RIIO-3 Team
Network Price Controls
RIIO3@ofgem.gov.uk(by email only)

National Grid ESO
Faraday House
Gallows Hill
Warwick
CV34 6DA

Adelle.wainwright@nationalgrideso.com
nationalgrideso.com

06 March 2024

ESO Response to RIIO-3 Sector Specific Methodology Consultation

Dear RIIO-3 Team,

Thank you for the opportunity to respond to your consultation on the RIIO-3 Sector Specific Methodology

Who we are

As the Electricity System Operator (ESO) for Great Britain, we are at the heart of the energy system, balancing electricity supply and demand second by second.

Our mission, as the UK moves towards its 2050 net zero target, is to drive the transformation to a fully decarbonised electricity system by 2035, one which is reliable, affordable, and fair for all. We play a central role in driving Great Britain's path to net zero and use our unique perspective and independent position to facilitate network and market-based solutions to the challenges posed by the trilemma.

As we become National Energy System Operator (NESO) we are building on the ESO's position at the heart of the energy industry, acting as an enabler for greater industry collaboration and alignment. This will unlock value for current and future consumers through more effective strategic planning, management, and coordination across the whole energy system.

In our response to the consultation questions, we have focused on answering the questions where we believe we can add value based on our experience and role within the energy industry. Below, we have summarised the key themes of our response with our more detailed thoughts contained within the later appendices.

Our key themes

A changing role for the ESO

There will be significant changes in the energy sector during the RIIO-3 price control period. By then, the ESO will have transformed to act as NESO with an evolving responsibility for strategic whole energy system and network planning, an emerging role as Regional Energy Strategic Planner and a new Directorate of Resilience and Energy Management.

For NESO to be a success, other organisations across the energy landscape also need to be set up for success, so that together, we can face the challenges of delivering a decarbonised, decentralised, and democratised energy system.

Strategic whole-system planning for net zero infrastructure

We agree with the proposal to use Future Energy Scenario (FES) 2023/24 as the basis for RIIO-3 plans, and we agree with the proposal to use FES Leading the Way as the planning scenario for Electricity Transmission (ET) in RIIO-3. An ambitious scenario for electricity is important to ensure delivery at pace and speed up investment in the network and is in line with the Electricity Network Commissioner's recommendations.

We also agree with the proposal to use the FES Leading the Way and Falling Short as the planning pathways for the gas networks. We believe that Falling Short is the most suitable scenario to use for the gas networks. Whilst Ofgem note reservations with the Falling Short scenario, we believe that there is still value in using this scenario to consider the risk of a slower transition to net zero. As the timeframe covered by the five-year forecast, does not consider gas network decommissioning, this would be in line with the RIIO-3 timeframe and would not drive substantial differences in network investment.

The next price control period will see significant changes in whole system planning, with strategic decisions around heat and progress in the hydrogen economy. It is reasonable that the development of a separate support mechanism for hydrogen transport infrastructure would mean change in the way that hydrogen related activity is supported in RIIO-3. As government proposals are at quite a high level, we recognise the work Ofgem is doing to ensure that RIIO-3 and Hydrogen Transport Business Model develop in a complementary way.

System efficiency delivered through innovation and reform

Innovation is vital for the development of solutions to the challenges of decarbonising increasingly difficult sectors. We agree with retaining Network Innovation Allowance (NIA) and Strategic Investment Fund (SIF) and think there is an opportunity to streamline and clarify the operation of both funding mechanisms. We also welcome the proposal for a Future Regulatory Sandbox.

We note the proposed timelines for a digital change workstream to look at modernising regulatory reporting and we are keen to stay engaged with Ofgem's forthcoming consultation on governance models for a Data Sharing Infrastructure in Spring 2024.

Connections reform is a key part of enabling the transition to a net zero energy system. We believe that proposals for generation and demand connections volume drivers in RIIO-3 need to be designed to efficiently consider the impact of reforms to the connections process.

Secure and resilient supply

As an Operator of Essential Services (OES), and with our role in ensuring the security and resilience of Critical National Infrastructure (CNI), we are supportive of the principles and proposals set out regarding resilience strategies and metrics.

We look forward to engaging with you further and should you require further information on any of the points raised in our response please contact Laura Thomson, Regulatory Policy Manager at laura.thomson@nationalgrideso.com.

Yours sincerely

Adelle Wainwright

Head of Regulation

Appendix 1 RIIO-3 Overview Questions

Question 1: Do you agree with our proposal for how RIIO-3 should interact with the Hydrogen Transport Business Model (HTBM)?

It is reasonable to assume that the development of a separate support mechanism for hydrogen transport infrastructure would need to be reflected in the way that hydrogen related activity is supported in RIIO-3.

However, we note that Department for Energy Security and Net Zero (DESNZ) proposals are currently at a high level, with only principles for an initial allocation round with a focus on development of two regional networks having been set out. No information on the timing or nature of further rounds has yet been given.

The next price control period is expected to see significant advances in whole system planning, strategic decisions around heat, and progress in the hydrogen economy. Care must be taken to understand the interaction of instruments across the price control period and avoid gaps in support that will delay progress.

We recognise that Ofgem are working closely with DESNZ to ensure that RIIO-3 and HTBM allocation develops in a complementary way. These interactions, and any activity around decommissioning, must be closely aligned to ensure progress towards net zero and security of supply alongside protecting consumers.

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

Yes, we recognise the strategic case for hydrogen blending into the distribution network as set out by DESNZ in December, noting the potential system benefits enabled by allowing electrolytic hydrogen producers operating in areas of thermal constraint to utilise electricity that would otherwise be curtailed and blend alongside, or in advance of, securing enduring offtakers for that hydrogen.

This benefit might be even greater if blending were allowed at transmission level. Allowing network costs for blending to be included in RIIO-3 makes sense. Determining whether Uncertainty Mechanisms (UMs) are the right route, and which UM, will depend on whether the timing and process can align with that of real-world projects approaching networks to explore blending. Otherwise, there is a risk that the UM route may be a blocker and result in unnecessary delays to progressing projects.

