

RIIO-2 Sector Specific consultation

Scottish and Southern Electricity Networks

14 March 2019



Section 1. Executive Summary

Scottish and Southern Electricity Networks (SSEN)¹ welcomes the opportunity to respond to Ofgem's RIIO-2 Sector Specific Methodology consultation. Ofgem acknowledges that RIIO-1 has delivered material benefits for network customers. We agree that the benefits are real and that they have been made possible by the RIIO framework. RIIO (Revenue = Incentives + Innovation + Outputs) has facilitated customer focused Incentives which have driven network improvement; a dynamic environment of Innovation, focused on releasing benefits now and preparing for the future; and clear Output targets ensuring consumers can be confident that they receive what they fund.

RIIO-1 has delivered

During RIIO-1, the framework has enabled SHE Transmission to meet its stakeholders' needs in a wide range of ways.

Supporting Government policy: We now support over 6GW of clean renewable generation, a change facilitated under RIIO by the creation of clear uncertainty mechanisms and revenue drivers. We have been able to commit over £3bn in network investment to make this decarbonisation possible², because we can see, understand and rely on the stable and predictable regulatory environment that RIIO brings.

Meeting Stakeholder needs: SHE Transmission has delivered customer satisfaction scores above its target through investing time and resources in engagement and improved customer processes. In response to our Connections output and incentive, we provide efficient and timely connections to new customers, enabling the growth and development of the system. With a potential to have ambitious objectives rewarded through the discretionary incentive mechanism, we have pursued a sustainability strategy to support the energy transition. Ofgem recognised this by awarding SHE Transmission leadership status in this area³.

Controlling costs: Throughout the RIIO-1 period SHE Transmission has also sought out and then delivered on improved network efficiency. Underspending our Totex allowance by seeking out areas of unrealised efficiency and innovating to improve the cost of delivery, while maximising the quality of service, is a core objective of RIIO. This is how customers of the future are protected from being exposed to unjustified network charges. The balanced, strong incentive regime under RIIO-1 has enabled SHE Transmission to carry the risk of pursuing these improved levels of efficiency knowing that for this price control, we would share in the benefits.

¹ Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No. 1 Forbury Place 43 Forbury Road Reading RG1 3JH which are members of the SSE Group www.ssen.co.uk

² Investment since 2010.

³ <https://www.ofgem.gov.uk/publications-and-updates/decision-riio-t1-environmental-discretionary-reward-2017-18-scheme-year>

Responding to perception

We acknowledge and understand the external pressure on regulators to evaluate whether current settlements achieve what consumers need and want. We also face such pressure. Our response has been to address the issues in an open and transparent way. For example, we are part of a group which has championed the values of Fair Tax accreditation and are a committed Living Wage employer. We have responded to the public debate on issues such as transparency and fair returns by taking part; we are releasing a series of consultations and open letters in conjunction with Citizen's Advice on these topics⁴.

Our concern is that, in an attempt to avoid further criticism associated with these external pressures, Ofgem has failed to give the appropriate weight to lessons learned previously and has instead proposed a RIIO-2 framework which blunts existing efficiency incentives in a desire to secure a predictable outcome. With significantly weakened incentives on outcomes and efficiency, combined with unprecedented low base allowances, the proposed RIIO-2 methodology set out in the consultation risks a return to rate-of-return regulation. We do not believe this is in consumers' interests and fails to achieve Ofgem's principal objective.

RIIO-2 framework must reflect stakeholder priorities

Delivering for our customers and stakeholders has been facilitated by a RIIO framework which encourages ambition, rewards outcomes and drives ongoing efficiency. Our stakeholders tell us that they want to see the value in network outcomes; where value is represented by a balance of cost and outcomes. RIIO is the regulatory framework our stakeholders tell us they want to provide this assurance; a regulatory framework which enables rather than stifles the delivery of value for stakeholders. Ofgem must give appropriate weight to stakeholders' views in its decision making in order to ensure it meets its principal objective and statutory duties.

Stakeholder engagement tells us that our next business plan needs to ensure RIIO-1 success is maintained while being ambitious in meeting the challenges of a changing energy environment. Stakeholder feedback highlights key themes of decarbonisation, affordability, environmental impact, supporting vulnerable customers, and a sustainable, flexible, network. We are also aware of what Government wants from the energy sector. The focus of UK Government remains on meeting decarbonisation targets while in parallel creating a smart, flexible energy system supported by agile regulatory frameworks⁵. Scottish Government remains fully committed to a low carbon future through the significant growth in renewables across Scotland.

RIIO-2 framework must enable delivery of stakeholder priorities

It is insufficient to assert that this process is stakeholder-led, it must be demonstrably so. Networks are not the same, and the wants and needs of their local and national customer base vary. The price control settlement must allow for this variation where it can be evidenced and justified; if Ofgem disagrees then the burden of proof should be equivalently high. The stakeholder voice, including as

⁴ <http://news.ssen.co.uk/news/all-articles/2019/january/reform-in-riio-transparency>

⁵ <https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

expressed through the User Group, should play a material role in the assessment of the business plan.

As a responsible network operator, we are developing an efficient and balanced plan that can deliver the key priorities of our stakeholders⁶. However, this is only part of the solution. To ensure stakeholder priorities and ambition can be delivered we need a regulatory framework which facilitates it. RIIO-2 must be agile, incentivising networks to be open to the risk of reaching new levels of service and performance while providing support for an environment of continued innovation. One of the great strengths of RIIO-1 has been that allowances, as far as possible, have been set for the delivery of outputs not inputs, allowing networks to be responsive to changing Government and customer requirements.

It is imperative that the regulatory mechanisms of RIIO-1 which have delivered stakeholder benefits remain in place and remain effective. These mechanisms are:

- an **output incentive package** large enough to allow a high performing network to reach the upper return range;
- a **strong Totex incentive**, to ensure networks continue to chase efficiency;
- a **strong and equitable business plan incentive** that allows networks to reveal potential in the knowledge that they will share in the benefits;
- an **innovation stimulus** which supports solutions to current as well as future network challenges; and
- a **fair financial package** for investors that recognises current and future risk.

How should RIIO-2 proposals change

Ofgem has an obligation to deliver a balanced price control outcome that will work for both consumers and investors. We agree with that objective. The current sector specific minded-to policies will fail to achieve Ofgem's intended effect and we, therefore, believe Ofgem must adopt the following simple amendments to the sector specific arrangements in order to ensure it carries out its principal objective and complies with its statutory duties.

- **Increase the output incentive package.** Ofgem describes the current RIIO-2 sector proposals as 'highly incentivised' and the first to be truly stakeholder led. We welcome the stakeholder emphasis and the role of new enhanced engagement panels in developing rich, dynamic business plans. Ofgem must ensure that the compressed programme does not limit the ability for stakeholders to scrutinise and challenge business plans. As the energy system adapts to the needs of its users, the benefit of linking stakeholder expectations to clear and transparent financial incentives that can respond quickly to change is obvious. Our experience so far in the plan process confirms the benefits of working closely with our stakeholders. However, this policy position must be achievable within the framework Ofgem is proposing for RIIO-2. We do not find the substance matches up; there must be opportunity and reward.

⁶ <https://www.ssen-transmission.co.uk/news-views/articles/2019/2/a-key-milestone-in-the-development-of-our-future-business-plan/>

Opportunity: Ofgem also commits that the final business plan will reflect the asks of our stakeholder community. For this to become reality, it must be willing to positively consider and then allow the range of outputs and associated justified incentives that this engagement process brings forward. We have outlined some of these potential areas within the detailed consultation answers in Section 3 and would ask that Ofgem commits to considering the proposals we will bring forward in subsequent bilateral meetings.

Reward: Ofgem proposals suggest that an additional 3% of RoRE can come from incentive rewards⁷. As currently set out, the proposed output incentive package has such limited upside that Totex outperformance would need to be in the region 20-25% based on a 50/50 sharing factor to generate 3% additional returns. We do not believe this is an outcome which would support the legitimacy of the price control settlement, nor is it plausible. For the policy intention to be achievable, Ofgem must increase the potential package based on current and new output delivery incentives.

- **Provide a strong Totex Incentive Mechanism (TIM).** A strong sharing factor has been proven to drive in-period efficiency that will keep costs down for current and future consumers; to move away from successful practice makes no sense for consumers. While addressing the strength of the output incentive package, Ofgem must also ensure that strong efficiency incentives remain. A weak incentive is not the correct response to concerns over the provision of incorrect ex ante allowances. It does not encourage operators to chase productivity gains and, in doing so, reveal underlying efficiency. It does not benefit consumers in the short or long term.

A blended sharing factor approach is also the wrong response to a perceived issue. Where an allowance is potentially too high or low, diluting the incentive properties will move it closer to a pass through. This risks unnecessary investment, a lack of focus on efficiency and higher consumer bills. The correct tools are a strongly calibrated, non-competitive, business plan incentive and effective targeted cost assessment to identify and respond to the revealed underlying efficiency that a strong Totex incentive sharing factor engenders.

Ofgem can address this distortion by retaining a TIM with a 50/50 sharing factor and not proceeding with plans for a blended sharing factor.

- **Develop a strong and equitable Business Plan Incentive (BPI).** Ofgem must provide a strong BPI that encourages **ambitious** and **innovative** RIIO-2 plans. The correct response in this environment is for Ofgem to increase the upfront reward potential to 4%⁸ of Totex regardless of the assessment of the other TOs' business plans. A strong BPI should not be a relative assessment between network operators.

To ensure networks can meet this challenge, Ofgem must also provide clear, informative, guidance on how network companies can produce a compliant and then exceptional business plan. Networks will then be able to respond, ensuring the detail and justification for their plan proposals support a better value price control settlement for consumers.

⁷ Totex and output incentives, as the business plan incentive is excluded from the RAMs.

⁸ Across the price control review period including uncertainty mechanisms.

Facilitating this response provides invaluable information that Ofgem must give the appropriate weight to when setting efficient Totex allowances. We have already provided our comments to Ofgem on this topic through our response to its Business Plans Draft Guidance Document consultation⁹.

- **Support a wide innovation stimulus.** Innovation has been, and will remain, essential to ensure networks can target efficiency improvement measures and prepare for the challenges of the Energy System Transition (EST). Ofgem should support innovation across the pipeline building on the success of RIIO-1 by retaining the Network Innovation Allowance (NIA) and an equivalent to the Network Innovation Competition (NIC) with projects focussing on, but not restricted to tackling EST challenges. For the same reasons as discussed above, innovation is most effective when coupled with strong incentives to realise the improvement. Therefore, it is essential that RIIO-2 also retains a 50/50 sharing factor to support BAU innovation.
- **Ensure a fair financial package for investors.** A good outcome for consumers is where networks efficiently secure the necessary capital, have confidence to make investments to deliver the energy transition and can deliver the range of outcomes stakeholders have requested. For this to become reality requires a balanced and fair regulatory settlement. The policy direction of RIIO-2 to date has been to expect low returns. However, it is not axiomatic that smaller low returns are fairer. A fair outcome is one where the financial parameters under which networks operate are based on evidence and represent a balanced package.

Our response identifies several material issues which Ofgem must address when settling the sector specific framework. The evidence and arguments presented represent industry wide views, are substantiated by expert advice and have been the subject of repeated engagement with Ofgem. We find that there is no justification for a downward expected return adjustment nor is the rationale for Return Adjustment Mechanisms (RAMs) sound. We continue to support a transparent, principle-based approach to Cost of Debt funding as well as encouraging movement towards tax transparency. In seeking a low return settlement through a range of new and modified mechanisms (RAMs, asymmetric incentives, dynamic targets, blended Totex sharing factor), Ofgem is unconsciously increasing the risk to networks through increased earnings volatility and the consequent negative equity market response. It is clear that Ofgem must reconsider its position on these items to avoid current and future consumer detriment.

Our consultation response

Our response is constructive. It sets out why Ofgem should and how it can follow alternative solutions to the issues it is seeking to address. In transitioning to RIIO-2 Ofgem must carefully consider whether revisions to the RIIO framework will **truly improve outcomes for all energy consumers**. Adopting our proposals will meet the challenges of the next decade by ensuring essential and stable investment in our critical national energy networks while balancing efficiency of delivery with the needs and desires of consumers. It will also ensure that Ofgem's decisions meets

⁹ <https://www.ofgem.gov.uk/publications-and-updates/rriio-2-business-plans-draft-guidance-document>

its principal objective and statutory duties to deliver a balanced price control outcome which the current approach fails to do.

We have outlined the five key areas of change which are necessary to realise the potential for consumers in RIIO-2. Our response to the sector specific consultation also highlights the many areas where we are encouraged by and supportive of Ofgem's proposals. We emphasise where the policy response must learn from RIIO-1 and evolve for RIIO-2. These areas include:

- **Dealing with uncertainty:** We remain convinced that outputs and incentives are the most effective tool in dealing with uncertainty within a price control. RIIO-1 has also been very successful in developing and applying a range of Uncertainty Mechanisms to address the energy system change we have experienced to date. The Strategic Wider Work mechanism developed by Ofgem has been instrumental in enabling £1.5bn of transmission investment to be brought forward, assessed and delivered, with a further £1.6bn in-flight. This mechanism, and other similar tools must endure into RIIO-2 to provide the form of responsive and agile regulatory framework that is required to meet all customers' needs.
- **Development of enhanced stakeholder engagement:** We are very encouraged by the benefits that a structured stakeholder engagement programme has already brought to the price control process. There are clear lessons on the necessary timeline for effective engagement, but we continue to support the underlying benefits of Ofgem's stakeholder proposals.

In the "Section 2: Sector Specific Methodology consultation changes required", we have explained why these limited, yet material, changes are necessary. In "Section 3: Question Response", we provide a detailed response to the questions asked in the consultation.

Section 2. Sector Specific Methodology consultation changes required

In our Executive Summary we outlined how RIIO-1 learning has informed our view of RIIO-2. We raise a limited number of changes to the current Sector Specific Consultation which we consider necessary to ensure RIIO-2 can deliver for stakeholders, consumers and investors. This section develops these points in more detail and is supported by the responses provided to each consultation question in Section 3.

We would urge Ofgem to give these proposals proper and due consideration and reiterate our request in our response to the Framework consultation to conduct the most thorough analysis possible of the likely impact of Ofgem's proposals, and the alternatives, before adopting any decision.

2.1. Meeting the RIIO-2 challenge

SSEN understands that Ofgem faces the difficult task that confronts any regulator in output driven incentive-based regulation; to achieve a balance between:

- avoiding excessive costs and customer bills; and
- encouraging the right behaviours from network companies to meet the outputs customers and stakeholders want.

Our assessment is that in developing its RIIO-2 minded-to position Ofgem risks adopting a narrow focus on the first to the detriment of the second. If left unchanged, this would be a failure of RIIO-2. Short-term, low-cost and punitive settlements will leave network companies no option but to adopt a risk averse response to preserve some assurance of minimum returns. Unless addressed, this will have **unavoidable adverse consequences**.

- RIIO-2 will be ineffective in meeting the consumer-facing outcomes Ofgem seeks¹⁰;
- RIIO-2 will be ineffective in addressing the future EST challenges¹¹;
- Networks will not have the financial foundations necessary to deliver stakeholder led ambitious business plans while ensuring a fair and balanced outcome for investors;
- Ofgem will not fully play its role as a National Regulatory Authority in promoting and delivering against government policy established to meet the EST challenges¹²; and,

¹⁰ Customer service (meet the needs of consumer and network users), network resilience (maintain a safe and resilient network) and environment (deliver and environmentally sustainable network).

¹¹ There is much to do in the next decade to decarbonise gas and petroleum through electrification of heat and transport, and the Committee on Climate Change advising that there are gaps in the policy proposals to achieve the fourth (2023-27) and fifth (2028-32) carbon budget

<https://www.theccc.org.uk/publication/independent-assessment-uks-clean-growth-strategy-ambition-action/>

¹² Cleaner economic growth is one of the Grand Challenges

(<https://www.gov.uk/government/publications/industrial-strategy-the-grand-challenges/industrial-strategy-the-grand-challenge>) of the UK Industrial Strategy (<https://www.gov.uk/government/publications/industrial-strategy-building-a-britain-fit-for-the-future> and is central to both the UK

(<https://www.gov.uk/government/publications/clean-growth-strategy>) and Scottish Government

(<https://www.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/>)

ambitions to deliver economic growth and decreased emissions.

- Ofgem will be unable to meet its principal objectives of protecting the interests of existing and future electricity and gas consumers by promoting value for money and ensuring security of supply and sustainability.

All of this is possible in RIIO-2 but only if the current proposals are modified. Ofgem must focus on the key issues outlined below and the accompanying evidence and engage with stakeholder proposals to modify its current approach. The deficiencies identified in the following sections demonstrate that **the proposals have not been assessed in the round**. There are material inconsistencies between policy intent and application of mechanisms and while Ofgem asserts the package will remain attractive to investors, the evidence suggests otherwise.

The sections consider the following proposed Sector Specific changes.

- 2.2 **Output incentive package:** Incentivising companies to continue to deliver the level of service stakeholders expect while making a step change in line with new world expectations
- 2.3 **Totex Incentive Mechanism:** Incentivising companies to drive down costs
- 2.4 **Business Plan Incentive:** Providing a framework under which solutions to the EST challenges can be developed
- 2.5 **Innovation:** Maintaining a culture of innovation
- 2.6 **Setting the right Financial parameters for RIIO-2:** Facilitating crucial investment in a changing future

The RIIO-2 incentive package - driving the right behaviours

The consultation claims RIIO-2 is a highly incentivised settlement that will deliver a balanced package, benefiting customers and network companies. This claim is not substantiated by the detail in the consultation. The consultation suffers from a 'say-do' problem. While the rhetoric is aligned with the sound economic principles of RIIO, it lacks the substance to deliver the consumer benefits which stakeholders are asking for.

The potential transmission incentive package (Totex and Output Delivery Incentives (ODIs)) is materially less than that developed for RIIO-1 and does not enable even the best performing companies who deliver for consumers to reach the upside returns that Ofgem considers plausible. This is particularly relevant when considered in parallel with the unprecedented lower cost of equity and, as such, the consultation proposals do not represent a balanced package.

2.2. Output incentive package

Ofgem proposal: significantly weaken the output incentive package for the TOs; we estimate a reduction of 50% from RIIO-T1. The combined minded-to policy proposals limit the upside opportunity across several output delivery incentives (ODIs) in favour of more downside penalties, combined with a move from financial to reputational incentives. This leaves the gap to be filled by bespoke incentives set with a high-bar and price control deliverables (PCDs).

Our proposal: stretch the TOs through tightening the baselines from T1 performance but retain the incentive strength of T1 and build on it as we enter a period where network companies face significant challenges.

Our justification: there is no evidence of incentives being calibrated wrongly in RIIO-T1 or TOs earning excessive or unjustified rewards. To deliver outputs and earn rewards has taken considerable effort from the TOs. In short, the incentive package in RIIO-T1 has worked. Therefore, RIIO-2 should build on it rather than seek to reduce its overall strength to solve a different problem of unjustified Totex outperformance. Only by doing so, will RIIO-2 be able to meet its objective of being stakeholder-led and highly incentivised to meet the needs of consumers.

A problem perceived

Ofgem’s minded-to policy proposals, set out in the Electricity Transmission annex of the consultation, are framed in the context of its perception of RIIO-1 performance – that there was “higher than expected returns...largely driven by a significant underspend in allowances”. Outperformance is good for consumers, we do not believe returns in RIIO-T1 were above expectations. Outperformance arises because a network is showing Totex efficiency by spending under its allowance and / or delivering higher levels of output than its target. In both cases consumers benefit. We discuss the Totex position in the next section.

The consumer benefit from output delivery is clear and has been acknowledged by Ofgem and a wide range of stakeholders on many occasions. Having set a baseline target and defined the marginal financial incentive (consumer value) that an increase in output creates, companies have assessed the risk and invested to deliver a higher level of consumer service.

Therefore, to resolve a perceived Totex underspend problem through a set of proposals that significantly weakens the output incentive package from RIIO-T1 to RIIO-T2 is illogical and damages the consumer’s experience of RIIO-2 for no benefit. Put simply, the solution and problem are not aligned.

Meeting the RIIO-2 challenge through incentives

Despite weakening the incentive value, Ofgem also acknowledges that there are three key challenges as we move from RIIO-1 to RIIO-2:

- managing the EST;
- managing uncertainty in a changing energy environment; and,
- embedding performance improvements as BAU to ensure a fair deal.

Therefore, what role should incentives play in meeting these challenges in RIIO-2? We summarise our assessment as follows:

Managing the EST: While we are aware of the type of challenges ahead, no part of the energy industry has a complete understanding of the detailed solutions required to meet these challenges. A regulatory settlement requires agility when moving into a period of considerable change. Therefore, incentivised outputs, rather than reliance on fixed, embedded targets are the logical response.

Managing uncertainty: As we approach an uncertain future the role of incentive mechanisms has never been more important. Incentive mechanisms are a strong tool to address uncertainty in a changing environment. Where the potential maximum network output is not known in advance and where this might change as the energy system changes, then incentives allow network operators to respond to the marginal value expressed by consumers. Logical network operators will never incur more to deliver an outcome than the consumer's marginal value. Therefore, consumer and regulator can know that the result is in the consumer's interest.

- **The combination of the need for agility to meet the EST challenge along with the underlying uncertainty of the energy industry points to the requirement for a wider and stronger incentive package during RIIO-2.**

Embedding performance as BAU: In RIIO-1 all transmission operators have delivered strong incentive outcomes. The response of each to incentive rewards now provides valuable information to Ofgem when considering how RIIO-2 baseline targets can be set. Ofgem's consultation proposals lean towards removing incentives and embedding targets as BAU. To achieve this, it must be able to identify the additional cost of delivering these RIIO-1 outcomes to ensure networks are funded to continue this level of service.

- **The ambition of embedding service targets as BAU is contradictory to Ofgem's statements on information asymmetry. It risks losing the benefits created in RIIO-1 and without a clear understanding of what the impact has been and will be on consumers.**

What is the cost of incentives to consumers?

In trying to balance between lower costs and a flexible, agile energy system are the cost savings worth the potential risk to outputs? The simple answer is no. The cost to customer bills in RIIO-T1 of our output incentive reward was **2p per annum**. Assuming the same outturn performance on half the potential value of the package, Ofgem's proposals will save **1p per annum** on the average consumer bill.

Ofgem has recently reported on the incentive outcomes for the first five years of RIIO-T1. This shows that total incentive costs to SHE Transmission customers is around 0.6% of the total revenue

collected¹³. It cannot be argued that incentives, which have been shown to deliver considerable service benefits to consumers, are in any way a contributing factor to *'higher than expected returns'*.

Therefore, the proposed solution does nothing to solve the perceived problem, nor does it do anything to tackle the EST challenges identified by Ofgem, nor does it even save enough for consumers to warrant justification in balancing costs over outputs. The response is illogical.

What does the Sector Specific Consultation propose?

The output incentive package is a clear example of the 'say-do' problem.

'Say'

Ofgem is introducing a very important change from RIIO-1 to RIIO-2. RIIO-1 was described as **Revenue = Incentives + Innovation + Outputs**. This change placed incentives at the heart of RIIO and, with innovation and outputs, allowed the relationship between what consumers want and pay for to be transparent. RIIO-2 changes this by removing or weakening the incentive variable as a driver of Revenue. Ofgem has changed RIIO to become **Revenue (Incentives) = Innovation + Outputs**.

Ofgem states in the consultation that it wants "to continue to use strong incentive-based regulation to align the interests of companies and consumers in delivering high quality service ... [where] the better performing companies will be able to earn higher returns if they are able to improve the quality of service". The policy intent is that a highly incentivised output package will deliver the RIIO-2 outcomes and, consequently, meet Ofgem's statutory obligations and contribute and promote government policy. Linking customer outcomes to strong incentives is a logical approach to tackling the energy system challenges.

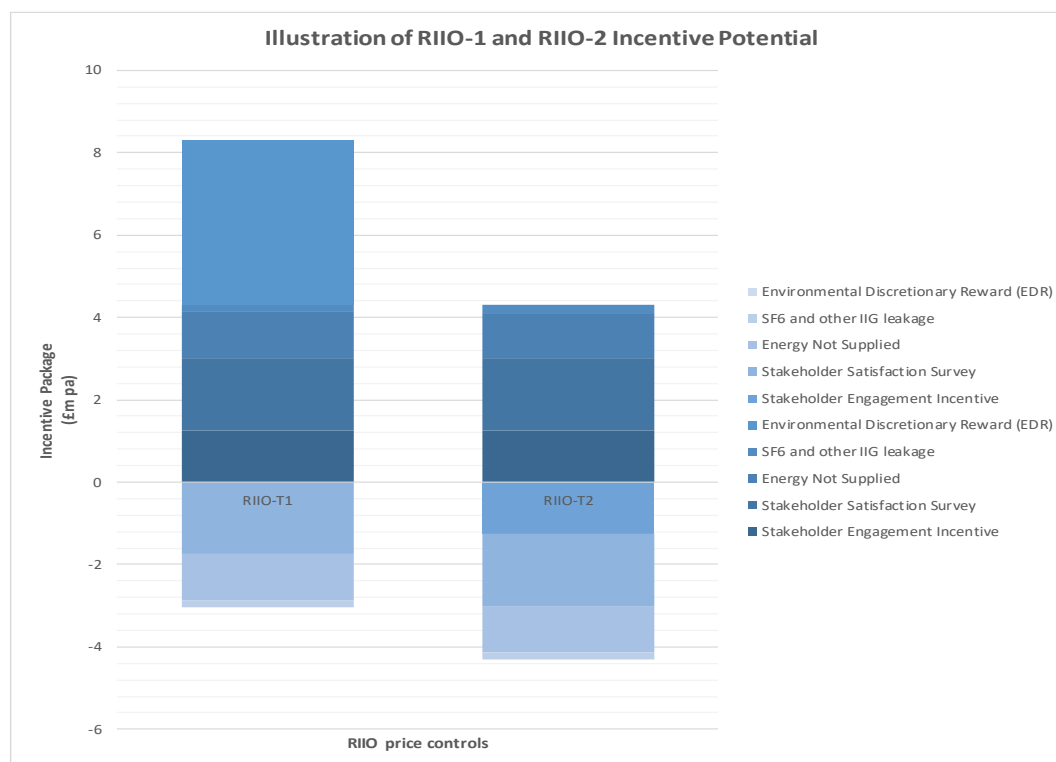
'Do'

The conclusion that the incentive component of RIIO-T2 is weakened is not subjective, nor does it rely on qualitative evidence. The following simple graph demonstrates that, by direct comparison to RIIO-1, the opportunity within the RIIO-2 proposals is materially lower and, given the challenges ahead for RIIO-2, inadequate. At best, the package which is consulted on will deliver only 50% of the incentive opportunity of RIIO-1. At worst, companies will find themselves in a penalty only incentive regime.

- **The substance of what is proposed in the package does not meet the rhetoric; there is no evidence of a highly incentivised package.**

¹³ Based on Ofgem 2017/18 Annual Report, cumulative incentives for five years to 2017/18 and total Allowed Revenue for SHE Transmission.

Figure 2.1 Output incentive potential RIIO-T1 v RIIO-T2



* RIIO-2 incentives are indicative of the current consultation proposals and reflect an optimistic view of the continued use of symmetric rewards.

Sector Specific minded-to policy gaps

While the consultation is framed as being a strong incentive package the gap with reality is evident in several areas. This arises because the RIIO-2 package has not been considered in the round. We have summarised the key drivers of the incentive gap below. These are the policy decisions which Ofgem must consider reversing when making its sector specific decision.

- 1) The absolute potential reward is less than in RIIO-1
 - a. most ODIs are penalty only or reputational
 - b. the few that offer rewards are lower than in RIIO-1. Our assessment of the package consulted upon would see reward potential fall by at least 50% to just over £4m pa.
- **Ofgem has no evidence that consumers do not want increased outputs in each of the existing RIIO-1 incentive areas. Therefore, there is no rationale for removing an appropriately calibrated financial incentive to target further performance increases in RIIO-2.**
- 2) The potential for dynamic and relative targets will result in high performing companies being punished with tighter targets.
 - **Ofgem wishes to reduce the risk in a price control. Networks must be able to assess whether the investment to deliver a higher output outcome will result in the revenue reward to fund this. Dynamic or relative targets make this investment judgement impossible.**
- 3) The opportunity to fill the potential returns gap and deliver for consumers is dependent on bespoke incentives. Acceptance in RIIO-T2 of bespoke ODIs is conditional on such a high bar that the opportunity is unlikely to be achieved.

- **Ofgem must continue to consider application of bespoke ODIs across all TOs and accept that, where justified by stakeholder feedback, bespoke ODIs should only be eliminated in exceptional circumstances.**
- 4) The claimed opportunity to perform has not been properly assessed against the cost to deliver the incentivised outcomes; the incentives set out are gross revenue. The actual package is materially lower than the maximum £4m pa upside. This results in the sector specific consultation over representing the opportunity available under RIIO-T2.
- **Ofgem should assess RIIO-T2 in the round and ensure that the net incentive potential is considered when evaluating whether the package delivers a fair return range for networks.**

Addressing Sector Specific gaps

In summary, we believe the following is required to deliver a sufficient range of service outcomes for consumers in RIIO-T2 and to ensure networks are incentivised to respond to the challenges and changes during the price control period. More detail relating to each of the RIIO-T1 output incentive mechanisms is provided in our detailed answers to the consultation questions in Section 3 below.

- **Whole systems:** strong incentive in the delivery of whole system outcomes where risk is taken so that theory can become reality.
- **Environment and wider sustainability:** increase the incentive potential and strength for TOs to deliver a sustainable network by accepting the need for a wider sustainability incentive and by setting appropriate SF₆ targets where upside rewards are a possibility.
- **Stakeholder engagement:** retain both the Stakeholder Engagement Incentive (SEI) with clearer criteria and the Stakeholder Satisfaction Output (SSO) to deliver on customer service and considers further bespoke incentives to improve engagement, particularly around quality of connections and support for vulnerable customers.
- **Reliability and availability:** as network reliability remains the primary concern of electricity users, retain the Energy Not Supplied (ENS) incentive. Availability is of increasing consideration, particularly for flexible connections, so retain the Network Access Policy (NAP) and ensure quality of service for connections customers.
- **Balance scorecard:** introduce a balanced scorecard mechanism to ensure that TOs deliver an 'in the round' outcome above and beyond the baseline price control settlement.

2.3. Totex Incentive Mechanism (TIM)

Ofgem proposal: blended sharing factor that will result in a sharing factor significantly weaker than 50/50.

Our proposal: retain a 50/50 sharing factor for all Totex cost elements to ensure networks are incentivised to continue to seek efficiency and reveal the potential of such throughout RIIO-T2.

Our justification: Ofgem has other mechanisms to avoid unjustified Totex outperformance and therefore the sharing factor is not required to deal with this problem. A weak incentive creates new problems; it will not drive the in-period efficiency that has been evident in RIIO-1 that will keep costs down for current and future consumers.

Ofgem proposes a blended Totex sharing factor for RIIO-2 that will be weaker than SHE Transmission's current 50/50 sharing factor to address the perceived problem of Totex outperformance. We outline below why this is the wrong tool for a perceived problem and, rather than address Ofgem's concerns, will harm consumers and lead to further calls for RIIO to be modified at the end of the next price control. Ofgem makes references in the consultation to its "ability to set cost allowances" but as demonstrated below, attempts to insulate itself from getting it wrong, will harm consumers rather than protect them.

A problem perceived

Ofgem's RIIO-1 expectations were clear; double digit returns were available for good performing network companies. At RIIO-1 it was accepted that underspend due to efficiency was good for consumers and investors alike. Underspending of allowances is shared with consumers during a price control and the regulator can incorporate these efficiencies into future allowances. We see no evidence presented by Ofgem or any other regulatory body which changes this core principle.

If an underspend arises because of unjustified circumstances, then the reason for the variance and the solution to prevent it recurring also become evident through the assessment of Totex variances. We support Ofgem tackling unjustified Totex outperformance. However, this must not be at the expense of outperformance driven by efficiency; the very purpose of the Totex incentive mechanism.

Ofgem considers that RIIO-1 suffers from issues with outperformance resulting from three sources.

- **Luck:** networks are benefiting from unwarranted returns due to changes in circumstances;
- **Ofgem error:** information asymmetry allows networks to outperform by securing a performance opportunity into the business plan; and,
- **Efficiency:** networks realise improved cost efficiency while delivering customer outcomes. Innovation is a catalyst to enduring and positive change in costs and outputs.

The third of these is, and should be acknowledged by Ofgem, as a positive reason for outperformance and of material value to current and future consumers.

Ofgem Totex toolkit

Ofgem must assess whether its response to perceived unjustified Totex outperformance will have the desired effect and the associated impact on consumers. Crucially, Ofgem already has the tools and can effectively address Totex outperformance resulting from luck or regulatory error without resulting in altering the Totex incentive properties. It has already sought to do so within the Framework and Sector Specific Consultation. In neither instance does the solution require, or justify, a change to Totex incentive strength to remove the perceived impact.

The table summarises sources of what might be conceived as unjustified Totex performance. It demonstrates that for each, Ofgem has and already applies several RIIO tools to address the perceived risk.

Table 2.1 Ofgem view of Price Control Failings and Ofgem Response

Perceived Failing	Response	Comment
Material change in investment driver: e.g. large projects funded in the ex ante baseline no longer required or no longer required to the scale set out in the baseline	<ul style="list-style-type: none"> • Attach uncertainty mechanism such as a volume driver • Introduction of price control deliverables (PCDs) 	<ul style="list-style-type: none"> • Successfully applied within SHE Transmission RIIO-T1 settlement. • Non-delivery of outputs results in allowances being fully returned commensurate to output non-delivery • Neither response weakens the incentive to deliver improved efficiency
Deferral: Ex ante Totex, no outputs attached, and no outputs delivered. Companies keep allowance but do nothing (when “do nothing” is not the efficient option)	<ul style="list-style-type: none"> • Introduction of price control deliverables (PCDs) 	<ul style="list-style-type: none"> • Non-delivery of outputs results in allowances being fully returned commensurate to output non-delivery
Exogenous factors: External economic factors result in windfall gains / losses to companies	<ul style="list-style-type: none"> • Attach uncertainty mechanism 	<ul style="list-style-type: none"> • Mechanism will adjust allowances within the parameters set – both reduction and increase
Information asymmetry: Ofgem error	<ul style="list-style-type: none"> • Business Plan Incentive* 	<ul style="list-style-type: none"> • A strong incentive (where ambition will be rewarded) encourages companies to put forward ambitious cost forecasts
	<ul style="list-style-type: none"> • Use of historical costs from previous price control and proposals** 	<ul style="list-style-type: none"> • Efficient costs from a consistently strong RIIO-1 incentive informs baseline for RIIO-2 keeping comparable costs low
	<ul style="list-style-type: none"> • Enhanced Engagement process where business plans are subject to ongoing and detailed scrutiny by User Groups, Consumer Engagement Groups and Challenge Group 	<ul style="list-style-type: none"> • Powerful tool to give confidence to Ofgem, consumers and stakeholders that business plans have been given the upmost scrutiny and to a higher level than in the past

*this requires a strong Business Plan incentive as described below. **where historical costs reflect future costs.

Ofgem can put in place mechanisms to address the perception of unjustified network results. Where it seeks to address periods of uncertainty it can combine the flexible attributes of incentivised outputs to ensure both an efficient delivery of stakeholder asks and a flexible response to the changing energy environment.

With effective mechanisms at its disposal, Ofgem can be confident in setting a strong sharing factor and know that it will drive innovative solutions to meet the ambition in company business plans and reap the cost efficiency rewards for both the companies and consumers. A weak sharing factor will achieve the opposite, constraining companies to low risk actions.

A strong Totex incentive delivers consumer benefit

A strong sharing factor has been proven to drive in-period efficiency that will keep costs down for current and future consumers; to move away from successful practice is not in consumers' interests. RIIO-1 was established to create that outcome and at the end of the control period Ofgem now has the evidence through annual reporting to assess where efficiency gains have arisen and, in setting RIIO-2 allowances, capture these benefits for RIIO-2 and into the future.

Ofgem does not need to amend the TIM to protect consumers from any potential unexpected outcomes. Rather, Ofgem should harness the power of the incentive regime and use the TIM to reveal efficient outcomes that consumers can capture in future price controls. The shorter price control period further justifies the need for a strong incentive to maintain the same pace of change in efficiency. We believe that the logical response will be to set a strong TIM with a 50/50 sharing factor. To do otherwise would be to discard the Totex incentive, and the benefits that come from that, for no identifiable consumer gain.

- **The current sector specific proposals disincentivise networks from seeking out innovation solutions to meet and exceed RIIO-2 outcomes. Instead, they encourage a race to the bottom.**

2.4. Business Plan Incentive

Ofgem proposal: weak and uncertain incentive with low and relative reward.

Our proposal: provide assured reward on delivery of a strong plan of 4% of total price control review period Totex regardless of other TOs' performance. Clear, informative guidance on how network companies can produce a compliant and then exceptional business plan.

Our justification: logical response to information asymmetry and will drive companies to submit high quality, ambitious and cost efficient business plans in the interests of consumers.

A problem perceived

We noted in our Framework response¹⁴ that regardless of whether the tool to encourage high quality business plans is the RIIO-1 IQI model, a modified version or a new mechanism, the incentive strength must be maintained or strengthened. If the model does not result in companies showing ambition in business plans, revealing potential efficiency savings or tackling areas of uncertainty then consumers will not benefit.

Despite this, Ofgem has proposed a Business Plan Incentive that is weaker than that in RIIO-T1, further dampening the incentive package, and is lacking the clarity and guidance necessary to assure networks that the effort can lead to a reward. The IQI reward in RIIO-T1 was equivalent to 2.5% of baseline ex ante Totex. The absolute maximum reward proposed to be available in RIIO-T2 is 2% of baseline ex ante Totex.

Ofgem has concluded that the RIIO-1 IQI mechanism needed to change as it was overly complex. However, the proposed incentive in RIIO-T2 is characterised by uncertainty. This is uncertainty on both the level of reward (as it is not solely within the company's control through relative assessment) and uncertainty surrounding the assessment criteria (how will Good be assessed?). Industry engagement confirms that rather than provide a simpler mechanism, the current proposals:

- **Are asymmetric:** The outline proposals, as far as the industry is able to interpret them, will dilute the reward for good plans but apply a fixed penalty for "Poor Value" plans.
- **Are subjective:** We and other industry parties have responded to the recent business plan incentive guidance. We encouraged Ofgem to adopt a level of outline guidance at least equivalent to that introduced by Ofwat under PR19. The Sector Specific Consultation indicated that the updated business plan guidance would include '*more detail on the characteristics of a plan that may distinguish it as either good or poor*'. There are only three bullet examples included.
- **Are too late:** The industry has clearly communicated that the current business plan guidelines are insufficient to permit networks to respond to the incentive properties. Furthermore, as noted above, the incentive design remains in flux during the sector specific

¹⁴ RIIO-2 Framework consultation Scottish and Southern Electricity Networks 2 May 2018 - <https://www.ofgem.gov.uk/publications-and-updates/riio-2-framework-consultation>

consultation period. Yet networks will be judged on their plans starting with the draft submissions (1 July 2019) against this unconfirmed mechanism and only four weeks after the publication of the sector specific decision.

Taken as a combined approach, this will not drive companies to take risks and submit the most ambitious cost and outputs forecasts. It is an illogical response to information asymmetry and is out of step with the RIIO principle that in driving efficiency customers stand to win in subsequent price control periods.

A more effective solution

While Ofgem needs to seek the balance between (a) avoiding excessive costs and (b) encouraging the right behaviours from network companies to meet the outputs customers and stakeholders want, it also must first meet the basics of both. The *raison d'être* of the business plan incentive is to drive companies to put forward stretching and ambitious output targets at the lowest cost, yet it does little for either.

A more logical business plan incentive is one that:

- **Has a greater and clearer upfront reward at 4% of total price control period Totex.** In an in the round assessment of this proposed dampened package, a strong incentive to put forward an ambitious plan that is not subject to all the ex-post adjustments proposed would serve the purpose it was intended.
- **Removes the relative assessment between networks.** Under current proposals a TO that puts forward an ambitious stretching business plan and achieves “Good Value”, can receive a reward ranging from 0.66% to 2% of ex ante Totex. The gulf in that scale is significant to the company but the benefit to consumers is the same. Yet, the penalty for “Poor Value” is 2% regardless of the performance of other network companies in the sector. This lack of certainty on the reward will limit the risks companies will take in their business plan submissions.

In the Framework consultation Ofgem used the limited competitive pressures across the three TOs and the limited comparability as clear justification for removing fast-tracking for the Transmission sector. The same arguments apply in this context. The recognised lack of comparability raises significant concerns as to how Ofgem could assess and reward each TO equitably. It further creates barriers to TO collaboration – the exact opposite of what should be encouraged in the sector as we seek more whole-system outcomes for consumers.

- **Has clear, less subjective assessment criteria:** Similar to that developed by Ofwat for PR19 to remove uncertainty (see our response to the consultation on the Draft Business Plan Guidance).
- **Has guidance that is communicated as early as possible:** Ofgem must acknowledge that networks cannot respond to a business plan guidance document and associated incentive mechanism when they are not permitted to know its design or application. Ofgem must confirm the changes noted above and unhook the draft business plans from this assessment process. Not to do so would deny networks a reasonable opportunity to deliver a “Good” plan.

2.5. Innovation Stimulus

Ofgem proposal: encouraging more BAU innovation, removing the Innovation Rollout Mechanism (IRM), replacing the Network Innovation Competition (NIC) with a new funding pot that exclusively focussed on EST challenges, and possible removal of the Network Innovation Allowance (NIA).

Our proposal: supportive of more BAU but this is dependent on a strong (50/50) sharing factor, retain both the NIC and the NIA which focuses on but is not exclusive to addressing EST challenges.

Our justification: weakening the sharing factor will put BAU innovation at risk. Both NIC and NIA have delivered benefits for consumers, with the latter also instrumental in driving third party involvement, a key ambition of RIIO-2. Innovation not directly related to EST challenges can deliver real benefits to consumers which will be lost under the current proposed restriction on the NIC replacement.

RIIO-1 has delivered real consumer benefits

Ofgem is proposing several reforms to the innovation package as noted above which also include the removal of the Innovation Rollout Mechanism (IRM). We accept the removal of the IRM as we believe this has had negligible impact in RIIO-1.

The remaining innovation stimulus has delivered real benefits for consumers during RIIO-1 and previous price control periods. We strongly encourage Ofgem not to dilute the stimulus which, as we move into a period of momentous change across the energy sector, is more necessary than ever.

The innovation stimulus has been successful in RIIO-1 because of the mechanism design. We encourage Ofgem to take care that, in revising the design of the innovation mechanism, it ensures the drivers of innovation benefits are not lost.

