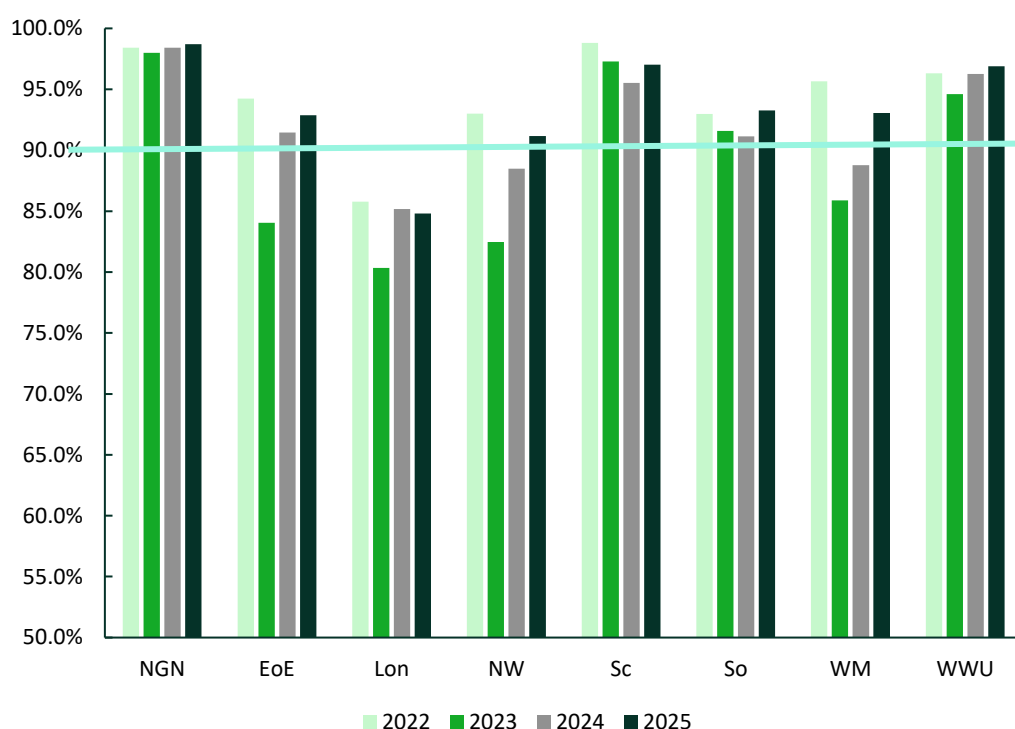*Figure 15 - 7 days ODI performance target (75%)*

Figure 16 - 28 days ODI performance target (90%)

Our analysis demonstrates a negative relationship at the industry level between companies' levels of efficiency at RIIO-GD3 and their latest achieved level of service (2025), please refer to Figure **1**17. That is, *higher* cost performance (towards the bottom of the y axis) is associated with *lower* service performance (towards the left of the x axis), and vice versa.

Intuitively, we would expect companies with lower service levels to perform less efficiently under RIIO-GD3, given the investments required to improve response times. However, the analysis suggests the opposite: better cost performance is associated with lower service performance, implying that some companies may be compromising on service standards by not allocating sufficient expenditure to improve them