The consideration of blending on the transmission system could be a factor in the commercial decisions for electrolysers. To minimise wind curtailment due to demand or constraint boundaries, electrolysers could continue to make use of this excess generation, however, a demand for the gas is required.

Blending may achieve a lower price for the hydrogen (as it would be sold at the price of Natural Gas) but would ensure a consistent demand and income source.

Question 4: What are your views on the proposal of using the GD specific Heat Policy reopener, the RIIO-3 net zero related UMs, or a mixture of both to fund network costs incurred as a result of the government's 2026 decision on hydrogen for heating (where RIIO is deemed to be the most appropriate funding mechanism for these costs)?

It would be helpful to have clarity on a single funding route. The Heat Policy reopener seems to be ideally placed to respond to the 2026 Heat Policy decision, though some of the categories may need revising for RIIO-3.

Question 5: What are your views on our proposal to not enable funding for further evidence relating to repurposing the existing network for hydrogen heating ahead of government's decision on hydrogen heating in 2026?

It is unclear what this proposal would mean in practice. The period between the start of the price control and a decision on heat could be quite limited. We would like to understand if the proposal means that networks could seek funding for activity that would only be supported in light of a positive decision or is the proposal seeking to discourage any plans for hydrogen heat related work until after the decision, in which case it would presumably only be supported by an UM. We think that more clarity would be useful here, particularly on how to differentiate between evidence and preparatory works that are supportive of government hydrogen and whole system ambitions and those that are specifically heat related.

Question 7: Do you agree with the proposal to use the FES framework for selecting the RIIO-3 scenarios?

Yes, we agree with the proposal to use the FES framework for selecting the RIIO-3 scenarios for all the reasons articulated in the consultation. The process is well established and understood by all parties.

Question 8: Do you agree with the proposal to use FES Leading the Way as the planning scenario for ET in RIIO-3?

Yes, we agree with the proposal to use the FES 2023 Leading the Way scenario for draft planning, as it reflects a more electrified pathway to net zero. An ambitious scenario for electricity is important to deliver at pace and speed up investment in the network and is in line with the Electricity Networks Commissioners recommendations. As we have discussed in recent conversations with Ofgem and more widely, the scenario framework is changing for FES 2024 and there will not be a direct equivalent for Leading the Way in FES 2024. Leading the Way would be used for the draft submission and then could be updated with a FES 2024 pathway for the final submission. We are working with Ofgem to determine which pathway would be the most suitable one to use for the final submissions.

Question 9: Do you agree with the proposal to use two FES planning pathways for the gas networks, ie Leading the Way and Falling Short as the additional common conservative scenario?

We agree with this recommendation and the reasoning set out.

The change from scenarios to pathways for FES reflects how we aspire to optimise the trilemma and seek to meet net zero ambitions in a fair and efficient way, considering the impact on consumers, and engagement of consumers across all segments.

We believe that in using scenarios, that Ofgem will need to consider the trade-offs between the potential for asset stranding against the consumer impacts impact of not building an asset when it is needed. We believe that a suitable risk-based approach is required to accommodate this balance.

Question 10: Is Falling Short the most appropriate common conservative planning scenario to be used for the gas networks? Or is a common gas network developed scenario more appropriate?

We believe that Falling Short is the most suitable scenario to use for the gas networks. Whilst Ofgem note reservations with the Falling Short scenario, we believe that there is still value in using this scenario to consider the risk of a slower transition to net zero. As the timeframe covered by the five-year forecast, does not consider gas network decommissioning, this would be in line with the RIIO-3 timeframe and would not drive substantial differences in network investment.

Question 23: Do you have any views on our proposed long-term approach to embedding climate resilience, including the principles for embedding climate resilience?

We agree that embedding climate resilience measures across the energy network, is important for maintaining the reliability of future energy supplies as well as reducing the impact and cost of severe weather events, and we agree with the principles as outlined in paragraph 6.157 of the RIIO-3 overview document.

We agree it is important for companies to consider high-impact, low likelihood events when making climate resilience decisions, however it’s important that all companies have a clear and consistent understanding of what these are. We suggest that reasonable worst case and central scenarios are produced or endorsed by Government so that all companies are planning against the same baseline.

We think that it is useful to consider regional variances in climate and weather when developing these scenarios. This will help ensure that companies do not invest in climate resilience measures that are not required.

Question 24: Are there any early learnings we should be aware of/incorporate to make progress on this in RIIO-3 or beyond?

We have identified the following high-level gaps and discrepancies in relation to resilience analysis;

- A need for common language frameworks and definitions of resilience,
- A need for standardisation, particularly in regards of climate scenarios used for climate change projection-based analysis and datasets,
- A need for modelling capability to be set up to cover electricity and gas interactions and interactions with key sectors and Critical National Infrastructure external to the energy industry, including water and telecoms.

Question 25: Do you agree with our suggested approach for embedding climate resilience into RIIO-3, namely: introducing resilience strategies; developing forward-looking resilience metrics; and introducing climate resilience working groups?

We are supportive of the proposal to introduce climate resilience working groups. However, we think that there would be benefit in establishing an overarching working group which includes all sectors (electricity, gas, distribution, transmission etc.), with smaller sub-sector working groups. This will help ensure that a whole-energy approach is being considered.

We think that the development of climate resilience strategies is useful, and companies should be held accountable to delivering these. We think that the development of resilience metrics would be beneficial in supporting this and have outlined our thoughts on this in more detail in response to question 26 below.

We think that further consideration needs to be given to how costs related to climate resilience decisions will be treated, to avoid double counting costs and minimise the cost to consumers.

Additionally, we think that there could be scope in updating the Cost Benefit Analysis / Engineering Justification Paper guidance so that companies need to demonstrate that they have considered climate resilience in their investment decisions.

Question 26: Do you agree with the proposals that we have set out around the resilience metric?

We think there would be merit in developing resilience metrics, particularly in relation to holding companies accountable to delivering their climate resilience strategies, measuring the impact of any climate resilience interventions; and complying with any resilience standards.