- **Totex incentive:** Ofgem's innovation policy ambitions are dependent on policy decisions taken elsewhere and Ofgem needs to be cognisant of the impact of decisions taken in other areas on its innovation ambitions. As noted above, Ofgem's BAU innovation ambitions are very much dependent on the strength of the Totex sharing factor proposal (see 2.3 above). To encourage innovation activity the Totex sharing factor strength must be maintained. We propose this is 50/50. To weaken it will put BAU activity at risk.
- **Innovation investment:** BAU funded innovation requires specific shareholder investment which will reasonably anticipate an appropriate level of return. Innovations that have a longer lead times before reaching implementation due to early technology readiness level or that deliver benefits to other parties would be unlikely to receive funding from this source, and therefore would not be able to progress.
- **Third party involvement:** One of Ofgem's key objectives for innovation in RIIO-2 is to increase third party involvement in innovation. We have supported that through RIIO-1. However, the NIA is where there has been significant third-party involvement during RIIO-1. Removing NIA will undermine current third-party involvement and risks this future ambition

for an increased role. This would be an illogical and inconsistent policy position for Ofgem to adopt.

- **Business plan incentive:** Similarly, its ambitions of greater third-party involvement are dependent on the strength of the BPI. Ofgem states ‘network companies will be incentivised by the Business Plan incentive to set out in their Business Plans how they will engage with third parties in identifying and delivering innovation’. However, this depends on the strength of the Business Plan Incentive (see section 2.2 above) and how networks understand that this effort will be rewarded.

We strongly support the retention of both the NIC (or equivalent) and the NIA. The evidence contained in this response demonstrates the impact BAU activity and the innovation stimulus have had. It has unquestionably delivered for consumers. Evidence of the innovation potential is set out further in cross sector question responses 44-50 in Section 3.

2.6. Setting the right Financial parameters of RIIO-2

Ofgem proposal: Ofgem sets out a range of RIIO-2 minded-to policy positions in the Sector Methodology and Finance Annex of the Sector Specific Consultation. The changes proposed, and the mechanisms considered, all focus on delivering Ofgem’s over-arching policy objective of lower returns to reflect a perceived lower risk settlement.

Our proposal: We believe a good outcome for consumers is where networks efficiently secure the necessary capital, have confidence to make investments to deliver the energy transition and can deliver the range of outcomes stakeholders have requested. For this to become reality requires a balanced and fair regulatory settlement. A fair outcome is one where the financial parameters under which networks operate are based on evidence and represent a balanced package.

Our justification: We summarise the arguments and evidence for each of the financial parameters below.

- 2.6.1 Cost of equity including indexation
- 2.6.2 Allowed vs expected returns
- 2.6.3 Cost of debt indexation
- 2.6.4 Transition to CPIH from RPI
- 2.6.5 Financeability and the Bailout mechanism or Cashflow floor (CFF)
- 2.6.6 Return Adjustment Mechanisms (RAMs)
- 2.6.7 View of risk-return relationship in the price control
- 2.6.8 Taxation

These should be read alongside our detailed answers to the consultation questions set out in Section 3. We have cross referred to the range of evidence prepared for the ENA as part of the Finance Working Group where relevant and also draw the reader’s attention to the wealth of evidence provided in response to the 2018 RIIO-2 Framework consultation. The transition to CPIH from RPI affects several financial parameters in the price control and therefore our response for each element is summarised in the section on Transition to CPIH from RPI.

2.6.1 Cost of Equity (including indexation)

Ofgem has set the cost of equity too low for RIIO-2

A range of evidence has been submitted to Ofgem since it commenced the process for RIIO-2 in July 2017 in relation to the appropriate methodology for setting the cost of equity for RIIO-2. This has primarily included evidence prepared for the ENA as part of the Finance Working Group. In considering Ofgem's proposed range for the cost of equity and selection of its working assumption of 3% RPI-real or 4% CPIH-real, we have referred to this evidence.

We are supportive of two steps of Ofgem's methodology for setting the cost of equity, namely using the CAPM and relying on cross checks. In advance of the RIIO-2 Framework consultation, Oxera prepared a wide-ranging report considering the available evidence in setting the cost of equity¹⁵. In doing so, Oxera referred to a broad cross section of available evidence covering long run historical market returns, appropriate asset beta benchmarks, survey evidence, regulatory precedents and a number of cross checks. The CAPM may be imperfect as highlighted by Ofgem and acknowledged by academics, but it is the most appropriate model available. Therefore, we remain supportive of using the CAPM alongside considering other evidence including real-world cross checks before setting the range and point estimate for the cost of equity.

Ofgem has not provided sufficiently robust or compelling cross check evidence to justify its range for the cost of equity. Ofgem has relied upon a range of cross checks to justify the range for the cost of equity. We have reviewed this evidence in conjunction with the ENA Finance Working Group and have identified a number of errors in Ofgem's analysis. We have addressed these in our discussion of each element of the CAPM below.

The financial parameters selected by Ofgem in calculating the cost of equity using the CAPM are incorrect. In reviewing the reports Ofgem has published alongside the Sector Specific Consultation, the conclusions reached by Ofgem in determining the range for the cost of equity are not reflective of either the evidence presented previously by the ENA or included in the response to the Sector Specific Consultation¹⁶. We have summarised our view on the cost of equity parameters below with reference to Table 1 which sets out the elements of the CAPM proposed by the industry compared to Ofgem's estimations. As illustrated, the industry's interpretation of evidence is between 2.34% and 3% higher than Ofgem on a like-for-like basis (CPIH-real).

¹⁵ Oxera report, The cost of equity for RIIO-2 – A review of the evidence, Prepared for the ENA, (Feb 2018)

¹⁶ Some of the evidence presented to Ofgem during the ENA Finance Working Group meetings has been presented previously and has not yet been responded to.

Table 2.2 Setting the cost of equity using the CAPM

CAPM*	Ofgem (CPIH)		Industry (RPI)	
	Low	High	Low	High
Risk Free Rate (RfR)	-0.69%	-0.69%	-0.50%	0.00
TMR	6.25%	6.75%	6.00%	6.50%
Asset Beta	0.35	0.36	0.40	0.42
Debt Beta	0.15	0.10	0.05	0.05
Gearing	60%	60%	60%	60%
Equity Beta	0.646	0.762	0.93	0.98
Cost of equity	3.79%	4.98%	5.51%	6.34%
Cost of equity after step 2	4.00%	5.00%	6.00%	6.34%

* all numbers are in noted as RPI or CPIH real as appropriate.

The Total Market Return (TMR) proposed by Ofgem is not reflective of observable evidence, relies too much on survey evidence and incorporates a novel approach to adjusting for inflation. The evidence presented by Ofgem to justify its range for the CPIH TMR does not reflect the evidence presented by NERA¹⁷ on behalf of the ENA Finance Working Group. This is set out by NERA in its review of the UKRN study, in particular the analysis by Mason, Pickford, Wright (MPW)¹⁸ and the TMR recommendations it made. MPW recommend that CPI should be used as the reference measure of inflation when analysing historical real market returns going back to 1990. MPW recommend using CPI inflation published by the Bank of England (BoE) Millennium dataset. MPW estimate a TMR of 6-7% (CPI-real) based on long-run realised returns. The lower bound reflects a 1% downward adjustment to the simple arithmetic mean of realised returns (due to the return predictability at long horizons). NERA, however, shows that this is not a reliable CPI dataset which is also acknowledged by the ONS and academic research. Historical TMR should be calculating using the *official* RPI inflation measure. NERA also notes that the MPW conclusion around predictability of returns is *not well founded* and that the CMA's position on the NIE (2014) case is more robust. The *novel* approach adopted reduces the TMR by 1%, which has been noted by Moody's¹⁹ in its analysis of RIIO-2.

Ofgem's reference to measuring TMR in USD terms should not be relied upon as evidence in support of UKRN's approach to deflating historical TMR in CPI terms. Ofgem argues that using CPI as the preferred deflation technique enhances the comparability of UK real market returns in GBP with the UK returns converted to USD-based returns. This method is supposed to account for changes in the nominal exchange rate and differences in UK and US inflation. Ofgem uses the theory of Purchasing Power Parity (PPP) to predict that changes in the nominal rate will exactly offset differentials in inflation rates between the two countries. We believe that the comparability of real returns is actually driven more by the choice of the averaging period than the inflation index. When considering this, the implied TMR is not consistent with the range per the UKRN study of 6-7% TMR

¹⁷ NERA report, Review of UKRN Report Recommendations on TMR, Prepared for the ENA (Nov 2018)

¹⁸ We have excluded Burns from the reference to this particular point as he disagreed with the other authors on a number of areas as set out in the UKRN study.

¹⁹ Moody's, Credit quality likely to weaken in RIIO-GD2 regulatory period (14 Feb 2019)

CPI-real²⁰. Additionally, PPP depends on other factors which are not explored in Ofgem’s consultation document and are not supportive of its contention.

Ofgem should adjust their TMR estimate by 100 to 200 bps through moving to arithmetic from geometric returns in line with evidence and regulatory precedent. The UKRN study argues that the adjustment to move from geometric to arithmetic returns does not need to be as large (as the upper end of the 100 to 200bps range) when regulators set returns over a long (10 year) horizon. Ofgem has continued to argue throughout its consultation document that it is setting returns for a relatively short period over 5 years and therefore using short term data is more appropriate. We do not believe this is appropriate based on the evidence of selecting between arithmetic and geometric returns and the related adjustment for setting the allowed equity return for a price control. Oxera²¹ reviewed this position and contend that UKRN’s reasoning is not transparent and is contradicted by academic literature, which is supportive of placing more weight on arithmetic averages for setting equity market returns. This is consistent with an earlier report prepared for the ENA by Oxera which also supported placing more weight on the upper end of the adjustment when moving to arithmetic means²². NERA²³ also analysed the issue of arithmetic vs geometric means for the ENA and contend that more weight should be applied to arithmetic vs geometric averages when estimating the TMR referencing the CMA position on this area (as well as reference to the CMA review of NIE in 2014).

When estimating the equity beta for a regulated network, care must be taken to use observable, reliable and consistent data that is in line with regulatory precedent. The reports published by Ofgem from Indepen²⁴ and Dr Robertson²⁵ outline a number of points but appear to contradict one another in places. For example, Dr Robertson refers to using longer term data series unless there are structural breaks while Indepen note there is a “*structural break*” but this should be ignored as betas are mean reverting. There appears to be no clear conclusion from either of these studies in relation to use of Ordinary Least Squares (OLS) or Generalised Autoregressive Conditional Heteroskedasticity (GARCH), time period or frequency, or indeed sample size (UK or international comparators).

Ofgem’s approach appears to be more a matter of convenience than statistical significance, where it seems to overrule some of the recommendations from its own studies in an attempt to disagree with the ENA Finance Working Group studies. Ofgem elects to rely on long term beta estimates despite both of its studies and the study undertaken by Oxera²⁶ advocating for shorter periods if there is evidence of a structural break, which Indepen agrees there has been. Ofgem seems to prefer selecting between high and low frequency data, citing a trade-off between noise and signal as the reason, but there appears to be no justification for this conclusion. Ofgem argues that longer term periods are more appropriate, but simultaneously rules out using international comparators

²⁰ Ofgem’s reasoning is that if real returns measured in different currencies are similar and PPP holds in the long run, then the ‘back-cast’ index of historical CPI is an unbiased estimate of the unknown true historical CPI. This reasoning implies that the old DMS index (which is not based on CPI) is a more appropriate measure of inflation. Therefore, using CPI as the preferred historical deflation technique is not supported by the cross-check against returns in USD terms.

²¹ Oxera report, Review of Ofgem’s initial cost of equity proposals for RIIO-2, Prepared for the ENA, (May 2018)

²² Oxera report, The cost of equity for RIIO-2 – A review of the evidence, Prepared for the ENA, (Feb 2018)

²³ NERA report, Review of UKRN Report Recommendations on TMR, Prepared for the ENA (Nov 2018)

²⁴ Indepen report, Ofgem Beta Study – RIIO-2 Main Report (Dec 2018)

²⁵ Dr Robertson paper, Estimating Beta (April 2018)

²⁶ Oxera report, The cost of equity for RIIO-2 – A review of the evidence, Prepared for the ENA, (Feb 2018)

without quantifying why these are inappropriate benchmarks to be considered. Oxera²⁷ has provided a comprehensive study on beta whereby it addresses the points raised by Ofgem through its own studies.

Ofgem has incorrectly reflected the de and re levering of the equity beta for differences in actual observed betas, gearing and notional gearing. The ENA commissioned Oxera²⁸ to review levering of the equity beta and Oxera found that Ofgem’s adjusted gearing ratio is not reliable. Oxera identified several other errors that Ofgem has made in calculating the equity beta including its approach to calculating a debt beta in the range; the use of GARCH modelling; the selection of appropriate data sample; and the length and frequency of beta estimates. This report provides evidence that Ofgem has miscalculated the beta and failed to rely on appropriate and valuable evidence.

Ofgem has incorrectly interpreted nominal estimated returns from asset managers and financial organisations. Oxera²⁹ has analysed this information and provided a report outlining why Ofgem’s analysis is incorrect. Ofgem has misinterpreted the basis for which these estimates are provided publicly. The estimates are heavily regulated by the Financial Conduct Authority (FCA) and therefore cannot be relied upon as a guide to future returns as set out in the FCA Code of Business.

Additionally, this evidence can be classed as survey evidence in that it is not as observable as actual outturn performance or indeed expectations of investors. Oxera highlighted that academic research refers to this evidence as less reliable, for example, Brealey, Myers, and Allen (2016) state *“Do not trust anyone who claims to know what returns investors expect.”*. The CMA has also commented on the empirical reliability of survey evidence where they *“have preferred to consider underlying data on which survey respondents presumably base their views”*. Survey evidence therefore suffers from significant empirical drawbacks and less weight should be given to it. Oxera notes that even if this evidence could be relied upon, Ofgem needs to adjust nominal returns from the geometric to the arithmetic average leading to a significant uplift in the nominal TMR which is more in line with Oxera’s previous evidence³⁰.

Ofgem has relied upon weak evidence using the Dividend Growth Model (DGM). In conjunction with CEPA and with reference to Ofwat and the CAA, Ofgem identifies a nominal TMR using CEPA’s DGM approach between 7.4% to 8%. Oxera set out in February 2018³¹, that when using the Bank of England’s (BoE) DGM it calculates an RPI-real TMR of 7.5%. As set out in that report, Oxera does not place the full weight of evidence on the BoE DGM and recommend that the TMR be set 100 bps below between 6% and 6.5% as set out in Table 1. Oxera notes that there is a strong negative correlation between the Risk Free Rate (RfR) and the Equity Risk Premium (ERP) meaning lower end DGMs are theoretically flawed. Furthermore, NERA³² sets out in its analysis of CEPA’s methodology specifically where the DGM calculation is incorrect in a report prepared for the ENA (Nov 2018). In its report it corrects for CEPA’s errors in its DGM which supports a forward-looking TMR of 6.5 to 7.1% (RPI-real). Corrections NERA makes include reference to use of UK GDP as a proxy for long run

²⁷ Oxera report, Review of RIIO-2 finance issues – The estimation of beta and gearing, Prepared for the ENA (March 2019)

²⁸ Ibid

²⁹ Oxera report, Review of RIIO-2 finance issues – Rates of return used by investment managers (March 2019)

³⁰ Oxera report, The cost of equity for RIIO-2 – A review of the evidence, Prepared for the ENA, (Feb 2018)

³¹ Ibid.

³² NERA report, Further evidence on the TMR, Prepared for the ENA (Nov 2018)

dividend growth compared to analyst forecasts or global GDP (noting 70% of UK companies derive earnings overseas). NERA also notes that there is no evidence that the TMR is reducing over time and mainstream evidence supports a broadly constant TMR.

When considering other robust and reliable cross checks in calculating the cost of equity, Oxera has provided compelling academic evidence relating to the Asset Risk Premium (ARP) and the Debt Risk Premium (DRP) of regulated networks. Oxera³³ analyses the relationship between the ARP and DRP as an appropriate cross check for estimating the cost of equity for RIIO-2. Due to the security ranking of debt over equity, the rule must hold that the premium to equity holders is higher than for debt holders. In providing the analysis, Oxera empirically reviews evidence using UK regulatory precedents, bonds issued by UK utilities and regulated entities and bonds issued by US utilities. Oxera notes in its analysis that Ofgem has understated the asset risk premium differential to the debt risk premium by a significant amount from Ofgem's point estimate of 4.5% CPI-real (before applying the 50 bps downward adjustment for allowed vs expected returns). **Considering all evidence presented and where weight of evidence should be reflected, it is clear that Ofgem has materially understated the cost of equity for RIIO-2.**

Cost of equity indexation needs to be considered and developed further before being implemented

Cost of equity indexation using the RfR is a new regulatory innovation and should follow the same high bar set for cost of debt indexation. The ENA Finance Working Group commissioned NERA³⁴ to evaluate the various methodologies for indexing the cost of equity using the RfR. In doing so NERA assessed Ofgem's proposed options as well as considering the appropriate tenor of gilts, the averaging period and the adjustment for inflation from nominal to real using RPI and CPIH. NERA recommends that a *nominal 20-year gilt deflated using CPI forecast, based on a 12 month average prior to the charging year, provides a more stable and objective measure of the RfR*. They identify a number of practical requirements for a methodology and we believe this needs developed further with Ofgem including any true-up required for outturn inflation. Ofgem has outlined the option of a 1 month averaging period which we perceive as too volatile and potentially not reflective of either interest rates over time or the investment period. There are also potential implications for financeability metrics as well as longer-term implications for consumers which, to date, have not been considered by Ofgem. Any switch to indexation on the cost of equity carries with it a potential longer-term commitment as Ofgem has implemented with cost of debt indexation. Therefore, across multiple price controls there is a risk of material changes in the cost of equity which will impact customers by way of changes in the WACC influencing both the risk of underinvestment and intergenerational transfers.

We note that the relationship between the ERP and the RfR is not exactly 1:1 and therefore further analysis is required to refine any methodology for implementing cost of equity indexation.

There is insufficient evidence to specifically identify the exact empirical relationship between the ERP and RfR other than that current evidence points to a strong negative correlation. We believe this needs to be explored further alongside the elements identified above.

³³ Oxera report, Review of RIIO-2 finance issues – Asset and debt risk premiums, Prepared for the ENA (March 2019)

³⁴ NERA report, Cost of equity indexation using RfR, Prepared for the ENA, (March 2019)

2.6.2 Allowed vs expected returns

Ofgem should not be applying any downward adjustment to allowed returns

The overall financial package and range of returns is unclear and therefore the cost of equity cannot be set based on any expectation of future performance until this is clearer. The ENA commissioned Frontier Economics³⁵ to appraise Ofgem’s proposals and it concludes that “*As far as the theoretical foundations Ofgem relies upon are concerned, these are deeply flawed.*” and “*MPW fail to consider the wider implications of forcing convergence [between allowed return and expected return]*”. Frontier outlines why the data being relied upon is selective and misleading and comment that energy networks have outperformed the UK economy by around 1% per year in the 30 years since privatisation due to clear incentive-based regulation. Frontier also outlines that price controls have historically been calibrated more symmetrically and are not therefore a *one-way bet*.

Ofgem has not set out the range of potential performance outcomes for RIIO-2 and therefore has not justified its rationale for setting the cost of equity range or point estimate or illustrated how it would calibrate the allowed cost of equity. At this stage any expectation of future out or under performance is unclear, with proposed elements of the price control as set out in the sector specific consultation limiting any degree of outperformance.

There are existing mechanisms and regulatory tools in place to address any uncertainty in the price control. These established mechanisms, such as reopener mechanisms, the cost assessment and incentive target setting, are in place to continue to drive performance, recognise good performance and deliver for consumers. As with Return Adjustment Mechanisms (RAMs) there is no clear justification or evidence that this new regulatory innovation is of benefit to consumers more so than refinement of existing mechanisms. Ofgem has sought to include several new mechanisms in RIIO-2 which inadvertently overlap and are being used to address the same *perceived* problems from RIIO-1. How these mechanisms interact is complex and therefore dampens incentives to the longer-term detriment of customers.

Ofgem has failed to take account of customer detriments in adopting this approach. Frontier outlines several factors which harm customers. It points to erosion of investor confidence and increased investor risk (which leads to an increased cost of capital); weakened incentives for efficiency and innovation (which will dampen incentives to the longer-term detriment of customers); the distortionary impact on incentives to invest; and loss of clarity over price control calibration.

Aiming off or down on the cost of equity range by differentiating between allowed returns and expected returns is unjustified and a break from regulatory precedent. Ofgem sets out in its Framework Decision that it would distinguish between allowed returns and expected returns³⁶ following on from the UKRN Study on the cost of equity. However, any application of an adjustment to the setting of the cost of equity base is arguably a deviation from the decision in July 2018 which intended to distinguish between allowed and expected returns but not explicitly adjust allowed

³⁵ Frontier Economics, Adjusting baseline returns for anticipated outperformance – An assessment of Ofgem’s proposals, Prepared for the ENA (March 2019)

³⁶

Ofgem Framework Decision (July 2018)

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returns. No other regulator to date has aimed down or off on the cost of equity on the basis of potential future outperformance or expectation of outperformance.

Regulatory precedent supports aiming towards the upper end of the cost of equity range to mitigate the risk of underinvestment and adverse impact on consumers. As Frontier sets out in its report, using this approach to aim down on the cost of equity is damaging to consumers due to the risk of underinvestment. The risk to consumers' social welfare by setting the cost of equity too low has long been seen as a risk to be avoided. The CMA decided to aim towards the upper end of the range as set out in its report on London airport companies:

“However, we [the CMA] consider it a necessary cost to airport users of ensuring that there are sufficient incentives to invest, because if the WACC is set too low, there may be underinvestment from BAA or potentially costly financial distress....Given the significance to customers of timely investment at Heathrow and Gatwick, we have given particular weight to the cost of setting the allowed WACC too low. Most importantly, we note that it is difficult for a regulator to reduce the risks of underinvestment within a given regulatory period.”

We believe Ofgem's cost of equity range has been incorrectly set and that it should be aiming towards the upper end of the range. This will avoid consumer detriment particularly given the adverse impact of underinvestment during a period that is expected to deliver the energy system transition. Frontier notes that the UKRN report supported aiming up but has identified issues with MPW's review of regulatory precedent, including the stylised model to calibrate the appropriate level of aiming up. It believes more weight should be placed on the Dobbs (2011)³⁷ model on aiming up which is more robust³⁸.

Separately, Oxera³⁹ was commissioned in a study in 2014 by the New Zealand Commerce Commission to give evidence in setting the WACC for electricity Transmission and Distribution. Oxera evaluates setting the cost of capital in the 75th percentile compared to the 50th percentile including analysing the various loss to consumers and see that aiming up in the range is justified. This paper also references Dobbs (2011)⁴⁰.

Rating agencies see the downward adjustment on the allowed return as set out by Ofgem as credit negative. As set out by Moody's⁴¹ and S&P⁴² in their review of the RIIO-2 consultation document, they see proposed lower returns, including aiming down on the cost of equity, as credit negative. They outline their view on RIIO-2 proposals and highlight that lower cost of equity is significantly credit negative alongside the other mechanisms Ofgem has proposed.

³⁷ Dobbs, (2011), Modelling Welfare loss Asymmetries Arising from Uncertainty in the Regulatory Cost of Finance

³⁸ Frontier Economics discuss the comparison between MPW's analysis in the UKRN study and Dobbs (2011) where the difference in models is outlined.

³⁹ Oxera report, Input methodologies – Review of the '75th percentile' approach, Prepared for New Zealand Commerce Commission (23 June 2014)

⁴⁰ Dobbs, (2011), Modelling Welfare loss Asymmetries Arising from Uncertainty in the Regulatory Cost of Finance

⁴¹ Moody's, Credit quality likely to weaken in RIIO-GD2 regulatory period (14 Feb 2019)

⁴² S&P Global, Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks (20 Feb 2019)

2.6.3 Cost of debt indexation

The cost of debt index should be transparent and in line with Ofgem principles

We set out in our response to the RIIO-2 Framework Decision that the principles Ofgem had adopted were consistent with RIIO-1 and we were supportive of those principles. In considering those principles, we evaluated the different options Ofgem proposed covering full indexation, partial indexation with a fixed debt allowance for existing debt and a move to full pass-through. In evaluating these options against Ofgem's principles, we agree that full indexation is the most appropriate and advocate that company specific adjustments may be warranted in certain circumstances. Our updated view on the cost of debt index mechanism is set out in this section.

In line with previous price controls, Ofgem should leave options open on the most appropriate indexation and company specific arrangements until submission of business plans. During both RIIO-T1 and RIIO-ED1, Ofgem maintained options for indexation and company specific circumstances up until final determinations. In doing so, this allowed business plans and refinancing profiles to be considered as part of the process for calibrating the cost of debt mechanism. In SHE Transmission, we have had a weighted mechanism linked to changes in our RAV as a proxy for our financing profile during a capital-intensive price control. As we move into a new price control, it should be ensured that business plans and uncertainty mechanisms are fully considered prior to final determinations.

We believe the cost of debt mechanism for RIIO-2 should deliver Ofgem's principles consistent with previous price controls, while ensuring historical financing decisions are not penalised by current market conditions. NERA⁴³ evaluated the cost of debt performance by sector against the mechanisms in those sectors, whether that is 10-year trailing average, 10-20 year trombone or the SHE Transmission existing mechanism⁴⁴. In each sector, Networks underperform their existing mechanisms in RIIO-2 based on a range of interest rate scenarios. Following on from this analysis, we believe a 15-20 year trailing average is the most appropriate starting index. This would be based on either the average of A/BBB non-financials consistent with RIIO-1, or a combination of these two indices dependent on business plans, credit ratings and justifications by energy networks. We would also advocate for company specific mechanisms where appropriate, based on unique circumstances as justified by each company in their business plan submission. We believe this should include, but not be limited to, the capital investment profile and small company adjustments alongside any other adjustments that may be justified in business plan submissions.

We believe that calibration of the cost of debt mechanism which is weighted within each sector towards the largest debt books is contradictory to regulatory precedent and Ofgem principles. Ofgem has indicated that it intends to calibrate the cost of debt index mechanism by ensuring the absolute cost of debt incurred by each sector is what is paid by consumers. We recognise the attempt to protect consumers as one of Ofgem's principles but believe this would not be in consumer interest in the long term and ignores Ofgem's other duties. This approach is consistent with a pass-through mechanism for those companies with the largest debt book. For example, in Electricity Transmission, NGET has a debt book 8-10 times the size of SHE Transmission and SPT. This would result in SHE Transmission and SPT's debt allowance being a function of NGET's treasury

⁴³ NERA report, Cost of debt at RIIO-2, Prepared for the ENA (March 2019)

⁴⁴ The analysis undertaken by NERA was normalised for SHET plc as SHET plc is in the process of developing its business plan and any analysis would have been premature.

policy and therefore would remove the incentive properties of the mechanism for smaller companies and introduce uncontrollable risk. This approach is not simple, transparent or reflective of company specific circumstances which are yet to be considered.

We do not believe that cost of debt out or under performance should form part of any RAM mechanism if it were introduced. Historical or embedded debt is a function of past financing decisions which were either deemed efficient at the time or there is no evidence to show that the decisions were inefficient⁴⁵. Therefore, it would seem unjustified that cost of debt should form part of RAM adjustments given costs are a function of historical decisions pre-dating the price control. RAMs dampen the incentive properties of the price control and we are not supportive of these mechanisms, as set out in this and previous responses⁴⁶. Considering one of the principles of Ofgem's cost of debt policy is to retain the incentive properties of full indexation alongside there being concern regarding applying a debt sharing mechanism, we see no reason to justify including financing performance in a RAM mechanism and we believe Ofgem's reasoning is supportive of that position. Any dampening of incentive properties around the cost of debt index mechanism would be to the detriment of consumers in the long-term, discouraging refinancing and pro-active treasury management to be better than the cost of debt benchmark.

There is evidence that there is no presence of a *halo effect* for regulated networks raising debt against a market index. NERA⁴⁷ has provided an updated report for the ENA evaluating the presence of a *halo effect*. In doing so, NERA notes that previous analysis by Ofgem in GD1 and T1 failed to compare bonds on a like-for-like basis including controlling for tenor and credit rating of debt. During ED1 Ofgem agreed with analysis presented by NERA that tenor and credit rating should be corrected for and reached the same financial analysis. However, Ofgem still concluded in ED1 that there was presence of a *halo effect* post 2012 of c20bps. The CMA concluded during the BGT Appeal to the CMA for the Slow Track DNOs⁴⁸ that there was no presence of a *halo effect*, despite BGT arguing for 50bps. In updating that analysis, NERA reviewed the CEPA report prepared by Ofgem in February 2018⁴⁹, which argued that there was a *halo effect* amounting to 10-25bps. When NERA corrects the coupon rate used by CEPA (as debt was issued below par in many cases), control for credit rating at issue and correct for the treatment of Index Linked Debt (ILDs) in the CEPA analysis, they conclude that there is no *halo effect*.

Ofgem should ensure the cost of debt mechanism reflects transaction and liquidity costs (cost of carry) for energy networks. NERA prepared analysis for the ENA in relation to transaction and liquidity costs but further work is required. NERA found in its analysis that there is evidence that there are significant transaction and liquidity costs which must be accounted for when calibrating the cost of debt mechanism.

⁴⁵ In para 2.12 in the Finance Annex, Ofgem highlight that there are implementation issues due to an extensive cost verification exercise.

⁴⁶ In para 2.8 Ofgem note that the mechanism should be both *transparent* and *simple*.

⁴⁷ NERA report, Cost of debt at RIIO-2, Prepared for the ENA (March 2019)

⁴⁸ This was part of the British Gas Appeal in 2015. See ground 4 as per CMA Final Determination https://assets.publishing.service.gov.uk/media/5609588440f0b6036a00001f/BGT_final_determination.pdf

⁴⁹ NERA report, Cost of debt at RIIO-2, Prepared for the ENA (March 2019)

2.6.4 Transition to CPIH from RPI

The transition to CPIH from RPI should be NPV Neutral across all aspects of the price control with care taken to mitigate value leakage from the transition.

In transitioning from RPI to CPIH, the ENA Finance Working Group⁵⁰ provided a report outlining the main financial parameters of the price control affected by the transition. In doing so, the mechanics of the transition are noted as being extremely important. This applies when converting from nominal values to real, using breakeven RPI inflation using nominal gilts or debt coupons, or adjusting using the RPI-CPIH wedge. Regardless of approach adopted, we believe that value neutrality should endure which we do not believe has been achieved across all financial parameters.

Ofgem should not be using the immediate transition to CPIH from RPI as a means to boost short term cash flows in order to support credit ratios and allow a lower cost of equity. Of greatest concern is the observation that Ofgem appears to be relying on an immediate switch to CPIH from RPI to support cash flows during RIIO-2. Both Moody's⁵¹ and S&P⁵² have published notes outlining that credit metrics will weaken as a result of Ofgem's RIIO-2 financial parameters to a point where key ratios, such as the AICR, will make networks non-investment grade rated (to below 1x cover). When considering the cash flow benefit of switching to CPIH from RPI (at the expense of indexing the RAV by RPI), ratios are *propped up* and we do not believe that is appropriate. Ofgem is employing the transition as a means to '*back-solve*' the cost of equity and support credit ratings. We do not believe this is appropriate and highlight that this is credit negative as the rating agencies have noted.

Care must be taken in adjusting for CPIH in the absence of appropriate data to allow adjustments from nominal to real-CPI compared to real-RPI. As we have noted for calculating the cost of equity and set out by NERA⁵³ in its review of the TMR evidence, the adjustment undertaken by Ofgem via the UKRN study is *novel* and not reliable. The adjustment assumes what investor expectations and judgements were based on over a long period of time based on a reconstituted *patch work* of inflation measures. This inadvertently removes 1% from the real-CPI TMR estimated by the UKRN study as set out above. Separately, we have highlighted how RPI to CPIH should be treated in cost of debt and have proposed areas for consideration in developing the indexation of the cost of equity using the RfR as well as the impact on RPEs.

There is exposure to index linked debt for energy networks as a result of the switch to CPIH. Moody's⁵⁴ and S&P⁵⁵ both note this in their respective reviews of RIIO-2, where S&P note that "a move to CPIH from RPI could complicate Network Operators' Financing". They highlight that the risk

⁵⁰ ENA, A discussion paper – Ensuring the value of neutrality through inflation index transition in RIIO price reviews (Oct 2018)

⁵¹ Moody's, Credit quality likely to weaken in RIIO-GD2 regulatory period (14 Feb 2019)

⁵² S&P Global, Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks (20 Feb 2019)

⁵³ NERA report, Review of UKRN Report Recommendations on TMR, Prepared for the ENA (Nov 2018)

⁵⁴ Moody's, Credit quality likely to weaken in RIIO-GD2 regulatory period (14 Feb 2019)

⁵⁵ S&P Global, Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks (20 Feb 2019)

of the change in index without a transition period would mismatch revenues and RAV from the financial liabilities (which comprises c30% of index linked debt). NERA⁵⁶ also noted this in its review of inflation for WPD where additional financing costs and risks should be considered by Ofgem, including the implementation of a transitional period.

Ofgem should consider the impact on customer bills as part of the transition to CPIH from RPI which would increase by more than 6% over RIIO-2. Ofgem has not yet considered a transitional arrangement which would smooth the move to CPIH from RPI to the benefit of consumers. We recognise the value in simplicity but this transition will increase bills over the next period (and for the following 30 years) compared to retaining RPI.

2.6.5 Financeability and the Bailout mechanism or Cashflow floor (CFF)

The introduction of a Bailout Mechanism for energy networks is of little credit value and is a mechanism with practical real-world limitations as well as likely to be detrimental to customers

We do not agree with the principles of a Cashflow Floor (CFF). The introduction of this mechanism has been proposed in order to deal with potential headroom issues influenced by the lower cost of equity currently tabled for RIIO-2. This is in effect a bailout mechanism or *payday loan* for energy networks which cannot meet their debt repayments during the price control period. The presence of such a mechanism within Ofgem's proposals implies that the availability of the mechanism has been considered as being necessary. Ofgem set out in its consultation document that due to the level of cost of equity being proposed there would be circumstances where they would expect energy networks to fall into financial distress. The possibility that companies could fail to meet their repayments in the next price control period and trigger the mechanism is therefore a safety net for Ofgem to defend its failure to calibrate the price control accordingly.

This mechanism is not in the interests of consumers and is likely to lead to higher customer bills, intergenerational inequity and a higher cost of capital. Ofgem states in the consultation that the floor exists only where there is no alternative to the company to manage their debt payments and state that customers should not be adversely affected by the floor which is incorrect since they would be the individuals contributing to the bailout and would not be repaid for potentially more than 10 years. This creates material intergenerational transfers between customers which is not in their collective interest.

Companies would not trigger this if the price control is calibrated accordingly for the period and Ofgem fail to recognise that customers will be adversely affected as they will have to 'bailout' any company which triggers the floor. In essence, every UK customer is exposed as if the floor is triggered by any operator, all customers will fund it. Customers will receive full repayment in the future but there are intergenerational issues in that it will not necessarily be the same customers who 'bailed out' the company who are repaid.

In our opinion, a fair settlement which is effectively calibrated would meet each of the CFF objectives stated by Ofgem and avoid the need for the introduction of the complex cashflow floor. There is no need to introduce a mechanism around creditworthiness and protection from downside

⁵⁶ NERA report, Evaluation of Inflation Indexation for RIIO-2, Prepared for WPD (May 2018)

scenarios if the price control is properly calibrated as companies would earn a reasonable and appropriate rate of allowed return. This would mean that credit metrics would be stable (even without CPIH transition as noted by Moody's⁵⁷ and S&P⁵⁸) with credit rating agencies putting little credit value in this mechanism.

Credit rating agency reports have referred to the lack of value in the floor. Moody's state that the *"Bailout mechanism would socialise debt service shortfalls, but likely to have significant limitations"* and comment that *"future regulators may find it difficult to renew the scheme...there is a significant risk that the mechanism could be removed or modified as soon as 2026."* They go on to state that *"If a mechanism is eventually devised that successfully removes the need for Ofgem to allow any headroom to financing costs, the credit quality of the sector is likely to be weakened."* Moody's therefore see this as credit negative. S&P have stated that they *"see limited credit value in the proposed mechanisms"*.⁵⁹ S&P *"question whether the introduction of the mechanism signals the regulator's willingness to allow credit quality in the industry to decline."*⁶⁰ Such commentary contradicts the aim to support creditworthiness and protect consumers and debtholders. We agree that the over-riding sentiment in the current proposals is that credit quality is set to decline and do not support the introduction of the cashflow floor.

KPMG prepared a report for the ENA to evaluate the bailout mechanism, stating that they see little value in the mechanism. It notes that the marginal cost for an equity investor to take an energy network out of financial distress would need to be materially greater than the cost of equity for normal investment. This is because the marginal return would need to be greater to reflect the greater risk to equity holders. KPMG also notes the distortionary impact this mechanism would have on the fairness between equity and debt investors and that it is not Ofgem's place to favour one funder over another. KPMG also suggests already established regulatory mechanisms would be more appropriate for handling financeability issues⁶¹.

2.6.6 Return Adjustment Mechanisms (RAMS)

Return Adjustment Mechanisms (RAMS) are inadequately justified and cause long-term detriment to customers

These mechanisms are akin to a tax on effort as set out previously in our response to the RIIO-2 Framework consultation. Also, these mechanisms have a distortionary impact on incentives and their introduction has not been justified by means of a full and clear regulatory impact assessment. Although Ofgem has provided some form of assessment of each mechanism, this is overly simplistic, lacks clarity and transparency, and does not appropriately evaluate the mechanisms in full. A study commissioned by the ENA, undertaken by EY⁶², reviewed these mechanisms against a comprehensive framework and found they provided little value compared to existing mechanisms.

⁵⁷ Moody's, Credit quality likely to weaken in RIIO-GD2 regulatory period (14 Feb 2019)

⁵⁸ S&P Global, Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks (20 Feb 2019)

⁵⁹ "Credit quality likely to weaken in RIIO-GD2 regulatory period", Moody's Investor Service

⁶⁰ "Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks", S&P Global Ratings

⁶¹ KPMG report evaluating the Cashflow floor for the ENA (March 2019)

⁶² Ernst and Young report, Evaluating the need for, and strengths and weaknesses of, fair returns mechanisms for RIIO-2, Prepared for the ENA (April 2018)

EY's conclusion was that these mechanisms were inferior to existing mechanisms and adversely affect consumers in the long term due to the distortionary and behavioural affects.

We believe that these mechanisms are damaging to consumers in the long term. To date the performance of Networks has led to improved cost efficiency, productivity and customer service. The introduction of these mechanisms does not drive this performance further but rather restrict it.

These mechanisms are therefore targeted at perceived issues around returns being too high alongside the clustering of returns. These issues have manifested as a result of the way that performance has been communicated rather than being a failing of RIIO-1. Ofgem undertook its own analysis of the current price control through CEPA⁶³ who evaluated RIIO-1. As we set out in our response to the Framework consultation, the CEPA report shows there are limited issues in RIIO-1 with none requiring wholesale changes to the RIIO framework. Hence new mechanisms such as RAMs appear unwarranted.

Ofgem's concerns around forecasting can be addressed by way of a reopener mechanism and a shorter price control, both of which are available to Ofgem for RIIO-2. As we set out in our response to the Framework consultation, we do not believe there is a need for this regulatory innovation. The merits of each proposed RAM are unjustified with the mechanisms being likely to do more harm to consumers than good due to the adverse consequences they lead to. In our assessment, we identified that RAMs are incredibly challenging to implement fairly or transparently and would therefore lead to heightened risk and distortionary impacts.

We note that Ofgem is considering constraining the impact of RAMs by not upwardly adjusting those companies above their cost of equity while not downwardly adjusting those below their cost of equity. This implies that if you outperform, you will be *pulled back* whereas if you underperform you may be *pushed forward*. This seems an odd incentive whereby performing badly may result in better performance compared to performing well which could result in poorer performance. The behavioural incentives of this mechanism are at odds with what is the best interests of consumers. Ofgem should also be aware of the interaction this mechanism has with both allowed vs expected return adjustments and the bailout mechanism. Companies who fall into difficulty can be bailed out, but if these companies begin to outperform, with outperformance being required to pay off the bailout, they may be pulled back under the RAM mechanism. Conversely, if a company is close to bailout and is performing poorly, then it may or may not be pushed into bailout by another network. The risk-reward relationship is completely broken as a result of these mechanisms, including the allocation and control of these risks. As we set out below, we believe there is heightened risk in the regulatory framework including interventionist regulation compared to RIIO-1 which needs to be considered fully in advance of RIIO-2. This risk is in addition to the ongoing political, regulatory and technological risk for energy networks which is not reflected in the allowed returns or indeed the wider price control framework.

⁶³ CEPA report, Evaluation of RIIO-1, Prepared for Ofgem (2018)

2.6.7 Taxation

Ofgem should continue to support tax transparency - passthrough of fair tax is in the interest of all stakeholders

We proposed in our response to the RIIO-2 Framework consultation that Ofgem should be supportive of transparency on tax. As a result, we proposed that Ofgem adopt a Fair Tax Mark (FTM) type approach whereby FTM accreditation should lead to companies receiving the full payment of their tax costs from consumers (who are also tax payers). We believe this is the right behaviour for entities acting in the public interest. Where energy networks cannot yet obtain FTM accreditation due to international ownership, compliance with similar disclosure requirements is an option until accreditation is achievable. We believe this is an appropriate approach and would allow Ofgem to adopt a pass-through policy on tax costs. In this regard, consumers would be paying for an appropriate and fair amount of tax while encouraging companies to continue to adopt responsible tax behaviour.

We are not supportive of the double-lock system on tax allowances as it encourages the wrong behaviour. The double-lock mechanism proposes to allow companies to recover the lower of notional tax allowances and actual tax charges. We believe this will inadvertently encourage companies to have lower tax than the notional allowance to avoid being underfunded for tax costs. We do not believe this is in the best interests of consumers. We propose that our recommendation for approach to tax is developed in conjunction with FTM and Ofgem via the ENA.