In this regard, NGN represent an outlier, as it combines (close to) frontier cost performance with the highest level of service across both metrics. We demonstrate this graphically in Figure **1**17 and Figure 18, where the trendlines have been estimated by excluding NGN from the sample.
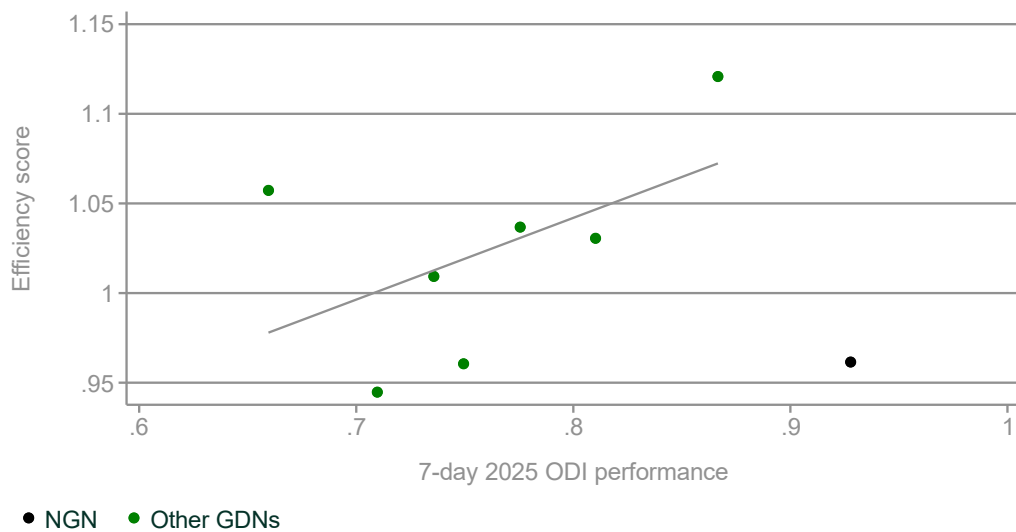
Figure 17 - Cost-service disconnect 7 days
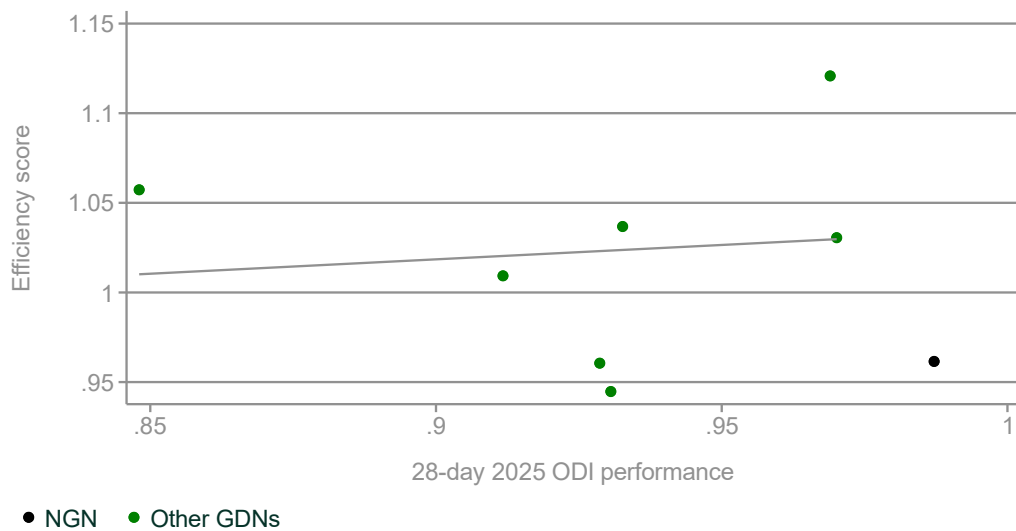
Figure 18 - Cost-service disconnect 28 days

Ideally, we would account for this disconnect between cost and service directly in the modelling (for example by including measures of service quality as an additional cost driver). However, we note that some regulators in the UK have avoided this approach, given the complex relationship between cost and service where both are under management control. Moreover, as NGN is a clear outlier (it is uniquely a low-cost and a high-service GDN), this anomaly needs to be treated appropriately to estimate operationally intuitive relationships between cost and service. Therefore, further work is needed to integrate service performance into the cost assessment modelling.

We have explored two alternative means of demonstrating the impact of service performance on cost efficiency.

First, we use the RIIO-GD3 performance targets to estimate anticipated ODI penalties if GDNs were to maintain their historically observed performance levels, and then add these penalties to the model-predicted costs. The rationale is that a low-cost company is not necessarily efficient if it is also low-quality and have failed key service performance. Such a company could set an infeasible benchmark for the industry and distort the Business Plan Incentive (BPI) mechanism.

Table 11 shows how this affects efficiency scores. Note that this analysis only accounts for the 7 and 28 day standards.

Network	Ofgem efficiency	Ofgem rank	ODI adjusted efficiency	ODI adjusted rank
EoE	96.1%	2	97.0%	3
Lon	105.7%	7	110.4%	7
NGN	96.2%	3	96.2%	2
NW	100.9%	4	102.1%	4
Sc	103.1%	5	103.1%	5
So	103.7%	6	105.6%	6
WM	94.5%	1	95.4%	1
WWU	112.1%	8	112.1%	8

Table 11 ODI-adjusted efficiency[7]

The analysis shows that EoE is erroneously assessed as more efficient than NGN, as NGN overtakes EoE once EoE's poor service performance is accounted for. Meanwhile, the gap between WM and NGN narrows. Note that this analysis implicitly assumes that the ODI rates are somewhat reflective of the costs associated with improving performance, which is unlikely to be accurate. Therefore, this analysis should be treated qualitatively.

Second, we have explored a well-established statistical approach commonly applied in regulatory contexts, in which Ofgem's cost modelling is treated as given, and the GDNs' performance on key

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[7] Note: As the ODIs are 'penalty only', the efficiency score for GDNs that have already met the target (like NGN) do not change.