We agree that metrics should be developed for all sectors, including Electricity Transmission, Gas Transmission, Electricity Distribution and Gas Distribution.

We agree that the development of metrics should align with the development of climate resilience strategies and resilience standards, to ensure that a holistic approach is being taken to measure company progress and performance.

Whilst we agree that the level of complexity inherent to climate resilience warrants special attention and resources, we think that any metrics (and methodologies that are used to calculate the metric) should be risk agnostic, so that assessments can be replicated across other risk areas as well. This will be important for risk comparison and prioritisation.

Question 47: Do you have any views on our proposal to retain a flexible allowance, providing evidence for why you think that it should, or should not be, retained?

We support the proposal of retaining a flexible allowance, such as the Network Innovation Allowance (NIA), which is critical to supporting innovation across the industry.

NIA has successfully incentivised higher risk network innovation in a more agile way that wouldn't necessarily have been possible within the Business Planning cycle. The flexibility of this funding provides innovators with the opportunity and resources to find novel solutions to key system challenges, which are able to deliver consumer and system benefits, faster and more cost effectively.

Question 48: Do you have any views on our proposal to retain a competitive network innovation funding pot, that continues to focus on key challenges facing the energy sector, with phases to de-risk the pot?

We support the proposal to retain a competitive network innovation funding pot, such as the Strategic Innovation Fund (SIF). The SIF mechanism has bridged a gap between funding for smaller projects and funding for larger commercial offerings, in preparation for market adoption.

We support changes to make this competitive funding pot focused on Alpha and Beta type projects and streamlining the mechanism with a single application process and a decision point prior to Beta.

Preliminary Discovery projects (i.e., feasibility studies) could then be delivered through, but not limited to, the flexible allowance (NIA) to simplify the development of these early-stage projects and allow them to be more adaptable in their delivery of required outputs to move to Alpha or Beta directly.

Question 49: Do you have any views on how the structure of the price control innovation funding could be adapted to better focus on whole systems problems, and ensure strategic alignment with other public sector initiatives?

We agree with Ofgem's comments on the need to streamline the operation of the innovation funding mechanisms further. We think that simplifying the conditions and application processes would facilitate the participation of new stakeholders, to allow whole system stakeholders, to successfully collaborate and innovate in partnership with networks.

Ensuring the availability of funding to drive all aspects of the energy transition to Net Zero is contingent upon strategic alignment, particularly with a focus on whole energy system challenges where innovation can have the most significant impact. Strategic focus should not solely rely on stakeholder feedback but also incorporate other pieces of evidence and analysis, such as literature reviews and benefits analysis, where available, to identify challenge areas where innovation funding could have the most significant impact.

The strategy development process and the evidence used should be entirely transparent to stakeholders.

Question 50: Do you agree with our proposal to continue with a similar level of innovation funding, and if not, could you provide evidence for why a different amount is required, including consumer research you are aware of into their willingness to pay for network innovation?

The current level of funding was first proposed in 2020. Since then, the challenges facing the energy system have continued to intensify (e.g., increasing balancing costs, number of market participants and the amount of new generation needing to connect).

NESO and network owners will continue to have a clear role in encouraging greater innovation across the whole energy sector, therefore additional innovation funding will be required as the industry begins to focus increasingly on solving whole energy system challenges.

We haven't yet determined an amount we believe would be required to maintain (or increase) our innovation activities during the RIIO-3 period or carried out consumer research to support this.

Question 51: Do you agree there is a need to expand the scope of innovation funding to be more inclusive of third parties?

All innovation funding requires significant third-party involvement already. 75% of NIA must be spent externally, and all SIF and NIA projects must have external partners. This has often been limited to SMEs and large, incumbent organisations, because of barriers for smaller suppliers and startups to work within restrictive contracting and procurement constraints, but also due to a reluctance to share Intellectual Property at such an early stage.

We believe a key barrier is due to the maturity of smaller supplier and startups' technologies making it difficult for their offerings to compete with more established solutions.

Question 52: What are your views on us establishing an accelerator to support early-stage innovators?

More clarity is needed on the purpose of the accelerator and consideration should be given to how this would link to existing energy accelerators and support mechanisms such as the Energy Systems Catapult, Green Finance Institute, Knowledge Transfer Network and Energy Innovation Centre, to avoid duplication.

The market will choose solutions which are lowest cost, therefore support for startups should focus on developing their solutions to compete equally with established providers. This could be achieved through sandboxes which allow earlier-stage innovators to demonstrate their solutions on an equal basis with existing providers, highlighting where regulatory and market barriers should be addressed to allow greater participation from these smaller, more diverse providers.

If third parties were to access funding independently of networks, networks would still need to be involved to review proposals or participate in steering committees to ensure proposed solutions are viable for implementation. Improved access to information and clarity around the funding conditions, contracting terms, and better engagement with startup ecosystems would go further to support early-stage innovators to work more effectively with networks, whilst avoiding the additional administrative burden, and associated costs of an accelerator.

Question 53: What are your views on our proposal for this to be a smaller part of a future challenge fund and to be sponsored by networks?

Startups would be best supported through sandbox environments (including the Future Regulation Sandbox and proposed market sandboxes) to develop and test their solutions on an equal basis with more established participants' solutions. This would also identify where changes are needed to regulation and market mechanisms to encourage greater participation from smaller, and more diverse participants.

Question 54: Do you have evidence of potential innovation projects that have not been implemented or sought funding due to the five-year structure of the price control? How could this issue be addressed?

Evidence suggests that innovation projects were postponed towards the end of RIIO-1 due to uncertainty surrounding the funding available for RIIO-2. To prevent a similar cliff-edge in activity, particularly given the inherent uncertainty in delivery timescales for innovation projects, it is essential to establish a similar roll-over mechanism between funding periods and achieve clarity over RIIO-3 funding early on.

Question 55: Do you agree with our proposal to run FRS trials with an explicit focus on informing changes to the rules governing energy network activities – incentivised through SIF or other price control mechanisms?