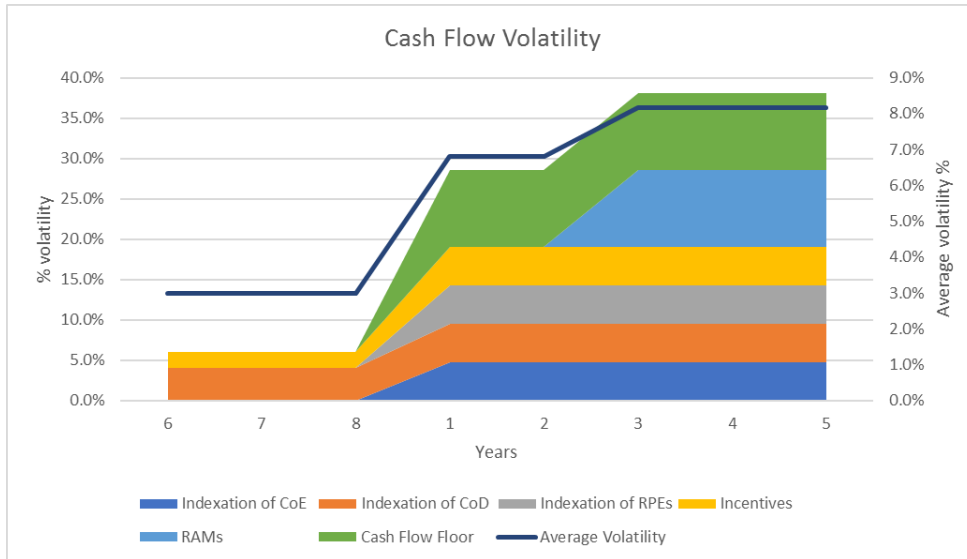
Ofgem's regulatory innovations that have led to the introduction of new mechanisms leads to significantly higher risks in RIIO-2 compared to RIIO-1

Ofgem has sought to “protect itself” from criticism of RIIO-1 by proposing to introduce several new mechanisms in RIIO-2, despite there being little evidence that RIIO-1 failed (see CEPA⁶⁴ report and our consultation response from April 2018). These new mechanisms seek to correct for the same perceived errors of RIIO-1, namely excess unwarranted returns. These mechanisms therefore cut across one another, whether that is RAMs, a lack of incentives or a significantly reduced Totex sharing factor. Furthermore, Ofgem has proposed to reduce the base allowed return so materially that financeability concerns have been raised which has led Ofgem to rely on the Bailout Mechanism to avoid energy networks falling into financial distress.

These new mechanisms create increased risk for energy networks while simultaneously reducing the allowed returns, contrary to central finance theory. In our analysis, we have quantified that there would be an increase in the volatility of earnings and cash flow as a result of these mechanisms by at least 9% compared to RIIO-1, excluding the capital investment programme and timing differences on cash flows. This is set out in Figure 1 below.

Figure 2.2: Change in volatility and variability in cash flows from RIIO-1 to RIIO-2

⁶⁴ CEPA report, Evaluation of RIIO-1, Prepared for Ofgem (2018)



As a result, to avoid the adverse impact on consumers both now and in the long term, Ofgem needs to review the justification for these mechanisms and the impact on the rate of return required for the given level of increased risk.

We have seen an adverse equity market response to Ofgem’s proposals and the surrounding political and regulatory environment in the UK. The FT⁶⁵ commented that *Infrastructure investors put a ‘blanket ban’ on UK assets*. This was based on concerns around negative and hostile political and regulatory environments in the UK. They went on to state that *“several influential infrastructure investors have told the FT that it is highly unlikely they would make further investments in the UK in the current regulatory climate”*. We see this as evidence that Ofgem is increasing risk in the industry while putting significant downward pressure on returns.

We believe that this response illustrates the deteriorating interest and value attributed to the UK regulated framework, which has historically attracted and retained investment into the industry. In competition with global market returns, the UK must compete with other industries in international markets and if returns are more attractive in the US, most of Europe and Australia, there is a risk that the UK sees underinvestment in the next price control to the detriment of consumers (as we have set out in our response on Allowed vs Expected returns).

⁶⁵ FT.com, Infrastructure investors put ‘blanket ban’ on UK assets (Jan 2019), (<https://www.ft.com/content/d23400e6-1d6e-11e9-b126-46fc3ad87c65>)

Summary of our Financial Policy Position

We have set out our view on the financial policies that Ofgem has included in the consultation. There is an extensive list of areas under review and a substantial body of evidence prepared and submitted by the ENA on behalf of the industry. We believe that there are still a number of critical areas which require further development, but we have summarised our main policy position for RIIO-2 at a high-level in Table 2.3 below. This table is intended as a summary and should not be read in isolation but alongside the main body of our response. Evidence and rationale for this high-level financial policy position for RIIO-2 is set out within the main response.

Table 2.3 – Summary of policy position for RIIO-2 financial parameters

Financial Parameters	SSE position
Cost of equity	The value set by Ofgem is too low and needs to consider market evidence. An appropriate range is between 6.0% and 6.3% RPI-real based on evidence we have seen to date.
Cost of equity indexation	The methodology needs further developed including the length of the index and averaging period as well as the adjustment required for a switch to CPIH.
Allowed vs expected returns	This adjustment is unjustified and is to the detriment of consumers as set out by CMA precedent and academic literature. Ofgem should aim up on the cost of equity range to maintain and attract investment and avoid the cost to consumers of underinvestment.
Transition to CPIH from RPI	Further analysis is required as immediate transition increases bills to consumers while allowing Ofgem to artificially inflate short term credit ratios to support a cost of equity which has been set too low. Ofgem must ensure that any change is implemented consistently across the price control and is NPV neutral.
Cashflow floor	We are not supportive of the cashflow floor as it is to the detriment of consumers, should not be required in a price control which is set fairly and is of little credit value as set out by rating agencies.
RAMs	We are not supportive of the introduction of RAMs due to their distortionary effects on incentives, adverse impact on consumers, and the fact that any perceived issues in RIIO-1 this is aimed at resolving can be addressed in RIIO-2 through use of existing mechanisms.
Taxation	Pass-through of tax costs is the most appropriate treatment while enhancing tax transparency through the FTM or similar disclosure requirement. We do not support the 'double-lock' system as it drives the wrong behaviour.

2.7. Conclusion

We do not believe that the sector specific consultation has identified any evidence to justify the proposed fundamental changes in the RIIO-2 Price Control.

As currently proposed in the Sector Specific Consultation, the change from RIIO-1 to RIIO-2 is considerable and unwarranted. We highlighted in our Framework consultation response that this action is not warranted by any assessment of RIIO-1 outcomes, nor is it consistent with Ofgem's assessment of network performance within its Annual Reports⁶⁶. Energy networks made considerable progress in RIIO-1, therefore, consumers expect this progress to continue and to grow; it is time for evolution not revolution of RIIO-1 into RIIO-2.

We consider that Ofgem needs to make a targeted revision of its minded-to sector specific consultation in order to avoid a poor, unbalanced regulatory settlement. In all three parts of this response we have identified the targeted changes Ofgem should make to its minded-to Sector Specific Consultation proposals. These are not complex or time-consuming changes; Ofgem has more than enough time to adapt its proposals before network plans will be submitted.

In each area we have sought to highlight the change required, the impact on consumers and the alternative regulatory tools which Ofgem has available to it. Further evidence and detail are provided where possible within the answers to each consultation question. We believe RIIO-2 has the potential to deliver high consumer outcomes, with fair returns while addressing the substantial challenges that the energy system transition will bring. However, for that potential to be realised the changes we have identified in this response need to be made.

⁶⁶ RIIO-ET1 Annual Report 2017-18 - https://www.ofgem.gov.uk/system/files/docs/2019/03/riio_et_2018_19_annualreport_final_version_published.pdf

Section 3.

consultation Question Response

3a. Cross Sector Questions

Output categories Questions – CSQs 1 to 7

CSQ1. Do you have any view on our proposed approach for considering the extent to which a successful appeal has consequences, if any, on other components of the price control?

At this stage it is difficult to provide any substantive comments in respect of your proposals given there is little detail provided on how any mechanism would operate and as such we reserve our position until your proposals are more fully understood. We note that there has been no meaningful industry engagement on this topic and we would seek discussion on a bilateral and industry wide basis with Ofgem. However, we have prioritised the material issues raised in this response before addressing such issues.

We note that you appear to acknowledge that the various components of RIIO-T2 Price Control require to be considered in the round and that a successful appeal in respect of one component may have consequences for the legitimate interests of licensees. The RIIO-T2 Price Control and the arrangements associated with it should be arrived at adhering to due process standards including a meaningful, transparent and industry-wide consultative process. Those standards are legal and regulatory standards which are well known and understood and these standards, along with regulatory requirements such as certainty and proportionality, are necessary for the public law legitimacy of the Price Control arrangements introduced by Ofgem. Any measures introduced pursuant these proposals must meet these regulatory standards and requirements in order to avoid any unfair or prejudicial outcomes for licensees.

We do note that the list provided in paragraph 2.19 of the Sector Methodology document supports the arguments we have laid out in our response to the Impact Assessment consultation questions and the consequence on the price control risk that comes from multiple, concurrent regulatory interventions, as summarised in Section 2, above.

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

SSEN does not disagree in principle that RIIO-2 should aim to deliver against the three high-level consumer-facing outcomes but the ambition must be matched with substance. The substance of the price control package, as proposed, will make the three outcomes difficult to achieve.

- Overall, the balance has not been achieved between: (a) avoiding excessive costs and customer bills and (b) encouraging the right behaviours from network companies to meet the outputs customers and stakeholders want. Ofgem's focus on (a) (short-term) value for money will come at the unjustified expense of displaying the right behaviours. Therefore, this will adversely impact on the outcomes Ofgem seek.

- Ofgem needs to be clear how such “outcomes” will be measured and how network companies will be held to account against these outcomes. SSEN currently believes that we will be held to account on “outputs” and not these “outcomes” but this needs clarification.
- The three output categories are essentially the six previous output categories combined, incorporating the EST. Customer Service (broadly encompasses the RIIO-1 output of customer satisfaction), Resilience (broadly encompasses the RIIO-1 outputs of safety, reliability, and availability) and Environment (broadly encompasses the RIIO-1 outputs of environment and connections). However, it would be helpful if:
 - the three output categories stated more clearly what they are: e.g. Customer Service, Resilience and Environment. This is particularly pertinent to the first, as “meet the needs of consumers and network users” is generic and can encompass the other two.
 - there was clarity and consistent application of the language, i.e. are they consumer-facing outcomes or output categories.
 - there was explicit mention of connections in the Environment description. Not to do so would suggest, wrongly, of less of a role of connections in going forward.
 - by moving to the three from the six, rather than tweaking the six, Ofgem should accept that the enduring nature of measuring progress against these may be lost.
 - shifting from six to three output categories could be argued to give more focus but we do not agree. Rather it simply puts the six RIIO-1 categories under new headings and this does not give it more prioritisation but less. If Ofgem believe there is a degree of prioritisation of the three, it should be clear.

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

As noted above, we would expect explicit mention of connections in the Environment description. Not to do so would suggest, wrongly, that there is less of a role of connections going forward.

We also believe that the output categories could be more ambitious and need to be flexible enough to accommodate the outcome of the ongoing engagement process. They are simply a restatement of the RIIO-1 output categories and our view is that they do not truly reflect the ambition of consumers and stakeholders. For example, resilience and safety can be *world-leading* rather than maintained, consumer needs can be *exceeded* rather than met and the *GB social and environmental ambitions* should be delivered.

We consider that output categories should be stakeholder-led. Ofgem sought stakeholder views and we have no reason to believe our stakeholders, who are showing considerable ambition, are different to those which Ofgem engaged with. Therefore, we do not believe these proposals reflect the views gathered by Ofgem during its engagement process and, therefore, we should be permitted to reflect the response of our, and industry wide, stakeholders.

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

SSEN does not disagree with the overarching framework of LOs, PCDs and ODIs. However, the consultation does not outline Ofgem’s thinking on structure, target setting process, review and monitoring or the timing and assessment of over/under delivery. We believe Ofgem need to provide its rationale and justification on this, as without this we are unable to provide our support to anything beyond the framework. We can outline our thoughts on how Ofgem might consider these questions over the coming weeks.

Accountability: SSEN agrees that it should be held to account for the delivery of outputs committed to in the business plan through PCDs, however:

- There needs to be flexibility to allow for materially equivalent outputs to be delivered particularly as we move into the EST. This flexibility is necessary to ensure the price control framework continues to provide for the needs and requirements of consumers throughout the period.
- We are concerned that there is a risk of “mission creep” with these proposals. We understood the principle of PCDs was originally designed to deal with outcomes from high value projects committed to in the business plan but subsequently not delivered (or substantively reduced). For example, a network company benefiting from doing nothing, when doing nothing is not the right option for consumers. We are supportive of this original policy intent.

However, in discussion at policy working groups, the network companies have proposals for ODIs and these ODIs have been suggested to be more suitable to PCDs. For example, the environmental areas of the price control outcomes. This adds significant complexity to monitoring the price controls, reduces flexibility and also adds to the baseline costs. Ofgem expects network companies to do more within their baseline settlements. This requires enough investment to deliver against an output enhanced settlement where more is subject to PCDs and less to ODIs. Furthermore, this also increases the regulatory risk that networks now carry in their baseline settlement (please see our comments on financing risk in Section 2 and relevant specific question consultation answers). Such moves to embed more ODIs as PCDs mean that we can only agree to the output proposals at a framework level until we understand Ofgem’s approach to determining the baseline settlement.

Flexibility: The detail we see so far within the framework will not drive innovative and a ‘can-do’, risk-taking, behaviour necessary to achieve the RIIO-2 consumer-facing outcomes and ultimately the EST challenges facing GB.

- A move to more PCDs with no outperformance reward, ODIs with more potential downside than upside, will drive more risk averse behaviour from Network Companies.
- Relative and dynamic targets will reduce the appetite for companies to set stretching targets or beat targets due to lack of reward or fear of being penalised.
- The burdensome nature to monitor and assess delivery against PCDs reduces the transparency and linkage between cost to the consumer, the service they experience, and the return received by the network. This does not meet Ofgem’s objective of simplifying the price control.

CSQ5. Do you agree with our proposals to introduce dynamic and relative incentives, where appropriate? Are there any additional considerations not captured in our proposed framework which you think we should take into account?

As noted in our response to CSQ4 relative and dynamic targets will reduce the appetite for companies to set stretching targets or beat targets due to lack of reward or fear of being punished.

Relative targets: We defer to our detailed response on each incentive to determine whether relative targets are appropriate as they are case-by-case dependent. But there are general points which we would highlight.

- Relative targets introduce a new dimension of risk to companies outside of their control. However, we do not see any commensurate proposed reward to recognise this change from RIIO-1 to RIIO-2; this could be through higher incentive calibration or recognition in base equity allowances. Rather, the sector specific proposals either reduce the reward potential or remove it altogether.
- Relative targets are not appropriate in the Transmission sector. In the Framework consultation Ofgem referenced the limited competitive pressures across the three TOs and the limited comparability as justification for removing fast-tracking for the Transmission sector. The same industry conditions must therefore also apply in this context. The recognised lack of comparability raises significant concerns on how Ofgem could assess and reward each TO equitably under a relative output reward mechanism.

Dynamic targets: we highlight the following concerns.

- Ofgem is not clear what problem it is trying to solve with the introduction of dynamic targets. Where is the evidence that dynamic targets are required and will have a desired and positive impact? The need for the mechanisms should be demonstrated through identification of targets that have been significantly outperformed due to a perceived generous baseline.
- If the problem can be shown to exist, SSEN suggests it will be resolved by the following:
 - A five-year price control where the risk of outperforming a baseline is substantially reduced from that in an eight-year price control.
 - Revising RIIO-2 baseline targets from those set in RIIO-1 (in ET no new incentives have been introduced so baselines are not new). We support the principle of baselines being reviewed from one price control to the next as, where enduring improvement has been made, it is in the interests of consumers to reflect this in future targets. It is exactly what an incentive, output-based framework is designed to do.
- We are not clear the evidence exists to show that there is a problem to solve in ET. If there is, it can be addressed more effectively via other means without increasing the risk of the price control.
- We question whether, in ET, the value to consumers vs the added complexity and increase to regulatory risk justifies the dynamic target mechanism. This does not meet the objective of simplifying the price control.

CSQ6. Do you agree with our proposals to allow network operators to propose bespoke outputs, in collaboration with their User Groups/ Customer Challenge Groups?

SSEN agrees with the opportunity to propose bespoke outputs in collaboration with our User Group. We believe that this is necessary to meet the needs of all our stakeholders and consumers who have shown considerable ambition to meet the challenges. Furthermore, Ofgem's policy intention to allow the development of stakeholder-led bespoke outputs is a necessary and public demonstration of its commitment to effective enhanced engagement and the outcomes from this.

Stakeholder engagement tells us that our next business plan needs to ensure RIIO-1 success is maintained while being ambitious in meeting the challenges of a changing energy environment. Stakeholder feedback highlights key themes of decarbonisation, affordability, environmental impact, supporting vulnerable customers, and a sustainable, flexible, network. We are also aware of the Government's aims for the energy sector. The focus of UK Government remains on meeting decarbonisation targets while in parallel creating a smart, flexible energy system supported by agile regulatory frameworks⁶⁷. The Scottish Government remains fully committed to a low carbon future through the significant growth in renewables across Scotland.

The opportunity to propose bespoke incentives is pertinent given the lack of ambition in the TO-wide output and incentive package as currently proposed by Ofgem. As noted in our Executive Summary, the lack of a sector wide incentive package shows limited ambition from Ofgem and therefore there is a considerable role for bespoke outputs. Ofgem must accommodate the proposed outputs and commit to a **stronger and wider incentive package** that builds on and is **significantly more ambitious than RIIO-T1** as we embark on the EST challenge.

We will be bringing our stakeholder-led bespoke incentives to Ofgem in the coming weeks and months ahead of our business plan submission. We are committed to do so but are nonetheless concerned with the time constraints. The dates of submitting the business plan have been brought forward to July from that set out in Ofgem's Framework Decision Document which puts significant pressure on our stakeholder engagement process.

We seek further guidance from Ofgem on criteria and standards of bespoke incentives and the process of engagement we should follow prior to submitting proposals in our business plan. Ofgem's view and our view/our stakeholders' view on what comprises an ambitious and acceptable bespoke incentive may be different. For example, Ofgem has suggested that we should engage with the other TOs in the incentive development, but this does not align with the behaviour a competitive business plan incentive is driving.

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

The key issue that needs to be considered is that there are no new incentives proposed by Ofgem as we approach a changing energy environment future. In order to meet the challenges, there is a greater need for bespoke incentives than was perhaps anticipated at the outset of the RIIO-2 review.

⁶⁷ <https://www.gov.uk/government/speeches/after-the-trilemma-4-principles-for-the-power-sector>

We would encourage Ofgem to remain open to the range of justification proposals for financial ODIs that will be presented to it through our business plans. Where these are shown to represent the views of our stakeholders, have been tested through the enhanced engagement process and are supported by evidence for the marginal incentive rates, then we would expect Ofgem to give due consideration to the proposal. Our expectation is that Ofgem would not seek to force conformity across the TOs in respect of their bespoke ODIs.

Enabling Whole System Solutions Questions – CSQs 8 to 18

Overview of SSEN's position on *Enabling Whole System Solutions*

We remain supportive of the industry's ambition to identify and then deliver whole system solutions. Our stakeholders view whole system outcomes as an obvious objective and our consumers would expect the continued focus on securing potential benefits. Our aim is to be realistic that, while the goal is simple and obvious, the solutions to reach it can be considerably more complex.

Our response seeks to simplify the challenge of unlocking whole system benefits. We support the progress towards whole system outcomes during RIIO-2 using the mechanisms at the disposal of the industry to achieve some progress. The learning from this and the momentum it can create will be of value to consumers in future price control periods.

The framework challenges

- *Demonstrating a clear benefit for consumers:* We are alive to the need to ensure a whole system framework demonstrates that consumers are beneficiaries from the actions of network companies to secure whole system outcomes. This is a prerequisite to justifying the need for an incentive component of a whole system framework.
- *Real and evident incentive properties:* Whole system outcomes may involve solutions on an incumbent's network, neighbouring networks or from third parties. Combined, the system solution will represent a lower cost than the corresponding individual actions that they would have taken to achieve the same or an equivalent output. For parties to take the steps to find and then deliver this outcome requires the incentive properties to be clear, obtainable and strong.
- *Incentives over cost and risk:* Network operators will have to incur additional costs and take additional risk of delivery when developing and delivering a whole system solution. The investment may not have been planned / envisaged, it may be higher cost to that network than its BAU individual solution and will entail sharing costs and outcomes with other industry parties. The incentive properties of a whole system framework need address the risk of seeking out these system solutions.
- *Transparency:* To ensure legitimacy, we recognise that Ofgem and Stakeholders need to be able to see how networks have made efficient investment decisions and acted in the common interest of consumers. The transparency is required in the design of the framework and the reporting of outcomes.

The hurdles

A whole system approach to network planning and investment can create opportunities to invest more efficiently across sectors and possibly vectors. However, it also creates hurdles that need to be recognised in order to be overcome. Seeking integrated solutions with other industry parties:

- Requires material levels of proactive effort to uncover the opportunities. This includes data and network analysis;
- Introduces additional delivery risk on the parties involved. Coordinating the delivery of a network's licence outputs through the actions of another network or industry party requires alignment of outputs, priority of outputs, delivery deadlines and a clear understanding on how delivery risk can be shared. Whole system introduces more than one system output, outcome or target that is being met. This is a change from the current experience where network, client and / or contractor are focused on one set of outcomes;
- Introduces additional operational risk. Operating smarter, more joined-up networks that are dependent on communications infrastructure, third parties, commercial contracts and limited headroom inevitably carries greater risk; and
- Introduces licence, regulatory and legal risk. While the detail will be revealed over time, it is reasonable to expect that concurrent delivery of network outcomes through single or combined system solutions may create regulatory tension. This needs to be addressed and accommodated in a successful whole system framework.

➤ **The RIIO-2 framework has to recognise all of this if network operators are to embed whole system thinking in their cultures going forward.**

It is our view that a strong incentive package is the most compelling driver of behaviour, particularly where a change is required. Whilst there is merit in aspects of Ofgem's whole system proposals, we do not believe the mechanisms put forward by Ofgem in its sector-specific consultation create the framework necessary to drive and deliver a sustained approach to whole system. We have put forward an alternative package of mechanisms, which we believe is more commensurate with the challenge.

The three main elements of this package are:

- (i) A strong whole system delivery framework – a sandbox approach with an oversight role for Ofgem;
- (ii) The continued, strong, Totex Incentive Mechanism (TIM); and
- (iii) A new sharing mechanism that allows the resulting costs and benefits of any whole system solutions to be fairly and equally shared between consumers, network companies and wider parties.

The four supporting mechanisms of the sandbox delivery framework are:

- (i) An *ex ante* allowance to fund the additional effort (similar to SWW preconstruction);
- (ii) An appropriate 'finder's fee' to encourage and reward network operators that actively seek out whole system solutions;
- (iii) An information provision incentive to drive improvements in the way information is presented and made available to interested parties; and

- (iv) An uncertainty mechanism to accommodate additional costs caused by whole system thinking not foreseen at the setting of the price control.

Underpinning all of this is a need for a clear and robust whole system framework. Further detail on this is contained in the following consultation answers. We will provide more to the relevant Ofgem teams following consultation close through bilateral sessions.

CSQ8. Do you feel we have defined the problem correctly?

We would not be inclined to describe the approach to date as a ‘problem’. We would describe the advances in technology and newer, smarter ways of working as an opportunity in RIIO-2 to explore whether greater coordination between networks could deliver cost savings across the system as a whole. Not approaching the whole system challenge as a problem is important in how the industry and stakeholders view the likelihood of success.

In terms of the factors which might limit achieving this under the current framework, we primarily see these as being:

- (i) The additional investment of time and resources that whole system requires; in terms of identifying and developing the options and engaging effectively with industry and external stakeholders. This additional and significant effort is unrecognised and unsupported by the current framework.
- (ii) The absence of a whole system framework which is robust while also displaying sufficient flexibility and agility. We believe this is fundamental to the successful delivery of whole system. All parties need to know where system issues exist, how whole system options will be consistently and transparently assessed and how costs, risks and benefits will be shared.
- (iii) The additional risk to network operators of entrusting third parties to deliver their network obligations, particularly in the absence of a robust whole system framework and clarity around where accountabilities and liabilities lie.
- (iv) The current lack of a sufficiently strong incentive package to overcome these blockers and drive network operators to change their behaviours. This is more pronounced when considered alongside a sector policy framework which favours lower risk and lower returns.

CSQ9. What views do you have on our proposed approach to adopt a narrow focus for whole systems in the RIIO-2 price control, as set out above?

Primary focus: We maintain that the primary focus of whole system for RIIO-2 should be on the interactions between the electricity transmission and electricity distribution sectors. This is an area that is under the control of Ofgem and the sector and, as such, is an area where real and demonstrable progress can be made. This is a practical stance, recognising that consumers would rather see some progress, although limited to electricity, rather than wait for a complete energy system mechanism.

Expanded opportunity during RIIO-2: However, we recognise that there may be opportunities where whole system thinking could be broadened out beyond the electricity sector within RIIO-2 timescales. Indeed, we are already exploring this wider definition of whole system through our

Constraint Managed Zone (CMZ) process, which is evolving to consider a range of synergistic solutions from energy storage, heat networks through to energy efficiency. The whole system framework must be able to facilitate these; this is where flexibility is essential.

Supporting role of NIA: We believe that the continuation of the Network Innovation Allowance (NIA) into RIIO-2, coupled with other forms of external funding, will help to provide the platform necessary to further stimulate this market in RIIO-2 timeframes and serve as an element of the framework to facilitate broader consideration of whole system. The key focus for RIIO-2 in this regard will be to monitor how these existing funding sources can be utilised and to include the flexibility to work swiftly to address barriers as and when they appear.

Whole system innovation stimulus: However, whilst the NIA supports well-defined projects, for other opportunities that arise through ongoing evolution, the NIA is less applicable. We believe that an incentive to support the deployment and replication of innovative solutions is needed to promote and accelerate the development of the market. An *ex ante* allowance / incentive is likely to be the most appropriate mechanism to drive this.

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

We consider whole system solutions to be where two or more parties in different sectors identify a joint / multi-party approach that delivers a more economic and efficient solution for consumers as a whole than had each of these parties pursued their own individual solutions independently.

If, in a specific location, it is more economic and efficient to invest in, for example, gas infrastructure to release capacity on the electricity network to accommodate Electric Vehicle charging, then arguably this is exactly what whole system thinking should facilitate.

However, these mechanisms would, for example, need to address the risk should a party (in this case, the gas network operator) fail to deliver the agreed infrastructure or investment on time. This could have significant implications for the other party. In the example set out above, the electricity network operator could find its network failing, congested or non-compliant.

We have recognised this challenge and are focused on developing a framework that could safely accommodate the wider scope outcomes. We will engage with Ofgem on this over the coming months and through our business plan submission.

CSQ11. Do you have reasons and evidence to support or reject any of the possible mechanisms outlined in this chapter? Do you have views on how they should be designed to protect the interests of consumers?

As set out in the overview to this section of our response, we believe a strong incentive package is the most compelling driver of network operators' behaviours, particularly where a change is required. Whilst there is merit in aspects of the whole system mechanisms set out in Ofgem's sector-specific consultation, we do not believe these proposed mechanisms will deliver the change in culture that Ofgem is seeking to drive. They are insufficient to meet the challenges that whole

system brings. However, they can be part of the overall solution to unlocking whole system benefits when combined with the additional measures we consider necessary.

Business planning incentive

We fully support incentives to drive robust and well-justified Business Plans to establish company 'baselines' that instil integrity in the industry (and Ofgem). We also agree that network companies need to establish clear and transparent processes for joint planning with other network companies and stakeholders. To this end, we see merit in broadening network companies' options analysis / Cost Benefits Analysis frameworks to include alternative, more innovative solutions to solving network constraints / issues. But as highlighted above, a clear framework is needed to ensure a consistent and transparent approach.

However, whole system opportunities over an entire price control period are unlikely to be fully identifiable at the business planning stage. Where they are, we believe the incentive needed on network companies to disclose this as part of the business planning process would need to be very strong and yet certainty over the delivery of the whole system 'solution' and realisation of the value would be unclear at this stage. Moreover, under Ofgem's current proposals, it would appear that by flagging this uncertainty, network operators would be subjected to a lower (more penal) sharing factor under their TIM.

Notwithstanding concerns regarding this obvious conflict between these mechanisms, we do not believe a Business Planning Incentive is likely to be effective in driving whole system behaviours.

Ensuring network innovation has a whole system focus (innovation stimulus)

We strongly agree that an innovation stimulus is still required. This is a key strand of the RIIO framework and is necessary to develop frameworks and test initiatives.

Importantly, many of the benefits of the existing innovation stimulus have accrued to customers in their entirety; whether this be through lower cost and faster connection, innovation benefits baked into Strategic Wider Works projects, or the enabling of local generation and demand growth in situations where traditional needs cases would have been unsupportable.

We believe a new funding pot would be beneficial in facilitating innovation in response to strategic network-related energy system transition challenges. However, this must not be at the expense of continuing to fund other innovations and it needs to be a stimulus rather than an opportunity to put undue risk on network companies. We believe this should operate on a collaborative basis; it is not appropriate to establish competition where the overarching aim is to promote coordination and joint working.

Coordination and information sharing incentive

We agree that wider stakeholders need to have information pertaining to the network to understand network issues and to be able to develop and offer solutions that are appropriate and fit-for-purpose. This information needs to be made available on an equal basis to all and in a way that is both accurate and useful to them. From a user's perspective, we believe it would be more advantageous if the nature and content of the information being shared was consistent across network operators. This would avoid potential users of this information having to 'interpret' regional

variations in how this information is presented. We are currently specifying new IT systems where appropriate to utilise the Common Information Model (CIM) with this end in mind.

We are mindful of information that already exists, for example through heat maps. Based on current planning standards, heat maps can indicate that parts of the network are heavily congested, whilst neglecting to highlight the potential for flexibility. In this regard, it may, for example, be helpful to re-visit heat maps and establish a common approach across the sector.

We are less certain that an incentive is the best way to drive information provision and sharing, but we believe there is merit in considering an incentive around the quality and usefulness of the information being provided. This incentive could be based on the network operator actively engaging with users of this information for feedback, the volume / nature of any complaints relating to its information provision and the speed and appropriateness with which the network operator resolves these. Whilst this would require parameters around what could reasonably be expected, this would seem to be the right mechanism to bring about improvements in this area for developers that need to understand what opportunities exist and where.

We are mindful of the whole system licence condition, which Ofgem recently consulted on. Whilst we did not agree with the drafting of this licence condition – not least because it attempted to precede a robust whole system framework - we believe that information sharing is something that could be established through an appropriate licence condition.

Importantly, there are costs incurred in producing this information, presenting it in a way that is of most use to users of the data, and keeping it up to date. We expect this to require ongoing review to ensure it continues to reflect available information and the needs of all potential users of the data. Network operators will need to be appropriately funded to do this and we believe the most appropriate mechanism to do this is through an *ex ante* allowance.

More generally, any sharing of information needs careful consideration to guard against unintended consequences such as cybercrime, terrorism, gaming and disclosing personal data, or the use of Artificial Intelligence to infer personal information.

Balancing financial incentives between traditional and whole systems behaviour

Our position is that Ofgem should adopt:

- (i) A strong whole system delivery framework – a sandbox approach with an oversight role for Ofgem;
- (ii) The continued, strong, Totex Incentive Mechanism (TIM); and
- (iii) A new sharing mechanism that allows the resulting costs and benefit of any whole system solutions to be fairly and equally shared between consumers, network companies and wider parties.

We believe this is the simplest and most effective suite of mechanisms to drive whole system behaviour, which reduces the likelihood of competing or mis-aligned incentives and unintended consequences.

However, we recognise that Ofgem’s sector-specific consultation proposes a substantial weakening of the TIM against RIIO-1 levels. As recognised elsewhere in this response, we believe this is the wrong response to Ofgem’s perceived concerns over network companies’ returns and will force

Ofgem to put in place a host of other incentives and mechanisms, which will substantially increase the risk of unintended consequences and perverse outcomes. This is exactly what Ofgem is keen to avoid.

For example, should the TIM be weakened, we would expect there to be less downward pressure on parties that are delivering whole system solutions to keep their costs / charges down. This could undermine an efficient whole system outcome. To this end, Ofgem could find itself having to introduce piecemeal and reactive incentives that aim to 'correct' behaviours rather than drive the right ones. For example, an incentive that sought to reward 'delivery' parties for submitting accurate costs or consistently demonstrating integrity (rather than creating a framework through TIM that more naturally incentivises this behaviour).

In terms of refining or formalising funding routes, we believe it would be prudent to review the provisions within the Excluded Services and DRS licence conditions to ensure that they are broad enough to recognise costs that are driven by more than one third party and / or have wider benefit than for a single entity. However, we believe that these provisions, aside from ensuring that the drafting is sufficiently flexible to accommodate this new policy intent, are broadly appropriate for RIIO-2 in terms of a mechanism to ensure that electricity network operators are able to recover non-baseline costs triggered and funded by third parties.

However, where whole system requires electricity networks to take action or to take a share in costs that did not form part of their baseline, we believe this requires an uncertainty mechanism. We believe a mechanistic approach, such as a revenue driver, whereby revenues can be flexed where licensees accept incremental whole system-driven costs that have been through the whole system framework and are properly assigned to electricity network customers, would be the most appropriate.

Ensuring the framework is able to flex to meet whole system needs

We agree that there needs to be provisions within the RIIO-2 framework to accommodate the uncertainty surrounding whole system. The industry is facing an unprecedented level of change over the next ten years and it would be nonsensical to neglect to put in place a mechanism that allowed network companies the opportunity to secure allowed revenues during the period in response to whole system activities.

As set out above, we believe the area requiring an uncertainty mechanism is where whole system actions triggered by third parties result in wider benefits for users of the electricity network and therefore impose costs on electricity network customers.

However, we do not believe coordinated reopeners contingent on set windows to be the best approach. We believe this needs a more 'agile' uncertainty mechanism; one that facilitates revenue adjustments throughout the price control period.

We would favour a more mechanistic approach, such as a revenue driver whereby revenues can be flexed where licensees accept incremental whole system-driven costs that have been through the whole system framework and are properly assigned to electricity network customers.

Whole system discretionary funding mechanism

Given the uncertainty surrounding whole system activity, there absolutely needs to be provisions within the RIIO-2 framework to accommodate this uncertainty. We have put forward a suite of measures that tries to do just that, i.e. by rewarding actions and behaviours that are taken rather than attempting to reward plans and proposals and highlighting the need for an uncertainty mechanism where these costs are not part of licensees' baseline allowances.

We are not opposed to a whole system discretionary funding mechanism *per se*. Indeed, it may be that this could be used instead of a revenue driver where electricity licensees face additional costs doing the right thing from a whole system perspective. However, the workings of this mechanism would need to be clearly defined upfront in order to ensure that electricity network licensees had confidence and transparency over how this mechanism would work and the certainty and timeliness of funding.

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

For reasons outlined above, we are less convinced of the merits of a Business Planning Incentive. We do not believe it is advantageous for network operators or customers to put forward uncertain, unconfirmed whole system solutions at the business planning stage and for this to be rewarded and for this information to inform their baseline allowances.

We believe this risks rewarding behaviours that may not materialise, whilst at the same time understating allowances during the RIIO-2 period, which will drive the wrong kind of efficiencies, i.e. those not in the interests of customers.

Instead, we believe the drivers for whole system behaviours need to be embedded in the price control framework that applies to the period. Moreover, we believe whole system thinking requires a robust whole system framework that establishes a clear and consistent approach. This framework is unlikely to be in place in the timescales that would be required to inform the Business Plan.

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

Existing licence framework: The existing Excluded Services and DRS provisions of the electricity Transmission and Distribution licences respectively allow for licensees to recover costs from the provision of services (including electric lines or electrical plant) that 'is for the specific benefit of any third party who requests it' and is not otherwise remunerated. This is fairly narrow in scope and may not be appropriate where costs are less attributable to the third party or represent investment in long term network assets which are shared between multiple parties. We have considered alternative mechanisms to remunerate licenced networks in such circumstances.

We believe it would be prudent to review these conditions to ensure that they facilitate whole system thinking and the ability for electricity network licensees to seek to recover incurred costs from multiple parties where the benefits are less attributable to a single party.

Treatment of margins: Separately, the electricity Distribution licence allows charges levied in respect of DRS to be 'set at a level that will allow the licensee to recover its reasonable costs and a

reasonable margin in providing the service in question'; the electricity Transmission licence is silent on this. It may be prudent to more closely align the provisions set out in the two licences so as to remove any potential distortion and to improve clarity and consistency for 'requesting' parties on the regulatory basis of their charges. Depending on the strength of the TIM, it may be appropriate to accommodate an enhanced margin to increase the driver on the 'delivery party' to engage in whole system. However, this is suboptimal to a strong TIM and a strong TIM should be the priority.

Fair value and fair reward: The greater challenge comes from placing a fair value on the service offering and a fair allocation of the costs and benefits between affected parties. This is made more difficult where multiple parties are involved. Also, there is no mechanism at present that would allow network operators to share the resulting savings with other parties other than customers. Sharing of the costs and benefits is fundamental to whole system thinking becoming engrained in network company cultures and to the market for whole system solutions evolving. The framework governing this needs to be established upfront and be applied in a consistent and transparent manner.

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

In order to balance financial incentives and align behaviours between networks, we believe the design of a price control framework that bridges the gap in key areas would be the first step. This may not require alignment of price control settlements, just that all networks recognise a common framework through which consistency can be achieved. We recognise that whole system solutions will have different values for different sectors. The frameworks that establish how whole system opportunities will be assessed will need to take account of this.

CSQ15. Are there other mechanisms that we have not identified that we should consider (please give details)?

As set out in the overview to this section of our response, our position is that Ofgem should adopt:

- (i) A strong whole system delivery framework – a sandbox approach with an oversight role for Ofgem;
- (ii) The continued, strong, Totex Incentive Mechanism (TIM); and
- (iii) A new sharing mechanism that allows the resulting costs and benefit of any whole system solutions to be fairly and equally shared between consumers, network companies and wider parties.

In addition, we believe the following are required:

- (i) An *ex ante* allowance to fund the additional effort (similar to SWW preconstruction);
- (ii) An appropriate 'finder's fee' to encourage and reward network operators that actively seek out whole system solutions;
- (iii) An information provision incentive to drive improvements in the way information is presented and made available to interested parties; and

- (iv) An uncertainty mechanism to accommodate additional costs caused by whole system thinking not foreseen at the setting of the price control.

The Totex Incentive Mechanism (TIM)

It is our view that strong incentives are the most compelling driver of behaviour. The TIM, which has allowed network operators to share equally in the benefit of any cost savings with customers, has delivered substantial cost savings and efficiencies over recent price controls. As argued elsewhere in this response, a weaker TIM – where network operators retain less of any saving – will almost certainly reverse cost savings and efficiency behaviours. Importantly, the effect of this will be felt in both RIIO-2 and future price controls as the strength and effectiveness of future benchmarking will be diluted. Therefore, if Ofgem wants to drive whole system behaviours and positively encourage network operators to actively engage and develop new ideas, we believe the right incentive package – and strength of incentive - is fundamental.

We believe one of the most appropriate ways to drive whole system behaviour is to retain a strong TIM. Indeed, we cannot see any circumstance where a weak TIM is beneficial to network operators' behaviours or customers. We believe a strong TIM, where network operators have the opportunity to share equally in the cost benefits realised from whole system approaches relative to what action they would otherwise have taken, will be key.

We acknowledge that it will not be appropriate to reference the counterfactual indefinitely, but we believe, at least for the purposes of RIIO-2, that this approach is needed to drive, as a minimum, those whole system behaviours that are demonstrably more economic. For example, where a single whole system action on one network negates the need for two separate and more expensive actions on different networks.

A new sharing mechanism

In addition to a strong TIM, a new mechanism is needed that enables the resulting cost benefit to be fairly and equally shared between all relevant parties, and not just between the network operator that was awarded the initial allowance and its customers. Without this wider sharing mechanism, parties will simply not engage.

A strong whole system incentive framework

Lastly, we believe a further strong incentive is required, particularly if it is envisaged that a whole system approach will look beyond the absolute cost of network solutions, where TIM, on its own, will certainly not be sufficient to drive whole system behaviours. As such, we believe there needs to be a separate incentive framework that parties taking forward any whole system solutions or foregoing network investment can access in order to reward the additional risk profile or the reduction in RAV growth that network owners will experience. In RIIO-2, we believe access to this uplift on network owners' returns needs to be through Ofgem on a case-by-case basis.

The rationale for this is that whilst going forward we would expect access to any whole system incentive to be on a more mechanistic basis, in RIIO-2, whilst frameworks are still being developed and established, we believe there is a strong role for Ofgem. We do not anticipate huge volumes of projects coming through this mechanism, but for whole system projects above a material threshold, we believe network operators should bring their developed solutions to Ofgem (or involve Ofgem in the development process).

This is in part about recognising that Ofgem oversight is needed until such time as the detailed frameworks necessary to permit a more mechanistic approach are in place. But it is also about bringing forward whole system projects to Ofgem that merit an additional incentive. The size of the incentive or uplift on returns would need to be at least commensurate to the financial impact on the network operator of taking this whole system approach. This is separate from the resourcing and more administrative and information provision costs, which we believe should be subject to a separate *ex ante* allowance.

Importantly, by taking the above approach to driving whole system thinking, i.e. a strong TIM; a new mechanism that allows costs and benefits from whole system solutions to be shared between all relevant parties; and a strong incentive framework to reward whole system delivery and account for the relinquishment of RAV growth and returns, we believe concerns around the two-year lag until RIIO-ED2 takes effect are reduced. The above framework drives parties to participate in whole system solutions where opportunities exist and, where this results in efficiency savings or wider whole system benefit, these benefits are shared and incentives awarded.

Whilst the framework may not apply to electricity Distribution until two years after it takes effect in electricity Transmission and possibly gas Transmission and gas Distribution, we see no risk to customers from introducing this framework in 2021. Any savings will be commensurate with the outputs.

Additional allowances / mechanisms required

In addition to the above mechanisms, we believe the following are also required if whole system behaviours are to be fully supported and embedded in the RIIO-2 framework:

- *Whole system ex ante allowance*

In terms of funding the additional effort required to develop new frameworks and processes and explore, identify and design whole system options, network operators will require allowances to cover the additional resources and time needed to actively engage with broader stakeholders and conduct this broader assessment of options, design and cross-sector stimulation.

This is not insignificant, and we believe this needs to be in the form of an *ex ante* allowance. Importantly, not all 'searches' will result in solutions that involve other sectors / vectors or deliver cost savings and therefore parties need to have the means of funding this additional work regardless. Importantly, this does not mean that a whole system approach has not been followed. If the outcome has been reached having gone through a whole system assessment, then the outcome is the product of whole system thinking regardless of whether it involves other sectors / vectors or not.

Ex ante allowances will also need to be made available to address the requirements for greater information provision. We recognise that wider stakeholders need to have information pertaining to our networks, but there are costs incurred in producing this information, presenting it in a way that is of most use to users of the data, and keeping it up to date. We expect this to require ongoing review to ensure it continues to reflect available information and the needs of all potential users of the data.

- *'Finder's fee'*

We believe there is merit in establishing a 'finder's fee' to reward network companies that identify whole system solutions. This would focus the network operator on ensuring that the process of seeking whole system solutions is as effective as possible.

- *Improved information provision incentive*

See our response to CSQ11.

- *Uncertainty mechanism to adjust for whole system actions triggered by a third party where there are wider benefits and costs for electricity network customers*

The existing Excluded Services and Directly Remunerated Services (DRS) provisions of the electricity Transmission and electricity Distribution licence respectively allow for licensees to recover costs from the provision of services (including electric lines or electrical plant) that 'is for the specific benefit of any third party who requests it' and is not otherwise remunerated. In so doing, the Excluded Services and DRS provisions allow electricity Transmission licensees and electricity Distribution licensees respectively to charge third parties (and therefore third parties' customers) for work that they undertake on their behalf.