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service measures is used to *adjust* the efficiency scores *ex post* (referred to as 'second-stage' analysis). Many European regulators commonly use this to account for complicated factors (such as weather, soil conditions, service performance) that are not considered in the first-stage cost models, and is conceptually similar to Ofwat's approach in the water sector, where ex post adjustments are applied to costs rather than to the efficiency scores.

Our process is as follows:

1. Replicate Ofgem's models and estimate efficiency scores for each GDN.

2. Estimate a regression model relating the GDNs' efficiency scores to their historical service performance (measured as the mean of the 7-day and 28-day standards).[8]
3. Predict each GDN's efficiency score based on their observed service performance.
4. The difference between the original Ofgem-based efficiency score and the service-adjusted score could be interpreted as the GDN's actual efficiency.

As an alternative to steps 3 and 4 above, we can use the regression estimated in step 2 to predict what other GDNs' efficiency scores would be if they had the same service performance as NGN.[9]

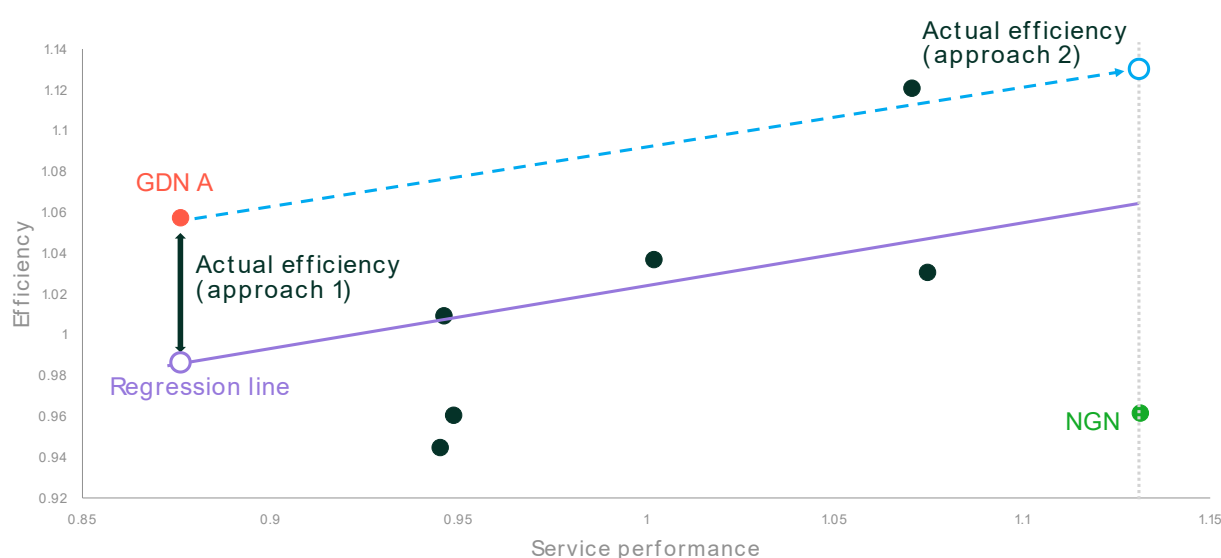The difference between the two approaches is shown in Figure 19.

Figure 19 Approaches to estimating service-adjusted efficiency[10]

Under the first approach, the actual (i.e. *service-adjusted*) efficiency of GDN A is represented by the vertical distance between its current performance and the regression line. The regression line reflects

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[8] Note that NGN is excluded from this regression as a clear outlier.
[9] Alternatively, the regression in step 2 could be used to predict the efficiency score of each GDN if they met the RIIO-GD3 targets. This would not affect the relative performance of the GDNs.
[10] Note: This is a stylised representation based on approximated real data. Each dot represents a GDN. Service performance is improving from left to right, while efficiency is improving from top to bottom.

the expected cost efficiency for a given level of service, with points above the regression line indicating higher-than-expected costs for that service level, i.e. inefficiency.

Under the second approach, GDN A's position is shifted rightward along the slope of the regression line (which represents the 'marginal cost' associated with service improvements), until it achieves the same level of service as NGN.

Table 12 below presents the service-adjusted GD3 efficiency scores derived from this analysis.