As outlined in our response to the call for input on the Future Regulatory Sandbox (FRS), we agree with the need to strike the right balance between rules not getting in the way of innovation and rules being in place to protect consumers, energy systems and efficient market functioning. We believe that the FRS could be a useful tool in the policy-making process, and we agree with the high-level principles of design outlined in the call for input.

We would be very happy to share our own experiences and learnings from Project REVEAL and would be glad to collaborate to ensure that the processes for any future ESO sandbox and the FRS are aligned. We believe this would be beneficial for innovators and help to produce viable solutions with less friction, at speed, to deliver more benefits to consumers.

We would anticipate that REVEAL and FRS would be complementary so that a trial in FRS which would impact on the operation of the system could be managed through REVEAL rather than through the existing live environments, promoting greater agility and minimising risks. We also see a future point where relevant pre-live simulations could be tested in the Virtual Energy System.

Question 57: Do you have any feedback on the view that not enough network innovation funded projects have been rolled out, and can you share any evidence you have to support your position?

As there may be a lag between the closure of an innovation project and the implementation of its solution into the business, there is a possibility that most benefits are unlikely to be realized within the same price control period. Even "unsuccessful" projects that are not implemented still generate value for the business in terms of knowledge/learnings acquired, avoided future work/costs, and more informed decision-making.

Due to the type of innovation projects the ESO carries out, which are not infrastructure or asset focused, we don't usually have a problem funding smaller scale implementation, and successful roll-out, into the business-as-usual environment, is usually dependent on the availability of IT resources or data.

Introducing rewards for the deployment of NIA projects and a roll-out allowance for SIF projects could serve as incentives to facilitate deployment and eliminate barriers to initiating larger, cross-sector IT investments. This is especially relevant in cases where the benefits could be more widely realized by the broader industry for example, where networks are not typically incentivized to deploy a solution more widely.

Question 58: What are your views on the design of potential new mechanisms to address this?

We feel that the proposed ‘Roll-out penalty’ will discourage networks from pursuing higher-risk ideas that may not be successful (this is an inherent risk, particularly in more transformative innovation projects).

Roll-out funding could be included within the SIF mechanism; i.e. once implementation plans are clear, projects could access the funding necessary to support greater roll-out innovations to the wider system. Likewise, the terms of NIA funding could be expanded to include the rapid implementation of a project within its scope, provided that it satisfies the requisite criteria. This would avoid unnecessary delays in realising the benefits from projects. Funding could be used to support benefits tracking to better demonstrate the value of innovation funding and encourage wider implementation of outcomes, as this tracking is difficult to do as BAU, especially where the benefits are indirect to the ESO.

We think that improving roll-out should be a secondary priority to improving the ‘consistent sharing’ of innovation, as the aim of innovation should be to generate learning. Even the best project dissemination is not valuable unless it is incorporated into the existing body of knowledge and can be easily found by others.

Question 60: Do you have any initial views on opportunities for improving efficiency in providing the data that Ofgem receives as part of regulatory instructions and guidance?

We think that secure and resilient data sharing at scale across the sector is an important enabler for the sector’s digitalisation and in achieving the energy transition. Efficient data sharing is necessary in both our current role, and our future roles as NESO. We are supportive of activities that contribute to reducing the friction of data sharing, and that ultimately benefit consumers.

We consider that a suitable sector digital governance model and trust framework is required to enable this success. We are supporting the development of an energy sector data sharing infrastructure through our Virtual Energy System programme.

Appendix 2 ET Annex Questions

Question 1 - What are your views on the materiality threshold that should be set to determine which projects fall into or out of our proposed major projects regime?

We agree with having a materiality threshold for major and smaller projects. Given the scale of investment required, it may be beneficial to review the current £100m threshold as the type of project which would be classed as a major project, as the £100m threshold would capture the majority of Main Integrated Transmission System (MITS) investment. A threshold could also consider other factors, for example linking to the complexity of project delivery, or the importance of a project from a wider net zero perspective.

Question 2 - What are your views on our proposed approach to setting PCF and ECF, the scope of PCF and ECF and continuing the 'operational aspects' introduced under ASTI?

We agree with the principles and scope of Pre-Construction Funding (PCF) and Early Construction Funding (ECF) and note that alignment with CSNP outputs will be key, particularly environmental and community aspects. It would be useful to understand how the PCF and ECF re-opener would impact CSNP decisions and how the reopeners may change from the initial Accelerated Strategic Transmission Investments (ASTI) approach. We agree that a cost pass through approach for PCF and ECF costs, may be appropriate given the complexity of the projects and agree with a reasonableness test if this approach is taken forward.

Question 3: What are your views on options for how the ITA could be implemented for major new ET3 investments, and what are your views on its role and scope?

We agree with the proposal for an Independent Technical Advisor (ITA), as outlined in the ET Annex document, and think that it could provide increased regulatory assurance which could help facilitate a regulatory decision-making process, where timelines are important to the development of network infrastructure.

Question 4: What are your views on introducing a delivery incentive into RIIO-ET3 for major projects that is broadly similar to the ASTI ODI-F? Do you consider that delivery should be more strongly incentivised than under ASTI, and if so, how?

We agree that there should be a delivery incentive mechanism with rewards and penalties.

The timely delivery of projects is important. If the risk/reward structure is not set at the appropriate level it could result in unintended consequences, for example, encouraging more risk averse behaviours, in terms of earliest in-service date and introducing new and innovative solutions, and potentially prioritising major projects ahead of other investments.

Question 5: What are your views on our proposed cost assessment approach for major new RIIO-ET3 projects?

We agree that an alternative approach would be useful and look forward to further detail on how it would be implemented.

Question 6: What are your views on our proposed treatment of sub-£100m schemes identified by the CSNP?

We agree with the approach that the principles and framework would retain the characteristics of the regulatory regime for major projects and should align with major projects including the timings of regulatory decisions.

Question 9: What are your views on our proposal that there is a need for generation and demand connections volume drivers in RIIO-ET3, and how, if at all, they should change relative to those used in RIIO-ET2?

We are observing major increases in the number and capacity of connection applications, with more than 175GW of new applications received over the last year. The queue for transmission connection currently stands at over 450GW.