However, the current provisions are relatively narrow in scope and may not be appropriate where costs are less attributable to a single third party or are shared between multiple parties. We believe it would be prudent to review the existing provisions with the current policy intent in mind to ensure that they provide a valid route to recovering less specific or less attributable costs.

Notwithstanding the above, where electricity Transmission or Distribution licensees benefit from whole system actions identified and triggered by third parties (or where electricity Transmission or Distribution licensees are required to take action as well as fund that action), the current provisions do not account for the additional costs that would (at least in part) need to be funded by electricity network customers. Therefore, there needs to be: (i) a way of attributing these costs across customers in a fair and equitable way; and (ii) a means of allowing electricity Transmission and Distribution licensees to recover these unforeseen costs through their allowed revenue. We believe this requires an uncertainty mechanism.

We do not believe a specific re-opener with defined application windows is likely to be the most appropriate response. Instead, we would favour a more mechanistic approach, such as a revenue driver whereby revenues could be flexed where licensees accept incremental whole system-driven costs that have been through the whole system framework and have been properly assigned to electricity network customers.

Importantly, the mechanism needs to be capable of adjusting companies' revenues in a way that does not create financeability issues. In a world of tighter price control settlements, it could be unmanageable for network companies to fund whole system solutions that they do not have an allowance for or a mechanism that does not allow for a near immediate funding adjustment.

- *Whole system framework*

We believe a strong and robust framework is fundamental to ensuring transparency so that parties who want to engage in whole system solutions are able to do so.

Regulated parties will need to have clarity on how additional costs in delivering whole system solutions will be allocated and funded and the benefits appropriately shared, and their outputs adjusted – recognising that solutions will have different values to different sectors. There also needs to be clarity on what costs and benefits are to be considered. For example, we believe the planning process, through the Cost Benefits Analysis, needs to consider the optionality value of solutions in order to properly assess the wider potential benefits. If wider benefits, for example, environmental and societal benefits, are to influence whole system actions, the framework and methodology needs to clearly set out how these benefits are quantified and factor into decisions made. We have been developing such methodologies as part of our Social Constraint Managed Zones.

Non-regulated parties will need to have clarity on the process so that they are able to develop investment models that take appropriate account of the engagement and likelihood of success. Clarity will also be required as to where enduring ownership and responsibility for any whole system actions taken sits. There are clearly risks for parties that instigate and rely on whole system actions if the ‘delivery party’ continues to own and operate the asset or service and the ‘delivery party’ subsequently neglects to maintain it, or the asset or service fails and needs replaced. It is not clear whether this arrangement and relationship can be determined on a case-by-case basis or whether this requires a common approach.

This framework will also need to address challenges, such as where costs and benefits are difficult to align or assign, for example where a benefit on one part of the network results in a negative impact on another. Who decides what action to take and how the resulting costs and benefits will be allocated? It will be important to set out how whole system requirements are identified and how solutions are assessed and decisions made. It will also be important to establish how these decisions will impact network operators’ outputs and the mechanism to adjust or account for this.

It will be important to consider more complex cases too, for example where multiple parties are involved.

In addition, there may need to be consideration given to the consequential impacts of adopting whole system solutions. For example, action taken by a Distribution licensee in the interests of the whole system that had an adverse impact on that licensee’s interruptions incentive scheme (IIS) performance or operational complexity or network losses, would need to be appropriately compensated or protected.

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

As set out above, perhaps one of the main challenges to ensuring that whole system solutions are realised and appropriately rewarded stems from: (i) being able to place a fair value on the service offering; (ii) being able to derive a fair allocation of the costs and benefits between affected parties;

and (iii) having the appropriate mechanism to be able to share these costs and benefits between the relevant parties. This is made more difficult where multiple parties are involved. Appropriate sharing of the costs and benefits between parties beyond just the licensee and its customers, is fundamental to whole system thinking becoming engrained in network company cultures and to the market for whole system solutions evolving. The framework governing how costs and values are derived and the mechanism to facilitate wider sharing of the costs and benefits needs to be established upfront and be applied in a consistent and transparent manner.

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

As above. Please see our response to CSQ16.

CSQ18. Which of the proposed mechanisms would be most suitable in circumstances where a broader definition of whole system is likely to deliver benefits to network consumers?

In order to drive complementary behaviours, clearly the sectors / vectors involved need to be subject to similar drivers. There is little point in highly incentivising (or even obligating) electricity network licensees to seek out and deliver whole system solutions if other sectors do not have equivalent drivers and the appetite to participate or pursue. Similarly, it is important to recognise that not all whole system solutions will result in reduced costs. In some instances, parties will face additional costs.

As a result, we believe common frameworks that allow costs and benefits to be shared are fundamental to a broader definition of whole system. Without this wider sharing mechanism, parties will simply not engage.

Asset Resilience Questions - CSQs 19-26

The Network Asset Risk Metric (NARMs), or Network Output Measures (NOMs) as referred to in RIIO-1, provides a means for TOs to profile network assets into the asset's risk of failure and the criticality of such failures. Although this measure is of no immediate consequence to customers compared to measures like reliability of supply, NARMs is a good indication of a network company's ability to achieve a reliable service for future customers. It enables TOs to evolve asset management policies that do not compromise their ability to deliver reliable service in future periods.

SHE Transmission believes there is a need for an uncertainty mechanism that allows for TOs to cover financing costs associated with non-load related projects where the load related driver has not materialised as originally forecast. This will allow TOs to potentially recover costs for any projects where the load driver has fallen away but there is still a requirement to undertake the project on a non-load basis but no associated allowance to do so. It would be up to SHE Transmission to justify that the changes are in the best interest of the consumers through any potential claim made under an uncertainty mechanism.

CSQ19. Do you agree with our proposals to use monetised risk as the primary basis for network companies to justify their investment proposals for their asset management activities?

“Asset management activities” incorporates activities a lot wider than just asset resilience. Therefore, it is important that Ofgem should define what it means by “asset management activities” in the context of this question. We agree with Ofgem’s proposals to use monetised risk as the primary basis for network companies to justify their investment proposals for risk-based interventions. Monetised risk allows companies to make trade-offs between asset categories and respond to the most recent/updated information and deliver in the interests of the consumer. We would encourage Ofgem to utilise the NOMs methodology which has been developed through the RII0-T1 price control period.

CSQ20. Do you agree with our proposals to define outputs for all sectors using a relative measure of risk?

Yes, we agree with Ofgem’s proposal to define outputs for all sectors using a relative measure of risk. The network companies need to demonstrate their expenditure is linked to managing network risk and it is up to the network companies to demonstrate that it has delivered what it was paid to do over the course of the price control period. Setting a relative target and utilising a monetised risk approach allows network companies to respond to new information that becomes available, such as type faults or improved means of assessing asset deterioration. Network Companies can then undertake trade-offs and re-prioritisation across their asset portfolio, as long as it can demonstrate that it has achieved an equivalent level of risk reduction and that the programme it has delivered is of equal or greater benefit to customers.

In our view, even absolute targets should take into account changes to risk levels that result from non-intervention activities. It’s essential that any outputs related to NOMs or NARMs ensure that the network companies are delivering what it was paid to do over the course of the price control period.

Network companies should not be exposed to windfall gains or losses just because the information on asset health provided by them to set the allowances proved to be incorrect.

CSQ21. Do you agree with our proposals for defining outputs using a long-term measure of the monetised risk benefit delivered through companies’ investments?

Yes, we agree with Ofgem’s proposals for defining outputs using a long-term measure of the monetised risk benefit delivered through companies’ investments. It is in the consumers interest for network companies to consider the long-term benefit of the work it is funded to undertake across the price control period. Average asset life spans a lot longer than a single price control period, and therefore it is better asset management for network companies to consider the longer-term benefits of any asset management interventions and ensuring that this investment is in the longer-term interests of the consumer.

However, it is essential that the industry, Ofgem and other key stakeholders work together to consider the best way to measure and report on the long-term benefits of asset interventions. This

includes designing Cost Benefit Analysis (CBAs) which incorporates monetised risk and provides the present value of future benefits. For RIIO-T2, this exercise is going to be challenging to deliver during the consultation period, taking into account the ongoing rebasing exercise for RIIO-T1.

CSQ22. Do you agree with our proposed approach to setting allowances and outputs?

We have concerns with Ofgem's approach to setting allowances and outputs. Monetised risk outputs is not a real valuation and we do not have a suitable means in the Transmission sector to value risk points. The rebasing exercise currently underway in year 6 of the RIIO-T1 price control will translate the TOs current targets, which are specified in the licence as replacement priority profiles for individual asset categories, into network-specific monetised risk measures using the common methodology. This monetised risk target is essentially a utility function which allows trading between asset categories in a common currency. The rebasing methodology has been carefully developed through RIIO-T1 and it had to be carefully designed to overcome to different asset management approaches (CBRM vs FMEA), therefore we would strongly encourage Ofgem to utilise a consistent methodology for RIIO-T2. However, we need to determine an appropriate way of setting allowances against the monetised risk outputs.

In the Distribution sector, they have developed a unit-rate approach which currently does not exist in Transmission and a £ per risk point approach is not appropriate due to the scale and size of Transmission projects and the project scope can often change. Therefore, we need to determine an appropriate way of setting allowances against the monetised risk outputs.

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

We would support option 2 proposed by Ofgem for the funding of asset intervention work spanning across price control periods, i.e. allowing a fixed pot of money in RIIO-2 for funding outputs to be delivered in RIIO-3 and a true-up at the end of RIIO-2. This would ensure the network companies some funding to cover the costs associated with non-load related projects initiated in RIIO-2 but not delivering outputs until RIIO-3, and ensure companies are not incentivised to delay works in to the next price-control to recover these costs. The true-up at the end of RIIO-T2 provides the protection to consumers for any possible funding from schemes spanning across price control periods. Something similar to the pre-construction funding pot available for load-related projects may be appropriate.

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

We agree with Ofgem that the use of monetised risk is a more explicit balance between costs and benefits to justify licensees' RIIO-2 Business Plans. However, as outlined in our response to the CSQ22 above, we do not have a suitable means in the Transmission sector to value risk points and therefore we need to determine an appropriate way of setting allowances against the monetised risk outputs. This creates a major concern regarding Ofgem's proposal to penalise companies who

fail to justify its under-delivery by an “amount equivalent to the monetised risk benefit that consumers have lost as a result of the under-delivery in excess of the cost allowances clawed back”.

The monetised risk approach ensures that network companies can make trade-offs between asset categories in a common currency. The use of a relative target, as opposed to an absolute target, ensures that network companies must deliver an equivalent level of risk reduction and that the programme that has been delivered is of equal or greater benefit to customers and will not receive windfall gains or losses due to extraneous factors or “non-intervention changes”.

We do not agree with Ofgem’s proposal to remove a financial reward for justified over-delivery but yet still propose to penalise network companies who fail to justify under-delivery. If a network company can justify that it has over-delivered on its non-load related outputs and that this over-delivery is in the right interests of the consumer then a network company should be suitably incentivised to do so. We are concerned about Ofgem’s proposal to penalise companies by an amount equivalent to the monetised risk benefit. As explained in response to question 22, the transmission sector does not have a suitable measure to value the monetised risk outputs.

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

We strongly agree that network companies should not be double funded for asset intervention works. However, it is important that projects which have multiple drivers, for example schemes which deliver both a load and non-load related output, are suitably apportioned across both funding mechanisms. It is also important for Ofgem to note, that there are other drivers such as TCA assets which are funded directly from the customer but the network companies are then responsible for the maintenance of these assets going forward.

CSQ26. Do you have any views on ring-fencing of certain projects and activities with separate funding and PCDs? Do you have any views on the type of project or activity that might be ring-fenced for these purposes?

We agree that for certain high value projects, such as an SWW project, then this should be ring-fenced and receive its own funding and PCDs.

Workforce Resilience Question - CSQ27

CSQ27. Where companies include a sustainable workforce strategy as part of their business plans, what measures do you think could be established to hold companies to account for delivering these plans, without distorting optimal resourcing decisions?

SSEN puts considerable emphasis on ensuring that it has the right people and skills and that it provides the opportunity for people to develop within our organisation. The most significant human capital challenge we face is a looming industry skills gap in the 2020s. SSEN has implemented a broad sustainability strategy across both Distribution and Transmission businesses. This strategy captures the impact of ensuring our workforce, both current and future, remains well positioned to deal with the industry challenges and future energy changes that we experience.

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With an aging workforce combined with the removal of the default retirement age, we are also faced with a looming skills shortage within our organisation. We recognise that we need to plan and prioritise not only our current day to day roles and responsibilities but also facilitate the future talent to be attracted to our company, be that through apprenticeships, graduates, up-skilling training programmes, or other routes. We must ensure that we have a strong pipeline to recruit and develop talent which will require the promotion of Science, Technology, Engineering and Mathematics (STEM) education.

To complement the SSE group partnership with the Energy & Utilities Skills Partnership to develop and launch a Workforce Renewal and Skills Strategy, we will review and define approach to support the future skills gap for our industry ahead of the next price control period. Our resourcing plan will document the action that we will take to attract future talent into the next decade.

We believe that the management of our workforce is firmly within SSEN management control and we will continue to plan our business accordingly, taking account for these risks and demands as they emerge and change. However, it is important to reiterate to Ofgem that SSEN does not operate in isolation and there are many factors that impact on our ability to sustain and maintain a workforce that are beyond our control. SSEN wants to ensure that Ofgem remains mindful of the challenges that we face when we put our next RIIO-2 price control submissions together.

We accept that workforce resilience, should be considered in equal terms with other more prominent resilience risks, notably asset resilience and cyber resilience. We believe, as a business, we are only as strong as our weakest component when something goes wrong. Not having the right people in the roles we need is a similar risk. As such it is our intention to present a workforce strategy as part of our Business Plan submissions, which sets out our proposals and plans for RIIO-2 and beyond.

As part of our output incentive proposal, we are considering putting forward a social sustainability incentive. We acknowledge that Ofgem may consider workforce resilience as part of this incentive.

Physical security questions - CSQs 28-31

CSQ28. Do you agree with maintaining the existing scope of costs that fall under Physical Security, ie costs associated with the PSUP works mandated by government? Please explain your reasons and suggest alternative definitions you believe should be considered.

Network companies work closely with BEIS and government to identify assets which are deemed Critical National Infrastructure (CNI) and implement the measures required to enhance physical security at CNI sites as in line with the Physical Security Upgrade Programme (PSUP). There is an element of uncertainty for the network companies about the list of sites which require security upgrades and the scope of works required at each site.

We agree with maintaining the existing scope of costs that fall under Physical Security.

CSQ29. Do you agree with our proposed approach of ex ante allowances for PSUP works mandated by government? Please explain your reasons and suggest alternative approaches you believe should be considered.

We agree that an ex ante allowance should be provided for PSUP works mandated by government for works which are PSUP works which are known from the outset of RIIO-T2.

CSQ30. Do you agree with our proposal to include a reopener mechanism to deal with costs associated with changes in investment required due to government-mandated changes to the PSUP?

Yes, we agree with Ofgem's proposal to include a reopener mechanism to deal with costs associated with changes in investment required due to government-mandated changes to the PSUP. As the government is responsible for identifying assets which it deems to be CNI, it is outwith the network companies control to determine whether a site may require PSUP works, particularly if it is resulting from a change in government policy during the price control.

CSQ31. We would also welcome views on the frequency that is required for any reopener, eg should there be one window for applications during RIIO-2 and, if so, when?

We would recommend that Ofgem has one reopener application window in year 3 of the 5-year price control period, however we also believe that Ofgem should also allow a further chance to recover any costs resulting from Physical security as part of the RIIO-2 close out process.

Cyber Resilience Questions - CSQs 32-34

In May 2018 the EU Directive on security of network and information systems (2016/1148) (NIS Directive) was transposed into UK law as The Network and Information Systems Regulations 2018 ("NIS Regulations") for the water, health, transportation, digital and energy sectors. These regulations pose new duties on Operators of Essential Services ("OES") and give relevant Competent Authorities ("CAs") new powers and responsibilities to ensure OES are meeting those duties - Ofgem has been designated in the NIS Regulations as a joint CA with the Department for Business, Energy and Industrial Strategy ("BEIS"), for the Downstream Gas and Electricity sectors in Great Britain.

We are currently in the process of developing our strategic investment plans for cyber resilience to be submitted to Ofgem, which will outline the steps we will take to comply with the NIS Regulations during RIIO-2 and beyond.

CSQ32. Do you agree with the scope of costs that are proposed to fall under cyber resilience, i.e. costs for cyber resilience which are (1) incurred as a direct result of the introduction of the NIS Regulations, and (2) above 'business-as-usual' activities? Please explain your reasons and suggest further or alternative costs you believe should be considered.

Yes, we agree with the scope of costs that are proposed to fall under cyber resilience should as a minimum cover the costs resulting as a direct result of the new NIS regulations and above BAU activities.

CSQ33. Do you agree with our proposed approach of ex ante 'use-it or lose-it' allowances? Please explain your reasons and suggest alternative approaches you believe should be considered.

We agree with Ofgem's proposed approach of an ex ante 'use-it or lose-it' allowance for those network companies who can submit a strategic investment plan by December 2019. However, we strongly recommend that Ofgem includes an uncertainty mechanism for cyber resilience in the RIIO-2 price control, regardless of a "use-it or lose-it" allowance due to the uncertainty surrounding the required investment and the speed at which cyber security is developing.

CSQ34. Do you agree with our proposal to include a re-opener mechanism for cyber resilience costs? Please also provide your views on the design of the reopener mechanism.

As outlined above, we strongly agree with Ofgem's proposal to include an uncertainty mechanism to allow changes to a network company's allowed revenues to cover any cyber resilience related costs which may not be foreseen at the outset of the RIIO-2 price control. Cyber-crime is developing at an alarming rate and reports of hacking are constantly reported in the news, such as the recent examples of TalkTalk, yahoo and Ticketmaster. Therefore, a re-opener mechanism will allow network companies to recover any justified costs for cyber security which may not be foreseen at the outset of RIIO-2. We agree that the reopener should cover any cyber resilience investment which emerges because of any regulatory change or change in risk landscape during RIIO-2 as this is outside the control of the network companies.

Real Price Effect Questions - CSQs 35-37

CSQ35. Do you have any views on our proposed factors to consider in deciding on appropriate input price indices? Do you have any evidence justifying the need for RPEs and any initial views on appropriate price indices?

We support retention of the price indices used for RIIO-1 as we feel that these are the most appropriate indices for the cost categories discussed. We intend to submit proposals on where Real Price Effects (RPEs) will occur in the price control based on our cost structures and underlying cost base. This will likely include evidence for plant and materials and labour. Additionally, the transition (immediate or otherwise) to CPIH may result in additional cost pressures where costs are closely related to RPI.

We also believe that the construction of indices should involve a careful selection process. There are two differing options on indices selection:

1. Indices which closely reflect the underlying cost base
2. Indices which do not closely reflect the underlying cost base

For option 1, it could be argued that closely reflecting indices represent the characteristics of a pass-through mechanism and therefore may dampen the Totex incentive mechanism for companies. For option 2, the nature is more uncontrollable and therefore, in the short to medium term there would be a risk of material gains or losses for companies and customers. In the long term, companies would practically need to implement some form of change in their underlying cost base to mirror the indices selected to help control the risks. This would carry transaction costs and would likely take several

years to transition to while in the meantime exposing customers and companies to uncontrollable risks.

We believe there are indices which can be used but the methodology, averaging period and stability will be factors in determining if they are appropriate or not. We therefore would propose that RPEs are considered as part of business plan submissions.

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

We agree with the view to retain notional cost structures in RIIO-2 as we support the sentiment of ensuring that inefficient cost structures are not rewarded. Applying notional cost structures in the application of RPEs should make the calculation fair for the consumer across all operators. However, where justified and clearly evidenced, cost structures should be considered based on actual business plans. Differences in regional networks and conditions mean that there are variations in both cost structures and proportions. Such differences should be fully considered when establishing an appropriate RPE methodology.

CSQ37. Do you agree with our initial views to update allowances for RPEs annually and to include a forecast of RPEs in allowances? Do you have any other comments on the implementation of RPE indexation?

We believe setting ex ante RPE allowances for TOs scores well, in theory, relative to indexation under the regulatory best practice criteria. We do not believe that indexation of RPEs will provide the appropriate mechanism for RIIO-2 as we have outlined in CSQ 35, whereby selection of indices is the critical factor for RPEs. We believe that in-year changes are most appropriate (option 1) in principle. Logging up changes in RPEs to be reflected in a future price control may only be appropriate for certain categories. Some form of deadband may be appropriate for bounding changes in RPEs to avoid ongoing changes in allowances and provide certainty to both companies and customers on network charges. The selection and volatility of indices will be a determining factor in managing in year changes and the cash flow impact may prove prohibitive if indices manifest as uncontrollable risks and material changes.

We note that a similar approach to that taken by Ofwat in PR19 would be appropriate, whereby Ofwat did not allow for any RPEs upfront but instead asked companies to provide evidence on input price inflation. We would welcome a similar approach, allowing companies to submit proposals for RPE allowances. We intend to propose an appropriate ex-ante allowance for RPEs based on evidence as part of our business plan submission.

We would welcome the opportunity to discuss this further in a comprehensive debate around indices alongside the other TOs and Ofgem. This would also need to factor in the transition to CPIH (whether immediate or otherwise) and how this would be treated annually with forecast RPI and CPIH compared to outturn, to estimate the wedge where appropriate.

Ongoing Efficiency Question

CSQ38. Do you agree with our proposal to use the EU KLEMS dataset to assess UK productivity trends? What other sources of evidence could we use?

We consider EU KLEMS to be an appropriate basis for productivity analysis given its widespread use in regulated utility sectors. EU KLEMS includes data on economic growth, productivity, capital formation and technological change at the industry level for all EU member states. It specifically contains data to derive value-added (VA) productivity growth measures which can be used to assess the frontier shift in the industry.

However, we also note some limitations of this data source. Firstly, EU KLEMS does not allow users to construct alternative productivity measures such as gross output (GO) based productivity for the UK. The main advantage of using GO-based measures (instead of VA-based) is that gross output includes the contribution of intermediate inputs to production. To derive GO productivity measures, alternative datasets may be considered to collect additional information on intermediate input volumes and prices (e.g. OECD STAN). Secondly, TFP estimates obtained from the EU KLEMS productivity database encompass all productivity changes, including catch-up improvements and scale effects. As such, some adjustments or assumptions are required to isolate frontier shift. Alternatively, more direct approaches, such as stochastic frontier analysis and data envelopment analysis, can decompose productivity growth achieved by the industry into its constituent parts and therefore isolate the impact of frontier shift. This approach will require company level data as part of the business plan submissions at which point this should be considered more fully.

Managing the risk of asset stranding questions - CSQs 39-43

CSQ39. Do you think there is a need for a utilisation incentive at the sectoral level? If so, how do you think the incentive would operate coherently with the proposed RIIO-2 price control framework for that sector?

We support the view that a utilisation incentive, at the sectoral level, is not justified for electrical transmission networks. We come to this conclusion for the following, compelling, reasons.

- Electrical network circuit design, in all but very simple topologies, takes account of outages in order to bestow a degree of resilience to the operation of the network. This has an impact on the utilisation of the circuits within the network, making it complex to assess an effective, meaningful utilisation incentive.
- This complexity is further compounded by the intermittent generation and demand sources using the networks.
- Furthermore, the TO's ability to influence is limited as it does not direct the flow of power on the transmission system, which is a function for the Electricity System Operator.
- Great care would be required to avoid perverse outcomes that limited the decarbonisation of electrical energy by restricting access to the networks.

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

We have some specific comments on each of the New Asset category proposals set out within the consultation; these follow below. However, we also have some general comments on the policy issues and what we perceive as gaps in the consultation.

- We cannot confirm whether Ofgem is proposing that's its approach to anticipatory investment will apply from the sector specific decision date until the end of the price control review process or for the duration of RIIO-T2. This is an essential point of clarification for networks to be able to respond to the consultation proposals.
- The Managing the risk of asset stranding section of the Sector Methodology document considers solutions to manage new investment. Proposals such as increased CBA requirements would suggest that Ofgem will be applying this approach during the RIIO-2 cost assessment process to inform ex-ante allowances and the Final Determination.
- However, proposals to establish a new industry wide joint working group, while stating that '*appropriate governance arrangements for this working group could be established prior to the commencement of RIIO-2*', hint at this group reacting to changing energy sector context. This suggests that Ofgem might see the group having an enduring role. These questions have also been included in Section 7 – Managing Uncertainty.
- An enduring process to consider anticipatory investment would need to be established as a defined uncertainty mechanism. We would seek Ofgem's clarification that, at present, this is not its policy intention but, rather, this is a process by which it might consider ex-ante allowances.

Proposed Approach for New Assets (Standard Assets)

Cost assessment: While we welcome the general direction of travel that will encourage companies to demonstrate that they have properly explored alternatives to network investment, we would seek assurances that sufficient consideration is given to the significant misalignment of timelines between large scale network assets and the renewable generation they are created to serve.

Dependency on other parties: Furthermore, for CBAs to truly be comprehensive, the process will require input of data from the ESO in terms of cost of constraints or alternative potential market solutions. There is an expectation for TOs to be able to consider potential market solutions. To produce a CBA which incorporates these options, would mean the TO needs to know the cost of these potential solutions and enough detail of how they provide benefits. There therefore needs to be a mechanism to ensure the ESO provides sufficient, accurate and timely information to the TO.

Proposed Approach for New Investment (Highly Anticipatory Investment)

We would welcome a joint working group to consider the merits of proposals for highly anticipatory investments. One of the key areas of concern that we have had during our recent SWW engagement with Ofgem has been a lack of recognition of the impetus government policy has had on the need for long term anticipatory investment. We believe that a cross party working group would allow a more holistic approach to establishing the need for projects to be brought forward.

A joint working group would be useful in establishing principles to be applied to anticipatory investment and for establishing the methodologies to assess such investments (e.g. scenarios and

techno-economic CBA approaches). It is likely that greater funding will be required during the early, preconstruction period to allow TOs to develop anticipatory investment proposals to a point where option refinement can proceed in a timely manner should the anticipatory need materialise.

There is a need to define a clear set of guidelines on what is classified as highly anticipatory investment. In terms of efficiency in the development of solutions to system requirements, it is important to ensure that an appropriate level of anticipatory investment is allowed for without triggering the mechanisms for 'highly anticipatory investments' (which are likely to be onerous). There are primarily two reasons why this is important. Firstly, transmission plant comes in defined capacity sizes (a standardised approach that is proven to minimise production and supply chain costs), therefore, it is unreasonable to expect investment in asset solutions to match the current need exactly. Secondly, depending on the anticipated future requirements, it may be necessary to choose an asset size that provides headroom for future growth and minimise the risk of stranding assets (minimum regret solution). In the majority of asset investment cases, the approach for new 'standard assets' being proposed above, with appropriate modifications as suggested (not exhaustive suggestions given so far), should be sufficient. This would leave those large, high value investments where a strategic long-term view, potentially impacting wider cross-industry and societal benefits, to be considered against highly uncertain future drivers. Also, it may in part, be enabled by the investment being proposed, partly as a deliberately targeted enabler to achieve those benefits.

In light of the assumptions above (that these proposals relate to evaluation during the price control review process) we would urge Ofgem to consider how and when it will implement the proposals in the remaining regulatory timeframe. The consultation states that, *'To support networks in understanding how best to approach these types of investments, we propose to establish a new governance arrangement'*. This indicates that Ofgem expects the Joint Working Group to inform the business planning process.

However, Ofgem does not propose to decide on the sector specific policy until late May 2019. Final Business plans are due to be submitted in December 2019 following two rounds of draft plan submission. Based on the limited information provided we would be concerned that there is insufficient time to design and implement the new arrangements.

Furthermore, we would seek clarity that the arrangements to evaluate both Standard Assets and Highly Anticipatory Assets are clearly understood in sufficient time and that any interaction with the evaluation of and then award of the business plan incentive is not distorted by the timeframe constraints.

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

This is hard to say as there are large scale Strategic Wider Works projects, business as usual projects, projects at both distribution and transmission level, etc. involving multiple third parties and system and transmission owners. There is no consensus of specific types of projects, notwithstanding the risk elements of said projects than can be shared consistently. At this time SSEN cannot say what type of projects may be appropriate for a risk-sharing approach.

SSEN also has the following questions with regards to risk sharing:

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- What mechanism/s will be in place to ensure that risk sharing is attributed fairly between parties? Are the parties limited to only network companies and consumers or should / could connecting parties be included?
- Is it down to the parties involved to agree the terms?
- At what stage will this be agreed?
- If a party decides that the risk is too great for a project and pulls out, does this put the entire project at risk, leaving GB consumers vulnerable to costs?
- Who then picks up the previously agreed shared risks costs and will there be incentives to offset?
- Are there specific/generic aspects that could be shared, or will these always be project specific?

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

In the absence of further clarity or guidance Ofgem at this stage, we are not in a position to comment on how best to facilitate risk sharing for high-value anticipatory investments. The proposed joint working group would be useful in establishing principles to be applied to anticipatory investment and for establishing the methodologies to assess such investments.

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

Given the various types of projects and their complexities, at this moment, we cannot say what projects will or should fall under BAU and what would be classed as highly anticipatory. Therefore, to propose safeguards against risk sharing for activities that may or may not be considered as highly anticipatory seem premature. Again, we would need further clarity and suggest that the joint working group be the forum for developing this detail.

Innovation Questions - CSQs 44-50

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

Innovation is a key principle of the RIIO framework and SSEN accepts that as we move into RIIO-2 certain aspects of innovation could move into BAU as we have a strong track record in successfully delivering innovation into BAU. However, we still fervently believe a strong innovation stimulus is required for activities that do not have a clear rationale for being delivered via the BAU funding mechanisms.

BAU funded innovation requires specific shareholder investment which will reasonably anticipate an appropriate level of return. Innovations that have a longer lead times before reaching implementation due to early technology readiness level (TRL) or that deliver benefits to other parties would be unlikely to receive funding from this source, and therefore would not be able to progress. In Poyry's evaluation of the LCNF innovation funding package, they anticipated that between £600m

- £1.2bn of benefits could be delivered to customers from the innovations developed⁶⁸. These benefits will accrue across the energy supply chain, with a significant proportion outwith the network, but ultimately will benefit the GB consumer. Therefore, we believe that it is reasonable to expect that the costs, risks and benefits from innovation are appropriately shared and that a strong innovation stimulus is retained.

Also, in circumstances where innovation has the possibility to generate a return within a price control period (e.g. high TRL), SSEN believes that if Ofgem want to encourage it through BAU, it will require that companies are appropriately incentivised, particularly in light of the unprecedented proposed low level of cost of equity. There is an assumption throughout the innovation section of the consultation that the Totex Incentive Mechanism (TIM) will do this in RIIO-2. However, this very much depends on the strength on the TIM sharing factor. There is a clear dependency on Ofgem's desire to move innovation BAU and setting a strong sharing factor. If it is weakened due to the blended sharing factor proposals, the incentive to innovate will be diminished. See our response to the blended sharing factor. Ultimately the realisation of benefits from innovation requires deployment. No innovation trial in isolation has ever delivered sustainable benefits; the value of innovation will only be fully realised with the combination of stimuli to innovate and incentives to deploy as part of a rounded and complete RIIO incentive package

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

Yes, we agree with Ofgem's proposals to remove the IRM from RIIO-2.

CSQ46. Do you agree with our proposals to introduce a new network innovation funding pot, in place of the Network Innovation Competition, that will have a sharper focus on strategic energy system transition challenges?

We agree with the retention of a pot similar to NIC as it has delivered real benefits by lowering cost for consumers, facilitating the low carbon economy, improving network reliability and delivering environmental benefits.

The SSEN portfolio of NIC projects includes a wide spectrum of participants, partners and collaborators from across the industry, including large scale original equipment manufacturers (OEMs), academics and SMEs. We believe that that the most successful projects require a strong mix of participants, and we have always been welcoming of external proposals from third parties when developing our projects. SSEN were one of the first network operators to run a "Call for Ideas" for NIC funding; our 2017 joint call with ENWL resulted in over 50 responses, which eventually led to the TRANSITION project being funded in that year's competition.

SSEN has been an active participant in both the NIC and its predecessor the LCNF Tier2. These projects cover a wide range of topics, but all have the potential to develop significant benefits for customers, specific examples of benefits which have been delivered from our portfolio are set out below:

⁶⁸ https://www.ofgem.gov.uk/system/files/docs/2017/03/the_network_innovation_review_our_policy_decision.pdf

- **My Electric Avenue (MEA):** This was the first large-scale trial of the impact that EVs and clustering of EVs would have on the electrical network. This project produced multiple learnings which clearly demonstrated that smart charging will be an essential requirement if networks are to be capable of supporting the **shift to EVs without excessive costs for consumers**. The outputs and recommendations from MEA have directly helped to inform the detail of the Automated and Electric Vehicles Act 2018 which passed into statute in mid-2018. A further analysis of the economic benefits from MEA was undertaken by Frontier Economics in 2018, which showed that the project could produce up to **£500m of benefits for customers by 2050**.

“My Electric Avenue was, and continues to be, a key project of its time. The datasets and output reports have been instrumental to our understanding and have helped inform our policy on grid issues. The evidence on customer charging behaviours and smart charging acceptance has helped give Government the confidence to push ahead with widescale electrification of cars and vans. The project has informed our thinking on legislation currently making its way through Parliament as the Automated and Electric Vehicle Bill. The project also led to the establishment of the EV Network Group, a much needed and relevant forum, which is now being directly supported by OLEV”. -

Nick Brooks, Head of Energy Office of Low Emission Vehicles⁶⁹

- **SAVE:** This was a large-scale trial of how the wide-spread deployment of energy efficiency measures could help derive benefits for networks and provide wider benefits for the participating customers in terms of **reduced bills and reduced carbon emissions**. The project is not due to close until mid-2019, but the learnings from SAVE are already being implemented SSEN as we move to increasingly adopt **flexibility as a preferred option for network reinforcement**.
- **Northern Isles New Energy Solution (NINES):** This was an ambitious project which used Automatic Network Management (ANM) to directly link new renewable generation with new flexible demand and energy storage on Shetland. In this project, ANM was used to manage the charging of heating and hot water in approximately 230 homes along with a large-scale energy storage device to allow the connection of an additional 9MW of new **renewable generation** on the island. This resulted in reducing operation of the island diesel fired power station which resulted in **lower costs and much improved environmental performance**. Although the NINES project concluded in 2015, the systems installed continue to play an important role in operation of the islands power system and will form an integral element of the long-term energy solution for Shetland.
- **Multi Terminal Test Environment (MTTE):** The MTTE project led to the creation of the National HVDC Centre, which combines real-time simulation capability with replicas of the control systems from HVDC schemes, to perform in-depth analysis of HVDC interactions and test the operation of complex HVDC schemes. This will enable issues to be anticipated and resolved, to **ensure the integrity and security of the GB Network**. The HVDC Centre is already being used to de-risk the design, commissioning and operation of the Caithness Moray HVDC Project. The Caithness-Moray HVDC Project (CM Project) is the first HVDC

⁶⁹ https://www.eatechnology.com/wp-content/uploads/2018/05/SSEN_MEA_Final-Submision-1.pdf

scheme in the north of Scotland and represents a £1.1bn capital investment by SHE Transmission. It is a complex and challenging project, which has been delivered on time and on budget, the HVDC Centre was able to help provide design assurance to ensure the delivery of this project through the use of replicas of the control panels to test the operation of the system under a wide range of operational conditions. Going forward the HVDC Centre is engaging with all current and planned HVDC projects connecting to the GB Grid and plans to work with these projects to de-risk their deployment and operation. The enhanced modelling capability at the HVDC Centre has the ability to bring significant future benefits for customers through the optimisation of the performance of existing HVDC systems, de-risking the design of future systems especially multi terminal systems and also enables a more competitive approach to procurement of future systems.

- **New Suite of Transmission Structures (NeSTS):** The NeSTS project has designed a new suite of transmission structures in response to stakeholder inputs. Stakeholders support the project and have assessed that the new supports could **reduce the environmental impact of overhead lines**. A refreshed analysis of future OHL requirements has indicated that there is still substantial need for new OHLs which could benefit from lower environmental impact enabled by NeSTS. Based on updated information from supply chain engagement, SHE Transmission continues to estimate that the **cost of new overhead line projects could be reduced by up to 10% over a whole asset life**, where projects could realise all the available benefits. Should NeSTS be applied to up to 15% of new OHL projects between 2023 and 2050 and achieves a reduction in costs of 10%, this could facilitate benefits of up to £40 million.

Restricting NIC to EST will limit its benefits

The above demonstrates the diversity of projects delivered and importantly the diversity of benefits that it brings for consumers – from the more traditional (reducing bills, improving visual amenity, improving energy efficiency, security of supply) to facilitating the EST and the changing consumer needs and needs and behaviours (EVs, reducing carbon emissions, connecting renewables). Whatever “camp” it falls into it this innovation activity has and will continue to meet the three RIIO-2 consumer facing outcomes.

We have always and continue to develop our innovation portfolio in an incremental and structured manner to ensure we build on early stage work but also allow flexibility to address emerging challenges and respond from specific issues identified by our stakeholders, an area of even more importance in a RIIO-2 world. This results in the development of a broad-based portfolio that allows innovation to progress across the key challenge areas facing the industry. Therefore, our portfolio includes projects that look at issues related to the EST as well as those related to the design, construction and operation of the network. It should be noted that **all of these projects have the potential to deliver benefits to customers that would not otherwise progress without the stimulus.**

While SSEN supports innovation being targeted at the EST, as per our earlier letter, as the above demonstrates we do not believe it is the only reason to innovate. While we will adapt to meet the challenges of the EST, we are still and will remain an asset heavy, infrastructure company and there continues to be innovation opportunities in the design, construction, commissioning and operation of that infrastructure. We firmly believe that these types of projects should not be excluded from

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any future NIC replacement, as they still deliver benefits for customers, benefits to consumers beyond the network as well as carbon and environmental benefits.

SSEN support a similar pot to the NIC as it has had additional benefits including collaboration and engagement as set below, which has ongoing benefits for GB consumers. We demonstrate this through examples.

Collaboration

The flagship nature of NIC projects encourages collaboration, which drives ambition and ultimately delivers results and better evidenced outcomes. This would not be possible without the support of NIC funding.

The NIC funded MTTE project has resulted in the creation of the National HVDC Centre. This is a joint facility operated by SHE Transmission on behalf of all of the Transmission licensees, which has produced a centre of excellence in the technology for the whole industry in the UK. This has ensured that the models and expertise developed are available for all future projects which will help ensure that systems develop in a more coordinated fashion. The success of the HVDC Centre relies on having a strong working relationship with the HVDC supply chain, which is dominated by a small number of large multinational vendors. As the HVDC Centre is a joint facility it has enabled engagement with the supply chain from a much stronger position, which has improved knowledge capture and ensured that the vital replica control panels are available to allow the modelling work to be successfully concluded. Having a single centre for **GB reduces costs and improves efficiency, resulting in lower costs for customers**. This level of collaboration would have not been possible without the NIC.

Similarly, SSEN and ENWL are collaborating on the TRANSITION project which is looking to demonstrate much of the functionality required for the DSO transition. This project is being developed alongside complementary projects being delivered by SPEN and WPD. These projects are strongly aligned with the Open Networks project and will inform the DSO transition. This collaborative approach across the three projects will reduce costs, drive efficiency and ensure more robust outcomes which will help accelerate and de-risk the transition to DSO. Importantly, this programme will help deliver outcomes and learning in time to help the planning of RIIO-ED2, in which the transition to DSO will play a major role.

Without NIC funding, this level of collaboration would not have been achieved leading to potentially a more fragmented and ultimately costlier and less timely approach to DSO transition.

Engagement

NIC funding allows a much broader and detailed approach to be taken when engaging with stakeholders. For example, during the development range of the NeSTS, SSEN engaged with a wide range of both GB and international stakeholders to gain input to the design of the new structures and assess their feedback as the project design progressed. This included engagement with consenting bodies, environmental bodies, other utilities and licensees as well as international vendors. Crucially, the NIC funding allowed for engagement with overseas network operators to gain learning from their experience with alternate structure design, other market sectors such as wind turbine manufacturers for their experience with new materials and the wider construction supply chain to gain an appreciation of new innovative approaches to civil works. This ensured that the new

design being proposed by NeSTS employed the latest thinking in materials, manufacturing and construction techniques whilst also reflecting the needs of our stakeholders.

The comprehensive stakeholder engagement, encompassing over sixty separate stakeholder groups, allowed for the design requirements to be reviewed from “first principles” to ensure that we understood and included the views of our stakeholders and could incorporate these with the best of modern manufacturing and construction techniques. This level of engagement would not have been possible without the focus that an NIC project has within the industry. The designs produced are more acceptable to stakeholders than traditional alternatives, will bring financial benefits and will be crucial for the connection of further low carbon generation in GB. The result was a truly stakeholder-led outcome.

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

SSEN believes that it is appropriate that given the Electricity System Operator (ESO) will have a separate price control that will be funded through BSUoS and they are able to independently able to compete for innovation, BSUoS should contribute to the RIIO-2 innovation stimulus.

In addition, SSEN believes Ofgem should review its position on innovation budgets being proportionate to the size of the organisation. It should be proportionate to the size of ambition and the fixed cost associated with the challenges in developing innovation portfolios. As innovation is deployed the benefits are shared across all network companies and thus across all GB. We would like to further understand Ofgem’s logic and favour more equal distribution.

CSQ48. Do you think there is a continued need for the NIA within RIIO-2? In consultation responses, we would welcome information about what projects NIA may be used to fund, why these could not be funded through Totex allowances and what the benefits of these projects would be.

SSEN believes that there is a strong need for the NIA to be retained into RIIO-2.

Respond to change: As we move into a period of fast-paced change in both system requirement and technologies available, there will be increased need for further innovation to ensure that network operators are prepared for a wide range of possible future outcomes. There will be a continuing need to develop and deliver high-risk and uncertain innovation projects with potentially lower TRLs which that may not clearly deliver benefit through RIIO-2 to the networks and consumers via efficiency savings (and therefore cannot rely on BAU and the TIM).

NIA has delivered benefit: Through RIIO-1 the NIA supported a wide range of projects, delivering a broad spectrum of consumers benefits. Most of these benefits were to stakeholders beyond the traditional network boundaries. These projects would not have been feasible without continued support from NIA. They were truly additional. Our NIA portfolio has delivered several clear benefits for consumers, as summarised below. Please note that these figures were correct at time of writing.