Network	Ofgem modelling	Ofgem rank	Service-adjusted efficiency (I)	Service-adjusted rank (I)	Service-adjusted efficiency (II)	Service-adjusted rank (II)
EoE	96.1%	2	95.0%	3	102.6%	3
Lon	105.7%	7	107.3%	8	114.9%	8
NGN	96.2%	3	89.3%	1	96.2%	1
NW	100.9%	4	99.9%	5	107.6%	5
Sc	103.1%	5	97.5%	4	105.1%	4
So	103.7%	6	100.6%	6	108.3%	6
WM	94.5%	1	93.5%	2	101.2%	2
WWU	112.1%	8	106.2%	7	114.3%	7

Table 12 Service adjusted efficiency scores

The results shows that, once service quality is incorporated in this way, NGN becomes the frontier company. Indeed, under the first approach, NGN has the largest improvement in efficiency score relative to Ofgem's original modelling. In contrast, WM and EoE see only modest gains—indicating that their low cost are partly attributable to lower service quality (albeit not entirely, as they are still ranked second and third). By comparison, NGN's low cost cannot be attributed to low quality, reinforcing its position as genuinely efficient.

Under the second approach—where GDN's efficiency scores are adjusted based on the estimated costs of achieving NGN's level of performance—all GDNs' efficiency scores deteriorate significantly. This provides further evidence that WM and EoE are only assessed to be more efficient than NGN because they deliver a significantly lower quality of service to their consumers.

We are concerned that the DD did not include any reference to adjusting expenditure for past levels of service prior to running regressions. This runs the risk that the regression models could determine the frontier company to be one which is not providing consumers with an adequate level of service.

Where efficiency benchmarking does not incorporate actual performance in an appropriate way, it risks undermining the regulatory framework by introducing uncertainty for regulated companies and increasing risk of longer-term consumer harm as truly efficient, high performing companies are penalised and poorer performing companies are rewarded.

Ofgem should ensure that its approach to pre-modelling adjustments (or, indeed, other aspects of the modelling) can reflect past company performance. Reviewing cost efficiency as whole in this way better ensures that true performance is rewarded. Otherwise, companies could artificially reduce their cost expenditure forecasts in order to gain financial rewards and reputational benefits of being labelled the 'frontier' company. However, where customers are not receiving genuine frontier levels of service, rewarding this behaviour is likely to lead to long-term harm. Companies may be encouraged to focus on cost savings rather than customer service or safety, which has clear implications for customers, the industry and the environment.

Retaining this clear link between cost modelling and service levels better allows Ofgem to manage its duties to protect consumer interest, enable Net Zero targets and promote effective competition.

Indeed, Ofgem faced a similar issue at RIIO-GD1, and made pre-modelling adjustments to GDNs' expenditure to reflect poor performance, as shown in the box below.

> In 2010, we did not meet our licence obligation to attend 97% of uncontrolled gas escapes within 1 hour and 97% of controlled gas escapes within 2 hours and were fined £900,000 as a result.
>
> A cost adjustment was made to both NGN and NGGD (who also failed the standard) at the beginning of RIIO-GD1 with an additional £0.75m of costs added to NGN and NGGD costs, which would be equivalent to £1.17m in 23/24 prices. Ofgem stated: *"Safety is the key priority for each of the GDNs. We have therefore added costs to each of the GDNs that have failed the emergency service standard prior to running the regression analysis. We have added £0.75m based on the additional costs NGN and NGGD have stated that they would have required to meet the standard in 2010-11."*

Given the consistency of these results, we propose that Ofgem apply additional scrutiny to GDNs' proposed RIIO-GD3 expenditures, particularly in relation to the significant underperformance against gas escape response targets, and the possible lack of alignment between the RIIO-GD3 cost forecasts and the investment likely required to improve service levels. The publication of the 2025 RRPs may provide additional evidence in this regard. To ensure consistency we consider that Ofgem should apply similar adjustments to GDNs which have failed their standards during RIIO-GD2, such as Cadent and SGN missing their emergency response targets between 2022 and 2023[11].

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[11] Three gas distribution operators to pay £8 million for missing callout targets | Ofgem

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__National Insurance adjustment proposed by Cadent__

We are not in agreement with the proposal by Cadent to account for national insurance contributions (NIC) in the regional wage adjustment. All companies pay NIC. If NICs were a flat tax paid on all salaries, there would not be a need for a separate adjustment for NICs at all—if gross salaries were 17% higher in London than elsewhere, the total cost of employment (i.e. including NIC) would also be 17% higher, which could be directly reflected in the existing regional wage adjustment.[12] However, NICs are only paid on salaries above c. £5,000 p.a., such that the total NIC as a percentage of salary will vary depending on the salary paid, which could (in principle) influence the magnitude of the required regional adjustment.