We are implementing reforms to the connections process to set higher entry requirements in future, to terminate the connections contracts of projects that don't meet delivery milestones, and to accelerate viable and priority projects into capacity vacated by terminated projects. However, this will take time to deliver impact and we do not yet know what the future volume, capacity and technology mix of future generation and demand connections will be as a result.

It is possible that if the currently planned changes do not have sufficient impact, then we may need to consider greater intervention, for example through setting restrictions on connections in line with any future Strategic Spatial Energy Plan. Any future arrangements for funding connections in RIIO-T3 should be designed to efficiently take this uncertainty into account

We also note that Ofgem have published a date to which the SSEP will be provided in a footnote on page 14 of the ET Annex document, and we would like to confirm that any timing of the SSEP has not yet been agreed.

Question 14: Do you agree with our proposal to retain the NAP for RIIO-ET3, and do you have any views on if and how it should be updated?

Yes, the NAP should be retained to act as a guide and to give balance between the needs of the TOs to gain access to their equipment and the aim of the ESO to minimise and control constraint costs.

Question 22: What are your views on the extent to which fundamental reform of the ET connections incentives is required, and how would you approach that reform?

In December 2023 we recommended significant reform of the connections process and are aiming for 'go live' of the reformed connections process from 1 January 2025. We think any RIIO-ET3 incentives for connections need to take this process into account and align with the overall objectives of connections reform, namely to:

- provide the greatest opportunity for earlier connection dates for generation and demand projects across Great Britain, on a first ready first connected basis;
- ensure more efficient and coordinated planning of the network (i.e. onshore, offshore, including interconnectors and offshore hybrid assets, and across transmission and distribution networks), thereby delivering savings to project developers and consumers;
- support more efficient delivery of network infrastructure, by building out the network more efficiently in anticipation of need;
- better facilitate competition, innovation and the introduction of non-build solutions; and
- facilitate the introduction of a SSEP and align to and allow synergies with Centralised Strategic Network Planning and strategic planning of offshore networks.

Question 23: Do you have views on how the Timely Connections incentive can be reformed, or replaced, to better capture the efficient coordination of network offers?

Further to our response to ET Annex question 22 we also note that under our recommended reformed connections process, we are proposing annual application windows, with connection offers being made within 6-8 months of the window closing.

The specific timings and form of the reformed connections process remains to be confirmed during 2024, but the timely connections incentive should be designed to align with the reformed connections process once it goes live.

Question 24: Do you have views on how the QoCS incentive can be reformed, or replaced, to better capture the service that connections customers receive?

As outlined in our response to ET Annex question 23, we think that it would be useful to design the incentive to align with the reformed connections process, once it has gone live.

Question 25: What activities should be considered business as usual under the SO:TO incentive?

It would seem appropriate that an enhanced service that is offered to NESO in subsequent years (Year 2 & onwards) becomes business as usual and is no longer applicable to be considered for the SO:TO incentive, as it is no longer innovative. Any costs incurred by the TO associated with providing that service should be covered by normal regulatory funding.

Question 26: What are your views on our proposal to retain the blended constraint cost savings, the 90:10 sharing factor, and the current windfall gain protection mechanism?

From the four years that the SO:TO mechanism has operated, forecast and outturn costs can differ significantly due to the weather conditions and subsequent levels of renewable generation, over the period the enhanced service is offered. Therefore, it seems appropriate to keep the blended constraint cost saving. Likewise, the windfall gain protects the end consumer from paying a significant incentive payment, solely because at the time of the enhanced service, there was particularly windy weather, for example.

The sharing factor should be set in a way to incentivise the TOs to deliver innovative solutions whilst also considering the cost to consumers.

Question 27: We welcome your feedback on the SO:TO incentive scheme, and how we can ensure that it aligns with the long-term CSNP network planning and investments.

Any successful Innovation implemented by a TO following use as an enhanced service should be considered for wider role out across all TOs in the CSNP.

Question 29: What is the most effective way of ensuring collaboration between the FSO and the TOs, to ensure the delivery of high-level design of CSNP options?

We agree that collaboration between NESO and TOs will be required for the successful high-level design of the CSNP. We welcome and encourage TOs participation in the development of the CSNP methodology to ensure the approach is fit for purpose. Successful CSNP delivery will require additional insight from the TOs on the status of existing assets, agreement on what the options need to consider and agreement on how the CSNP outputs will be used. The approach will be underpinned by effective and efficient data exchange and a robust and transparent governance framework.

Question 30: Do you agree that there should be a licence obligation on the TOs to engage and collaborate effectively with the FSO to ensure the delivery of the CSNP?

We agree that it would be beneficial to place a licence obligation on TOs to engage and collaborate effectively with NESO to ensure delivery of the CSNP. Alignment with NESO licence obligations would be required, as well as consistency with other TO investment licence obligations.

Appendix 3 GD Annex Questions

Question 6: What are your views on the options we have laid out for the heat policy re-opener, including whether this should be combined with other RIIO-3 net zero mechanisms?

As it is expected that there will be a Heat policy decision in 2026, it would seem sensible to retain the heat policy reopener in RIIO-3.

Question 7: What are your views on our proposed approach for managing uncertain costs relating to regional energy strategic planning?

Using the net-zero reopener for uncertainty costs related to regional energy strategic planning (RESP) seems like a sensible approach. We think that the reopener windows should ideally be in line with RESP publishing timescales and be within six to twelve months of the relevant RESP publication. We understand that only Ofgem can trigger the current net-zero reopener and note that this may not be suitable for costs related to RESP activities.

Appendix 4 Overview and Annex Questions Not Responded To

For the avoidance of doubt, listed below are the questions from the suite of consultation documents, which the ESO has not responded to.

Overview Consultation Questions

Question 2: Are there any additional activities relating to the development of hydrogen transport infrastructure, or repurposing of natural gas assets, that you think should be funded through RIIO-3, and if so, why do you think this is justified?

Question 6: Should RIIO-3 help to manage future gas network decommissioning costs? If so, do you have views on what these costs could be and what mechanisms should be used, including for anticipatory funding?