Summary of benefits

- £16.5m total NIA Transmission and Distribution Innovation spend during the RIIO-1 period;
- £93.5m in Gross benefits across Transmission and Distribution since the start of RIIO-1;

- Ratio of 1:6 short term return on investment for consumers;
- SSEN projected ED1 distribution investment in deployment of £162m;
- Transmission benefits £37m achieved to date;
- Potential of £91m in savings 2021–26 and £684m up to 2050 from existing portfolio;
- Enables forward research into impacts of new technologies and allows the exploration of methods to enable LCTs and disruptive technologies;
- Promotes collaboration including dedicated Energy Innovation Centre to encourage more SMEs to enter the energy space; and,
- Incentive to innovate where third-party stakeholders are the primary benefactors.

We set out further detail on transmission specific benefits in tables 3.1-3.3 below.

NIA deliver benefits to a wide range of stakeholders: A proportion of our NIA funded projects have been developed primarily to deliver benefits for energy consumers and wider stakeholders, with little or no direct benefit for SSEN. For example, our ACCESS project based on Mull, was developed following an approach from several local stakeholders to help them to develop a means of using local renewable generation to supply domestic properties. The flexible connection arrangements developed for ACCESS allowed local community to better utilise the output from an existing hydro generator and reduce fuel poverty by transferring expensive oil-fired central heating systems to modern flexible electric systems. The successful demonstration in ACCESS led to this being included as one of SSEN’s suite of Flexible Connection options. While this approach has delivered significant benefits to the stakeholders involved, it provides little benefit to SSEN, therefore, would not have been funded via Totex.

Further, examples of projects from our NIA portfolio are can be viewed in the tables below. They highlight the project benefits, why they needed NIA support and why these projects would not have been viable to be funded via Totex investment.

NIA funded projects have been 100% additional – they would not have gone ahead without the funding: The current SSEN NIA portfolio contains projects across the technology readiness spectrum, without NIA funding early stage TRL projects would not be viable for funding through a Totex investment as the technology would not be mature enough.

The learning from these early stage TRL projects is a crucial first step in the innovation process, which ultimately leads to benefits to customers. For example, the use of ANM systems to manage flexible connections for distributed generation has been implemented across most DNOs. This has released vast quantities of network capacity for the connection of new generation across GB, producing extensive benefits for stakeholders and helping to achieve GB’s long-term carbon reduction targets. SSEN pioneered the development of this technology, at a time when the technology was still at a very low TRL level. Without the support from the Ofgem funded Registered Power Zone (RPZ) and Innovation Funding Incentive (IFI) that preceded NIA, it would have been impossible for SSEN to engage in these initial trial projects. Through a series of more complex and challenging innovation projects, the technology has now developed to a stage where it is BAU in most DNOs. This would not have been possible without the support of the NIA.

NIA is a crucial first stage in the pipeline in innovation deployment: SSEN consider funding, such as NIA, as an effective way to increase TRLs up to a point where BAU funding can be used to fund any innovation deployment which is ultimately what delivers financial benefits for network customers. There are strong examples where “seed funding” from NIA has developed our understanding and knowledge of various solutions that have then been taken into BAU. Without this initial NIA funding, these benefits would may never have materialised or reached the levels we have forecast.

NIA facilitates the sharing of best practice: The NIA has provided a platform for developing best practice and sharing of information amongst the network companies, which has enabled third parties access to the network innovation which has helped deliver a smarter network to the benefit of consumers. This has provided an opportunity to share learning and “fast follow”, for example, SSEN saw the potential benefits from LiDAR following on from NIA projects delivered by SPEN and UKPN. This gave SSEN the confidence to invest in small scale BAU funded trial of LiDAR, which in turn led to SSEN making decision to adopt a LiDAR across our entire network.

SSEN aims to build on this platform through our strategy for deployment of future innovation, which has developed a framework that has efficiency and stakeholder engagement as core themes. The strategy, and associated implementation plan, will ensure that the innovation lifecycle will always look to identify existing work on any topic and collaborate with the most appropriate parties to ensure that maximum value can be delivered from any innovation funding used.

NIA enhances collaboration and avoid duplication: Similar to NIC, across our portfolio of NIA projects we have a range of participants, collaborators and partners, with over 90 per cent of projects having third party involvement and over 60 percent of these being SMEs. Participants range from international OEMs, community groups, innovators, SMEs, local authorities and academics. In many occasions, such as ACCESS, these projects have been developed in response to approaches from stakeholders who have particular issues.

In building our portfolio, we also carefully consider projects being undertaken by other licensees to establish if there are opportunities for fast following and to ensure no duplication. This process has been reinforced via an increased level of scrutiny and review of proposed projects at the ENA Innovation Managers Forum. This includes a project review period prior to registration to identify potential duplication or offer opportunities for further collaboration. Therefore, we disagree with Ofgem that NIA projects do not build upon lessons learned which leads to unnecessary duplication.

NIA leverages additional value: throughout our portfolio, SSEN has looked to try and leverage additional value from innovation funding by using it as “match funding” as part of other wider scale funding programmes such as those run by Innovate UK, BEIS, Scottish Government and the EU. For example:

NINES – the NINES project used European Regional Development Funding (ERDF) to fund the installation of new heating systems across Shetland. The SSEN NINES funding was an essential element of the match funding package, this ensured an increased number of heating systems could be installed, which broadened the learning and strengthened the benefits from the project.

Aberdeen Hydrogen Project – the project partners accessed a wide range of funding streams from the EU, UK and Scottish Governments to facilitate the operation of the electrolyzers and hydrogen buses in the city. Again, the NIA funding played a crucial role in providing match funding, which

ensured the project had the scale to deliver significant learning on the future decarbonisation of transport.

DISCERN – this was an EU wide Smart Grid Programme, which looked to develop a common methodology for describing the operation of smart grids. The match funding from this was derived from the New Thames Valley Vision Project, therefore the additional learning was secured at no additional cost to customers. The learning from DISCERN, helped shape the requirements for modelling DSO, which has ultimately led to the use of SGAM models to describe the various worlds in the Open Networks project.

ACCESS – the NIA project was part of a much larger Scottish Government funded project on Mull, the Local Energy Challenge Funding was used to install all of the heating systems, control equipment etc needed to create the flexible demand.

The ability to participate in these larger scale innovation projects gives an opportunity to gain broader learning, develop more robust and better evidenced outcomes and engage with a much larger group of stakeholders which drives significant additional value for customers. To be able to compete and be successful in this very competitive environment, requires flexibility to develop projects which match the timeframes and scope of the funders. The NIA process has an inherent element of flexibility which allows us to develop projects along with partners which can then be entered into these third-party competitions, this would result in lost opportunities for customers and wider stakeholders if NIA was not available.

In addition to the above, the table below highlights a sample of SSEN projects delivered through NIA, illustrating the benefits each project has provided, how the innovation has been rolled out into BAU and why these would not have been funded through the Totex allowance in RIIO-1.

Project	Benefits	BAU Status	Feasibility without NIA	Totex Feasibility
<p>SSEPD 027 - Low Cost LV Monitoring The aim of LV Substation monitoring is to make it economically viable to fit LV monitoring devices in large volumes. At the outset of the project figures for LV monitoring obtained through the NTVV project is approximately £3,600 per substation.</p>	<p>This project stimulated the market, driving down the cost of monitoring which ultimately benefits the customer. Greater visibility of our network informs network planners decision making process. Preparing our network for electric vehicles.</p>	<p>£350k roll out this year and £1m planned next year.</p>	<p>Without NIA, the cost of monitoring devices would be stuck at the top of the curve, traditional procurement approach would not have unlocked these savings at the same speed. The work undertaken via the NIA project enabled a step change acceleration in the cost of LC substation monitoring. The project provides cost benefits that are available to all UK DNOs.</p>	<p>Procurement through Totex would not have resulted in price reduction benefits for customers.</p>
<p>Field Team Support Tool The aim of project was to demonstrate the use of a CIM (Common Information Model) based field tool for the two-way exchange of asset and dispatch related data in a challenging field environment.</p>	<p>This project provides experience of the use cases for the deployment of field support tools, in particular it provides experience of working with the CIM, something which is likely to have significant relevance to the requirements for data and information visibility that the transition to DSO is likely to require.</p>	<p>A “CIM compatible” field tool has been procured and deployed by SSEN as part of its current investments in Operational efficiency, and DSO readiness. Outputs from this project went on to be integrated into lightning reporter tools and the Power Tracker app both of which utilise aspects of the CIM architecture and are bringing benefits in terms of safety, storm management, restoration times and Customer experience. An “Street Ready” EV app is currently under specification.</p>	<p>The headline functionality would have been feasible as a tender exercise however it is highly unlikely that the innovative approach, in particular CIM, brought by a small start-up company would have made it through the procurement process. Unlikely that SSEN would have required CIM as part of a tender and as a result learning pertinent to DSO transition would be lost.</p>	
<p>TOUCAN To evaluate the effectiveness of Thermal imaging techniques for the locating of LV faults on underground networks, a purpose for which these tools had not previously been used in the UK. The project sought to establish the minimum cost unit capable of delivering the benefits and establish the field methodologies necessary to realise the benefits and gather information on the resulting effectiveness.</p>	<p>The project sought to accelerate the locating and reduce the cost of repair of LV underground faults bringing safety, losses and customer service benefits.</p>	<p>Since the closure of the project SSEN and a number of other UK DNOs have invested in the units and method which is now realising benefits for UK customers.</p>	<p>For any DNO to invest in solutions such as this, there needs to be a strong set of evidence that the benefits will be forthcoming. Without the output from this project and in particular the support from practical field staff this project would not have been funded losing out to more traditional approaches such as improved sniffers.</p>	<p>Technology not mature enough to undertake project through Totex and would not share any findings.</p>
<p>SEF Fault Passage Indicators To establish the effectiveness of reduction in Customer Minutes Lost (CMLs) achievable by locating SEF faults, to accelerate the process of adoption by utilising the facilities of the PNDC bringing benefits to customer quicker.</p>	<p>This project will be successful if we are able to determine the ability of the revised FPI to reduce CMLs due to SEF faults</p>	<p>The units are now available through our internal procurement systems and are utilised where appropriate.</p>	<p>The flaws that were identified during the trial would have (through a traditional procurement approach) resulted in the technology being abandoned.</p>	

<p>RAINMAN Use of sensors to detect wood pole movement on remote lines, allowing proactive response by the network operator. The sensors require development to differentiate 'normal' movement due to wind and wildlife, and 'alarm' movement which indicates gradual or sudden change in position. The project will advance the device TRL to 9 and determine if savings can be achieved on the device, the communications infrastructure, or through 'buddying' poles.</p>	<p>Despite regular inspection and maintenance of critical feeder lines, in remote locations instances of wildlife damage or gradual slippage cannot be tracked. Increasingly with changing climate degradation is becoming harder to predict. This project would allow proactive response by the network operator, avoiding or significantly reducing the time customers are off supply.</p>	<p>RAINMAN currently ongoing, following stages likely to focus on cost reduction.</p>	<p>Due to the low TRL of this device the project would not have progressed. The supplier is unable to further develop the device without trial on a real network to establish baseline data.</p>	<p>Technology not mature enough to undertake project through Totex and would not share any findings.</p>
<p>Sustainable Commercial Model for Networks Delays in project planning consent (due to subjective interpretation of impacts of infrastructure) result in increased cost of delivery. This project aimed to develop techniques for quantifying the incremental costs and benefits to the environment, society and the wider economy of network developments.</p>	<p>The resulting methodology is available to all DNOs and NG have successfully used it to save c.£100k on consultancy fees. The model delivers reduced negative visual impact, reduced negative biodiversity impact, and provides a consistent methodology across licensees for quantifying impact. This tool is useful for external stakeholders such as consenting bodies to gain a more rounded assessment of the potential costs and benefits when assessing options for major investment.</p>	<p>It was used in planning SHEPD Subsea Cables and as part of the final evidence submission for Caithness-Moray (subsea vs OHL).</p>	<p>SHET funded an initial investigation and established an advisory board to assess current process and make recommendations for improvements; this identified the potential benefit to customers of a more detailed method, which could only be delivered through innovation funding as the method delivers benefit to electricity customers, as the cost of infrastructure including delays is ultimately borne by electricity customers.</p>	
<p>ACCESS The aim of the ACCESS project was to facilitate the development and implementation of locally managed generation and demand. The project received £1.5m from the Scottish Governments Local Energy Challenge Fund (LECF). The NIA project was to explore the integration of this new approach with the network and to ensure the integrity and reliability of the network.</p>	<p>SSEN provided data to allow community to manage demand and generation within constraint limit. SSEN only intervene to predict network integrity, benefits to customers; lower cost faster connection of new renewables; improved utilisation of community owned hydro scheme; replacement of coal and oil heating systems with controllable storage; and reduction in network losses.</p>	<p>The learning from ACCESS has been adopted as one of SSENs Flexible Connection Offers – implemented at least twice.</p>	<p>SSEN would not have undertaken this trial as BAU. NIA allowed for solution to be developed which reflected the needs of the stakeholders, majority of benefits flow to stakeholders with limited benefit for SSEN.</p>	<p>No benefits to SSEN purely 3rd party benefits so would not be viable for Totex investment.</p>

<p>Plug-in Vehicle Uptake on the Distribution Networks</p> <p>The aim of this project was to inform the ENA Engineering Recommendation for connection, charging and control of new, large, PIV load to domestic properties. In doing so it will enable significantly larger number of PIV charging on today's local electricity distribution networks, with sizeable reduction in reinforcement costs and customer bills/disruption.</p>	<p>Industry accepted solution for PEV and provided evidence for the Automated Electric Vehicle Act 2018. Alternative approach informing the charging approach.</p>	<p>Being implemented in the work of our EV Readiness team.</p>	<p>NIA provides authority and mandate to work together as an industry to drive standards. Without NIA more likely to be influenced by funders creating a less open and transparent marketplace.</p>	<p>No benefits to SSEN purely 3rd party benefits so would not be viable for Totex investment.</p>
<p>Composite Core (ACCC) Inspection</p> <p>The aim of this project was to develop a prototype to evaluate the condition of the core of ACCC conductor and understand the effectiveness of ACCC composite core inspection tool in evaluating the carbon core.</p>	<p>ACCC is forecasted to produce £29m in savings due to reduced tower replacement in the T1 period to 2021. £39m to 2026 and £255m in benefits up to 2050. Our ACCC inspection project carried out under NIA has allowed us to de-risk and accelerate the BAU roll out of Composite Core Conductors.</p>	<p>Currently being deployed in Fort William.</p>	<p>Without innovation funding of our ACCC inspection project the roll out of Composite Core Conductors would be delayed and delayed savings to customers without the confidence to invest our NIA project has provided us.</p>	

Transmission specific NIA benefits

As part of our preparation for RIIO-T2, we have assessed the benefits from our Transmission portfolio in detail. This is set out in the Tables below.

The benefits laid out below have been modelled using the CBA issued by Ofgem for cost and volume assessment, in turn, SSEN had these reviewed by Baringa, to ensure they were appropriate.

Table 1 shows how an initial NIA looking at a relatively low TRLs innovation was used to increase our knowledge in the use of a new type of conductor material. The development and subsequent deployment of higher capacity conductor that can be used on existing overhead line structures has produced real benefit through initial trailing via NIA funding, which was then taken into a BAU deployment. The table below shows examples of specific pieces of work along with the benefits as we currently forecast them, up till the 2050 period. Please note that the benefits are quantified for T1, T2 and then from T1 all the way through to 2050 that includes the T1 and T2 figures.

Table 3.1 - Composite Conductor Innovation Benefits

Project Title	Description	Funding	Linkage (either product or knowledge transfer)	Benefits		
				2013 – 2021	2021 – 2026	2013 - 2050
Aluminium Core Composite Conductor (ACCC) Inspection	Project designed to improve understanding of how best to look after composite core conductor	NIA	Precursor to deployment of ACCC as BAU project	Increased TRL 5 -> 8	-	-
ACCC Investment	Reconductoring of double circuit between Fort William and Fort Augustus as alternative to building new tower line	BAU	Successor to ACCC Inspection NIA project	£29m	£39m (To all TOs)	£255m (To all TOs)
Total				£29m	£39m	£255m

Typically learning from several innovation projects is required to reach a level of confidence to fund a full BAU deployment. Table 2 demonstrates how the learning from NIA projects was used to inform both a subsequent NIC project and a BAU deployment. Table 2 illustrates the work that SSEN has completed on overhead line structures, which is a good example of how different innovation funded projects can be drawn together to deliver benefits through BAU projects.

The NIA project Alternative to Wood Poles project developed our understanding of what alternatives were available and how these compared with traditional methods. This project transferred knowledge to the development and deployment of a first GB use of composite pole structures in the construction of

a new 132kV overhead line. Alongside this, SSEN was undertaking NIA and NIC projects, New Suite of Transmission Structures, looking at other options for overhead line structures, based on international best practice that could be developed and deployed in GB. This allowed for wider stakeholder engagement to address concerns associated with the planning and consenting of new OHL. Our BAU composite pole project informed the progress of the NIC NeSTS project to further develop thinking in this area.

Table 3.2 Overhead Line Structure Innovation Benefits

Project Title	Description	Funding	Linkage (either product or knowledge transfer)	Benefits		
				2013 – 2021	2021 – 2026	2013 - 2050
Alternative to Wood Poles	Project designed to increase understanding of all aspects of alternatives to wood poles including technical specifications through to the Cost Benefit Analysis of their deployment	NIA	Precursor to OHL Design Approach and Composite Pole BAU projects	Increased TRL 6 -> 7		
New Suite of Transmission Structures	Project designed to de-risk NIC project through better understanding of requirements for structures and developing designs for approaches that meet the requirements for trial in NIC project.	NIA	Precursor to NeSTS NIC project	De-risked NIC project		
New Suite of Transmission Structures	The NeSTS project will develop innovative designs for overhead line (OHL) structures based on new technologies and techniques.	NIC	Successor to NeSTS NIA project Successor to Composite Pole Deployment	Increased TRL 8 – 9	£10.8m (All TOs)	£40m (All TOs)
Wind Farm Composite Pole Deployment	Project developed for BAU use composite poles for connection of a Wind Farm	BAU	Successor to Alternative Wood Poles	£1m	Tbc	Tbc
Total				£1m	£10.8m	£40m

- The benefits shown in T2 and to 2050 accrue to all TOs due to the base forecast data being applied from each TO 10-year forecasts.
- Further deployment of the composite pole in T2 and beyond is still to be confirmed due to the T2 planning process which is quantifying volumes currently.

Table 3 demonstrates how we have used a combination of NIA and NIC funding to develop our knowledge and understanding of HVDC systems. At the time these projects began, there was no HVDC equipment connected to the SSEN network and only a limited number of systems on the wider GB network. Both NIA and NIC funding have been used to better understand the technology and its characteristics to allow large scale BAU deployments of the technology to be de-risked. NIA projects allowed technology limitations to be better understood and improved upon. These, plus the NIC project, allowed the Caithness Moray SWW project to be de-risked during the design and construction stages and into operation.

Table 3.3 HVDC Innovation Benefits

Project Title	Description	Funding	Linkage (either product or knowledge transfer)	Benefits		
				2013 – 2021	2021 – 2026	2013 - 2050
DCDC Convertor	Improve understanding of DCDC conversion through review and develop and optimise a design that will inform future HVDC system integration	NIA	Precursor to Caithness Moray HVDC Link BAU and future HVDC systems as well	Increase TRL 2 -> 3	Increase TRL further	
HVDC Nanocomposite Insulation	Development of nanocomposite materials to improve polymeric insulation materials used in HVDC	NIA	Precursor to Caithness Moray HVDC Link and future HVDC systems	Increase TRL 1 -> 4	Increase TRL further	
National HVDC Test Centre (MTTE)	Project established a testing facility for all TOs and the ESO simulate and model the deployment of HVDC in GB	NIC	Precursor to Caithness Moray HVDC Link and future HVDC systems	£29m*	£46m*	£296m*
Caithness Moray HVDC Link	The HVDC submarine cable link transmits power beneath the seabed between Spittal in Caithness and Blackhillock in Moray, unlocking 1,200MW of renewable electricity generation across the north of Scotland. Energised in 2018.	BAU	Informed by DCDC Convertor and HVDC Nanocomposite Insulation NIA projects and the National HVDC Test Centre NIC project	£11.7m	£23.4m	£173.5m
Total				£11.7m	£2.34m	£173.5m

*Not included due to de-risking benefits and not monetary benefits.

- The benefits attributed to the NIC test centre are dependent on the number of HVDC projects that are developed in GB across the lifetime of the centre and then apportioned to the relevant timeframes.
- The benefits for the Caithness Moray Project accrue, as per the SWW methodology, in reduced constraint costs that would otherwise be paid by the ESO across the regulated lifetime of the link.

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

As identified earlier, there are many more benefits from innovation over and above the direct financial benefits, e.g. there are benefits for the wider energy supply chain, environmental and customer service benefits. But it is first important to note that some of the benefits that network companies are expected to deliver are not optional, in particular those in relation to dealing with climate change and environmental legislation. Our assets will be under new pressures to meet new standards and it is incumbent upon us to seek out innovations to meet these challenges (e.g. PCB, SF6 Creosote legislation etc). This places more weight on retention of NIA.

Retention aside, any measurement tracking mechanism should reflect the overall spectrum of benefits from innovation. It should also be recognised that successful innovation is not a linear process where a successful trial can be quickly followed with a deployment. In our experience the most successful implementations need to draw on learning from across several projects to reach a stage, where they can be considered confidently for a BAU funded deployment. Therefore, any innovation measurement needs to reflect this broad spectrum which NIA provides, and recognise the time taken to bring any innovation from idea through to deployment.

However, SSEN fully recognises that it is important to track the benefits from innovation. At the heart of our approach to this is Cost Benefit Analysis (CBA) which is developed for each project. This will be updated and refined as we progress with the project and gain a better understanding of the assumptions that were used to develop the initial CBA.

SSEN also feels that it is important to try and monitor the wider benefits from innovation. Therefore, along with the other Energy Innovation Centre members we have been working to develop an innovation measurement framework. Working collaboratively with other networks, we have begun developing a measurement framework to reflect the wide spectrum of benefits which arise from successful innovation. The framework includes outcome measures which address many of the areas highlighted in Ofgem’s RIIO-2 consultation:

- *“Demonstrate how innovation has moved into BAU”*: the framework includes measures looking at the percentage of mature innovations (TRL 8) that have moved into BAU and the time taken for these projects to move into BAU.
- *“Provide a better understanding of the benefits delivered through innovation”*: we are proposing to adopt a common approach to forecasting and tracking innovation benefits to improve the information available on potential benefits from innovation.

- *“Concerned that innovation funding has been used for operational and maintenance projects which could have been funded through BAU”*: The measurement framework would require companies to report on the focus (in terms of money and number of projects) of innovation across technology readiness levels which are a helpful indicator of innovation maturity.
- *“Need to demonstrate how learning from past projects has informed new projects”*: The measurement framework includes tracking how many innovation projects have informed useful follow on projects.

Progress to date has included a successful trial of the innovation measurement framework by two networks who volunteered to demonstrate that it is possible to report against most of the proposed measures. This has been useful to refine the framework and help develop a common understanding of the framework.

Importantly, with the EIC, we have engaged with a broad range of external stakeholders who have been supportive of the approach taken and would welcome implementation of the framework. The stakeholder engagement has included BEIS, Citizens Advice Bureau, Sustainability First, Ofwat, Energy UK and various company specific stakeholder panels. There has also been engagement with the Ofgem Innovation team, with the feedback being used to help further develop the measurement framework. SSEN, along with the other Network Operators involved are currently considering how to adapt the framework based on the feedback received.

SSEN fully recognise that the work undertaken is still very much a work in progress and requires further development to ensure that it produces a practicable and pragmatic solution which reflects the wider benefits from innovation. We would welcome Ofgem’s input to develop the innovation measurement framework further. We would be keen to discuss this option further following the close of the consultation, but it is a start and can be used to better track the benefits going forward.

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

SSEN agree with Ofgem’s proposals for the electricity distribution companies prior to the commencement of RIIO-ED2.

Competition questions – CSQs 51-64

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

No, SSEN believes that the current work Ofgem is undertaking to extend competition in onshore transmission is flawed, both in the process Ofgem has followed and in the perceived outcomes it seeks to achieve. We do not support Ofgem’s approach to progressing the extension of competition in onshore transmission in the absence of a clear legislative framework. The further extension of

competition should only be considered where it can be clearly demonstrated that it does not compromise the security and operation of GB's critical national electricity infrastructure and provides better value to consumers. In order to understand whether the extension of competition has the potential to benefit consumers, there is an obligation to proceed on an evidence-based framework with all relevant factors taken into consideration. The process of passing primary legislation would provide the necessary scrutiny required to examine all relevant evidence to provide Ofgem with clear guidance on how to exercise its powers to extend competition, such that it is clear that customers will benefit. Our views on this are consistent for the proposed extension of competition across all energy sectors.

Competitive models have their place if the policy, objective and impact are all known and are demonstrably positive. However, given the criticality of transmission infrastructure, SSEN believes its application to key transmission projects is inappropriate as the framework and policy is not fully understood and would likely result in several unintended consequences that are clearly at the detriment of consumers and society.

The electricity network is a dynamic, active system, which can be volatile to operate. In addition, the electricity network is continuing to become increasingly complex, a change which is recognised by Ofgem in its current work on RIIO-2. The introduction of DSOs and market developments/technologies, such as smart meters, active network management, demand side response, increasing battery storage and real-time dynamic energy pricing is adding more complexity to this active system, which is getting harder to secure and operate. The historical evidence of change and its impact on the transmission network as well as the implication of the current proposed changes to future operations should be considered very carefully by Ofgem.

There is an increasing requirement for network companies to consider the whole network and to be flexible and responsive in their planning activities. This includes identifying and then taking account of a wide range of possible scenarios to ensure economic, efficient and coordinated outcomes. We do not think that Ofgem's proposals for competition as set out in this consultation consider these whole system interactions.

We have consistently expressed our concerns with Ofgem that its approach to introducing competition for large capital projects in onshore transmission, and then beyond into other sectors, is disjointed, does not appear to be based on an assessment of net benefits and is being considered in the absence of Parliamentary scrutiny and guidance.

We note Ofgem's continued commitment to working with Government to seek appropriate legislative change to implement the CATO model and we are committed to continuing to work with industry and Ofgem on the continued development of these proposals to ensure that they demonstrate real 'true' competition.

Special Purpose Vehicle Model (SPV)

We strongly disagree with Ofgem's proposal that the SPV model is suitable for late competition. We have previously stated, and continue to believe, that Ofgem does not have the necessary powers to

introduce this SPV model and doing so will fundamentally impact the security and operation of GB's critical national electricity infrastructure.

No further detail on the SPV model has been brought forward as part of this consultation therefore we can only comment on the detail that was presented by Ofgem in its September 2018 consultation on the commercial and regulatory framework for the SPV model, to which we have already outlined our significant concerns⁷⁰ and to which we continue to await a response.

We consider the current SPV proposals to be underdeveloped and ill-informed and, if pursued, will be to the detriment of connecting generators and ultimately consumers. Ofgem has not adequately assessed and quantified the compliance risks associated with the proposed SPV model and we believe that the proposals concerning the effective operation of the SPV asset conflict with the duties of existing industry parties. There is no acknowledgement of the operational framework that an SPV would be obliged to deliver under, the absence of which leads to the conclusion that the proposed TO-SPV relationship will not deliver the quality and safety of transmission outputs that consumers require and rely upon. This is not in line with Ofgem's draft Impact Assessment on late competition⁷¹, where it has identified the need to ensure that any competitively appointed parties will have enforceable obligations regarding the maintenance of the project and will be subject to relevant technical and system standards and codes. We welcome the recognition of these requirements but note that Ofgem's proposed SPV model would not deliver this. The introduction of an unlicensed third party under the SPV model has substantial practical implications that can, and will, lead to detrimental impacts on the cost and quality of service of the transmission network.

At this stage, based on the concerns previously highlighted and in the absence of any further information from Ofgem on its SPV proposals, we do not consider the SPV to be an appropriate competitive model for RIIO-2.

Competition Proxy Model (CPM)

We note that CPM is not included within the table of examples (Figure 4, pg 78) as a type of competition that could apply in RIIO-2 but it is referred to in Appendix 2 as a model that will be considered in more detail and could be applicable in each sector. We have already set out our concerns with the CPM on a number of occasions, most recently in our response to Ofgem's 14 December 2018 consultation on the Final Needs Case and Delivery Model for the Orkney Transmission project and we refer Ofgem to the

⁷⁰ https://www.ofgem.gov.uk/system/files/docs/2018/12/ssen_scottish_and_southern_electricity_networks.pdf

⁷¹

Para 4.19, https://www.ofgem.gov.uk/system/files/docs/2018/12/competition_draft_ia_dec_2018.pdf

detailed arguments and analysis which we have presented in response to that consultation and earlier publications.⁷²⁷³⁷⁴

The RIIO framework already provides the ‘competition proxy’ price control mechanism where a TO is carrying out wider works. It was designed deliberately for that purpose and was imposed by Ofgem in the discharge of its statutory responsibilities to protect consumer interests. The CPM involves no “competition”, it is merely an alternative methodology for arriving at a revenue allowance as a proxy for competition.

In addition, the competition conditions that the CPM seeks to replicate are unrealistic and incorrect. In developing the model, Ofgem has made broad and unrealistic assumptions about what would have resulted from an efficient competition, in order to hypothesise supposed consumer benefits which are then sought to be replicated. Ofgem has failed to explain what the supposed competition would look like, or on what basis the incumbent TO would then win that competition, with an allowance to be replicated in that TO’s price control. The CPM uses the OFTO process as a competitive benchmark but ignores the real competitive dynamics and the reality of the TOs within that process.

The CPM also contains a large number of material errors that fatally undermine Ofgem’s conclusions on the alleged customer benefits of the model. When these errors are corrected, it is clear that CPM would in fact lead to no real benefit and is instead likely to lead to a significant detriment for consumers.

For these reasons we do not consider the CPM to be an appropriate competitive model for RIIO-2.

Models for early competition

We do not believe that Ofgem has set out any models for early competition at this stage but have provided our views on the proposals presented in the consultation in relation to early competition in the subsequent questions below.

CSQ52: Do you agree with the proposed criteria we have set out for assessing the suitability of late competition models? Would you suggest any other criteria, and if so, why?

We think it is important to clarify at this point, that Ofgem’s ‘new’, ‘separable’ and ‘high-value’ criteria were originally developed to identify projects that would be suitable for competitive tender application of the criteria is a ‘tick box exercise’ to determine whether a project is capable of being competitively tendered, not to assess the suitability of any late competition models, nor as a determinant of whether

⁷² SSEN response, [Orkney transmission project – consultation on Final Needs Case and potential delivery models](#) (14 December 2018)

⁷³ SSEN response, [Extending competition in electricity transmission: commercial and regulatory framework for the SPV Model](#) (14 September 2018)

⁷⁴ SSEN response, [Hinkley - Seabank: Minded-to consultation on delivery model](#) (23 January 2018)

the application of a competitive process is appropriate to a particular project. There may be valid reasons where a competitive process is not appropriate and to apply it arbitrarily could lead to consumer detriment.

We have previously raised our concerns regarding the benefits that Ofgem expects to realise through running a competitive tender for onshore electricity transmission and that further work is required to test the assumptions within its initial 2015 Impact Assessment⁷⁵ to determine a more appropriate 'high value' threshold. We have also on a number of occasions shared our views that Ofgem's criteria for competition is incomplete, and that critically, a decision on the suitability of competition for a particular project must be made subject to an evidence-based assessment as to whether it is in the best interests of consumers and other affected stakeholders.

In its March 2015 Impact Assessment, Ofgem acknowledged "the difficulties and uncertainties involved in trying to quantitatively predict the costs and benefits of introducing competitive delivery in new areas." In addition, the significant uncertainty around the potential costs associated with competitive delivery suggests that a higher threshold is likely to ensure maximum consumer benefit for lower cost. In light of this, we consider a two-stage approach to assessing the suitability of competition is necessary, with the competition criteria used as an initial indicator that a given project may be suitable for competitive delivery; followed by a full Impact Assessment to justify that the project in question has the potential to result in the benefits from competitive delivery that Ofgem expects.

A recent example of where this approach should have been applied was Ofgem's consultation on the Final Needs Case and Delivery Model for SHE Transmission's Orkney Transmission project, where it outlined its minded-to decision to apply the Competition Proxy Model in the absence of any formal Impact Assessment for the project. We have responded to this consultation separately outlining our significant concerns with this approach and what we consider to be significant failings in the resulting outcome.

⁷⁵ Integrated Transmission Planning and Regulation (ITPR) project: final conclusions (March 2015)

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

We do not believe that Ofgem has demonstrated a 'net-positive case' across the network sectors for opening up competition for projects that meet its proposed criteria for late competition

As Ofgem identified itself in earlier publications⁷⁶ when developing its proposals for the introduction of competition in onshore transmission under the ITPR, the level of costs and benefits of competitive tendering will depend on the number of projects that are tendered and their value.

Ofgem has also previously identified that it is particularly complex to quantify the efficiency and dynamic benefits of opening markets to competition, such as the scope of increased innovation and the introduction of new products, services and technologies, conceding that it was not reasonable to estimate the level of benefits in each of these areas and arrive at an estimation of total benefits, *"partly because of uncertainty over the exact benefits of subjecting capital investment to competitive tendering, and partly because many of the dynamic effects of introducing competition are hard to anticipate and monetise (for example, innovation)."*⁷⁷

Many of the benefits that Ofgem has identified are expected to be driven by encouraging more innovation and efficient procurement. Ofgem has conflated benefits it ascribes to competition with benefits due to increased innovation and any resulting lower capital spend. Absent of these, it is difficult to see how late competition will deliver any greater benefit. As Ofgem is aware, network companies already use competitive tendering when they engage the supply chain. Ofgem states in its Impact Assessment that *"the late CATO and SPV models encourage competitive pressures in the supply chain, leading to innovation and new sources of labour and capital"*, however Ofgem has not presented the analysis that supports this assumption nor why it is an improvement on the current competitive process. For example, there is no discussion or evidence presented on how the supply chain would be expanded to involve a wider set of contractors, or why existing contractors would bid 'more competitively' in potentially more complex and riskier contractual arrangements.

We note within the Impact Assessment that no new costs or benefits have been identified beyond those quoted in Ofgem's September 2018 'Impact Assessment on applying the Special Purpose Vehicle model and Competition Proxy model to future new, separable and high value projects'⁷⁸. We responded to this Impact Assessment as part of our response to Ofgem's consultation on the commercial and regulatory framework for the SPV model⁷⁹, where we commissioned an independent report, undertaken by Oxera, to assess Ofgem's Impact Assessment⁸⁰. Oxera concluded that:

- The IA focuses on the assumed financial costs and benefits stemming from the introduction of the CPM and the SPV model

⁷⁶ <https://www.ofgem.gov.uk/ofgem-publications/93913/itprfinalconclusionsimpactassessmentpublicationfinal-pdf>

⁷⁷ Paragraph 3.8, Integrated Transmission Planning and Regulation (ITPR) project: final conclusions (March 2015)

⁷⁸ https://www.ofgem.gov.uk/system/files/docs/2018/09/impact_assessment_2018_final.pdf

⁷⁹ https://www.ofgem.gov.uk/system/files/docs/2018/12/ssen_scottish_and_southern_electricity_networks.pdf

⁸⁰ https://www.ofgem.gov.uk/system/files/docs/2018/12/ssen_appendix_-_oxera_report.pdf

- The IA is based on three scenarios of theoretical projects costing between £100m and £1,000m, and therefore does not include important features of actual projects (e.g. differences in timing, risks, and the relevant counterfactuals)
- The risk assessment undertaken by Ofgem of the SPV and CPM is purely qualitative and requires more extensive analysis of scenarios before concluding on the materiality of these risks
- While many of the savings hinge on efficiently managed SPVs, robust evidence is required to make assumptions on the likelihood of those SPVs being more efficiently managed relative to the RIIO counterfactual
- Overall, the finding in the IA that the SPV model and CPM model create net benefits for consumers is driven by a few key assumptions, primarily around the cost of capital and to a lesser extent around the potential for CAPEX and OPEX savings
- However, there is no evidence is provided to support the assumed scale of potential CAPEX and OPEX savings or the mechanisms that might generate the CAPEX and OPEX savings.

We await Ofgem’s response to this report and would request that Ofgem considers the points raised in order to undertake a more detailed and robust Impact Assessment of the potential impacts of applying late competition to future projects.

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

Please see our response to CSQ53 above. We await Ofgem’s response to the issues raised in the numerous responses to previous consultations which remain unanswered. A robust IA must include, but not be limited to:

- The inclusion of transparent comparable financial information from the OFTO regime, including detailed analysis of the associated risk profiles
- Analysis of the impact of the regulated status of the winning entity on financeability and investor confidence when set against the competitive models proposed
- Realistic analysis of material administrative costs of competition, with examples such as the; material costs of conducting tender exercise, any resultant contractual and or physical interactivity of networks, ongoing management of contractual arrangements over the life of the contract/licence period
- An end-to-end analysis of the complex regulatory framework requirements, with a realistic view on the length of time these will take to put in place.

CSQ55: What are your views on the potential issues we have raised in relation to early competition? How would you propose mitigating any issues and why? Are there additional issues you would raise?

Critically, major uncertainties around the electricity demand and supply in the future means that there is a constant uncertainty as to whether a particular reinforcement will actually be needed at a particular point in time in the future. For projects with long lead times, there is likely to be the need to keep options available for a number of years without a clear indication of which option will proceed to

implementation until certainty on the need matures. It is not clear how Ofgem's early competition proposals will address this or how third parties/new entrants will be able to sustain a suitable business model to address the associated changing risk profile. As a TO, with a number of other projects, we can achieve efficiencies by redeploying resources on other projects while the uncertainty on the need settles. We are concerned that Ofgem's proposals for developing competition is detracting from the need to identify the 'problem' or 'opportunity', the 'solutions', and then if necessary developing appropriate processes that frame competition effectively.

Beyond the three drawbacks Ofgem has identified, deliverability, access to land, and change in circumstances, it is difficult to identify what other drawbacks may also arise in the absence of any clarity of the framework that Ofgem proposes early competition to be delivered under – though for the avoidance of doubt, all of these issues are likely to impact on cost certainty. For example, if Ofgem were proposing to introduce early competition by way of an early CATO model, whereby all competing bidders were appropriately licensed and governed, then some of the risks such as access to land and deliverability could potentially be addressed more easily. Though it is unclear how the set-up of the required framework for this could be achieved ahead of commencement of T2 or, in this example, as to how the management of stakeholders would progress between existing TOs (with those existing relationships) and new CATO.

It is clear from the proposals that Ofgem is still in the very early stages of its thinking and we consider that a significant amount of further work is required to allow the proposals to be fully understood, allowing industry parties to be in an informed position to comment on the potential impacts of early competition (both positive and negative).

CSQ56: Are there other potential drawbacks of early competition?

Please see response to CSQ55 above.

As the projects are in their infancy, risks are not yet known, or clearly identified. As such these risks cannot be adequately communicated or allocated in the tender documents, meaning that there is likely to be either:

- a significant contingency element built into tendered bids to manage this uncertainty; or
- a requirement for mechanisms to deal with changes in network requirements or connecting projects etc. This would need to be set out and clearly understood at the outset. This will undoubtedly require either contractual (SPV) or regulatory (CATO) price adjustment mechanisms, involving very careful and complex drafting, with appropriate penalty/incentive mechanisms.

CSQ57: Do you consider that there are any existing examples of early competition (including international examples or examples from other sectors) which demonstrate models of early competition that could generate consumer benefit in the GB context?

It is not the role of network companies or the ESO to assess existing or develop new models of competition.

We would welcome further detail on the examples of early competition that Ofgem has considered from other continents and sectors in developing its proposals.

CSQ58: What are your views on the advantages and disadvantages of the high-level approaches to early competition outlined? How would you recommend mitigating any disadvantages?

The NOA already has an important role in developing an efficient, coordinated, and economic system of electricity transmission by enabling both network and non-network solutions across the transmission and distribution systems to compete to meet transmission network needs, to the benefit of consumers. The ESO is working closely with industry to continue to develop its network planning tools to drive greater value for consumers. This includes opening the process up to a wider number of participants. We think Ofgem should continue to work with the ESO and other industry parties through the appropriate forums to explore further options for developing the future network.

Critically, major uncertainties around the electricity demand and supply in the future means that there is a constant uncertainty as to whether a particular reinforcement will actually be needed at a particular point in time in the future. This is recognised by Ofgem as a potential drawback of any early competition model.

In addition, running an effective process would require significant tender process design to ensure that the ‘need’ is clearly understood as well as the requirements for any proposed solution. Based on the proposals presented we would raise the following questions:

- What information would the TO be required to make available to the ‘market’/potential bidders to allow for an effective solution to be proposed?
- Any such process would need to include clear justification of why one solution is chosen over any others proposed. Who should be responsible for assessing the best solution? How would this process interact with the ESO’s role in running the NOA?
- How would bidders be remunerated if there is no guarantee of a contract or licence at the end of the process, and who picks up this cost?

Regarding Ofgem’s specific ‘One Stage’ and ‘Two Stage’ proposals, the proposals are extremely high-level and much more detail is required to provide a comprehensive view of the potential advantages and disadvantages of each.

CSQ59: Do you have any views on the potential criteria for identifying projects for early competition discussed above? Would you suggest any other criteria, and if so, why?

We note Ofgem's common view that of the 'New', 'Separable' and 'High-value' criteria, none may be considered applicable to early competition or in the case of the 'High-value' threshold, could be variable. Notwithstanding our comments in response to Question 52 on the applicability of the criteria for late competition, we think it is important for Ofgem and industry to develop some form of 'baseline' criteria for measuring the applicability and crucially the value of applying early competition.

Ofgem has identified the primary criterion for determining whether early competition models are appropriate is contestability of solutions, with time-criticality, value and certainty of system need being other relevant criteria. We disagree; a decision as to whether any early competition should be run should be based on a clearly understood policy objective and only where it has been demonstrated that it is in the long-term interests of consumers. To suggest that early competitions should be run simply where it has been identified that there are different potential solutions to a network solution is short sighted.

In line with our views on late competition, we consider a two-stage approach to assessing the suitability of competition is necessary, with the competition criteria used as an initial indicator that a given project may be suitable for competitive delivery; followed by a full Regulatory Impact Assessment to justify that the project in question has the potential to result in the benefits from competitive delivery that Ofgem expects.

CSQ60: Do you agree with the criteria we have set out for assessing who should run competitions? Based on these criteria, which institution do you consider is best placed to run early and late competitions?

We continue to believe that the NOA process is the principal route to identify the system needs. The ESO role should be to identify system need, with the existing TOs maintaining responsibility for system design in their geographic areas.

We welcome Ofgem's recognition within its Draft Impact Assessment on applying late competition, that in order to ensure that competitively-appointed parties are both capable and accountable for constructing and operating projects to an acceptable standard:

1. the tender process must be carefully run to assess the capabilities of the bidders and the robustness of their proposals, and
2. the competitively-appointed parties will have enforceable obligations and will be subject to the relevant technical and system standards and codes.

Currently the only entity that would be capable of ensuring that competitively-appointed parties have enforceable obligations and are subject to the relevant industry standards and codes is Ofgem due to its licensing powers.