We have simulated the NIC-corrected labour adjustment for London at different salaries, assuming that wages are 17% higher in London (as per Ofgem's regional wage adjustment). The differential will be lower if considering wages in the South East of England.

As shown in Figure 20, the NIC-corrected adjustment is only somewhat material at infeasibly low salaries (near the £5,000 p.a. threshold). At more conventional salaries, the impact of NIC is low (c. 0.003–0.004 difference), becoming immaterial at higher salaries.
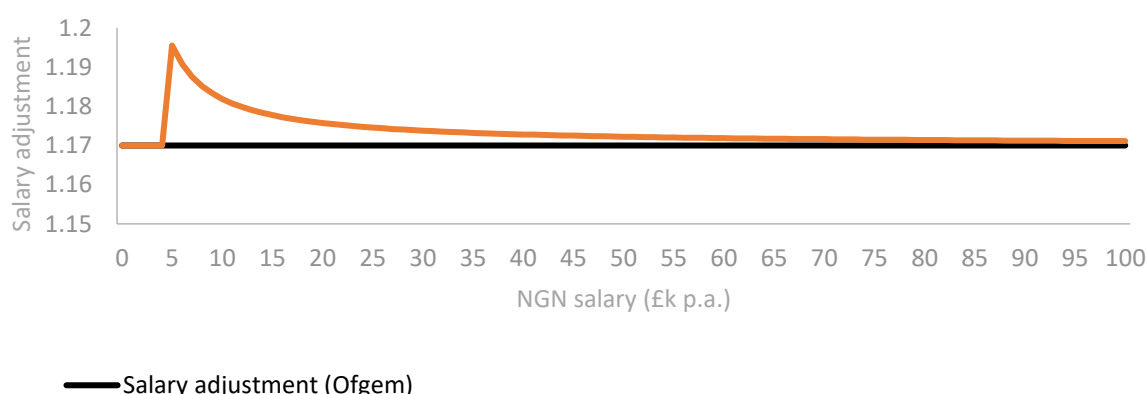

Salary adjustment (Ofgem)

__Figure 20 - NIC corrected salary adjustment__

We therefore do not consider that this adjustment is material enough to offset the additional complexity that would be introduced by it, noting that the magnitude of the adjustment would depend on the exact National Insurance framework that is put in place during RIIO-GD3.

Question 38. Do you agree with the proposed level of aggregation, estimation technique and time period for our econometric modelling?

Yes, we are generally supportive of the level of aggregation and estimation technique which aligns with RIIO-GD2, notwithstanding our concerns about what is included in the econometric modelling covered above. However, Ofgem should consider carefully any changes to the time period in

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[12] NICs would be 15% higher for all companies, so the 15% uplift in the numerator and denominator would cancel out.

econometric modelling and carefully balance trade-offs in including a longer time period / more weight on historical data vs. forecast data.

Totex Benchmarking questions

Question 37. Do you agree with our proposed approach to totex benchmarking?

As the DD stands, we do not agree with Ofgem's proposed approach to the Totex benchmarking. As set out in our responses to questions 34-36 above, we consider that there are material inconsistencies in the application of exclusions, and improvements that can be made to take account of group level effects, sparsity and quality of service. These need to be urgently remedied to ensure robust and fair benchmarking that provides the right incentives to networks to improve both efficiency and quality of service in the interests of customers. NGN considers that Ofgem's SSMD objectives have not been achieved with the benchmarking at DD. However, the remedies with have outlined above can be applied without fundamentally changing the approach to benchmarking and result in a more robust and fairer outcome for all stakeholders.

Question 38. Do you agree with the proposed level of aggregation, estimation technique and time period for our econometric modelling?

Yes, we are generally supportive of the level of aggregation and estimation technique which aligns with RIIO-GD2, notwithstanding our concerns about what is included in the econometric modelling covered above. However, Ofgem should consider carefully any changes to the time period in econometric modelling and carefully balance trade-offs in including a longer time period / more weight on historical data vs. forecast data.

Question 39. Do you agree with our proposed cost drivers and approach to weighting drivers in the totex CSV?

No, as set out in our response to question 34, NGN considers there is robust evidence for group scale effects and that these should be incorporated into the CSV. In addition, we recommend that Ofgem apply enhanced scrutiny to GDN's forecast of cost drivers to ensure they are well-justified, internally consistent and comparable across networks.

Given that Ofgem models business plan data, the underlying methodology used to forecast cost drivers can significantly influence Totex benchmarking outcomes and baseline allowance setting. Where companies adopt fundamentally different assumptions about the future evolution of the sector, the resulting forecasts may reflect divergent expectations of growth or decline, rather than true differences in underlying efficiency. This creates a risk that companies are either unfairly rewarded or penalised due to differing outlooks, rather than actual performance.