Question 11: Is it feasible for all network companies to initially plan against FES 2023 before updating business plans in line with FES 2024, as proposed?

Question 12: Do you agree with our proposed approach on the role, scope and format of PCDs?

Question 13: Do you agree with our proposed framework for setting financial incentives? Are there any additional considerations that we should take into account?

Question 14: Do you agree with our approach to setting reputational incentives? Are there any additional considerations that we should take into account?

Question 15: Do you agree with our proposals for bespoke outputs? Are there any additional considerations that we should take into account?

Question 16: Do you agree with our proposal to retain the EAPs and AERs in RIIO-3? Please provide reasonings for your position.

Question 17: What are your views on the new proposed AER format with Commentary and KPIs?

Question 18: Do you agree with our minded-to position of retaining the reputational incentive on TOs and GDNs for reducing their BCF?

Question 19: Are there any other suggestions you would like to make regarding reporting standards?

Question 20: Do you agree with our minded-to position to withdraw the Environmental Scorecard and incentivise improvements in environmental impacts through the Annual Environmental Report (AER)? Please explain your reasoning.

Question 21: Do you consider that there are other areas which require financial incentives which cannot be captured by the AER? Please explain your reasoning.

Question 22: Do you have any views on our proposals for the NARM framework?

Question 27: Do you agree with our proposals on workforce resilience?

Question 28: Do you agree with our proposed key objectives for truth telling and efficiency incentives?

Question 29: What are your thoughts on our proposals relating to minimum requirements under an evolved BPI approach?

Question 30: What are your thoughts on an 'in the round' assessment of cost forecasts as opposed to a high/lower confidence breakdown and assessment?

Question 31: What are your thoughts on an 'in the round' assessment of business plan ambition as opposed to requiring and assessing CVPs?

Question 32: What are your thoughts on the size and strength of any truth telling incentive?

Question 33: What are your thoughts on any alternative approaches that could be used instead of an evolved BPI?

Question 34: What are your thoughts on the options for calculating the sharing factors and do you see strong reasons for changing the overall strength of the sharing factors relative to RIIO-2?

Question 35: Do you agree with our proposal to retain the Net Zero Re-opener with its current scope and parameters for RIIO-3?

Question 36: What are your views on our proposal, in principle, to retain the Net Zero and Reopener development Fund UIOLI for RIIO-3? What are your views on the types of projects it could fund and how it would interact with other sector specific price control mechanisms?

Question 37: Do you think we should retain the NZASP for GD and GT? What should its scope be and what kind of projects would you expect to be funded through this reopener in RIIO-3?

Question 38: Do you have any views on consolidating the net zero related re-openers and the UIOLI allowance?

Question 39: Do you agree with our proposed position to retain the Coordinated Adjustment Mechanism for RIIO-3? If it were to be retained, what design and incentive considerations could we implement to enhance the utilisation and value of this mechanism?

Question 40: Do you agree with our proposal to allow physical security costs to be submitted through a broader resilience re-opener?

Question 41: Do you agree with our proposed approach to introduce a resilience re-opener?

Question 42: Do you have any views on whether the opex escalator should be retained and if so, how we could evolve the opex escalator for RIIO-3?

Question 43: Do you have any views on how we should effectively monitor the delivery of UMs?

Question 44: Do you have any views on whether to evolve the RIIO-2 methodologies for RPEs and ongoing efficiency for RIIO-3, and if so, how?

Question 45: Do you have any views on the potential application of RPEs and ongoing efficiency to re-opener applications?

Question 46: Do you agree with our proposed approach to cyber resilience in RIIO-3?

Question 56: What topics could FRS trials usefully focus on and why?

Question 59: Do you have any views on the timelines for modernising regulatory reporting?

Question 61: Are there areas of regulatory reporting that would be most beneficial to start with in the modernising project?

ET Annex Consultation Questions

Question 7: What are your views on our proposal for load-related expenditure outside of the CSNP, how these mechanisms can be improved and streamlined, and the appropriate thresholds for the mechanisms?

Question 8: What are your views on our proposal for 'shared drivers' projects, how TOs need to evidence investment requirements and how they can be held to account for delivery?

Question 10: What are your views on our minded-to proposal of retaining the IIG ODI-F during RIIO-ET3, and our additional commentary around the incentive and its associated reporting requirements?

Question 11: What are your views on retaining funding to support mitigation projects that reduce the visual impacts of existing infrastructure in designated areas?

Question 12: Do you agree with our assessment of the bespoke outputs described in Table 7?

Question 13: Do you agree that we should retain the RIIO-ET2 approach to safety, or do you consider there is anything more we could do?

Question 15: Should we retain the ENS incentive as an ODI-F and strengthen performance targets, or transition to a minimum obligation standard?

Question 16: Are either a rolling baseline target or the addition of an improvement factor appropriate changes to the incentive target calculation methodology given the increases in target outperformance?

Question 17: Would a change in the estimate of the VoLL impact TOs investment decisions, and should the incentive value methodology be updated if the VoLL is changed?

Question 18: Are the current definitions for excluded and exceptional events sufficient, or should they be changed for RIIO-ET3?

Question 19: Should Ofgem add a materiality threshold for exceptional events?

Question 20: What are your views on our proposed change to the ENS reporting requirements?

Question 21: Are there alternative modifications to the ENS incentive that will more effectively improve visibility of circuit availability across the grid?

Question 28: What are your views on whether and how TO customer service performance should be incentivised or enforced during RIIO-ET3, over and above the incentives and obligations described elsewhere in this chapter?

Question 31: Do you have any views on how the cost assessment methods used in RIIO-ET2 for load and non-load capex could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Question 32: Linked to ETQ30, do you have any views on how the cost assessment process could be adapted to capture multiple drivers and address the needs of evolving cost categories for 'shared drivers' schemes?