We agree with Ofgem's opening statement that any competition needs to be fair and transparent and for this reason, that the entity running the competition must be independent of any potential bidders. It is for this reason that we do not consider incumbent network licensees to be suitably placed to run early or late competitions. If Ofgem is proposing to introduce true competition, then network companies should be able to compete equally with all other potential bidders to deliver solutions to meet system needs.

CSQ61: Do you agree with how we have described native competition? Do you agree we should explore the proposals described above to enhance the use of native competition? Are there any other aspects we should consider?

We consider Ofgem's description of native competition to be reflective of the competitive processes currently undertaken by SSEN.

Competition already has a central role to play in the activities of all network companies. Through well-defined and tested procurement processes networks will have been seeking to secure Totex performance improvements during RIIO-1.

In addition to our own procurement processes, SSEN is subject to competitive requirements by virtue of the Utilities Contract (Scotland) Regulations 2016 and we have consistently shown how the current approach under the RIIO framework provides powerful incentives for efficient delivery.

We broadly agree with Ofgem's principles of best practice, in so far as the benefits of utilising competitive processes are not outweighed by the costs. However, we are unclear of Ofgem's proposal to use competition as a price finder to further enhance native competition. We consider Ofgem's 'Business plan process' proposal will provide Ofgem and the market with the same confidence in the cost of the works without the layer of additional complexity that we believe the 'competition as a price finder' proposal will introduce.

Proposal 1: Business plan process

At the commencement of RIIO-T1 SSEN identified that substantial investment would be required throughout the price control period, to deliver a number of large capital projects in areas with substantial construction, landscape and environmental challenges. At this time, it was recognised that SSEN would be required to secure the appropriate and sufficient contracting resources to deliver the required projects, and at the best value for the consumer. To meet this challenge, SSEN developed a specific T1 supply chain strategy team who carried out detailed market analysis and engaged with a range of relevant stakeholders, including the supply chain, to establish framework agreements which would enable access to the necessary resources for the works that had been identified.

Crucially, our framework tender cost submissions were based on competitively tendered schedules of rates. Not only did this permit competition between the supply chain during the tender process but as the framework agreements would provide the potential for long-term work, the supply chain was able

to consider economies of scale benefits to many areas of their tender submission. Each of the frameworks went through an intense review, evaluation and negotiation process.

In addition to this supplier relationship management, processes are used for strategically important suppliers to measure and improve relationships, which encourages supplier innovation and drives value from the supply chain. SSEN believes the costs achieved through these mechanisms are reflective, competitive and offer value to the GB consumer.

Overall, we believe best value is achieved through competitive tenders for all key procurement awards for both framework and one-off contracts. SSEN tender events are carried out pursuant to the requirements of the EU Procurement Directives, as reflected in UK Statutory Instruments under the Utilities Contracts Regulations 2016 and Utilities Contracts (Scotland) Regulations 2016, ensuring transparency and equal treatment of all participants. The use of framework agreements provides the following key benefits:

- Competition – a framework agreement is not a guarantee of work and successful framework contractors are aware they will likely have to compete against the other framework contractors for specific projects – ensuring costs are competitive.
- Enhanced quality – quality standards and experience on projects of a scale and cost commensurate with our projects is a key criterion for qualification into SSEN tender processes.
- Improved safety performance – SSEN places its safety requirements on a contractual basis, ensuring corners are not cut and everyone operates in a safe manner for their and others' benefit.
- Superior programme management and delivery – ensuring projects are delivered to plan, on time and on budget.
- Commercial benefits i.e. continuous work programmes avoiding duplication of resource and cost, cost efficiencies through project synergy and economies of scale.
- Accountability – Should anything not go to plan there are clear contractual mechanisms and financial instruments, ensuring consumers exposure to the potential cost of a contractor's act or omission is mitigated.

We are committed to the continued improvement of our processes to drive further efficiencies in the interests of current and future consumers.

Proposal 2: Competition as a price finder

We are unclear of the detail of this proposal and what additional value it will bring. Though not clear from the proposal, we think it is important to highlight at this stage the significant difference between a proposal which would require the network owner to tender out work to 'complete a project' versus running competitions to 'find a solution to satisfy the system need'.

Though again not clear, the proposal to tender for the completion of a project, seems to duplicate the activities already undertaken by network companies through their existing competitive tender processes, which Ofgem already proposes to seek further transparency from through the business plan process proposal outlined above.

We also note that Ofgem describes the process as being relevant for projects or items of expenditure where their costs cannot be accurately estimated at the time of setting the price control. However, this is what the existing Strategic Wider Works (SWW) mechanism for TO's is designed to deliver. In the RIIO-T1 determination, Ofgem needed to decide what aspects of a large transmission infrastructure project were features involving 'uncertainty'. Ofgem decided that those matters were to be the subject of re-evaluation during the price control through the SWW mechanism. As the RIIO Handbook explains, uncertainty mechanisms need "a clear rationale" and need to involve "simplicity and consistency". Ofgem therefore designed the SWW mechanism carefully after detailed consultation, identifying those parameters which needed to be reassessed for new large infrastructure projects and those financial parameters which did not.

Based on the limited detail Ofgem has presented on its 'early thinking' on the proposal, it is unclear under what scenarios the proposal would be triggered or how it will differ in practice from and improve upon those mechanisms already in place. We are concerned that the proposal will introduce unnecessary additional complexity and believe significant further work is needed by Ofgem, in consultation with affected stakeholders to develop the detail of the proposal before it can be considered further.

CSQ62: How do you think competition undertaken by network companies should be incentivised? Is the use of Totex the best approach? Will this ensure a level playing field between network and non-network solutions including the deployment of flexibility services?

We consider the existing Totex incentive will continue to be an appropriate and effective mechanism for incentivising the use of competitive processes.

As outlined earlier in our response, it is our view that strong incentives are the most compelling driver of behaviour. The Totex Incentive Mechanism (TIM), which has allowed network operators to share equally in the benefit of any cost savings with customers, has delivered substantial cost savings and efficiencies over recent price controls.

In terms of the funding required to develop new frameworks and processes to run competitive tenders, network operators would require allowances to cover the additional resources and time needed to actively engage with potential bidders, run tenders and conduct assessments of options. Network companies will need clarity on how the additional costs in delivering any proposed competitive tenders will be allocated and funded, and any benefits appropriately shared.

CSQ63: What views do you have on an approach where Totex allowances would be based on costs revealed through competition, with a margin or fee for the competition-running entity?

As outlined in our response to CSQ61, we are unclear of Ofgem's proposal to use competition as a price finder. We are therefore unable to comment on the effectiveness of an approach where Totex would be based on costs revealed through competition.

Our broader views on Totex allowances and the use of a blended sharing factor are outlined in response to CSQ66 below.

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

We believe the ESO and stakeholders in the gas sector are best placed to comment on this proposal.

Business Plan Incentive & Totex incentive – Q65-80

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

SSEN does not support the detail of the BPI. We support the aim of the BPI that Ofgem set out – **one that encourages companies to provide stretching cost forecasts and ambitious outputs** and one that rewards or penalises based on a score on both these elements – as this will deliver for consumers. But the detailed proposals will not deliver on the aim of the incentive.

We noted in our Framework response that regardless of whether the tool to encourage ambitious and efficient business plans is the RIIO-1 IQI model, a modified version or a new mechanism, the incentive strength must be maintained or strengthened. Despite this, Ofgem has proposed a BPI that is weaker to that in RIIO-T1, again a further dampening of the incentive package.

The IQI reward in RIIO-T1 was equivalent to 2.5% of baseline ex ante Totex. The absolute maximum reward proposed to be available in RIIO-T2 is 2% of baseline Totex. The proposed incentive in RIIO-T2 is further weakened by uncertainty. This is uncertainty on level of reward (as it is not solely within the company's control) and uncertainty surrounding the assessment criteria. Combined, this will not drive companies to take risks and submit the most stretching and ambitious cost and outputs forecasts. **It is an illogical response to information asymmetry and is out of step with the RIIO principle that in driving efficiency customers stand to win in subsequent price control periods.**

While Ofgem need to seek the balance between (a) avoiding excessive costs and (b) encouraging the right behaviours from network companies to meet the outputs customers and stakeholders want, it also must first meet the basics of both. The raison d'être of business plan incentive is to ambition and efficiency, yet it does little for either.

A more logical BPI and one that better meets the needs of consumers is one that:

- **Has a strong, certain upfront reward/penalty:** At **±4%** of Totex for “Good Value/Poor Value” plans. In an in the round assessment of this proposed dampened package, a BPI with greater incentive strength than in RIIO-1, which is not subject to the RAMs is justified to encourage companies to take more risk to put forward an ambitious plan that meets the outputs consumers and stakeholders seek at the most efficient cost. Given the heightened level of risk as we enter greater uncertainty in the uncharted area of the EST, a stronger incentive is also necessary to encourage companies to take even more risk in their output and cost ambitions than in RIIO-1.

- **Removes the competitive element:** Under current proposals a TO that puts forward an ambitious stretching business plan and achieves “Good Value” can receive a reward ranging from 0.66% to 2% of Totex. The gulf in that scale creates significant uncertainty for the company and the logical response will be to limit the risk to take in the business plan submission, which will not drive the best consumer outputs. It also weakens Ofgem’s argument on the strength of the incentive – citing that it is equivalent to 7% of Totex underspend. It is only equivalent to this if the upper 2% is reached and is also based on a 32.5% Sharing Factor (see below in response to **CSQ70** our significant concerns on the impacts of weakening the Totex incentive strength through a blended sharing factor).

In the Framework consultation Ofgem used the limited competitive pressures across the three TOs and the limited comparability as clear justification for removing fast-tracking for the Transmission sector. The same arguments apply in this context. The recognised lack of comparability raises significant concerns on how Ofgem could assess and reward each TO equitably. It further creates barriers to TO collaboration – the exact opposite of what should be encouraged in the sector as we seek more whole-system outcomes for consumers and what the Enhanced Engagement process is seeking to achieve.

- **Is symmetrical:** With a shared reward but absolute penalty, the proposed incentive is asymmetric which is inequitable and contrary to good incentive properties.
- **Has clear, less subjective assessment criteria:** The assessment criteria is currently ambiguous. Yet this is an illogical response to concerns over information asymmetry. If network companies are uncertain what is being assessed, this creates greater uncertainty of the reward potential, and may result in risk aversion in the submission of the plans. This will not drive the consumer outcome Ofgem desires in RIIO-2. We endorse the assessment approach used by Ofwat in its initial assessment of the PR19 business plans to reduce uncertainty (see our response to the consultation on the Draft Business Plan Guidance).

We are supportive of any BPI not being subject to the Return Adjustment Mechanisms. Here Ofgem recognises that it is inequitable and illogical to erode rewards because of subsequent performance as it will affect the ambition as a plan is submitted, the in-period performance or both. This would not be in the consumers interests. The same argument applies to RAMs in general.

CSQ66. Under the blended sharing factor approach, should the scope of stage 2 evaluation of cost assessment be based on the entire Totex or only on cost items that we consider we can baseline with high confidence?

For the avoidance of doubt:

- SSEN’s answer to this is not in relation to the blended sharing factor approach *per se* but in relation to “Stage 2: evaluation of costs” of the BPI approach as set out in Appendix 3 of the cross sector proposals.
- SSEN is strongly opposed to the blended sharing factor approach.

The answer here must be read alongside the answer to **CSQ67, CSQ70, CSQ71** and **CSQ73**.

The approach here is that:

- A company will submit its view of costs to deliver its programme of work to meet the RIIO-2 outputs
- Ofgem will come up with its view of costs using all the tools available to it (as set out in paragraph 6.4 of the RIIO-2 Sector Specific Methodology Annex: Electricity Transmission)
- The ratio between the two would classify the competitiveness of each company's costs and they will be categorised into high, medium or low (as in CSQ67 below).

This is an approach that has been used in previous price controls to set incentives to drive ambitious cost forecasts and is nothing new and one which SSEN supports. The difference in RIIO-2 is that Ofgem has stated that it wants to factor in **“the strength of confidence we have in our ability to set cost allowances”**. Ofgem has an extensive cost assessment toolkit to give to it confidence in assessing the costs put forward. If this “fails” it has a framework (ie PCDs and uncertainty mechanisms, in particular) to deal with unjustified Totex outperformance, as stated in our response to **CSQ70**. We also note in our response to **CSQ71** our concerns with the approach to the blended sharing factor and how this will work in practice.

Overall, we believe the problem of unjustified Totex outperformance is rightfully being addressed by Ofgem through other means and the blended sharing factor is flawed. If, despite all the above, and our responses to **CSQ70, CSQ71** and **CSQ72**, Ofgem continue with its proposal on the blended sharing factor, and use it in the BPI too, we believe that only high confidence baseline costs be used in Stage 2 evaluation for the BPI **but that the confidence in the baseline should be reached through a combination of the three factors set out in paragraph 9.44 of the RIIO-2 Sector Specific Methodology – predictability, ability to deal with uncertainty and quality of evidence**. To focus largely/solely on predictability will be inequitable. Unpredictable costs are not necessarily inefficient costs. If that link is made then transmission companies, due to the nature of their network will be penalised (see **CSQ72**). Unless Ofgem correct this focus on predictability over other factors, optimum behaviour from companies will not result. This is not in the interests of consumers. If networks companies know they will stand to lose regardless of the level of ambition in its submitted plans, a logical response will be to limit its risk and thus ambition in cost and output forecasts.

CSQ67. What should be the method for categorising cost forecast as High, Medium or Low? Are the indicative boundaries of 1.0 (High to Medium) and 1.04 (Medium to Low) appropriate?

SSEN believes that the method for categorising cost forecasts as High, Medium or Low should be based on the IQI approach used in RIIO-T1. SSEN believes that the indicative boundaries of 1.0 to 1.04 proposed should be on a sliding scale and **increased to a boundary of 1.0 to 1.06 for the Transmission sector**. This is to reflect:

- The **difficulty of benchmarking certain cost areas** given the unique nature of the networks in the UK. This difficulty is not only notable in comparing the three unique GB TOs but also against international benchmarks and across different sectors. Benchmarking has a role to play but it

must be used selectively and appropriately. The comparability will be heightened across and within the sectors as each company seeks to address unique needs and wants of stakeholders and consumers in their areas that emerge through the Enhanced Engagement process.

- The **proposal to drop the interpolation of the IQI** where previously final costs allowances comprised 75% Ofgem view and 25% company view to reflect that errors exist in cost forecasting and cost modelling from Ofgem. There has been no mention of this in the new BPI other than inferring it will be lost as the IQI will be removed. Therefore, there is no allowance made for errors in Ofgem modelling or errors in other companies' data for which SHE Transmission can't control but will be affected by.
- The **late introduction of new draft business plan data templates (BPDTs) for the TOs** which has no associated guidance yet drafted. This will mean that the data being used by Ofgem to inform the RIIO-2 cost assessment is placing significant weight on data from templates which have not been used in anger during the annual Regulatory Reporting process. This is a very different to the situation in the distribution sectors. There are well documented risks with this (as noted as far back as a decade ago when data templates were in their infancy in DPCR4⁸¹). Inconsistencies in approaches to completing the templates across the TOs will result in punishing/rewarding companies due to the inaccurate reporting of others which is outside their control. This is inequitable for both consumers and companies. This is exacerbated by Ofgem's focus on "predictability" which requires the backfilling of the new templates to the beginning of the RIIO-1 period to allow Ofgem to rely on historical information. However, the backfilling and re-cutting of data retrospectively will reduce data accuracy and reliability, despite the best efforts of the TOs. Ofgem has previously considered three years of annual reporting necessary to have confidence in new data templates.⁸²

SSEN also believes that that the BPI **must avoid cliff edges in the incentive properties**. The reward/penalty should be on a sliding scale. It is inequitable for a company with a cost ratio 1.01 to Ofgem's view to be given the same BPI reward as a company with cost forecasts of 1.39. The gulf between 1.01 and 1.39 is too large. The efficiency of the submissions is materially different, but the reward is the same. Consumers of the latter company should not have to pay the same incentive reward while also bearing the relatively more inefficient cost. As noted above, Ofgem also propose to remove interpolation, which previously provided a defence against Ofgem making some relatively minor errors in its assessment. As this is being removed, a sliding scale is more defensible than a cliff edge reward/penalty lines as currently proposed.

⁸¹ https://www.ofgem.gov.uk/sites/default/files/docs/2007/12/elec-dist-cost-review-200607-ref-28907_0.pdf

⁸² https://www.ofgem.gov.uk/sites/default/files/docs/2007/12/elec-dist-cost-review-200607-ref-28907_0.pdf

CSQ68. What should be the range for the Business Plan reward/penalty? Is the range of $\pm 2\%$ of Totex equivalent appropriate for incentivising high quality and ambitious Business Plan submissions (e.g. Value or Good Value)?

SSEN believes the range for the BPI reward (penalty) should be a sliding scale of $\pm 3-4\%$ for high (poor) quality and ambitious (unambitious) business plans the reasons set out in our response to **CSQ65**. It should also be symmetrical. $\pm 2\%$ suggests that the incentive is symmetrical – it is not. The reward is dependent on the business plan submissions of other companies in the sector, the penalty isn't. Anything weaker than a maximum $\pm 3-4\%$ is an illogical response to information asymmetry and is out of step with the RIIO principle that in driving efficiency customers stand to win in subsequent price control periods. We set out our proposed metric below.

Quality/cost	Good	Average	Poor
Good	Good Value +3-4% Totex equivalent (sliding scale)	Value +1-3% Totex equivalent (sliding scale)	Standard
Average	Value +1-3% Totex equivalent (sliding scale)	Standard	Value +1-3% Totex equivalent (sliding scale)
Value	Standard	Low Value -1-3% Totex equivalent (sliding scale)	Poor Value -3-4% Totex equivalent (sliding scale)

As noted in our response to **CSQ67** for categorising cost forecasts, the BPI must avoid cliff edges in the incentive properties. The reward/penalty should be on a sliding scale when cost and output performance is combined. The sliding scale also recognises the broad range of areas a business plan must cover to meet all the needs of stakeholders identified through the Enhanced Engagement process.

SSEN believes the range of the BP incentive reward/penalty needs to be strong enough to encourage companies to submit high quality and ambitious business plans. A critical part of this argument is the assessment of the package on offer. There is no doubt the incentive package has been significantly stripped back from RIIO-1 to RIIO-2. Alongside the low cost of equity proposed, the significance of the BPI with an appropriate incentive strength to encourage companies to take more risk to put forward an ambitious plan is increased. It is in the best interests of customers to have a strong incentive on the table for network companies to respond to with confidence.

Ofgem suggest that the incentive properties are strong citing the maximum reward is equivalent to 7% Totex outperformance. However, this hinges on the assumption of a mid-range sharing factor (32.5%). If this was to change, the argument on the on strength of the incentive being equivalent to 7% of Totex doesn't stand. This is illustrated below, using in both scenarios £1.5bn as the Totex expenditure in the RIIO-2 period.

Scenario 1: Ofgem view using 32.5% sharing factor. 2% max reward is broadly equivalent to 7% Totex underspend.

Scenario 2: Change sharing factor to 50%. 2% maximum reward is **significantly less** than 7% Totex underspend. For this argument to stand true the BPI reward would need to be increased to 3.5%.

Table 3.4 Sharing factor scenarios

	Scenario 1	Scenario 2
BPI reward £m	30	30
Company share of 7% underspend £m	34.1	52.5

As set out in our response to **CSQ70** anything less than a 50/50 sharing factor has adverse unintended consequences for consumers. It is a significant step backwards for driving efficiencies. Therefore, we believe it is reasonable to replace Ofgem’s assumption of a 32.5% with a 50% sharing factor. Notably, both scenarios make the significant assumption that only one TO is rewarded “Good Value” and receives the full 2% incentive reward.

CSQ69. Do you agree with our assessment of the IQI? (If not please provide your reasons). Do you agree with our proposal to remove the IQI?

SSEN believes network companies will react and respond to strong incentives for revealing information and submitting ambitious – it is exactly what SSEN did for both RIIO-T1 and RIIO-ED1 when the fast-track incentive and IQI were available. In our RIIO-2 framework response we noted that the IQI should be retained if Ofgem did not propose a strong alternative. As noted above, we do not believe Ofgem has proposed a strong alternative in the BPI. We also have significant issues with the blended sharing factor – see our response to **CSQ70**. Therefore, we do not agree with Ofgem’s proposal to remove the IQI as a suitable alternative has not yet been proposed.

SSEN don’t agree in full with Ofgem’s assessment of the IQI. In particular:

- **We don’t believe that Ofgem can be confident in the assertion that the IQI was unsuccessful in ensuring companies provide ambitious forecasts:**
 - The statement that “companies in RIIO-1 have systematically provided higher forecasts than their actual spending” does not hold true. SSEN has certainly not done so. Indeed, at RIIO-T1, SSEN was fast-tracked as a result of its ambitious cost forecasts. SHE Transmission, alongside SPT, the other fast-tracked TO are not outperforming Totex to the level of NGET who was not fast-tracked. So therefore, our view is that this is evidence that a strong incentive to submit ambitious cost forecasts worked.
 - In the ED sector, Ofgem also argue that the deviations in RIIO-ED1 between draft and final determinations is evidence that the IQI didn’t work in avoiding higher forecast submissions. Our view is that when upper quartile benchmarking is used, by the very nature of that assessment approach, the majority of DNOs can’t be upper quartile so will see their allowances reduced. It is not that IQI didn't work. It is simply a reflection of the assessment approach.

- **It is almost impossible to point to the counterfactual.** There is no evidence from Ofgem of the counterfactual – that is in the absence of the IQI what would have been the cost submissions from the companies? It is more feasible than not that cost forecasts would have been greater in the absence of the IQI.
- **We don't believe Ofgem can point to efficiency outperformance as a failure of the IQI:** Ofgem questioned the effectiveness of the upfront IQI reward because of outturn Totex underspend. However, this is exactly what the TIM is designed to do. With a strong sharing factor in RIIO-1 across all sectors companies responded and sought out efficiencies, which in both consumer and investor interests.

While SSEN do not agree with Ofgem's assessment of the IQI and advocate a strong information revealing BPI, we strongly support the need to tackle unjustified Totex outperformance. We do not believe consumers should pay for Totex outperformance that is not derived from genuine efficiencies. We discuss this in more detail in our response to CSQ70 on the blended sharing factor proposals.

- **Ofgem has previously given other reasons for outperformance.** In its response to the Dieter Helm Cost of Energy Review⁸³, Ofgem states (extract below) that “systematic outperformance” was due to actual input prices being lower than allowed or was largely confined to specific companies as opposed to being systematic to the industry.
- **The ability of Ofgem to come up with a view of costs that is wholly independent of the companies' view is almost impossible.** This is noted as a failing of the IQI and Ofgem has pointed only to “predictability” ie historical costs as a means of gaining this independent view. This may assist (to a degree) in the distribution sector where large proportions of expenditure areas are cyclical and benchmarkable, where there are more similarities than differences across the networks and where there has been consistent collection of well-defined and well-tested data in the Regulatory Reporting Packs (RRPs) over many years. This is not true of the Transmission sector. As such, no BPI will be close to being wholly independent of the companies' view and if it attempts to be it will either be flawed or will reach a discriminatory conclusion (see answer to **CSQ71**).
- **Ofgem inaccurately state that the IQI in RIIO-1 purely accounted for expenditure forecasts and didn't account for rigor of cost justification of qualitative aspects.** This is not true. In RIIO-ED1 the toolkit approach focused very much on cost justification and there was a qualitative assessment of the business plan which informed the IQI reward.

Overall, Ofgem has not fully justified its reasoning that the IQI has not achieved the desired results in RIIO-1. We accept that the RIIO-1 price controls had failings (see below) but these are not failings that the IQI mechanism (or equivalent in going forward) could and should account for.

⁸³ <https://www.gov.uk/government/publications/cost-of-energy-independent-review>

OFGEM'S ANALYSIS OF OUTPERFORMANCE

Outperformance during the previous electricity distribution price controls (DPCR4 and DPCR5) is largely explained by demand falling and fewer demand connections. In DPCR5, companies also outperformed allowances by using greater volumes of refurbishment rather than replacement to manage poorer condition assets, by improving efficiency, and because of falling input prices due to economic conditions.

Distribution companies are forecast to outperform their RIIO-ED1 TOTEX allowances by underspending in asset replacement and refurbishment by £400 million (7%), and in load-related expenditure by £400 million, due to demand falling away. These reductions in load-related expenditure are largely due to the load requirements not materialising as expected; uncertainty on the take-up of low-carbon technologies; and the greater impact of energy efficiency measures.

For electricity transmission, outperformance during TPCR4 and the roll-over year was largely explained by load (ie, demand) falling away through the period (SHET spent 85% of its load-related allowance; NGET spent 76%; and SPT only 44%). The companies also highlighted delays associated with planning consent as a major driver of spend. NGET and SPT also spent less than the allowances in the non-load-related category (10% and 24%, respectively) due to decisions to refurbish rather than replace assets and deferral of maintenance. SHET, in contrast, underperformed in this cost category (13%).

A range of factors drives the forecast level of outperformance across RIIO-ET1 by each of the transmission operator businesses. The majority of the outperformance lies with NGET.

NGET considers that refinements to its asset intervention plans more efficiently target replacement of higher-risk components. This technique is estimated to deliver around £170 million of savings compared with allowances. NGET expects changes in procurement strategies and general improvements to ways of working to increase volume delivery and reduce costs in excess of around £500 million.

SPT is forecast to spend 95% of its RIIO-T1 TOTEX allowances, while SHET forecasts spending 94% of RIIO-T1 TOTEX allowance.

When Ofgem set RIIO-ET1, it provided allowances to cover increases in input prices (relative to RPI growth). Due to macroeconomic conditions, actual input prices (eg, labour and materials) have increased much more slowly than expected. In Ofgem's 2016 annual report it estimated that the cumulative difference for all licensees could be approximately £1.5 billion across RIIO-ET1.

Source: Ofgem.

CSQ70. Do you have views on the effectiveness of the blended sharing factors approach and the incentive it provides on companies to submit more rigorous Totex submissions?

SSEN disagrees with the principles of the blended sharing factor. We strongly support the retention of a 50/50 sharing factor for the TIM in RIIO-T2 for two main reasons:

1. Other mechanisms exist within the framework to effectively deal with inefficient overspend and unjustified underspend.
2. A strong TIM sharing factor in RIIO-2 will build on the success of RIIO-1, continuing the drive the most efficient behaviour that delivers benefits for consumers as we enter the challenges of the EST.

In paragraph 9.36 of the RIIO-2 Sector Specific Methodology Ofgem state:

*“The rationale behind our proposal for a blended sharing factor is that the sharing factor should reflect the **strength of confidence we have in our ability to set cost allowances**. The sharing factor will be higher the more confident we are that cost allowances have been derived using benchmarks that are independent from companies’ influence. Where this is the case, we can have greater confidence that underspending would be a result of companies finding **genuine cost efficiencies**, rather than reflecting allowances that were set incorrectly.”*

SSEN believes that the principle and fundamental rationale behind the TIM sharing factor is not to give Ofgem confidence but to **drive cost efficiencies within a price control that will deliver short and long-term consumer benefits**. We believe that Ofgem can gain confidence from other elements of the price control framework that underspending would be a result of genuine cost efficiencies. In an ex ante price control Ofgem will never eliminate that risk but through learning lessons from RIIO-1 it can substantively reduce that risk without weakening the incentive strength of the TIM which will have adverse unintended consequences as set out below.

Framework mechanisms exist that will give confidence in genuine cost efficiencies

Ofgem considers that RIIO-1 suffers from issues with outperformance resulting from three main sources.

- *Luck*: networks are benefiting from unwarranted returns due to changes in circumstances;
- *Ofgem error*: information asymmetry allows networks to outperform by baking in performance opportunity to the business plan; and
- *Efficiency*: networks realise improved cost efficiency while delivering customer outcomes. Innovation is a catalyst to enduring and positive change in costs and outputs.

The third of these is, and should be acknowledged by Ofgem, as a positive reason for outperformance.

Ofgem must assess whether its response to perceived unjustified Totex outperformance will have the desired effect and the associated impact on consumers. Crucially, Ofgem already has the tools and can effectively address Totex outperformance resulting from luck or regulatory error without resulting to altering the Totex incentive properties. It has already sought to do so within the Framework and Sector Specific Consultations. In neither instance does the solution require, or justify, a change to Totex incentive strength to remove the perceived impact.

The following table summarises sources of what might be conceived as unjustified Totex performance. It demonstrates that for each, Ofgem has and already applies a number of RIIO tools to address the perceived risk.

Table 3.5 Ofgem view of Price Control Failings and Ofgem Response

Failing	Response	Comment
Material change in investment driver: e.g. large projects funded in the ex ante baseline no longer required or no longer required to the scale set out in the baseline	<ul style="list-style-type: none"> • Attach uncertainty mechanism such as a volume driver • Introduction of price control deliverables (PCDs) 	<ul style="list-style-type: none"> • Successfully applied within SHE T RIIO-T1 settlement. • Non-delivery of outputs results in allowances being fully returned commensurate to output non-delivery • Neither response weakens the incentive to deliver improved efficiency
Deferral: Ex ante Totex, no outputs attached, and no outputs delivered. Companies keep allowance but do nothing (when “do nothing” is not the efficient option)	<ul style="list-style-type: none"> • Introduction of price control deliverables (PCDs) 	<ul style="list-style-type: none"> • Non-delivery of outputs results in allowances being fully returned commensurate to output non-delivery
Exogenous factors: External economic factors result in windfall gains / losses to companies	<ul style="list-style-type: none"> • Attach uncertainty mechanism 	<ul style="list-style-type: none"> • Mechanism will adjust allowances within the parameters set – both reduction and increase
Information asymmetry: Ofgem error	<ul style="list-style-type: none"> • Business Plan Incentive* 	<ul style="list-style-type: none"> • A strong incentive (where ambition will be rewarded) encourages companies to put forward ambitious cost forecasts
	<ul style="list-style-type: none"> • Use of historical costs from previous price control and proposals** 	<ul style="list-style-type: none"> • Efficient costs from a consistently strong RIIO-1 incentive informs baseline for RIIO-2 keeping comparable costs low
	<ul style="list-style-type: none"> • Enhanced Engagement process where business plans are subject to ongoing and detailed scrutiny by User Groups, Consumer Engagement Groups and Challenge Group 	<ul style="list-style-type: none"> • Powerful tool to give confidence to Ofgem, consumers and stakeholders that business plans have been given the upmost scrutiny and to a higher level than in the past

*this requires a strong Business Plan incentive as described below.

**where historical costs reflect future costs.

With the effective mechanisms set out above at its disposal, Ofgem can be confident in setting a strong sharing 50/50 factor and know that it will drive innovative solutions to meet the ambition in company

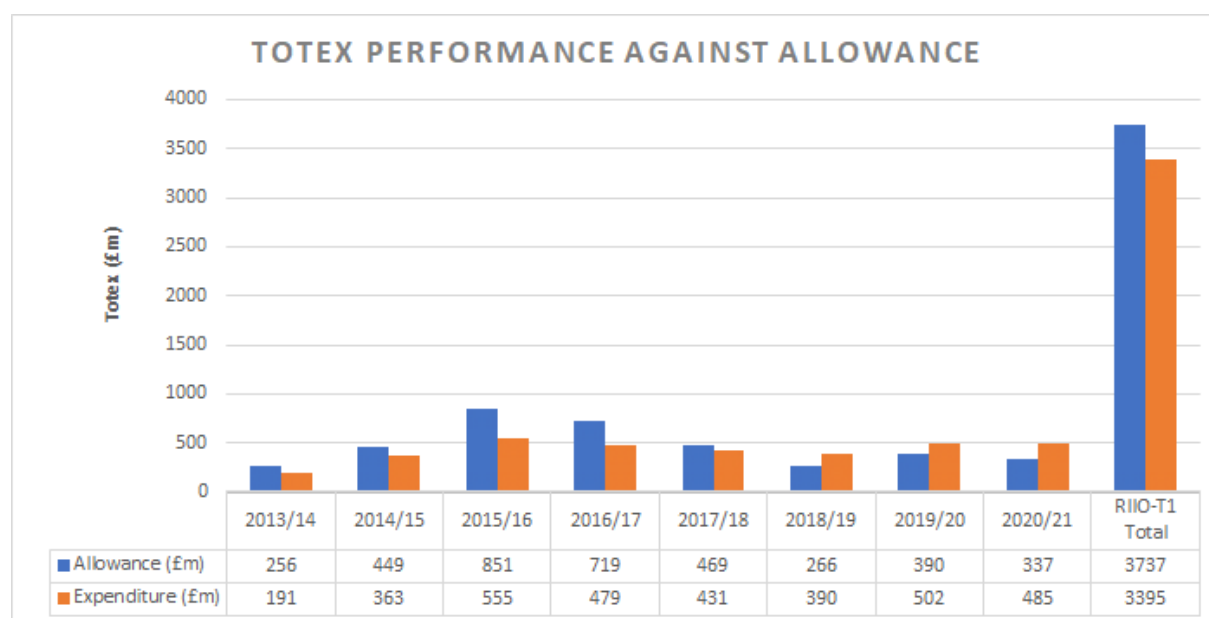
business plans and reap the cost efficiency rewards for both the companies and consumers. A weak sharing factor will achieve the opposite, constraining companies to low risk actions. We set out below what Ofgem put at risk if the sharing factor is weakened through adopting the blended sharing factor approach.

1. In-period efficiency: a strong sharing factor delivers consumer benefit

A strong sharing factor has been proven to drive in-period efficiency that will keep costs down for current and future consumers; to move away from successful practice is not in consumer’s interest. RIIO-1 was established to create that outcome and at the end of the control period Ofgem now has the evidence through annual reporting to assess where efficiency gains have arisen and, in setting RIIO-2 allowances, capture these benefits for RIIO-2 and into the future.

The data below sets out examples of cost savings we have made in so far in RIIO-T1 through process and delivery innovation. It is a proxy for what can be achieved in RIIO-T2 but only if a network perceives that the reward (Totex incentive) is sufficient to take the risk in changing its practice and process to consumers.

RIIO-T1 Totex efficiency improvements in SHE Transmission



Efficiency Driver	
Effective Project Management	<ul style="list-style-type: none"> ● SHE Transmission successfully delivered projects through RIIO-T1 with a reduced resource utilisation following changes to project strategy and schedules. ● The SHE Transmission procurement strategy to utilise sum contracts for key contracts resulted in a reduced requirement for the project site resource during construction and the testing and commissioning phases. ● Other efficiencies have been achieved on projects where the core project team was retained for all phases of the project, leading to efficiencies in the delivery programme, reduced risk and reduced the contractors’ opportunity to seek compensation events. ● SHE Transmission project teams successfully delivered projects using a reduced consultant engineering resource following changes to project strategy, structured factory inspection schedule and multi-disciplined project team approach.
Efficient Regulatory & Consent Frameworks	<ul style="list-style-type: none"> ● Through proactively engaging with landowners at pre-construction stage and successfully managing the main contractors during construction whilst emphasising the importance to contractors to respect the landowner’s property, projects progressed with minimal delays, complaints and costs.
Construction (Delivery)	<ul style="list-style-type: none"> ● Through effective project management by implementing and agreeing the genuine pre-estimate of loss delay damages with contractors this took cognisance of the delay costs that the overhead line contractor incurred, in turn controlling any exposure to additional costs for SHE Transmission. ● Successful and efficient management of contractors and the excellent relationships with landowners throughout the duration of projects meant we experienced minimal delays and therefore extensions to programme were minimised.
Risk & Contingency	<ul style="list-style-type: none"> ● Effective project and commercial management have significantly mitigated actual risk expenditure principally reducing the likelihood of high impact risks occurring and by controlling the potential impact.

We have shown why Ofgem does not need to amend the TIM in order to protect consumers from any potential unexpected outcomes. Rather, Ofgem should harness the power of the incentive regime and use the TIM to reveal efficient outcomes that consumers can capture in future price controls. The shorter price control period further justifies the need for a strong incentive to maintain the same pace of change in efficiency. We believe that the logical response will be to set a strong TIM with a 50/50 sharing factor. To do otherwise would be to discard the Totex incentive, and the benefits that come from that, for no identifiable consumer gain.

2. BAU innovation

Rather than seek to use the TIM as a tool to protect consumers from any potential unexpected outcomes, Ofgem should harness the power of the incentive regime and use the TIM to reveal efficient

outcomes that consumers can capture in future price controls. The shorter price control period further justifies the need for a strong incentive to maintain the same pace of change in efficiency.

Ofgem has ambitions of moving more innovation into BAU. As noted in our response to the innovation questions, this will only work in practice where a) there is a strong possibility of an in period return on investment and b) there is a strong sharing factor on that return on investment. Where the sharing factor is weak, this will disincentivise networks from seeking out innovation solutions to meet and exceed RIIO-2 outcomes. Instead, they encourage a race to the bottom. A lower sharing factor discourages investment in efficiency and innovation and leads to a worse consumer outcome.

3. Whole system solutions

As noted on our response to **CSQ11** on whole system solutions, SSEN believe that if Ofgem wants to drive whole system behaviours and positively encourage network operators to actively engage and develop new ideas, we believe the right incentive package – and strength of incentive - is fundamental.

We believe one of the most appropriate ways to drive whole system behaviour is to retain a strong TIM. Indeed, we cannot see any circumstance where a weak TIM is beneficial to network operators' behaviours or customers. We believe a strong TIM, where network operators can share equally in the benefits realised from whole system approaches relative to what action they would otherwise have taken, will be key. We acknowledge that it will not be appropriate to reference the counterfactual indefinitely, but we believe, at least for the purposes of RIIO-2, that this approach is needed to drive, as a minimum, those whole system behaviours that are demonstrably more economic.

4. Stable and necessary investment

Changes in price control period causes uncertainty and can destabilise investment. Retaining the same sharing factor will reduce this stability. Changing the sharing factor across price control period. Changing from a higher to a lower sharing factor from one price control period to the next can disincentive investment towards the end of a current price control.

There are also material concerns around having an asymmetric sharing factor especially when large capital expenditure programmes are subject to significant phasing movements compared to initial forecasts. In the event of phasing changes and an asymmetric sharing factor, then company or customer would be exposed to material gains or losses as a factor of phasing and not efficiency.

A weak incentive is not the correct response to concerns over the provision of incorrect ex ante allowances. It does not encourage operators to chase productivity gains and, in doing so, reveal underlying efficiency. It does not benefit consumers in the short or long term. Rather it will move it closer to a pass through and this risks unnecessary investment.

CSQ71. Do you agree with our assessment of the blended sharing factor in comparison to the Ofwat cost sharing mechanism? If not, please provide your reasons.

We don't agree with Ofgem's assessment. Neither Ofgem or Ofwat's approach is perfect but Ofwat's is considerably better than Ofgem's. This is due to the fundamental issues with the blended sharing factor approach (see our response to **CSQ70** above and **CSQ72** below) and the very likely inequitable outcome of an efficient and ambitious company having a significantly lower sharing factor than an efficient company in RIIO-2. The only issue of concern with Ofwat's is the double penalty/double reward where the ratio of a company's view of costs to Ofwat's view of costs informs both the business plan incentive and Totex incentive (this is similar to the IQI). This is insignificant compared to the issues with the blended sharing factor. The blended sharing factor is not an improvement on Ofwat's position on these incentive.

Ofwat's approach is simple and as such we believe will be effective. Ofwat clearly keeps at the heart the purpose of any business plan incentive and any Totex efficiency incentive. The former to drive cost ambition and the latter to drive in period efficiency. If a company is close to its view of costs (and is ambitious in its outputs) it will receive a business plan reward. That reward also comprises a strong sharing factor that will drive in period efficiency. Both outcomes are in consumers interests. Ofwat does not bring in "confidence in its ability to set cost allowances". Presumably this will come through the framework and the faith it has in the cost assessment toolkit. We accept that Ofwat's approach can be criticised as double reward (double penalty) but it is preferable to Ofgem's BPI and blended sharing factor approach (note the issues set out throughout this section on the blended sharing factor).

In any case, a comparison between Ofgem and Ofwat's approach is not the pertinent point. The focus should be – will Ofgem's proposals for the BPI and TIM deliver for energy consumer and stakeholders. We do not believe so.

The optimal position for consumers is to completely separate business plan incentives and in period efficiency incentives:

- 1. Use the BPI to drive ambitious cost and output business plans across all sectors***
- 2. Do not tie the assessment of these plans to the sharing factor but set the sharing factor at 50/50 to drive in period efficiency (for all the reasons set out in CSQ70).***

Despite our strong view on this we set out some thoughts on the question asked.

Ability to set a sharing factor based on an independent view of costs

Ofgem has placed a large weighting on the ability to set a sharing factor based on an independent view of costs. However, other than stating that this independence will come from making use of historical costs it has not revealed any further detail on how it will achieve this independence. We believe that there may be a difference in how "independence" is being defined in Ofgem and Ofwat. The use of historical costs was certainly at the heart of Ofwat's cost assessment in PR19 and therefore it played a

critical role in determining the PR19 sharing factor. As noted in its consultation on cost assessment for PR19⁸⁴:

“In July 2017, companies submitted data tables with cost, and relevant non-cost information (eg “cost driver” information) on their wholesale water and wastewater services in the preceding six years, 2011-12 to 2016-17. This data has been subject to extensive quality assurance. Based on this data submission, and information from the annual performance reports, we have been developing econometric cost models for PR19.”

It may simply be that because the source of the data is the companies (as is also true for Ofgem), that Ofwat do not classify this as “independent”. We do not believe Ofwat place less weight on the use of historical information or independent benchmarks in its cost assessment toolkit than Ofgem. It may simply be that Ofwat recognise and accept that past information doesn’t always exist and that is not a reason to automatically give a low sharing factor and limit in period drive for efficiency.

This response should be read alongside our answer to **CSQ72** below which sets out SSEN’s concerns with Ofgem using *predictability* as the strongest evidence on which to set a sharing factor.

Incentive on companies to provide robust cost justification and mitigation measures against uncertainty

If Ofgem pursue the blended sharing factor approach which we do not support, they must give significant weight to robust cost justification from the companies. See our response to **CSQ72** below on this.

Ability to drive company ambition in cost forecasts

See our response to **CSQ72**. Ofgem’s approach here to avoid double penalty/double reward as per Ofwat, can result in an inefficient company being given a higher sharing factor than a more efficient company. SSEN strongly believe a double reward/penalty is the least worst outcome for consumers.

Ability to mitigate behavioural biases

The blended sharing factor **creates rather than mitigates behavioural biases**. Ofgem throughout the document note that *predictability* is the strongest evidence that a company can provide to Ofgem in determining the sharing factor (see **CSQ72**). This will also be used in Stage 2 of the BPI. Companies that know it can’t provide such evidence and accept that they will stand to lose regardless will not respond to the incentives. The logical response at the price control review stage will be to limit the risk, submit a standard and not ambitious business plan. During the price control as it will have a low sharing factor the logical response will be to spend allowances. **This is not in the best interests of consumers, but the reward is simply not there for companies to take the risk.**

⁸⁴ <https://www.ofwat.gov.uk/wp-content/uploads/2018/03/Cost-assessment-for-PR19-A-consultation-on-econometric-cost-modelling.pdf>

Ofwat is the opposite. In simple terms the incentive properties drive companies to take the risk as the reward is available. Ofwat is seeking output ambition and cost ambition. It is not adding a layer of complexity into the incentivise design to seek “confidence. Presumably this will come from its cost assessment toolkit and other parts of the price control framework.