We assessed the submitted cost driver forecasts and identified material discrepancies in forecast trends across networks and companies, underscoring the need for greater consistency, transparency, and scrutiny in the treatment of forward-looking inputs. The areas where we find the largest inconsistencies are throughput, number of reports and number of repairs, as shown in Table 13 below.

We did not consider discrepancies in Capex and Repex Synthetic costs as they largely depend on company's Business Plans and forecast activity levels (and for which diverging trends can be expected).

	NGN	WM	EoE	Lon	NW	Sc	So	WWU	SD
Customers	0%	-1%	-1%	0%	-1%	0%	0%	0%	**0%**
Network Length	0%	0%	0%	0%	0%	0%	0%	1%	**0%**
Throughput	12%	29%	27%	17%	18%	0%	4%	9%	**10%**
PREs (Internal & External)	-14%	-19%	-19%	-19%	-19%	-14%	-12%	-3%	**5%**
Total repairs	-26%	-12%	-12%	-12%	-12%	-23%	-23%	-5%	**7%**
External reports	-26%	-14%	-14%	-14%	-14%	14%	-12%	-4%	**11%**
Service Damage Repairs	-26%	-13%	-13%	-13%	-13%	10%	8%	7%	**12%**
Service Condition Repairs	-26%	-13%	-13%	-13%	-13%	-26%	-19%	2%	**8%**
Mains Damage Repairs	-26%	-13%	-13%	-13%	-13%	14%	20%	16%	**16%**
Mains Condition Repairs	-26%	-9%	-10%	-9%	-10%	-27%	-32%	-16%	**9%**
Metallic network length	-11%	-8%	-8%	-12%	-9%	-7%	-9%	-3%	**2%**
PE network length	5%	4%	3%	5%	3%	3%	4%	4%	**1%**
Service Damage Reports	-26%	-13%	-13%	-13%	-13%	250%	9%	9%	**86%**
Service Condition Reports	-26%	-14%	-14%	-15%	-14%	-27%	-13%	1%	**8%**
Mains Damage Reports	-26%	-13%	-13%	-13%	-13%	156%	31%	19%	**56%**
Mains Condition Reports	-26%	-14%	-14%	-15%	-14%	-5%	-20%	-17%	**6%**
Emergency FTEs	23%	6%	-11%	-3%	1%	19%	-4%	2%	**11%**
MEAV	-2%	0%	0%	1%	0%	-1%	-1%	-1%	**1%**
Maintenance MEAV	0%	0%	1%	0%	0%	-1%	-2%	-2%	**1%**

Table 13 Analysis of cost driver forecasts

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Note: We highlight the cost drivers (in light red) presenting the highest standard deviation (the drivers with the largest variation in growth rates across companies, above 10%), as well as the companies (in red) that are driving this variation.

Question 40. What are you views on our proposed workload adjustments to cost drivers?

We do not agree with all the proposed workload adjustments that have been proposed for NGN. There are several disallowances to our submitted Totex which we consider should be included in our ex ante base allowance. For example, £29.4m of our requested Capex been removed from our proposed funding allowance which places us at risk of being unable to carry out essential works. If we are underfunded in these areas we will be at risk of non-compliance with various Health and Safety legislation, but also our overall resilience. For example, OVQ8 discusses our concerns with the disallowances for our Electrical and Instrumentation (E&I) which included proposed investment for backup power provision (generators) which are vital for our enhancing resilience in the event of a power outage which is of increasing relevance due to climate change as identified in our RIIO-GD3 Climate Resilience Strategy. We have also been disallowed £14.4m of funding for mandatory Repex, £16.5m for non-mandatory Repex and diversions. We discuss this in detail in NGNQ6 and also GDQ26 which provides our concerns around the removal of general reinforcement from base allowances, into a Re-opener.

Non-regression analysis question

Question 41. Do you agree with our approach to non-regression benchmarking analysis?

No, we consider that there are material inconsistencies in the cost exclusions earmarked for non-regression analysis across the networks and that these should be remedied before a fairer non-regression benchmarking analysis can take place. Please refer to our response to GDQ35 where we demonstrate the implications of this and provide solutions to ensure robust and fair benchmarking in the round.

Catch-up efficiency challenge questions

Question 42. What are your views on our proposed approach to applying the catch-up efficiency challenge?

NGN is supportive of retaining the RIIO-GD2 approach to applying the catch-up efficiency challenge. We do not consider that the quality of the Totex model has materially improved since RIIO-GD2 and, therefore, the benchmark should not be more stringent than it was at RIIO-GD2.