Question 33: Do you have any views on how the cost assessment methods used in RIIO-ET2 for non-operational capex could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Question 34: Do you have any views on how the cost assessment methods used in RIIOET2 for network operating costs could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Question 35: Do you have any views on how the cost assessment methods used in RIIO-ET2 for indirect costs could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Question 36: Do you have any views on how the cost assessment methods used in RIIO-ET2 for other costs could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Question 37: Do you have any views on how to evolve MEAV as a scale driver for RIIO-ET3? What other scale drivers could we consider?

Question 38: Do you have any views on how the cost assessment process could address the market volatility and supply chain challenges that the sector is facing?

Question 39: Do you have any views on our initial thinking around the role and potential evolution in RIIO-ET3 of the UMs listed in Table 9?

Question 40: We invite views on current reporting requirements and structure at the cost category level and how this may be adapted to better suit RIIO-ET3 and related development of BPDTs.

GD Annex Consultation Questions

Question 1: What are your views on our proposal to remove the shrinkage ODI-R as a separate output?

Question 2: What are your thoughts on the options we have set out for the shrinkage ODI-F and on the design of this incentive?

Question 3: If we provide baseline funding or a UIOLI allowance for shrinkage, can you provide examples of initiatives that could be funded, indicative cost, and why these activities would not go ahead without specific price control funding?

Question 4: If the Digital Platform for Leakage Analytics is rolled out to all GDNs in RIIO-GD3, what would be the indicative cost and timescales for this?

Question 5: If up to 20% hydrogen is blended into the distribution network, what would be the impact on operational practices and shrinkage?

Question 8: What are your views on our proposal to remove the Commercial fleet electric vehicle PCD in RIIO-GD3?

Question 9: What are your views on our proposal to remove SGN's bespoke Biomethane improved access rollout PCD in RIIO-GD3

Question 10: What are your views on our proposal to remove SGN's bespoke remote pressure management PCD in RIIO-GD3?

Question 11: What are your views on our proposal to remove SGN's bespoke Gas escape reduction PCD in RIIO-GD3?

Question 12: What are your views on our proposal to remove SGN's bespoke Intermediate pressure econfigurations PCD in RIIO-GD3?

Question 13: What are your views on our proposal to remove Cadent's bespoke HyNet Front End Engineering Design PCD in RIIO-GD3?

Question 14: What are your views on the benefits of repex that we have identified, how well the repex programme is currently working, and what evidence we should consider as part of the joint repex review?

Question 15: Do you consider there to be alternative approaches that could deliver mandatory repex at least cost to the consumer whilst maintaining the legislative safety standards?

Question 16: What are your views on our proposal to keep the HSE policy re-opener, but to reduce its use to a single trigger?

Question 17: What are your views on the design of the Tier 1 mains decommissioned PCD?

Question 18: What are your views on the proposed design of the Tier 1 services PCD?

Question 19: What are your views on the design of the Tier 2A mains and services replacement volume driver?

Question 20: What are your views on the design of the London medium pressure PCD (Cadent North London only)?

Question 21: What are your views on our proposal to retain the diversions and loss of development claims re-opener in RIIO-GD3, and whether all the cost areas are still uncertain in RIIO-GD3?

Question 22: What are your thoughts on our proposal to continue the emergency response time LO and whether the target should be set monthly, quarterly or annually?

Question 23: What are your views on our proposal to remove the Tier 1 iron stubs reopener in RIIO-GD3 and our approach for the costs to be included in the baseline allowances?

Question 24: What are your views on our proposal to remove the Capital projects PCD in RIIO-GD3?

Question 25: What are your views on our proposal to remove the Gas holder demolitions PCD in RIIO-GD3?

Question 26: What are your views on our proposal to remove the Multiple Occupancy Buildings safety re-opener in RIIO-GD3?

Question 27: What are your views on our proposal to remove NGN's bespoke job completion lead-time including re-instatement ODI-R in RIIO-GD3?

Question 28: What are your views on our proposed position on the role of GDNs in relation to vulnerability, and how can they support a just transition to net zero?

Question 29: What are your views on our proposal for GDNs to develop individual and joint-GDN vulnerability strategies?

Question 30: Do you agree with our proposal to retain the RIIO-GD2 vulnerability minimum standards is sufficient to ensure customers in vulnerable situations are protected and treated fairly?

Question 31: What are your views on our proposal to retain the use of the VCMA UIOLI allowance, on the alternative option to incentivise vulnerability through an ODI-F, and on which activities to support vulnerability could be funded through baseline allowances?

Question 32: At what level should VCMA funding be set to ensure its effectiveness and sustainability, and what percentage should be ringfenced for collaborative projects?

Question 33: How should VCMA funding be allocated to ensure maximum impact for consumers in vulnerable situations?

Question 34: How can learnings from VCMA projects better inform the GDNs' organisational approaches to consumer vulnerability?

Question 35: What are your views on the options we've set out to incentivise customer satisfaction during RIIO-GD2?

Question 36: What are you views on how the complaints metric can ensure customers' complaints are resolved quickly and effectively?

Question 37: What changes, if any, are required to the GSOPs?

Question 38: What are your views on our proposed options for the unplanned interruption ODI-F?

Question 39: What are your views on the options we have set out for the Collaborative Streetworks ODI-F?

Question 40: What are your views on whether the new, large load connections reopener is still needed in RIIO-GD3?

Question 41: What are your views on whether the specified streetworks costs reopener is still needed in RIIO-GD3?

Question 42: What are your views on our proposal to remove the Fuel Poor Network Extension Scheme in RIIO-GD3?

Question 43: What are your views on our proposal to remove the consumer vulnerability ODI-R in RIIO-GD3?

Question 44: How can the annual VCMA event be improved?

Question 45: What are your views on our proposal to remove the DLCA, and do you see any challenges that might arise if it were to be removed?

Question 46: What are your views on our proposal to remove the domestic connections volume driver? If you think it should be retained, what changes do you recommend for its design?

Question 47: What are your views on our proposal to remove the smart metering rollout costs re-opener in RIIO-GD3?

Question 48: Should personalising welfare services continue to be supported under RIIO-3 and, if so, how should it be funded?

Question 49: What are your views on our proposal to remove Cadents' bespoke Highrise building plans ODI-R from RIIO-GD3?