Ease of implementation

The blended sharing factor appears to be a very complex approach to setting sharing factors in comparison to Ofwat’s mechanism. One of the reasons Ofgem has decided to remove the use of the IQI is that it was too complicated but are proposing to implement a mechanism that is equally, if not more complex. The lack of detail provided by Ofgem on the blended sharing factor only adds to the uncertainty around the complexity. SSEN believes that a main aim of the RIIO-2 framework was simplicity, yet the blended sharing factor is very complex and the Ofwat mechanism should be considered.

CSQ72. Considering the blended sharing factor, what are your views on the factors (e.g. predictability, ability to effectively deal with uncertainty) or evidence that could be used to distinguish between costs that can be baselined with high confidence and other costs?

SSEN believes that Ofgem has not clearly set out how the blended sharing factor will work in practice. Ofgem states that it will provide further detail on the proposed process for calculating the blended sharing factor in its methodology decision should it decide to progress with it. To be able to respond in the most useful way requires being fully informed of how it would work in practice – the process should have been set out in the consultation. There are so many unanswered questions at this stage and the first industry engagement on the detail was provided a week prior to the response date. Nevertheless, we have provided our best view on the information available on the factors Ofgem set out in the consultation.

Predictability: Ofgem state that the strongest evidence a company is that directly linked to historical expenditure and this will lead to a higher sharing factor. This message was reiterated at an industry workshop on the TIM and BPI on 7 March 2019. Ofgem then go on to say that high-confidence baseline costs **may** apply where companies suggest effective *uncertainty mechanisms* or price control deliverables and where the *quality of evidence* is strong, but the weight on the latter two seems to be significantly less. **We believe all three should be used as “toolkit” and the appropriateness of each and therefore the weighting of each will differ by sector.**

For SHE Transmission predictability of costs is impossible to demonstrate for the majority of our costs. c70% of our expenditure is on large, **bespoke** projects. By their very nature there are no historical comparators or available benchmarks. For some elements within those projects (some assets) there will be comparators, but these will make up a small proportion of the costs. We will need to rely much more on *quality of evidence* and *uncertainty mechanisms* to give Ofgem confidence. Ofgem must recognise this and be open to this, or the approach is discriminatory and will do little to reveal truly efficient costs/reduce information asymmetry. It is not acceptable to ambitious companies who seek to build on

the efficient behaviour of RIIO-1, nor in the interests of consumers, for Ofgem to justify this by saying “a lower sharing factor will be applied to costs where the past is less likely to be a good indicator of the future. This may limit the benefit companies can gain from underspending, but equally it exposes them less to the impact of overspends that may arise”. This focus on predictability will not only unfairly “limit the benefit to companies” as Ofgem suggest but will limit the benefit to current and future consumers of those companies (such as those set out in **CSQ70**). It is a huge step back from RIIO-1. Moreover, it is a huge step back when Ofgem can gain the confidence it seeks from other price control mechanisms.

Ofgem must also recognise that past costs **may not be a good indicator of future costs** as they may not be sufficient to deliver for consumers in a RIIO-2 world. As companies are asked to do more in BAU costs to deliver PCDs as opposed to being incentivised to do so via ODIs, then future costs in some areas may be higher than past costs, even when accounting for efficiencies and productivity improvements. The higher costs may be necessary in **order to meet the needs of consumers and stakeholders as identified through the Enhanced Engagement process**. Therefore, the role of *quality of evidence* is arguably more important than *predictability* to ensure that the costs **will deliver for consumers as we move into the RIIO-2 period and the EST challenges**.

Further, past costs do not necessarily mean efficient costs; a “predictable” company may be an inefficient company but may have the opportunity to benefit in RIIO-2 through a higher Totex incentive strength than an efficient company who simply does not have the opportunity to point to historical/predictable costs to the same degree. Again, this points to the importance of the *quality of evidence* and the flaw in Ofgem’s view that *predictability* is the strongest evidence that a company can provide. To illustrate, a company that pays £100 for an asset and can show that it has consistently paid £100 in the past will get the top end 50% SF for that set of assets. Yet there is another company who pays £80 for that same asset so the first is inefficient but the first company will still get top 50% SF. Following the same logic, the “efficient” company traditionally only paid £75 so gets a 15% SF as it is now paying more at £80. The blended sharing factor focus is not about efficiency but predictability and giving Ofgem confidence in costs. It therefore follows that a company can be inefficient but as long as it is consistently and predictably inefficient it can be given the opportunity to benefit from a higher sharing factor. This is illogical, inequitable and not in the interests of consumers. The consumer of that company will pay more for the asset and will also share less in the benefit when the company underspends against allowances (which in these circumstances it is likely to do).

Ability to effectively deal with uncertainty: SSEN believes any costs subject to an uncertainty mechanism should be deemed “high confidence”.

Quality of Evidence: SSEN believe quality of evidence plays a critical role in Ofgem gaining confidence in the costs. However, Ofgem **must recognise that this cannot be independent of the companies’ submission**. As noted above, SHE Transmission operates in a unique environment that is not easily comparable to other companies, e.g. due to the very different topography. The cost of placing a substation in the North of Scotland will differ from a similar project in the south of England due to accessibility, weather conditions and travel. This is also the issue when benchmarking against international comparators. Therefore, Ofgem will be required to rely on justification in areas such as native competition, framework contracts, tendering processes etc. To suggest as Ofgem does that

companies can submit “a comparison with other companies’ cost for the same activity” assumes that the activity is the same (ie predictable). Again, this highlights the weight Ofgem is placing on *predictability*. As noted above, much of SHE Transmission’s activity is not predictable or comparable.

Overall if Ofgem want to rely on predictability and independence from companies’ submissions to gain confidence in cost and then use in setting the incentive strength of arguably the most important RIIO incentive it must set out in detail how this is possible in reality without resulting in inequitable and adverse consequences for companies and consumers. We have not seen such evidence to date.

CSQ73. Do you have any views on the level of cost disaggregation we should apply to calculate the blended sharing factors approach on (regulatory reporting pack level or another level)?

We believe this should be at the RRP level but as the packs have only just been issued in Transmission we are not able to comment on the appropriate level of disaggregation. This needs to be discussed in detail at the cost assessment working group.

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

SSEN believes that the business plan incentive and the blended sharing factor will not drive the right behaviours from the network companies. We believe that the two components are weak at incentivising the right behaviours – ambition and innovation. The Business Plan incentive reward should be incentivising companies to provide rigorous and ambitious plans that demonstrate efficient costs and ambitious outputs, and this should be supported by a strong 50:50 sharing factor that will drive genuine in period efficiency, as Ofgem has proposed measures which will substantively remove the risk unjustified underspend.

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

Ofgem hasn’t provided an assessment of its sharing factor ranges so we can’t comment on it in detail. It has not even provided a high-level view on why 50% is the maximum (when in GD for example it was 63%). We make some high-level points:

- A weak sharing factor will not drive the right behaviours as noted throughout our response
- Symmetry is well documented as a good incentive property so if 15% is the low end, 85% should be the high end
- We strongly oppose binary measures of 15% and 50%. At the very least there should be a mid-point
- Ofgem need to be clear on the effective sharing factor – ie are the ranges pre or post tax?

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

Ofgem need to go back to the raison d'être of the TIM/sharing factors, which is to drive in period efficiencies to benefit current and future consumers. If its approach does not achieve this, then it must reconsider it.

CSQ77. Do you have any evidence on the scope for productivity improvements in the different sectors?

Not at this stage.

CSQ78. Do you have views on whether adjustments to sharing factor levels after the price control is set are desirable or necessary?

SSEN as stated in previous questions in the is response believes that a 50:50 sharing factor is the most appropriate sharing factor RIIO-2, given the proposals to significantly reduce the risk of underspend from external factors. It provides the stability to companies and consumers while driving efficient practices, set the standard for the price control period. Adjustments to the sharing factor level after the price control has been set is not desirable or necessary. The fact that Ofgem is considering implementing the use of sharing factor adjustments

CSQ79. Under which circumstance do you consider such adjustments should take place?

SSEN doesn't believe that adjustments to the sharing factor should take place once the price control has been set. This provides clarity and certainty for both the networks and the consumers. However, if Ofgem pursues this blended sharing factor approach adjustments will have to take place for reopeners, where ex ante allowances are adjusted.

CSQ80. When do you consider an adjusted sharing factor should be calculated?

We believe that the Totex sharing factor, or range of factors if a tiered mechanism is utilised, should be calculated at the beginning of the price control period. However, if adjustments were to be made it should be calculated through the close out process.

Ensuring fair returns questions

CSQ81. Do you agree with our comparative assessment of RAMs set out in Appendix 4?

Our general view on RAMs is that these mechanisms are akin to a tax on effort, as set out previously in our response to the RIIO-2 Framework consultation. Furthermore, they have a distortionary impact on incentives and their introduction has not been justified by means of a full and clear regulatory impact assessment. We continue to believe that these mechanisms are damaging to consumers in the long term. To date, the performance of Networks has led to improved cost efficiency, productivity and customer service and the introduction of these mechanisms do not drive this performance any further. As set out in our main finance response, we do not believe these are in the best interest of consumers and have provided our own evaluation of RAMs on a more comprehensive framework as provided by EY⁸⁵ in our response to the Framework consultation. In this study prepared for the ENA, EY found that RAMs provided little value to consumers compared to existing mechanisms and had unintended consequences. Their conclusion was that these mechanisms were inferior to existing mechanisms and adversely affect consumers in the long term due to the distortionary and behavioural affects. In this report, they stated:

“The costs and benefits of these mechanisms, and the risks and uncertainties associated with them, need to be considered carefully, taking into account the objectives that RIIO-2 is trying to deliver, the principles of good regulation and whether those objectives could be more effectively achieved using some of Ofgem’s existing tools.”

It is also stated in EY’s Conclusion that *“Our assessment of the fair returns mechanisms summarised above tends to suggest that **none of these mechanisms is clearly going to create net-benefits for consumers**”⁸⁶.*

Ofgem’s concerns around forecasting can be addressed by way of a reopener mechanism and a shorter price control both of which are available to Ofgem for RIIO-2. Furthermore, it should be noted that higher returns do not always mean higher bills. If a company were to spend at allowance level and not drive efficiencies, bills would be higher versus a company which drives efficiencies and innovative solutions, driving down cost and therefore reducing bills. We also previously noted that in Ofgem’s own study undertaken by CEPA⁸⁷ evaluating RIIO-1, there was little evidence of errors which caused excess returns. As we set out in our response to the Framework consultation, the CEPA report shows there are limited issues in RIIO-1 with none requiring wholesale changes to the RIIO framework, such as RAMs. Furthermore, we believe that Ofgem’s comparative assessment of RAMs is inadequate. RAMs are in themselves an inappropriate substitute for setting a good price control using a refinement of existing mechanisms. Any comparison of RAMs needs to be undertaken against the counterfactual of existing mechanisms and should clearly show why these new mechanisms would result in better outcomes for consumers.

⁸⁵ Evaluating the need for, and strengths and weaknesses of, fair returns mechanisms for RIIO-2, Ernst and Young, April 2018

⁸⁶ Emphasis added

⁸⁷ CEPA report, Evaluation of RIIO-1, Prepared for Ofgem (2018)

With the view of considering the proposals in isolation in terms of which mechanisms are the least damaging to consumers, we have considered the three methods stated in the Sector Specific Methodology; Sculpted Sharing (SS), Sector Average Sculpting (SAS) and Anchoring (A). This has been done using Ofgem’s comparative assessment areas as below albeit this is predicated on these mechanisms being more fully developed and calibrated after business plans are submitted to Ofgem.

In our evaluation of the mechanisms in isolation, each mechanism has been scored *based on its’ ability to deliver Ofgem’s intended policy objectives*⁸⁸. Ofgem’s policy objective is to avoid the *clustering of returns and mitigate windfall gains and losses in each sector while mitigating any dampening of the incentive properties in the price control*. We have assumed that the over-riding criteria is **effectiveness** so have evaluated the other criteria first⁸⁹.

Impact on incentives – we do not agree that SS is only marginally negative, with SAS and A being neutral. RAMs in effect penalise outperformance and hence, there will be a negative impact on incentives as the benefit of high performance in these areas will be removed through reducing company returns. Due to the uncertainty of sector averaging and anchoring particularly in Transmission with fewer network companies, we believe that SS is the least adverse mechanism.

Risk profile – there is a comment against SS that there would be ‘complete certainty of when it would be applied’, reducing company risk profiles. The fact that there is a cap on returns increases the riskiness of companies as, even with there being certainty of application, companies are at risk of restricting their performance with the expectation that returns will be clawed back. This is not in the best interested of either consumers or investors as better performing companies provide a better, more efficient service. The influence on risk profile for SAS and A is stated as neutral and cited as ‘reducing risk as it would limit the range of possible outcomes’ however these are dependent on the performance of other companies so surely this increases the risk to individual companies as their performance is affected by others?

Impact on collaboration - stated as neutral, we do not agree with this sentiment as if individual company performance is affected by other companies in the sector, there will be reduced sharing of best practice and cross-sectoral collaboration as individual operators have the ability to have a negative impact on others in the sector if they outperform, the operators will therefore keep best practice to themselves in anticipation that sharing could push another operator over the upper threshold.

Complexity and implementation - Agree that there is a negative impact in relation to the level of complexity and challenges in implementation but do not agree that SS and A are only marginally negative in this area, all mechanisms greatly increase complexity in the price controls as these are new, complex mechanisms.

Overall Effectiveness – this has been answered from Ofgem’s point of view as is stated a positive in relation to keeping company returns within a range. The answer is dependent on the view of what

⁸⁸ This is our interpretation of the word “effectiveness” in the context of implementing a new regulatory mechanism.

⁸⁹ Ofgem has not defined the over-riding criteria in the SSC.

'effectiveness' means. The mechanisms may be effective in terms of reducing company returns but they are not effective in terms of driving high-levels of performance in either the Totex or output incentive arenas as these mechanisms will encourage companies to meet their targets and no more due to the threat of high performing companies having their returns reduced. The additional effort to maintain the highest levels of performance is therefore not rewarded but rather penalised and hence, effort will not be focussed on these areas. We do not believe the SS will deliver Ofgem's intended outcomes compared to existing mechanisms which would more appropriately achieve this.

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

Yes, we agree with the proposal not to give further consideration to using discretionary adjustments. By their nature, these adjustments would be ad hoc and would introduce a high degree of uncertainty and potential volatility to both consumer bills and investor returns. Neither uncertainty or volatility should be introduced to a price control unnecessarily and we feel that, in this case, it is unnecessary due to the fact that there are existing mechanisms which can be tightened in order to achieve the overall perceived aim of protecting consumers and investors from large variations between actual and expected returns.

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

We do not support any performance-based adjustment being applied to the transmission sector. If RAMs are included in the final price control settlement, we agree that an individual performance-based adjustment would be the most appropriate approach for the sector. A sector average approach would not work in this area as it would be largely skewed by the performance of National Grid Electricity Transmission plc (NGET) which would mean that the performance of the other Transmission Operators (TOs) in the sector would be unjustifiably affected by and up/downside performance on the part of NGET. This would mean that all UK consumer bills would be susceptible to an increase or decrease solely due to the performance of the largest TO. We do not feel that this is fair on the consumers in the non-NGET areas in the UK.

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

Our response concentrates on the ET and ED sectors as these are the sectors in which we operate. In terms of the read across of GD to ED, we do not support average-based adjustment approaches to RAMs. This would drive different behaviours in relation to sharing of best practice and efficiency aims if companies need to wait until they know the average performance for the sector before being able to bank the return they have made. Companies are not encouraged to perform to as high a level as possible if the commensurate returns can be taken away from them. We do not believe RAMs will deliver the intended

policy objectives that we have summarised in response to CSQ81 compared to existing mechanisms and therefore Ofgem's evaluation is both incomplete and inaccurate.

CSQ85. Do you agree with our proposal we should not adjust companies downward if they perform below their base cost of equity or upwards if they perform above their base cost of equity?

We do not support any return adjustments. If RAMs are included in the final price control settlement, we would not support a sector average based-adjustment as we feel that individual performance-based adjustments are fairer to both the consumers and investors of each operator. If a sector average-based approach was applied, we do not support the proposal to exclude those companies who are performing below or above the base cost of equity from the anchoring calculation. The behaviour that this would drive would be that companies would not strive to outperform to the extent possible due to the following factors.

Firstly, in the event that there was an upward adjustment required for the sector to remedy a below average return for the sector, those who are performing efficiently and achieving above the base cost of equity would not receive an uplift to their return while those who have average performance and are not pushing the boundaries of efficiency would receive an uplift to bring them closer to the level of returns of those who are outperforming. This dis-incentivises companies to achieve genuinely higher performance-linked returns as others in the sector are in effect receiving a free 'boost' to returns having not invested in efficient and innovative practices to achieve this.

Secondly, in the event that there was a downward adjustment required for the sector to a remedy an above average return for the sector, those who are performing efficiently would be penalised for this good performance while those who are materially underperforming would have a protected status as their returns would not be adjusted downwards. This dis-incentivises companies to perform efficiently as those performing well and delivering a better network for their consumers are being penalised while those who are not delivering are being protected.

CSQ86. Would a return adjustment threshold of ± 300 bps RoRE achieve a good balance between providing scope for companies to outperform and ensuring return levels are fair?

We do not agree with any return adjustment being in place. We do not see the potential of 300bps upside in returns when we look at the proposals in the round and so do not understand the need for RAMs when it is highly unlikely that the threshold can even be met particularly in our assessment of RIIO-T2 potential incentive ranges.

Ofgem has stated that the 300bps reference point would not have been breached by any operator within the RIIO-1 period and hence, RAMS would not have applied for this period. This leads to the question, what problem is Ofgem seeking to solve through the implementation of RAMs when they would not have had any effect in RIIO-1, the perceived period of 'higher than expected returns'? Our view is that the tightening of the current RIIO-1 price control settlement will result in a downward trend in returns from

the outset and, with the limited additional earning potential for good performance currently within Ofgem’s proposals, RAMs are unnecessary. Their only contribution to the price control being additional complexity. The sector specific consultation itself states “We do not anticipate them being employed if the price control operates as expected”⁹⁰. Ofgem should be confident that the tightening and re-calibration of the RIIO-1 settlement should achieve the aim of the price control operating as expected without the need for RAMs.

Furthermore, the interplay between the uplift in returns where the return on equity falls 300bps below the sector average and the cashflow floor needs to be further explored. If a company is about to trigger the floor but it is looking likely that it will be given an uplift in return due to overall returns falling below the sector average, there are questions which arise around whether the floor should or would trigger.

CSQ87. What are your views on the proposed use of RoRE as a return adjustment metric? Would it be suitable for the gas and electricity transmission sectors and the gas distribution sector?

We do not agree with RoRE being used as a return adjustment metric as it is not complete measure of performance. We do not support application to performance to the aspects where incentives are applied as this would dampen the incentive properties of output incentives. We would suggest that Ofgem continue to adopting a robust methodology for cost assessment in setting Totex allowances as with previous price controls which avoids the need for a RAMs mechanism. We note that we do not feel that the application of RAMs is the correct approach to managing this. Encouragement of submission of high-quality business plans should lead to the setting of reasonable Totex allowances for all companies.

Ofgem has the RIIO-1 actual versus allowance dataset against which to assess the business plan submissions, which will allow better informed allowances to be set. A comprehensive cost assessment process when setting of these allowances as well as a justified sharing factor being agreed for each company should lead to a sensible baseline and sharing regime. Furthermore, uncertainty mechanisms can be used for those areas where Totex spend is uncertain to ensure that reasonable allowances are agreed once better information comes to light as opposed to unjustified outperformance on the basis of incorrect allowance setting. Over 75% of SHET’s T1 allowances are driven from uncertainty mechanisms. These allowances are assessed during the price control when there is more clarity around the expenditure efficiency assessments.

For Transmission, there are insufficient data points to be able to rely upon this metric and also significant regional and company variations. As a result, we do not believe that using RoRE as a RAM metric is appropriate. This is supportive of our previous critique of this approach in our response to the Framework consultation with supporting evidence from EY⁹¹.

⁹⁰RIIO-2 Sector Specific Methodology, section 10.57, p.119

⁹¹ Evaluating the need for, and strengths and weaknesses of, fair returns mechanisms for RIIO-2, Ernst and Young, April 2018

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

We do not believe that financial performance should be considered within the scope of RAMs. In relation to cost of debt performance, the performance is driven by historical debt and there is no evidence to support that this was not efficiently raised debt at the time. As such debt precedes the price control rather than being an in-price control decision which companies can influence, the justification for including performance on debt is unclear. Furthermore, Ofgem's intention to retain cost of debt indexation for the price control period is not in line with requiring a RAM to manage performance in this area. Any dampening of incentive properties around the cost of debt index mechanism would be to the detriment of consumers in the long-term, discouraging both refinancing and pro-active treasury management to be better than the cost of debt benchmark. We have also noted that Ofgem does not intend to introduce a sharing mechanism for debt under or out performance to retain incentive properties. Therefore, including the cost of debt in a RAM mechanism is contradictory to that decision.

Our view on tax performance is that companies should be neutral to out/underperformance as tax should be a pass-through. The latest round of Regulatory Financial Performance Reporting (RFPR) has shown that tax outperformance across each sector as a whole is negligible, being nil on average across many of the sectors and hence, in the name of simplicity, tax performance should be excluded from the scope of any RAMs.

CSQ89. Should we implement adjustments through a 'true-up' as part of the annual iteration process or at the end of the price control as part of the close-out process?

We do not support any return adjustments. If RAMs are included in the final price control settlement, any known certain adjustments should be processed as part of the close-out process. It would not be practical to look at one year's performance in isolation for a myriad of reasons, including expenditure phasing variations, certain output targets being set for the full price control period, timing of agreement of re-opener spend and allowances etc. Therefore, our view would be that a close-out adjustment would allow a more accurate calculation to be performed at a time where full price control performance can be considered, as opposed to volatility being introduced through in year annual iteration process adjustments which may be reversed in future years of the price control, leading to unnecessary volatility in consumer bills. We therefore agree with Ofgem's current position, which reflects the feedback provided at the ENA working group where the practicalities of an AIP adjustment were discussed.

RIIO-2 Achieving a reasonable balance questions

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

This is a difficult question to answer without an impact assessment of the measures proposed. However, some observations are set out below:

- **Uncertainty mechanisms and indexation:** SSEN is supportive of the principles of having well-established uncertainty mechanisms and indexation but without going into or having the detail of each one it is difficult to comment if the balance between accuracy and simplicity is being achieved. Ofgem should leave options open on the most appropriate indexation and company specific arrangements until submission of business plans as getting these areas wrong could cause more damage than setting ex ante allowances with no ability to adjust.
- **Cashflow floor:** We struggle to see cashflow floor as a trade-off between simplicity and accuracy. While removing it will remove a layer of complexity it doesn't follow that the price control will therefore be more accurate. It simply follows that by having it Ofgem suspects it is likely to fail in its duty to ensure companies are financeable because it has failed to calibrate the price control correctly. There is no need to introduce such a mechanism around creditworthiness and protection from downside scenarios if the price control is properly calibrated as companies would earn a reasonable and appropriate rate of allowed return.
- **Price control deliverables:** SSEN supports PCDs and believe they play an important role in ensuring accuracy and fairness for consumers. Companies should be held to account for the delivery of outputs committed to in the business plan through PCDs but there needs to be flexibility to allow for the substitution for materially equivalent outputs particularly as we move into the uncertain world of the EST. Please also note the issue with mission creep of PCD in **CSQ4** which can result in sacrificing too much simplicity for marginal gains in accuracy.
- **Dynamic targets:** SSEN disagrees that dynamic targets provide greater accuracy to a price control. It is not the dynamic element of targets that provide accuracy, but it is the baseline calibration of the targets. Any change in a target during a five-year price control to reflect "getting it wrong" will be marginal. We also do not accept that companies exceeding these targets, even systematically, is necessarily a reflection of them being inaccurate. Rather, it may simply be that the incentive has driven the right behaviours; companies have responded to the incentive and sought to exceed customer and stakeholder expectations. Dynamic targets will not improve accuracy but will have unintended consequences of stifling performance.
- **Network resilience measures:** We fully support network resilience measures in the price control. But it is important that at the end of period position is based on accurate data at the start of the price control. As noted in our response to **CSQ20** it is essential that any outputs related to NOMs or NARMS ensure that the network companies are delivering what it was paid to do over the course of the price control period. Network companies and consumers should not be exposed to windfall gains or losses just because the information on asset health provided by them to set the allowances

proved to be incorrect. Given the scale and complexity in this area, ensuring accuracy at the start of the price control is difficult and we accept that a rebasing exercise may be required.

- **Innovation stimulus:** SSEN fully support the continuation of an innovation stimulus, although we are not convinced this is particularly complex and adds significantly to the simplicity v accuracy debate set out. This is essential to deliver consumer benefits, particularly in a shorter-price control and one where the sharing factor proposed will be weaker than in RIIO-1. Any complexity will be justified to deliver the well stated benefits as outlined in our responses to **CSQ46** and **CSQ48**.
- **Return Adjustment Mechanisms:** RAMs add an additional layer of complexity to the price control and fails to deliver on a core RIIO principle of transparency. Ofgem’s concerns around forecasting can be addressed by way of a reopener mechanism and a shorter price control, both of which are available to Ofgem for RIIO-2 and both of which do not lead to an illogical and inequitable outcome for consumers. RAMs imply that if you outperform then you will be *pulled back* whereas if you underperform you may be *pushed forward*. This seems an odd incentive whereby performing badly may result in protection compared to performing well which could result in punishment. The behavioural incentives of this mechanism are at odds with what is the best interests of consumers.
- **Competition:** we are not convinced there is a simplicity v accuracy debate for competition.
- **Business plan and sharing factor:** SSEN believes that calibrating both of these correctly are critical to the success of the price control. We have provided extensive feedback on both these in this response. As proposed they add significant complexity without justification i.e. that it will deliver the desired consumer outcomes. In fact, as proposed it will not drive ambitious cost forecasting in business plans nor will they drive efficiencies within the period, thus working against consumers.

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

SSEN acknowledge and understand the external pressure on Regulators to evaluate whether current settlements achieve what consumers need and want. We also face such pressure. Our response has been to address the issues in an open and transparent way. For example, we are part of a Group which has championed the values of Fair Tax accreditation and are a committed Living Wage employer. We have responded to the public debate on issues such as transparency and fair returns by taking part; we are releasing a series of consultations and open letters in conjunction with Citizen’s Advice on these topics.

Our concern is that, to avoid further criticism of its decisions, Ofgem has not sought to adopt lessons learned but proposed a RIIO-2 framework which blunts existing efficiency incentives in a desire to secure a predictable outcome. There is a real fear of “getting it wrong” and this has resulted in a risk averse approach. We do not believe this is in consumer’s interest. With significantly weakened incentives on outcomes and efficiency, combined with unprecedented low base allowances, the proposed RIIO-2 methodology set out in the consultation risks a return to rate-of-return regulation.

We do not believe the question should be one about other measures to improve the accuracy but about assessing the impact of current proposals on consumers.

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

We disagree that steps have been taken to simplify the price control. Overall it is much more complex. In particular, we note the proposals on the blended sharing factor (and its use in the business plan incentive), dynamic targets, RAMs, and cost of debt.

CSQ93. Do you agree with our consideration of the risks facing these companies? Do you think the measures we are proposing will mitigate these risks? Does the expected level of return indicated by our proposals reflect these risks?

We have set out our view of risk in the main part of our response. Our view is that Ofgem has introduced a significant level of risk to the sector and, as such, a mitigation would be to readdress the balance of the return and risk profile. This would involve considering the removal of some, if not all, of these mechanisms and providing an appropriate cost of equity as we have set out in our wider response.

CSQ94. Have we achieved a reasonable balance with our proposals in seeking to achieve an accurate price control with return adjustment mechanisms only being used as a failsafe? Should we instead have a simpler price control and put more reliance on return adjustment mechanisms?

RAMs do not provide a simple price control and therefore should not be included as a failsafe as they do not deliver the policy objectives we believe Ofgem is seeking to meet. We do not believe there is an appropriate balance of risk and return in the price control to maintain financeability, attract and retain investment, drive innovation and efficiency, and deliver value for consumers at a fair price.

CSQ95. Have we achieved a reasonable balance in our proposals in considering return adjustment mechanisms alongside the expected-allowed return wedge? Should we instead only rely on one mechanism? What additional value would this bring?

As we have set out in our main response, the allowed versus expected return adjustment is detrimental to consumers and should not be implemented. We also see RAMs as an inappropriate regulatory mechanism which will give rise to a net cost to consumers. RAMs and allowed versus expected return adjustments are being targeted at similar issues Ofgem believe exist in RIIO-1 and need corrected in RIIO-2. As we have set out, we do not believe there is evidence justifying their implementation compared to existing well-established mechanisms.

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

No, when comparing the sector specific response to evidence from our engagement process Ofgem has not identified the right focus.

Delivering for our customers and stakeholders has been facilitated in RIIO-1 by a RIIO framework which encourages ambition, rewards outcomes and drives ongoing efficiency. Our customers and stakeholders tell us that they want to see the value in network outcomes; **where value is represented by a balance of cost and outcomes**. Stakeholder feedback highlights key themes of affordability, but also decarbonisation, environmental impact, customer service, supporting vulnerable customers, and a sustainable, flexible, network. In short, our consumers value **both** lower costs and delivery of outputs.

Ofgem risks adopting a narrow focus on the first to the detriment of the second. If left unchanged this would be a failure of RIIO-2. Short-term, low-cost and punitive settlements will leave network companies no option but to adopt a risk averse response to preserve some assurance of minimum returns. Unless addressed, it will not meet the areas of most value to consumers.

Our suggestions to avoid this and modify the current proposals are set out in Section 2.

CSQ97. Are we proposing a methodology that allows us to achieve a reasonable balance between the interests of different consumer groups, including between the generality of consumer and those groups that are poorly served/most vulnerable? Are we missing any group?

In the Transmission sector, Ofgem has stipulated that there is no role for the TOs to support vulnerable consumers. We do not agree with this. Stakeholders tell us that that TOs can and should play a role in supporting vulnerable consumers – one that supplements and compliments what DNOs do. We support this.

As we enter the EST, we enter an increasingly decentralised, democratised and whole system world where TOs will be closer to the end consumer than ever before. As such, we must be able to better support the most vulnerable and ensure their voices are heard in the decisions that we make.

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

No. The proposals focus on short-term cost reduction above all else. E.g. proposals to weaken the sharing factor and reduce the innovation stimulus will stifle innovation which stand to benefit future consumers more than current consumers. The current incentive package in TO to drive performance across the RIIO outcomes has been substantively weakened suggesting that the “job is done” and there is not need for stretching performance but simply to continue as BAU. We do not believe this meets the ambitions of our consumers.

Please reference Section 2 for further detail on how consumer interest is being harmed by the current proposals.

Preliminary impact assessment questions

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

Significant changes from RIIO-1 to RIIO-2 have been proposed. We are disappointed a full impact assessment has not been published alongside the proposals. It would have helped all stakeholders understand in detail and in full, i.e. the package as a whole, the costs and benefits of the proposed changes.

We also believe the scope of assessing the impact on RIIO-2 is narrow. It does not fully explore the long-term consequences for consumers with an appropriate counterfactual whereby refinement of RIIO-1 vs wholesale changes in RIIO-2 is the most relevant. In considering this, we believe that the evidence presented in our response illustrates that there is material concern around underinvestment in the industry from the financial proposals. As stated in our response, the CMA precedent and academic literature is supportive of avoiding the social welfare consequences of underinvestment. We also believe Ofgem has not fully considered the intergenerational impacts of the cashflow floor, the long-term impact of indexing the risk free rate and the distortionary impact of RAMs on incentives. As we have set out, these new mechanisms and the low cost of equity have a significant detriment to customers compared to refinement of RIIO-1.

We also do not believe that Ofgem has considered the impact on risk as a result of these new mechanisms in their entirety and therefore the preliminary impact is indeed no better than preliminary.

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

We do not believe Ofgem has appropriately considered the counterfactual for RIIO-1 refinement. We do not believe Ofgem has considered the longer-term implications of its proposals. Given the extent of the changes in RIIO-2 and the new mechanisms being introduced, we believe the range of interactions and complexities is extensive. To undertake an appropriately robust and comprehensive impact assessment, we believe more time and more transparent analysis is required. We intend to provide evidence on our assessment of RIIO-2 overall in due course and will provide this as part of the evidence on evaluating RIIO-2 proposals.

The assumptions have not been clearly set out, so we cannot provide a detailed view. However, we make some observations:

- ***Ofgem state*** in the section on Impact of Information Asymmetry: *“Forecasting assumptions can prove to be wrong in an ex ante price control. We believe that information asymmetry increases the probability that these errors will not be symmetric, but are more likely to be in the network companies’ favour. For example, uncertainty around the need and scope of an investment often*

results in underspending of Totex allowances. Hence, information asymmetry may lead us to set allowances at higher levels than we would have otherwise set had we more and better quality information available to us. Accordingly, some of the companies' underspend may be due to factors other than cost efficiency and result in increased consumer bills.

Our preliminary assessment indicates that, in comparison to RIIO-1, our proposals for a Business Plan incentive and the application of blended sharing factors have increased prospects of: a) revealing better quality information; and b) mitigating the risk that companies may benefit from their information advantage."

- **Observation/comment:** we fundamentally disagree with this and therefore the basis on which this part of the qualitative impact assessment is based. Uncertainty mechanisms and PCDs will ensure that underspend will be most likely due to efficiency than anything else. This will not be due to Ofgem's proposals for the blended sharing factor and BPI. In fact, these proposals will have the opposite effect. A weak and uncertain business plan will not incentivise companies submit the most ambitious cost forecasts. A blended sharing factor that places so much weight on "predictability" where TOs will stand to lose regardless, will not encourage TOs to take risk with cost ambition. Indeed, a blended sharing factor that focuses on predictability over efficiency can award inefficiency and therefore will encourage and not discourage information revealing. See our answer to **CSQ65, CSQ70** and **CSQ74**.
- **Ofgem State** in the section on Linking incentives closer to their cost and risk of delivery: *"systematic outperformance in RIIO-1 indicates that reducing incentives may yield benefits for consumers"*.
- **Observation/comment:** again, we disagree with this statement and therefore the basis on which this part of the qualitative impact assessment is based. There has not been systematic outperformance in RIIO-1 of all outputs. This is factually incorrect. It also loses sight of a basic principle: if and only if a company outperforms will a consumer benefit. Consumers will suffer if companies do not outperform incentives. Consumers will not see improvements in reliability, the environment, in customer service etc and nor will they see improvements in cost efficiencies if companies do not outperform incentives. The key issue is that consumers should not be overpaying for any output improvement or any cost efficiency but that is not the same as suggesting systematic outperformance is a negative thing. It is about ensuring the calibration of the incentives is correct and that the framework avoids unjustified cost outperformance (which it will do in RIIO-2).

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

We agree that there are significant uncertainties in RIIO-1 and RIIO-2 and these need to be further understood as part of a more comprehensive impact assessment. We believe Ofgem has failed to consider the impact of underinvestment on consumers and the appropriate counterfactual. We also

believe Ofgem need to consider the impact of RIIO-1 before making substantial changes to the regulatory framework.

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

As we have outlined, we believe more evidence is required and a more robust approach is required over a long period of time. We believe further time is required to fully consider the extent of the changes prior to concluding on the impact. As we have set out in our response, the sum of the component parts of RIIO-2 indicate that it will lead to a detriment to consumers compared to the counterfactual of refining RIIO-1 into RIIO-2.

Electricity Transmission Specific Questions

Chapter 3: Outputs: Meet the needs of consumers and network users General Output Questions – ETQs 1 to 4

ETQ1. What are your views on the overall outputs package considered for this output category?

SHE Transmission is very concerned with the outputs and incentives package that is proposed by Ofgem within this consultation. The incentives proposed within this output category represent a tightening from RIIO-T1, and when combined the potential is for a significantly weaker and financially smaller package for RIIO-T2 that will not deliver for our consumers and stakeholders.

The potential return does limit the risk we can responsibly take in putting together an ambitious business plan. We are concerned that there is a disconnect between what Ofgem has presented and what it claims to want to encourage. Ofgem appears to be setting out an approach that makes incentives harder to achieve and this runs contrary to the principles of protecting both current and future consumers. As set out in section A and B, we believe that Ofgem is overlooking an opportunity to build on RIIO-1 and drive the right behaviours in the sector to meet the ambitions of consumers and stakeholders.

ETQ2. For each potential output considered (where relevant):

- a) Is it of benefit to consumers, and why?**
- b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**
- c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**
- d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

SHE Transmission wants Ofgem to recognise the value that an incentive package delivers for consumers. We believe that a well calibrated incentive package has the potential to provide **substantial benefits with protection** for consumers that is not necessarily achieved through the delivery of outputs through baseline allowances in some circumstances. **There is a role for both PCDs and ODIs.** The experience through RIIO-T1 highlights that incentives encourage firms to reach for rewards and push to deliver better outcomes that benefit consumers.

SHE Transmission considers that all outputs and associated incentives in this output category have delivered benefits to consumers by incentivising networks to outperform challenging targets. We would continue to question, particularly with the move to reduce incentives, whether it would be sensible to remove the reward elements or to reduce the upside potential from the incentives package.

In general, we believe that Ofgem should re-evaluate any incentives that do not deliver benefits to consumers. We believe that all measures within this output category in RIIO-T1 deliver benefits, but we continue to question particularly with the move to reduce incentives whether it would be sensible to remove the reward elements or to reduce the upside potential from the incentives package.

The energy system is changing at an ever-increasing rate and is expanding into new arenas which requires engagement across a variety of stakeholders or on new issues some of whom, and which, we have had no or limited engagement. To ensure true democratisation by reaching all relevant stakeholders will require ambitious and new thinking from the networks, especially the TOs. It is logical to incentivise the TOs to rise to this challenge to reach a broader range of stakeholders to inform decision making and to test if this is working. We see this challenge is two key areas for SHE Transmission – in supporting vulnerable consumers and in engaging directly with customers that connect. We discuss this in more detail below but due to the competitive element of the business plan incentive we reserve detail of this for bilateral discussions with Ofgem at this stage.

As such, we believe that the structure of the incentives need to be refined rather than reformed.

Output	Benefit to consumers	Target	Design of incentive	Comments
SSO	Yes	Absolute	Reward/Penalty	<p>SHE Transmission believe that the SEI and components of the SSO should be retained as two separate incentives and both as financial incentives.</p> <p>SHE Transmission believe that all 3 components of the SSO should be retained and not only the survey.</p>
Timely Connection/ Quality of Connections	Yes	Absolute	<p>Timely Connections - Reward/Penalty (F)</p> <p>Quality Connections - Reward/Penalty incentive (F)</p>	<p>Support the retention of the Timely connection incentive. We believe TOs should be incentivised to produce the connection offers quicker than the 90-day deadline, as this is valued by stakeholders.</p> <p>Stakeholders value the ability to re-design their connection if required. We believe there is a limited clock-stopping function which requires Ofgem approval in these cases. SHE Transmission believes that even through increased pre-application engagement the number of re-designs required will be minimised, if a customer chooses to redesign there should be enough flexibility in the application process via a clock stopping function.</p> <p>Believe that the Quality of Connection should be a separate financial reward/penalty incentive.</p>
Energy Not Supplied (ENS)	Yes	Absolute	Reward/Penalty	Support the retention of the ENS as a financial incentive.

Stakeholder Engagement Output: Stakeholder Engagement Incentive

SHE Transmission does not agree with Ofgem's proposal to introduce business plan commitments in place of the current SEI. We recognise Ofgem's concern that it is difficult to objectively evaluate stakeholder engagement, and we do support the move to a less subjective process. However, we consider that a refinement to the current format, which includes input from the User Group and a form of audit for the SEI report will deliver the same results.

SHE Transmission's main concern surrounding the SEI is that it is not assessed against the expectations of our local Stakeholders. We propose that the User Group is utilised in assessing our engagement performance, and the submission is sufficiently evidence-based, to assist the User Group's assessment which could incorporate Stakeholder Testimony or interviews. We believe that the Stakeholder Engagement Incentive and the SSO components (Survey, Key Performance Indicators (KPIs) and External Assurance (EA)) should remain two separate incentives.

SHE Transmission strongly disagree with the proposal to introduce a competitive fixed reward pot. SHE Transmission believe the approach to setting the financial incentive for the SEI and components of the SSO should remain as per RIIO-T1 and strongly disagree with a move to a competitive fixed reward pot. SHE Transmission suggest that in order to continue to move from engineering focussed to customer driven businesses in RIIO-T2 an absolute financial incentive is necessary for each network company. The focus of the regulatory mechanisms in RIIO-T1, especially the Stakeholder Satisfaction Output incentive have delivered huge benefits to stakeholders and consumers. This has been achieved through the collaboration of the networks, sharing best practice and lessons learned which would be lost if a competitive reward pot was introduced to the detriment of current and future consumers.

Stakeholder Engagement Output: Stakeholder Satisfaction

SHE Transmission strongly supports the use of absolute targets as they provide clear and certain targets for each of the networks to perform against, that are within their control to meet these targets. The introduction of dynamic or relative targets/incentive is not suitable in the transmission sector. A key principal of a dynamic or relative target is comparability and given the difference in the three TOs networks and as a result, the stakeholder requirements can be very different. Given the potential volatility of scores across the price control period we do not believe dynamic targets or improvement factors would be appropriate for this output category. We therefore consider an absolute target and incentive is the only option for stakeholder engagement.

The use of historical data of performance is the most appropriate approach for setting target baselines for stakeholder engagement. We believe that using RIIO-T1 performance data would allow Ofgem to set appropriate and well evidenced baseline targets. We do have concerns that if the structure of the stakeholder output changes, Ofgem will have to gather evidence to set appropriate baselines. This could be achieved by running a trial survey, as was done for RIIO-T1. However, given the extremely tight timescales before the commencement of the RIIO-T2 period and the work required to design, consult and implement the new stakeholder component with enough time to gather meaningful data to set an

appropriate baseline target. It would not be in the best interest of consumers if the incentive was 'switched off' for the first few years of the price control period to gather this data.

As discussed further in our response to the questions below, SHE Transmission believes that the design of the stakeholder satisfaction output components (Survey, KPIs and EA) should remain in the same format as RIIO-T1. We consider that the incentive should remain as a reward/penalty financial incentive and believe that the level of reward should be strong enough to continue the improvements in stakeholder engagement seen in RIIO-T1. Throughout RIIO-T1, elements of stakeholder engagement have moved into Business as Usual (BAU), however it is a key performance metric of the RIIO framework that licensees should have targets and associated financial consequences for failing or exceeding the targets set by Ofgem. We believe that the current level of 1% of base revenue remains appropriate to continue to drive the improvements in stakeholder engagement in RIIO-T2.