As a change to the catch-up efficiency challenge would affect all networks equally, we see no further evidence either in favour or against a change in the benchmark, besides the quality and reliability of the underlying model.

Question 43. Do you consider that the efficiency frontier should be set based on historical performance?

Yes, as highlighted in our response to GDQ36 above, we consider that historical performance of both cost and service should be taken into account when assessing the deliverability of GDNs' business plans. In particular, NGN has a long track record of delivery a high quality of service to our customers at a low-cost, and our ambitious business plan takes this further. Meanwhile, other GDNs have not met service standards, yet are proposing substantial (relative) reductions in costs—we do not consider that it is feasible for GDNs to meet the RIIO-GD3 service standards without increasing their expenditure. The RIIO-GD3 Business Plan Incentive assessment should also take this into account.

Technically assessed costs question

Question 44. Do you agree with our assessment of technically assessed costs and bespoke outputs?

No, we consider that there are material inconsistencies in the cost exclusions earmarked for technical assessment across the networks and that these should be remedied before a fairer technical assessment analysis can take place. Please refer to our response to GDQ35 where we demonstrate the implications of this and provide solutions to ensure robust and fair benchmarking in the round.

Disaggregation of allowances question

Question 45. What are your thoughts on our approach to disaggregating cost allowances?

We are broadly supportive of the proposal to maintain the existing approach when it comes to disaggregating Totex allowances for RIIO-GD3. However, as noted in our response to the RIIO-GD3 SSMC, the discrepancies between disaggregation of allowances and the naming conventions between cost assessment modelling outputs, Price Control Financial Model (PCFM) and the Regulatory Reporting Pack (RRP) has resulted in issues and errors throughout RIIO-GD2. We would therefore encourage alignment between all areas as we move into RIIO-GD3, ensuring consistent disaggregation levels but also naming conventions. NGN recommend that there is a collaborative process with Ofgem and the sector following FD to ensure there is an appropriate breakdown and mapping between the various files to ensure clarity in allowance disaggregation.

Totex Incentive Mechanism (TIM) question

Question 46. Do you agree with our proposed TIM sharing factor?

No, we do not agree. We propose a differentiated Totex Incentive Mechanism (TIM) rate whereby GDNs close to or beyond the cost efficiency benchmark would receive a greater TIM rate

We consider that there is a need to assess the strength and application of the TIM in the context of the risk symmetry of the regulatory package. We commissioned Frontier Economics and Oxera Separately to test the incentives in the Regulatory package.

1. Frontier Economics – Expected performance Modelling for RIIO-GD3

We have commissioned Frontier Economics to undertake an assessment[13] of the regulatory package, which indicates a clear skew, with greater downside risk, as shown in Figure 21. The incentive framework is, at expectation, skewed to the downside with a mean outcome of -47bps of RoRE. This means that a notional company would be expected to underperform against the regulatory package set out in the DD. This asymmetry is being driven by:

- Expected underperformance in totex,
- GSOPs
- BPI
- Penalty only ODI-Fs
- Risks of breaching the ERTLO
- Penalties for NARM underperformance
- Modelled PCD clawback

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[13] Please see EXPECTED PERFORMANCE MODELLING FOR RIIO-GD3 report (Frontier Economics) appended with our DD Overview response.

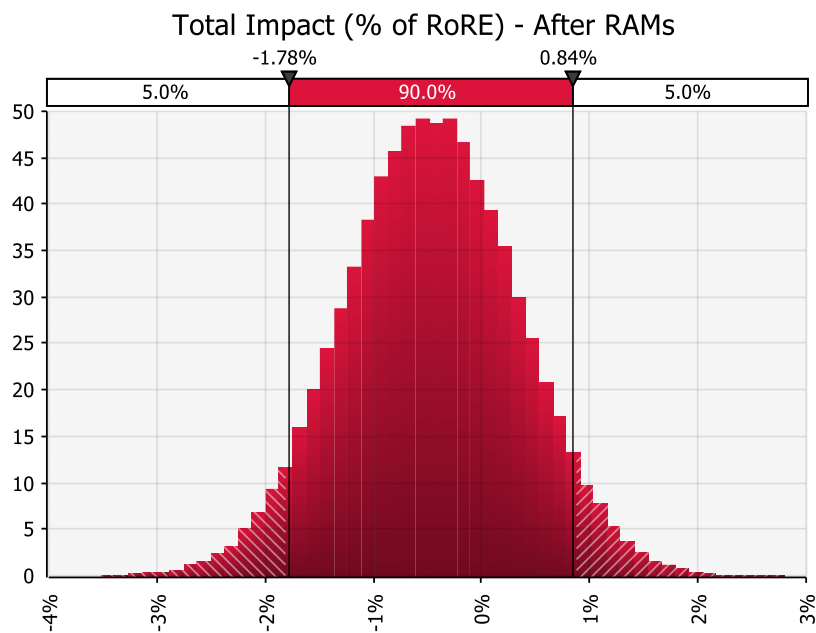## Total Impact (% of RoRE) - After RAMs

Figure 21 Risk asymmetry of the RIIO-GD3 regulatory package – with expected Totex underperformance