Question 50: What are your views on the potential advantages of using multiple totex regression models in RIIO-GD3?

Question 51: What alternative cost drivers and model specifications would you propose for early testing?

Question 52: What are your views on the potential of middle-up modelling in RIIOGD3?

Question 53: What are your views on the potential of disaggregated modelling in RIIO-GD3?

Question 54: In your view, what is the most suitable configuration of cost activities for middle-up or disaggregated modelling, that once combined, could form a complete bottom-up assessment of totex?

Question 55: What do you think would be appropriate criteria for determining cost exclusions for RIIO-GD3?

Question 56: What are your views on the modelling treatment of workload adjustments for RIIO-GD3?

Question 57: What are your views on the approach to regional factors for RIIO-GD3?

Question 58: What are your views on the approach to company-specific factors for RIIO-GD3?

Question 59: In your view, which cost areas will require separate technical assessment in RIIO-GD3

Question 60: What are your views on alternative technical assessment approaches for RIIO-GD3?

Question 61: In your view, which cost areas will require separate non-regression analysis and benchmarking in RIIO-GD3?

Question 62: Which separately assessed cost activities from RIIO-GD2 could potentially be included in totex benchmarking in RIIO-GD3?

Question 63: What are your views on retaining the RIIO-GD2 pass-through cost items for RIIO-GD3?

Question 64: What are your views on suitable approaches to the disaggregation of totex allowances for RIIO-GD3?

Question 65: In your view what are the high-priority areas of reporting inconsistency between GDNs within the RIIO-GD2 BPDTs and RRPs, and how can these be addressed for RIIO-GD3?

Question 66: We invite views on current reporting requirements and reporting structure at the cost activity level and how this may be adapted to better suit RIIO-GD3 and related development of BPDTs.

GT Annex Consultation Questions

Question 1: Do you agree with our proposal to include a re-opener to manage the impact of introduction of the CSNP and gas strategic planning processes, with annual windows starting from the first year of the price control?

Question 2: Are there any other areas of our proposed RIIO-3 framework (eg outputs or UMs) that you think may need to adapt to accommodate the future role of the FSO in strategic network planning?

Question 3: What are your views on what the overall focus of the RIIO-GT3 environmental package should be, and should any additional areas be incentivised?

Question 4: What are your views on each of the current individual environmental outputs presented in this section and the Overview Document?

Question 5: What are your views on the above two options for the GHG emissions incentive?

Question 6: What improvements to the incentive would continue to minimise NGT's impact on the environment from venting?

Question 7: What are your views on the above three options for the NTS Shrinkage incentive?

Question 8: What are your views on reviewing the way the GSO costs, including costs for procuring NTS shrinkage gas, are forecast and recovered?

Question 9: What are your views on including NTS Shrinkage costs within NGT's baseline totex allowance?

Question 10: Do you have any views on the future of the Redundant Assets PCD?

Question 11: Do you have any views on the proposed removal of this re-opener? (Compressor Emissions Re-opener)

Question 12: Do you have any views on the above proposed PCD for RIIO-GT3, including on the Hatton PCD and on baselining compressor emission costs for the next price control?

Question 13: Do you have any views on whether the ANCAR will still be required as an output in RIIO-GT3 and on its need for RIIO-GT2 business planning?

Question 14: Do you have any views on the effectiveness of this PCD? (Asset Health - non lead assets)

Question 15: Do you have any views on our proposal to remove the Bacton re-opener mechanism but retain the PCD?

Question 16: Do you have any views on this re-opener? (King's Lynn subsidence Re-opener and PCD)

Question 17: Do you have any views on our options for the Customer Satisfaction Survey Incentive? In particular, do you see merit in recalibrating target performance to NGT's most recent performance?

Question 18: Do you have any ideas how the strength of the incentive and the range between capped and collared outcomes should be set?

Question 19: Which new touchpoint areas could be added to the incentive, and which new engagement and survey channels could be introduced to help NGT improve in the delivery of its services to customers?

Question 20: Do you have any views related to the transparency of the customer survey results?

Question 21: Do you have any views on how positive changes in NGT's behaviour and customer service could be incentivised?

Question 22: What are your views on our proposal to remove the Stakeholder Satisfaction Survey reputational incentive?

Question 23: What are your views on our minded-to proposal to retain D-1 Quality of Demand Forecasting incentive as a financial incentive with a tighter target?

Question 24: What are your views on the options presented for the D-2 to D-5 Quality of Demand Forecasting incentive?

Question 25: What improvements to the D-1 and D-2 to D-5 incentive could be considered?

Question 26: Does NGT's D-2 to D-5 forecasts of demand provide a service that is valued by consumers and network users? Please explain why.

Question 27: Should the Quality of Demand Forecasting incentive be widened to include other areas of demand forecasts? If yes, which ones?

Question 28: Do you agree with our minded-to position to retain all three elements of the maintenance incentive as a financial incentive in RIIO-GT3?

Question 29: Should the Maintenance incentive include any other types of maintenance work that are currently not included in the incentive? If yes, please explain which one.

Question 30: Do you agree with our minded-to option (option 1) for the CCM incentive? Please provide reasons for your position.

Question 31: Do you have any views on introducing seasonal baselines into NGT's licence at the start of the RIIO-GT3 price control?

Question 32: Do you agree with our minded-to position to retain the Residual Balancing Incentive in its current format? Is there merit in considering a recalibration? Please provide reasons for your position.

Question 33: Do you agree with our proposed approach to cost categorisation?

Question 34: What are your views on setting allowances for internal costs and SO rewards and penalties from the ODIs?

Question 35: Do you support the need for greater granularity and transparency in cost reporting and to better understand the relationship between GTO and GSO costs to further develop our cost assessment capability?

Question 36: Is the proposed toolkit appropriate or are there other assessment techniques that we should consider for RIIO-GT3?

Question 37: Do you have any views on the UMs needed for RIIO-GT3?

Question 38: Do you have any views on current reporting requirements and structure at the cost category level and how this may be adapted to better suit RIIO-GT3 and related development of BPDTs?