As shown by Figure 22 below, Frontier Economics' simulation shows an expected underperformance on totex of -0.29% in RoRE terms. Achieving an equivalent upside outperformance occurs at the 80th percentile of our simulation. The modelling assumptions for totex (which are calculated using RIIO-GD2 data) are conservative given the extent of disallowances vs business plans that Ofgem has proposed in the DD, which are almost three times larger than the disallowances Ofgem made at RIIO-GD2.
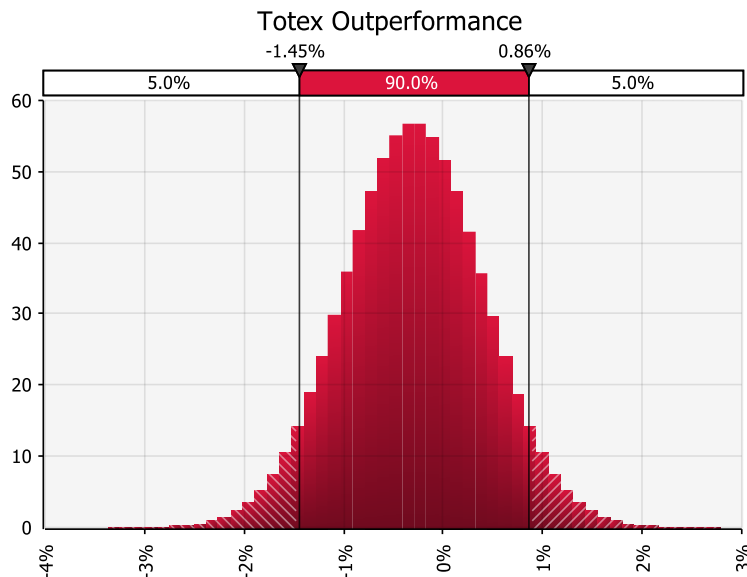
Totex Outperformance

Figure 22 Baseline model results –Totex performance

Opportunities to outperform during RIIO-GD3 are therefore limited, with a challenging regulatory package offering few opportunities to outperform. To ensure that GDNs remain incentivised to perform against targets, consideration should be given to the sharing factor percentage and whether this offers sufficient reward to enable companies to overperform.

We would also suggest that the TIM could be strengthened by ensuring that the rates are reflective of the actual performance, either by linking the incentive rate to relative efficiency (i.e. differentiating according to the frontier or laggard efficiency status) or where there is low confidence in the costs. This would improve the effectiveness of the TIM by ensuring companies only benefit when they outperform, which has clear benefits for consumers.

2. *Oxera – BPI Incentives at the RIIO-GD3 Draft Determination*

Oxera's report, appended to this response, assesses Ofgem's RIIO-GD3 approach to incentives within the RIIO3 framework, focussing specifically on the Business Plan Incentive. It finds that the RIIO-GD3 framework incentivises GDNs to submit business plans with ambitious cost reductions, without clear accountability for their deliverability—unlike mechanisms such as the RIIO-1 IQI regime. In contrast, incentives to deliver high service quality are notably weaker, both at the planning stage and during delivery. Cost and quality are assessed separately, despite jointly defining value for money.

This misalignment risks incentivising low-cost, low-quality outcomes in future price controls. To address this, Ofgem can strengthen the incentive properties of the RIIO-GD3 framework and better align rewards with sustained value delivery.

To improve the incentive properties of RIIO-GD3, Ofgem could introduce a differentiated TIM, with higher sharing rates for companies close to or beyond the efficiency benchmark, and lower rates for those lagging behind. This approach—similar to the RIIO-1 IQI would reward credible ambition and actual delivery while discouraging over-optimism.

Such a mechanism would better align rewards with deliverability, enhancing the quality of information revealed through the Business Plan Incentive. It could operate alongside or instead of fixed lump-sum Business Plan Incentive rewards, and be conditional on-Stage B eligibility or offered as an opt-in for efficient networks.