We support the retention of the stakeholder satisfaction survey but believe that a wide range of stakeholders should continue to be surveyed, and areas such as quality of connections should remain separate due to the complex nature of the connection process, and we are disappointed with the proposals to remove the KPIs and EA. SHE Transmission supports the refinement of the current format of the stakeholder survey, KPIs and EA.

Timely Connections

SHE Transmission supports retaining the Timely Connections Incentive and it should be applied consistently across all TOs, given that the ESO is to be separated from NGET. The Timely Connections Incentive has worked well in delivering timely offers for customers and allowed renewable generation to connect to the Transmission network to enable the transition to a low carbon energy network. However, SHE Transmission believes that the Timely Connections Incentive could deliver a more efficient service for customers if TOs were incentivised to produce connection offers quicker than the deadline.

Given there has been a shift in customer requirements to deliver a quality in the connection offer, rather than just a timely offer we believe a reward/penalty Quality of Connection incentive that compliments the Timely Connection output is required to deliver this stakeholder-led output. Customers that connect to the transmission network are increasingly exploring a variety of connection options that seek to optimise the network cost for their individual project economics. Flexible, or 'non-firm', types of connections are growing in use. Under these arrangements, the availability of the transmission network to the connected party is an important measure of the quality of their connection.

SHE Transmission does not support Ofgem's proposal for capturing the quality of the connections process through the TO User survey. We believe that the quality of connections should be captured through a separate survey, discussed further in **ETQ17**. The connection process is complex, with various parties involved in delivering the connection design, contract and the physical delivery of the connection.

Energy Not Supplied (ENS)

SHE Transmission strongly supports the use of absolute targets as they provide clear and certain targets for each of the networks to perform against, that are within their control to meet these targets. The introduction of dynamic or relative targets/incentive will not be suitable in the transmission sector. A key principal of a dynamic or relative target is comparability and given the difference in the design of the three TOs networks and geographical areas, comparability is extremely difficult. We therefore consider an absolute target and incentive is the only option. The targets for ENS in RIIO-T1 were derived through a detailed process and whilst there were differences between TOs, these were all appropriate at the time. We believe that past performance should be factored into re-baselining. We are happy to engage if there is a better way to quantify a RIIO-T2 target, but at this stage we would be content with a similar methodology being applied for the next price control.

SHE Transmission believes that there is enough evidence to support the continued inclusion of a financial ENS incentive. Reliability remains the principal concern of customers and there are strong stakeholder concerns about availability (generators) and resilience (Government) that we believe warrants the continued focus in RIIO-T2.

Through our engagement with Ofgem we have attempted to demonstrate, through the ET Policy Working Group, that SHE Transmission manages reliability as a high priority and that we continue to retain a large exposure should there be any outage on the system. SHE Transmission has implemented a comprehensive policy to ensure that interruptions are minimised, which benefits the customer. This comprehensive policy has an associated cost to ensure that our network performs well in relation to ENS and the financial incentive provides the incentive for us to continue to deliver a safe and reliable network for consumers.

SHE Transmission would prefer a fixed target across the period and does not believe improvement factors are appropriate. We emphasise that changes in period, particularly within Transmission, are more challenging and not straight forward. We believe that setting a fixed target across the period is best. The moving of the price control from 8 years to 5 years, also allows for a faster resetting of targets in future price control periods.

ETQ3. What other outputs should we be considering, if any?

SHE Transmission considers that as time moves on stakeholders' opinions and requirements evolve so do outputs and the associated incentives should change to ensure that benefits to consumers are delivered. However, we believe that the above are absolute vital in meeting the consumer-facing outcomes Ofgem seek⁹² and if you add the ambition of our stakeholders and consumers to this, to deliver over and above the BAU, an incentive package is essential. As such we oppose any move to reduce the incentives package in this area. To do so will be at the detriment of consumers.

⁹² Customer service (meet the needs of consumer and network users), network resilience (maintain a safe and resilient network) and environment (deliver and environmentally sustainable network).

ETQ4. What are your views on the RIIO-ET1 outputs that we propose to remove?

SHE Transmission supports the retention of all the components of the outputs within this output category. Especially the KPIs and EA within the SSO. We discuss our views on this within the specific responses to the consultation questions.

Stakeholder Satisfaction Output: Stakeholder Engagement Incentive ETQs 5-8

ETQ5. We welcome views on whether a specific incentive for stakeholder engagement is appropriate in RIIO-ET2, and if so, whether this should be reputational or financial.

SHE Transmission believes a key principle of RIIO is to provide a strong voice for network users and consumers in the price control process. SHE Transmission believes a stakeholder incentive should continue to seek to gather the views of stakeholders and reflect networks companies' successes (or otherwise) in responding to those stakeholder needs. The incentive remains important to both network licensees and the stakeholders that they serve and remains an important part of the price control as we move into RIIO-ET2.

The Stakeholder Satisfaction Output mechanism provides the incentive to continue to develop and improve the Stakeholder Engagement. Stakeholders value the role the SSO plays in the RIIO framework and believe it has been an important driver in the improvement in Stakeholder Engagement through the RIIO-T1 price control and will continue to bring improvements through RIIO-T2. SHE Transmission believes that the structure of the incentive needs to be refined rather than reformed and that the current SEI incentive remains appropriate.

Stakeholder Engagement Incentive

SHE Transmission considers that there is no rationale to remove the financial reward/penalty opportunity for doing the right thing in Stakeholder Engagement. Removing the financial incentive may result in companies deprioritising stakeholder engagement activities and this could be detrimental to stakeholders, who value the high-quality engagement that is driven by the incentives opportunity available to the networks.

SHE Transmission remains concerned that Ofgem's proposals, which puts at risk much of the good work within the sector, moving from engineering focussed companies to becoming customer centric where customers drive everything that we do. If the financial element is removed, it may create a compliance culture and erode the progress in Stakeholder engagement that has been achieved through RIIO-T1. SHE Transmission urges Ofgem to retain upside potential in efforts to retain a balanced incentive package. We suggest that Ofgem should consider maintaining the Stakeholder Engagement incentive at RIIO-T1 levels to continue to encourage companies to push further in Stakeholder Engagement to benefit consumers. Therefore, the incentive for the stakeholder engagement should remain as a financial one.

While much progress has been made to ensure the voices of stakeholders have been reflected in our decision making the work here is not complete. To make significant changes to the SEI and place it into BAU implies the optimum position on stakeholder engagement has been reached. It has not. As we move

into an increasingly decentralised energy world that seeks out whole system solutions, engagement will be more complex and involve more diverse groups. To ensure true democratisation by reaching all relevant stakeholders, including the most vulnerable in society, will require ambitious and new thinking from the networks, especially the TOs. It is logical to incentivise network operators to rise to this challenge to reach a broader range of stakeholders to inform decision making.

In the Transmission sector Ofgem has stipulated that there is no role for the TOs to support vulnerable consumers. We do not agree with this. Stakeholders tell us that that TOs can and should play a role in supporting vulnerable consumers – one that supplements and complements what DNOs do. We support this. As we enter the EST, we enter an increasingly decentralised, democratised and whole system world where TOs will be closer to the end consumer than ever before. As such, we must be able to better support the most vulnerable and ensure their voices are heard in the decisions that we make. The SEI should evolve in a way that recognises these new challenges.

As such, we believe that the structure of the incentive needs to be refined rather than reformed.

Firstly, the purpose of the reward needs to be apparent – licensees going over-and-above the minimum standard of engagement being assessed by the Stakeholder Survey and KPIs. As stated previously, SHE Transmission’s main concern surrounding the SEI is that it is not assessed against the expectations of our Stakeholders. We propose that the User Group are utilised in assessing our engagement performance, and the annual submission is sufficiently evidence-based, to assist the User Group’s assessment which could incorporate Stakeholder Testimony or interviews.

ETQ6. Do you think individual components of the SSO should be combined into a single incentive mechanism in RIIO-ET2, should the SEI and components of the SSO be retained?

SHE Transmission believes that the current structure of the SSO is still fit for purpose for continuing to guide stakeholder driven outcomes and should remain as two separate incentives.

We believe that the SSO incentive is a key performance metric that should have targets set through the Stakeholder Survey, KPIs and EA with an associated financial reward or penalty. The discretionary SEI encourages improvement beyond the Survey and KPI targets and drives industry best practice which can be shared amongst the licensees.

Therefore, we believe that the SEI and SSO components should remain as two separate incentives and both retained as financial incentives.

ETQ7. We invite views on types of business plan commitments that would be appropriate for stakeholder engagement.

SHE Transmission does not agree with Ofgem’s proposal to introduce business plan commitments in place of the current SEI. We recognise Ofgem’s concern that it is difficult to objectively evaluate stakeholder engagement, and we do support the move to a less subjective process. However, as previously discussed,

we consider that a refinement to the current format, which includes input from the User Group and a form of audit for the SEI report will deliver the same results.

If Ofgem decide to go down the route of introducing business plan commitments they should provide Stakeholders with real, measurable and transparent commitments that meet their needs. Another consideration is that the pace of change within the energy system will be fast and stakeholder requirements may change as the system does. We believe it would be sensible to allow flexibility in the form of a review of commitments to ensure they remain relevant and appropriate for stakeholders and should only cover areas that are directly linked to the transmission network.

SHE Transmission believes it would be more suitable to have an annual discretionary reward with clear objective criteria at the end of the price control to show progress of performance to stakeholders and ensure the KPIs or deliverables remain appropriate.

We set out below potential business plan commitment areas that we believe would be appropriate for stakeholder engagement. A thorough engagement process would be required to develop these areas into detailed business plan commitments. This list is not exhaustive.

- Transparency of Information: timely publications of consultation, regular reporting on our performance.
- Co-ordinated Outage Planning approach with directly connected stakeholders.
- Stakeholder Engagement Accessibility: ensure that all stakeholder engagement material and events, both physical and digital events are accessible to all.
- Build and maintain lasting, mutually beneficial relationships with those affected by our activities.

SHE Transmission believes that a large amount of work would be required to establish appropriate business plan commitments and develop baseline targets. We also consider the already tight timescales will hinder the ability to design, consult and set appropriate baseline targets for the business plan commitments. We do not want to be in the same position as RIIO-T1 where components of the incentive were switched off.

ETQ8. We welcome views on the potential approaches to setting a financial incentive for the SSO in RIIO-ET2, if retained. Are there any other considerations we should take into account if we move to a fixed reward pot that network companies compete for?

SHE Transmission believes the approach to setting the financial incentive for the SEI and components of the SSO should remain as per RIIO-T1 and strongly disagree with a move to a competitive fixed reward pot. SHE Transmission suggests that in order to continue to move from engineering focussed to customer driven businesses in RIIO-T2 an absolute financial incentive is necessary for each network company. The focus of the regulatory mechanisms in RIIO-T1, especially the SSO incentive have delivered huge benefits to stakeholders and consumers. This has been achieved through the collaboration of the networks, sharing best practice and lessons learned which would be lost if a competitive reward pot was introduced to the detriment of current and future consumers.

SHE Transmission believes that the use of a competitive fixed pot will not drive the correct behaviours from the companies. Rather than incentivising companies to stretch for ambition, Ofgem will create uncertainty and increased risk that networks will not be rewarded for ambition as factors outside of their control (the performance of other networks) would impact on this. Networks will not make a step change in delivering improvements if there is not an appropriate and certain reward where targets are met. A fixed reward pot will add complexity to the price control. Moreover, Ofgem need to consider that given that the three TO's being very different companies, operating in very different geographical areas with differing stakeholder requirements it may not be appropriate to adopt a comparative measure.

Stakeholder Satisfaction Output: Satisfaction Survey, KPIs, and External Assurance components Q9-14

ETQ9. Do you have any views on whether we should retain a TO User Survey, targeted at a number of key areas as identified in this document? Are there any alternative mechanisms to address potential issues in these areas we should be considering?

We believe that the TO User Survey should be retained as it allows the network licensees to collect information directly from local stakeholders on the issues most important to them. Ofgem's proposals for narrowing the TO survey to focus on a specific group of stakeholders who are directly served by the transmission network will provide detailed feedback from key stakeholders. However, it could mean certain stakeholders such as consumer groups are not represented. This was a key benefit for various stakeholder groups in RIIO-T1 and provided a balanced view on how SHE Transmission were performing for a wide range of stakeholders.

SHE Transmission agrees that for the visual amenity policy area, Ofgem could introduce a mandatory section within the TO user survey, measuring the engagement with stakeholders impacted by new transmission projects. Ofgem could also set out a question that contributes to the overall score of the survey as this can be comparable across all three TO's. However, we disagree that the survey should capture the quality of connections process. As discussed in questions **ETQ16-18** below, the connections process is extremely complex, and we believe that the wider survey is not appropriate as stakeholders may not fully understand the roles of each party delivering the connection. We believe that a separate connections survey should be created, focussing on currently connecting stakeholders. This is explained further in **ETQ16** in the timely connections section.

SHE Transmission believes that only surveying targeted stakeholder groups with the User Group playing a key role could make it difficult to make it comparable across all TOs, especially if they are to compete for a relative pot of reward. This is due to the fact each TO will have differing stakeholder views as each network is unique with different a challenges and potentially very different stakeholders.

The major benefit of the survey currently is that it allows the network licensees to directly collect information from local stakeholders on a wide range of issues that are most important to them. This is due to the flexibility that the survey offers to TOs in the design and administration of the survey to

stakeholders. Thus, for example, the content of the survey can be reviewed annually and revised to capture new and emerging issues.

ETQ10. Are there any other areas, beyond those identified in this consultation document, which we should consider targeting through a potential survey?

SHE Transmission believes that the survey should cover a wide range of topics that are important to our broad range of stakeholders that are directly impacted by SHE Transmissions activities. The Stakeholder Satisfaction Survey through RIIO-T1 has provided network companies with a large amount of data on a variety of stakeholder views and this has helped shape our business. Therefore, we would suggest that this broad scope is retained going forward.

ETQ11. Do you have any views on our proposal to retain one question on overall satisfaction from which the scores will be collated?

SHE Transmission believes that given that the Stakeholder Satisfaction Survey may be the only component of the SSO and if this is based all on one question it will be disproportionate to base the overall score on one question. It would be more appropriate to have three cross-TO questions of equal weighting that cover key areas for all TOs. However, all the network areas have very different stakeholders, who all have differing needs and want from the network. As such Ofgem should still allow network companies the flexibility to design the survey for their specific stakeholder groups as in RIIO-T1.

ETQ12. Do you agree that we should use RIIO-ET1 performance as a starting point for setting a RIIO-ET2 baseline? What alternative approach(es) should we consider?

SHE Transmission believes that it is important to ensure that the RIIO-ET2 baselines are evidenced and justified and deliver challenging but achievable targets. We believe that it is sensible that the performance in RIIO-ET1 is a key consideration for the starting point of setting the RIIO-ET2 baselines. However, if the structure of the incentive changes then Ofgem must ensure that the baseline value is changed accordingly and is evidenced-based.

SHE Transmission does not believe that relative or dynamic targets are appropriate for target setting in the SSO. Given the potential volatile nature of the elements of the SSO, such as the satisfaction survey, we feel that the proposed tighter baseline targets based on RIIO-T1 will provide a challenging baseline for the network companies.

ETQ13. Do you agree that the User Groups could provide guidance on the stakeholders that should be included in the survey sample? Are there any specific stakeholders that you think must be surveyed to improve the validity of the scores?

The User Group could play an important role in providing guidance on the stakeholders to be included in the survey sample. SHE Transmission believes it would be sensible to seek guidance from the User Group, as they can provide an independent view on the groups who are key stakeholders. It also provides a level of assurance to Ofgem that the Stakeholder groups being surveyed are not selected by the network in areas they are performing well, and a wide sample of stakeholder views will be captured by the survey. SHE Transmission believes that a broad range of stakeholders should be surveyed to generate a full picture on the different stakeholder feedback used to improve our stakeholder engagement.

ETQ14. Do you agree with our proposals to remove the financial incentive associated with the KPI and EA components? Should the EA component be retained as a minimum requirement/ licence obligation?

SHE Transmission believes that the KPIs and EA have played an important role in RIIO-T1 and have delivered stakeholder benefits and driven the correct behaviour from the networks. Therefore, we disagree with Ofgem's proposals to remove the KPIs and EA. We believe that the Stakeholder Satisfaction Incentive components; the Stakeholder Satisfaction Survey, KPIs and EA need small refinements to deliver improved performance in RIIO-T2. These are set out below:

- The KPIs need to be developed in consultation with stakeholders and reviewed regularly to maintain relevance. We suggest that TOs should be obliged to do so at least once during the five years of RIIO-T2. The format of the KPIs should be no more than 12 performance indicators, of which one third should be common across all TOs with the remainder focussing on TO specific performance driven by local stakeholders.
- EA should remain in a simple format of pass or fail against a clear criterion.

To deliver the tangible benefit of improved engagement for stakeholders and consumers, Ofgem should be using financial incentives to encourage companies to go above and beyond the baseline. We are very concerned that incentives are being eroded, and Ofgem is disincentivising companies to drive for outperformance, driving a culture of penalty avoidance with the introduction of reputational and penalty only rewards.

Timely Connections Output ETQs 15-18

ETQ15. Do you have any views on whether we should retain the RIIO-ET1 Timely Connections Output (which applies to the connection offer stage) for RIIOET2, including the penalty rate, and extend it to NGET?

During RIIO-T1 SHE Transmission believes that the Timely Connection incentive has worked well in delivering timely offers for customers and allowed renewable generation to connect to the transmission network to enable the transition to a low carbon energy network.

Both Scottish TOs have performed well against the incentive and we believe that the penalty rate of 0.5% of revenue remains appropriate for RIIO-ET2. We are supportive of Ofgem's view that the Timely

Connections output should be applied consistently across all TOs, given that the ESO is to be separated from NGET.

For RIIO-T2 SHE Transmission believes that the Timely Connection incentive could deliver a more efficient service for customers if TOs were incentivised to produce connection offers quicker below the deadline.

However, there are cases during the connection application that a customer re-design is required due to a change in customer requirements. A re-design can be delivered to the customer to ensure the connection offer suits their needs; however, there is a limited clock-stopping function which requires Ofgem approval in these cases. SHE Transmission expects that through increased pre-application engagement in RIIO-T2 that cases where a re-design being required during the application stage will be minimised; however, **if a customer chooses** to change their requirements there should be enough flexibility in the application process via a clock stopping function. Stakeholder feedback from one of our recent RIIO-T2 engagement sessions demonstrated the requirements for flexibility: *“I don’t think reducing the timeframe for an offer from three months is necessary as long as you know what it is in advance. However, some customers may be driven by shorter timescales. The important thing is flexibility.”*

ETQ16. Do you have any views on options for capturing the quality of the overall connections process through our stakeholder engagement proposals, for example through the use of a survey?

SHE Transmission believes that even though the Timely Connection incentive has been successful in delivering timely connection offers to customers, there has been a shift in customer requirements to a more quality offer, rather than just a timely offer. This change in customer requirements means that a Quality of Connection incentive that compliments the Timely Connection output is required to deliver this stakeholder led output.

We believe that in a general stakeholder survey, stakeholders who have not experienced the connections process may not understand who does what between the TO, the ESO and possibly the DNO. As such, SHE Transmission does not support Ofgem’s proposal for capturing the quality of the connections process through the TO User Survey. We believe that the quality of connections should be captured through a separate survey, discussed further in **ETQ17**. The connection process is complex, with various parties involved in delivering the connection design, contract and the physical delivery the of connection.

ETQ17. Are there any alternative options for capturing the quality of the overall connection process, not identified in this consultation document, which we should be considering?

Ofgem’s proposals to make the Stakeholder Satisfaction Survey more focussed on specific areas such as the quality of connections may add a layer of complexity to the survey and take away from the benefits it creates from being a survey on a wide range of topics. The Stakeholder Satisfaction Survey reaches to a wider stakeholder base which could for example include consumers, academics, industry parties and local authorities which have not necessarily experienced the connections process.

SHE Transmission believes that a separate targeted connection survey unique to our connection customers and network is required to ensure the feedback from customers reflects the connection process. Connections customers should include directly transmission connected customers as well as any distribution connected customer who has engaged with SHE Transmission during the transmission assessment of the connections process.

We are engaging with stakeholders in the development of our business plan to understand what areas we should focus on in the connections process and potentially be measured against in the price control framework as we develop a proposed Quality of connections incentive. We would welcome discussion with Ofgem on the development of this.

ETQ18. How do you think we can ensure that transmission operators are not rewarded and/or penalised for actions actually undertaken by the System Operator?

The transmission connections process is complex and can involve different parties. As part of our ambition we want to ensure that the connections process is accessible and testing this accessibility will require transparency and clarity of the role of the TO versus the role of the ESO in the connections process.

The role of the TO in the connection process

In our experience, despite the customer's contractual relationship being with the ESO, the engagement with the connecting customer, the system design and the delivery of the connection is led by the TO. The traditional role of the TO of being a passive part of the connections process is no longer. It has evolved to be a customer-focused TO delivering for connection customers.

We see our role of the TO as being an essential part of the route to market for renewable generators and have acted on customer feedback during RIIO-T1 to deliver over 6GW of renewable generation connected to our network (forecasted to be over 8GW by the end of RIIO-T1). Examples of this can be seen from SHE Transmission's performance during RIIO-T1 by engaging with more customers before applying for connection, delivering innovative flexible solutions including intertrips and ANM as well as more commercial innovative solutions such as the Alternative Approach for Orkney.

The customer experience is central to our RIIO-T2 connections policy and our overall strategy of enabling the transition to a low carbon economy and we will continue to evolve and deliver connections solutions and services which enable the connection of our North of Scotland customers. We want to ensure that we are delivering the services required for our customers and delivering them in the most optimal way. In RIIO-T2 the role of the TO should be measured against the Quality of Connections solutions delivered for our customers throughout every stage of the connections process.

Working together with the ESO

The ESO's role during the connections process is focused on ensuring compliance with the CUSC for associated charges with the connection and checking the quality of the TO's connection design against technical design standards.

Any survey should clearly distinguish between the role of the ESO and the TO to ensure that both the ESO and the TO are not rewarded and/or penalised for actions undertaken by the other party. RIIO-T2 should consider including targets for working together between the TO and the ESO to deliver the most optimal connections solutions for the end customer. We already have measures in RIIO-T1 to ensure we engage effectively with the end developer. For example we contact the end customer once we have received their connection application from the ESO.

During one of our RIIO-T2 engagement events a stakeholder said: *“It’s not SHE Transmission’s fault, but they have to go through National Grid. The process is invisible and agonisingly slow. It can feel like going through treacle. Is there anything you can do about that? The process is quite rigid. It needs more transparency.”* A Quality of Connections incentive which distinguishes between the roles of the ESO and the TO alongside an improved timely connections incentive should incentivise both parties to deliver the optimal service for connections.

Energy Not Supplied – ETQs 19-28

ETQ19. Do you have any views on whether we should retain the ENS incentive, and whether we should retain it as a positive reward mechanism, or move towards a penalty-only scheme? What impact could the move to a penalty only mechanism have on TO decision-making and behaviours? Please evidence.

A positive reward mechanism needs to be retained in RIIO-T2. Interruptions to supply might be low probability, due in part to the high-levels of reliability that SSEN maintains, but the impact of any interruption remains high. SSEN believes that there is enough evidence to support the continued inclusion of an ENS incentive. Reliability remains the principal concern of customers and there are strong stakeholder concerns about availability (generators) and resilience (Government) that we believe warrants the continued focus in RIIO-T2. Through our engagement with Ofgem we have attempted to demonstrate, through the ET Policy Working Group, that SSEN manages reliability as a high priority and that we continue to retain a large exposure should there be any outage on the system. SSEN has implemented a comprehensive policy to ensure that interruptions are minimised, which benefits the customer. This comprehensive policy has an associated cost to ensure that our network performs well in relation to ENS and the financial incentive provides the incentive for us to continue to deliver a safe and reliable network for consumers.

ETQ20. Do you have any views on how Ofgem should take into account issues other than past performance when determining baseline targets? For example, processes adopted as BAU, increased TO experience and expertise on fault mitigation and management, future modernisation projects, etc. What adjustment mechanisms are appropriate?

SSEN believes that it continues to make progress in targeting lower levels of ENS, as incentivised to do so. The targets in RIIO-1 were derived through a detailed process and whilst there were differences between TOs, these were all appropriate at the time. We believe that past performance should be

factored into re-baselining. We are happy to engage if there is a better way to quantify a RIIO-T2 target, but at this stage we would be content with a similar methodology being applied for the next price control.

ETQ21. Is the introduction of an improvement factor appropriate within the context of the electricity transmission system? What other mechanisms are appropriate?

Whilst it might seem plausible for an improvement factor to be applied in ENS across the period, SHE Transmission would prefer a fixed target across the period. We emphasise that changes in period, particularly within transmission, are more challenging and not straight forward. We believe that setting a fixed target across the period is best. The moving of the price control from 8 years to 5 years, also allows for a faster resetting of targets in future price control periods.

ETQ22. We welcome views on additional considerations we should take into account when setting baseline targets?

Baseline targets should be based on the full spectrum of available information. Targets should reflect the current network performance levels and add an element of increased performance, if appropriate. We will be taking our proposals for RIIO-T2 to our stakeholders and User Group, and they might challenge us to do more in this space above the Ofgem target.

ETQ23. Do you agree with our proposals to base the ENS incentive rate in RIIOET2 on an updated, agreed VoLL?

We accept that an updated value would be appropriate, noting that the last study was undertaken in 2011. We note the recent VOLL studies that have been undertaken and look to the outputs of other studies underway that might influence VOLL.

ETQ24. Do you agree with our proposals to retain the financial collar for the ENS incentive in RIIO-ET2?

We do not believe that moving the collar would be the right thing to do, in either direction. We would be more inclined to see it reduce, given concerns on other areas of the RIIO-T2 proposals, but it would demonstrate the wrong behaviours to consumers that it was a decreasing priority.

ETQ25. We welcome views on approaches to estimating embedded generation at GSP points.

The aim of the revised incentive seems to be capturing the actual demand i.e. by discounting the measured embedded generation. This would only capture generation actually metered so would never be 100% accurate but would require a lot of administrative effort and further forecasting of unmetered generation.

An alternative, which would be easier to administer, would be to use forecast demands. A methodology for agreeing the demand would need to be agreed across TOs but it could be a percentage of peak demand as submitted by DNOs as part of their week 24 data to NG ESO. This percentage could be varied by week to take account of seasonal varying demand i.e. winter week/month 100%, summer months 50%

For RIIO T3, DNOs / DSOs are going to have to start forecasting demand and generation data as they transition to DSOs so this would be a better time to move to an “actual” demand lost.

ETQ26. What measures need to be in place to facilitate the collection of data on embedded generations and other real time information? How do you propose to approximate embedded generation data?

The alternative, proposed in **ETQ25**, removes the need for additional complexity of trying to meter and capture all embedded generation at the time of a fault.

ETQ27. We invite views on changing the metrics used to measure reliability on the transmission system from MWh lost to CI/CML? What measures and processes (e.g. data sharing frameworks) need to be in place to facilitate the collection of CI/CML data?

Very limited application for SHE Transmission / TOs as we only restore the GSP supply. The detail of when each customer is restored within that GSP, is down to the DNO network operability, investment and potentially availability of DNO network staff - all of which are outside of a TOs control.

ETQ28. Do you have any views on whether all loss of supply events should be incentivised? Do you have any views on amending the scope of the definition of events excluded as ‘loss of supply events’ and/or ‘exceptional events’?

We feel the existing definition of exceptional events is appropriate.

Chapter 4 Questions: Deliver an environmentally sustainable network

General output questions – ETQs 29-32

ETQ29. What are your views on the overall outputs package considered for this output category?

SHE Transmission fully agrees that “network companies must play a stronger role in minimising their environment impact and facilitating the decarbonisation of the energy system”. In addition, our stakeholders believe broader socio-economic sustainability is equally important to ensure a sustainable low-carbon energy transition.

SHE Transmission are very concerned with the outputs package, and, scope of the incentives package, that is presented within this consultation. In summary, SHE Transmission believe the proposed environmental outputs package (*Table 6 Summary of potential outputs for consideration in RIIO-ET2*) needs greater consideration to be practical and feasible for our transmission business to implement. Further refinement of what is targeted and encouraged through Price Control Deliverables (PCDs) vs. incentives is also required to ensure the package does not limit benefits to customers and society while meeting stakeholder expectations. Our stakeholders have high expectations in this area and are pushing for us to achieve stretching targets in RIIO-T2 across both environmental and social sustainability. Refer to the following table for a summary of our views of the overall outputs package for this category.

Outputs	Comments
Environmental PCD	Environmental PCD outputs can embed environmental activities within TO business plans. However, careful consideration is needed of what environmental impacts can viably be included within PCD outputs given current data availability, maturity of transmission network processes and lack of industry defined methodologies. Refer to answer ETQ30 for specific comments on the proposed PCD environmental impact areas.
Annual performance reporting license obligation	We agree transparency on environmental performance is important to customers and wider stakeholders. Refer to answer ETQ35 .
SF6 and other IIG leakage ODI	We believe that the SF6 incentive should remain as a reward / penalty incentive based on relative targets agreed in collaboration with Ofgem. Given uncertainty of the technical and commercial viability of SF6 alternatives across each voltage level alongside the existing SF6 asset based and projected future network growth it would not be in the best interest of consumers to set an absolute target. Refer to answer ETQ39-42 .
Mitigating visual amenity	We agree with Ofgem’s proposal to incentivise TO engagement with Stakeholders for the development of new transmission projects through the TO user survey. We and our stakeholders are supportive of retaining the existing scheme however, following further detailed stakeholder feedback on this topic, the overwhelming feedback is that the scope of the current VISTA policy should be extended beyond National Parks and National Scenic Areas to our wider network, focusing on existing assets that have not been through modern consenting regimes (EIA) where significant landscape and visual benefits can be achieved. Refer to ETQ45-48 .
Bespoke additional contribution to low carbon transition ODI	It is disappointing to see the proposal to remove Environmental Discretionary Reward (EDR) incentive (Table 8 Summary of outputs we propose to remove for RIIO-ET2) despite the positive impacts of EDR noted in paragraph 4.5, 4.6 and Annex 2. It is acknowledged that the current EDR incentive is too mechanistic and ambiguous, however we believe incentives play a vital role in promoting ambitious plans and encouraging the right behaviours related to environment and sustainability. A broader sustainability incentive will be essential to build on the success of EDR, ensure ambitious plans, better outcomes for customers and meet our stakeholder expectations. Refer to answer ETQ36-38 .

Incentives

Individually the incentives package presented represent a tightening from RIIO-T1, but when combined the potential is for a significantly weaker and financially smaller package for RIIO-T2.

SHE Transmission is concerned about how the package will impact on the wider financial settlement, and when assessed with the risks for the sector and SHE Transmission, it does not appear to offer, or incentivise, SHE Transmission to put together an ambitious proposal. We are concerned that there is a disconnect between what Ofgem has presented and what it seeks to encourage.

SHE Transmission believes that Ofgem should, in conjunction with a tighter and lower baseline, incentivise companies to stretch and push themselves to deliver benefits for consumers. We believe this is good regulation, good for consumers and provides the incentive for companies to go above and beyond their base plans. Ofgem appears to be setting out an approach that makes incentives harder to include in the business plan and runs contrary to the principles of protecting both current and future consumers while encouraging ambitious plans and targets. We believe that Ofgem is overlooking an opportunity to drive the right behaviours in the sector.

We believe, based on the information available, that there is little likelihood that any company will achieve a return that would reach, or breach the 300bp RAM level, and as such the package looks to run contrary to the 'highly incentivised package' that Ofgem claim exists. We would strongly advocate that Ofgem should be building the returns from a bottom up perspective, correctly calibrating the levels for each measure and then assessing the final position of the package before implementing any failsafe mechanism cap. By applying a cap before any bottom up process has started, Ofgem has precluded a fair assessment and arbitrarily limited returns without considering the consequences of those actions.

We believe that Ofgem should be using incentives to encourage companies to go above and beyond the baseline. We are very concerned that incentives are being eroded, and when placed together with an increasing risk profile, Ofgem is disincentivising companies to aim for ambitious plans.

We want to demonstrate ambition in our plans but are concerned that the rewards for ambition are not proportionate to the risks. The only way to encourage this is through incentives, especially when other areas such as sharing factors are all pointing to tightening also.

It is far from clear what the composition and size of the incentive package might be, what elements will be reputational, penalty only, reward and penalty or even reward only. Without this clarity it is not possible to understand both the upside and downside risks to the incentives package and how to position SHE Transmission with regards to ambition in our business plan. At this stage we take the view that this consultation has increased the uncertainty and risks for SHE Transmission and made determining an ambitious business plan harder in the face of these issues.

ETQ30. For each potential output considered (where relevant):

- a) Is it of benefit to consumers, and why?**
- b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**
- c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**
- d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

Environmental Framework PCD

We are concerned about the practicality and feasibility of the proposed environmental framework price control deliverables (PCD) impact areas. We have noted the reality of including the indicative environmental impacts areas to be considered in paragraph 4.19-4.20 in the following table.

Impact area	Suitable for a PCD
BCF	Yes – provided only controllable scope 1 and 2 carbon emissions are included. Losses and scope 3 should be excluded due to lack of control by TO. Note that reduction targets will be challenging given likely network growth during T2; therefore, stretch targets beyond core actions should be incentivised.
Transmission Losses	No - as losses are predominantly controlled and reported by the SO. Furthermore, the TO does not receive reporting on losses from the SO until three months following the end of the financial year. This should remain reputational based on reporting.
Embedded carbon	Not ready – currently there is not a defined or consistent methodology across the industry for assessing and reporting embedded carbon. As a result, it is not feasible to set targets in business plans without clearly defined baselines or methodology boundaries. Actions on embedded carbon can be included within business plans but output targets cannot be determined.
Supply chain management	No – encouraging sustainable procurement is an iterative process that requires close collaboration and engagement with contractors and suppliers to avoid perverse cost implications for customers. Timescales for adapting procurement frameworks and contracts also have long time horizons. Actions could be included in the business plan, but output targets cannot be predefined.
Resource use and waste management	No – given the current lack of clearly defined baselines it is too early to set targets without baselines. Inclusion within an incentive would be more suitable.
Biodiversity	Yes – however there remains a challenge that clear baselines do not exist across the industry, but industry accepted methodologies exist that can be integrated and suitably developed for a Transmission company. Again, there are long time horizons to observe, measure and confirm biodiversity improvement. Careful consideration will therefore be needed on a suitable output on biodiversity for new projects and any period will have to be for the duration of the price control period.
Natural Capital	No – lack of baselines data or an industry wide adopted approach and defined methodology on natural capital. Given this lack of clarity and maturity of the natural capital approach across the industry it would not be suitable to include a PCD on natural capital at this point.

We recognise some outputs can be included in the business plan with efficient costs to deliver these which will require an increase in base funding. However, standard industry norms would only be appropriate for

a business plan environmental framework price control deliverable given uncertainty, risk and cost implications for non-delivery. Where suitable qualitative outputs may be more suitable than quantitative targets for some impact areas given the lack of visibility and methodology maturity. Areas not feasible to be included in the PCD environmental framework should be included in a broader incentive package that would provide opportunities for Transmission companies to outperform standard industry norms without burdening the consumer with costs for these less certain outcomes. SHE Transmission would welcome the opportunity to discuss the suitability of environmental impact areas and metrics in further detail with Ofgem. The level of delivery across the environmental framework PCD and incentive must be based on benefits for customers and society.

Incentives

We want Ofgem to recognise the value for consumers from the incentive package. We continue to believe that incentives provide a significant benefit to consumers and importantly they do it at minimal cost for consumers. This approach provides consumers with the potential of additional benefits with protection if not achieved, rather than being included within the regulatory baseline.

We accept that it is entirely within the power of a company whether it pursues the 'carrot' of additional rewards, but experience shows that incentives encourage firms to reach for rewards and push to deliver better outcomes. We also emphasise that rewards are gross, but the impact on companies is net, as there are costs associated with pushing for incentives. There are risks associated with pushing for incentives, and reducing the reward upside, or skewing the rewards towards penalties, has an impact on the behaviour of companies to push further.

Our analysis illustrates that SHE Transmission forecasts to achieve total incentive reward in the region of c£11m across the 2013-2021 period. This is approximately 13 pence per consumer over the period, or rather 2 pence per year per consumer. If SHE Transmission was to achieve maximum performance, then this would rise to c£67m and 8 pence per year respectively. We believe that without the incentives package there would not have been the drive to push in these areas and consumers would not have benefited.

We believe that Ofgem should, increase rather than reduce the size of the incentive pot and tighten the metrics around the incentives. Ofgem needs to evaluate the benefits being delivered against the cost to consumers in RIIO-T1. We believe that in terms of value for money that incentives provide a low cost and low risk approach to consumers and that it drives the right company behaviours.

We believe that Ofgem should, and may indeed have to, consider increasing the size of the incentives pot in RIIO-T2. We believe that this is partly to ensure the financial parameters of the price control remain acceptable to all, but also because it is the most cost effective and easiest method to monitor benefits to consumers and protect consumers from potential future costs if stretch improvements are not made during the RIIO-T2 price control period.

SHE Transmission believes that this is an opportunity for Ofgem to set both a tougher baseline, with tighter allowances, but also keeps the door open to stimulate companies to push for the higher rewards. This is effective regulation and rewards high performing companies.

In general, and in response to the specific ETQ30 question, we believe that Ofgem should re-evaluate any incentives that do not deliver benefits to consumers. We believe that all measures in RIIO-T1 deliver benefits, but we would continue to question particularly with the move to reduce incentives whether it would be sensible to remove the reward elements or to reduce the upside potential from the incentives package.

Output	Benefit to consumers	Target	Design of incentive	Comment on options
SF6	Yes	Relative - defined by TO in collaboration with Ofgem	Reward/ Penalty	We believe that the incentive should remain as a reward/penalty. Given uncertainty of the technical and commercial availability of SF6 alternatives across each voltage level alongside the existing SF6 asset based and projected future network growth an absolute target would not be in the interest of consumers.
Environment Discretionary Reward	Yes	Absolute and relative as deemed appropriate in the package metrics	Reward	Whilst we don't like the subjectivity of this reward, we recognise that it continues to incentivise the right behaviours and the removal of it would put at risk the positive actions undertaken. Reform is something we would support. If it was removed, we would look to embed our actions previously carried out as part of the EDR into our baseline costs.

ETQ31. What other outputs should we be considering, if any?

Consideration of displaced carbon should be factored into decision making but would not be suitable for a PCD due to the lack of control of connection requests it would not be appropriate to target displaced carbon.

Current suggested outputs are limited to carbon and environmental responsible practices. Following extensive stakeholder consultation on our sustainability strategy and workplans, our stakeholders have asked that we focus on broader socio-economic sustainability that would be appropriate to include within a broader sustainability incentive. We have been and are continuing to test our sustainability strategy and the need for a broader sustainability incentive with our User Group.

ETQ32. What are your views on the RIIO-ET1 outputs that we propose to remove?

As noted above, we believe it is essential to meet our stakeholder ask to keep and develop an environmental/sustainability incentive in RIIO-2. We note the intention to remove the EDR going forward and we believe that this is premature. We do not accept that this measure is no longer required. We accept the position in the consultation that the discretionary reward has and continues to deliver benefits, but whilst we do not like the subjectivity of the reward, we value the benefits it incentivises us to deliver.

We believe that Ofgem should consider reform, rather than removal.

If Ofgem were to remove, we would strongly support the inclusion in our business plan to ensure continuity. Whilst we do consider the EDR to be mechanistic and burdensome, we would continue to push for reform rather than removal.

SHE Transmission worked hard to achieve the recent EDR discretionary reward. Whilst we do not like its discretionary and subjective nature, it has driven substantial environmental improvements that would not otherwise have occurred. In the absence of anything else, its removal will fail to build on the RIIO-1 momentum to seek the “new norm” in social and environmental sustainability to meet ambitions of our stakeholders.

Environmental framework - Business Plans and annual monitoring - ETQs 33-39

ETQ33. Do you have any views on the extent to which company activities relating to environmental impacts should be embedded in Business Plans?

With reference to answer to **ETQ30**: “We recognise some outputs can be included in the business plan with efficient costs to deliver these which will require an increase in base funding. However, standard industry norms would only be appropriate for a business plan environmental framework price control deliverable given uncertainty, risk and cost implications for non-delivery. Where suitable qualitative outputs may be more suitable than quantitative targets for some impact areas given the lack of visibility and methodology maturity. Areas not feasible to be included in the PCD environmental framework should be included in a broader incentive package that would provide opportunities for Transmission companies to outperform standard industry norms without burdening the consumer with costs for these less certain outcomes. SHE Transmission would welcome the opportunity to discuss the suitability of environmental impact areas and metrics in further detail with Ofgem. The level of delivery across the environmental framework PCD and incentive must be based on benefits for customers and society.”

We have several points to make regarding embedding activities within the business plan.

We accept that Ofgem wants to embed activities into firm commitments for SHE Transmission. We support this and believe that this is the right way to ensure that companies focus on the right areas and are held to these commitments. We are preparing our plan to incorporate these element and costs.

As Ofgem notes, our business plan will include the efficient costs to deliver our commitments, not as part of any incentive opportunity. However, these will be incrementally higher than in RIIO-T1. This must be incorporated into the cost assessment framework.

We will put forward areas including wider social and economic aspects of our activities. Our preference would be to extend to wider sustainability, including social, community and economic, not just environmental. However, we believe that this sits better as an incentive at this stage, as it is beyond the purely environmental measures focussed on in RIIO-T1.

We would like to present an ambitious plan, being observed to be responding to the stretching boundaries of what consumers, stakeholders and the wider public expect going forward. We again highlight that we are concerned that Ofgem's approach to pushing activities into a BAU approach and moving away from incentivising companies to take risks, drive the wrong behaviours and not deliver the maximum benefits to consumers and society. Moving away from an environment/sustainability incentive would drive TOs to limit activities to core actions, leaving untapped the stretch and speculative action that could be delivered to the benefit of consumers and society.

We are in favour of increased co-ordination, where it delivers value for consumers through co-development of common methodologies and tools. However, we remain concerned about the impact on business plan assessment criteria and on the one hand we don't want to be obstructing collaboration, but on the other we are unsure if our proposals will be assessed against the quality of other TOs and hence raise the likelihood of reduced collaboration. Clarity is needed here.

ETQ34. We invite views on whether the proposed environmental impact categories are appropriate areas to focus on. Are there any areas that should be excluded and/ or other areas that should be covered? We also invite views on the potential indicators and/ or metrics that are appropriate for each environmental impact category.

Refer to answer **ETQ30** and suitability of the proposed environmental impact areas for an environmental framework price control deliverable.

SHE Transmission supports the progress and ambition in these areas, and where possible we would like to include ambitions on these elements within our Business Plan. We highlight the challenges and subjectivity around embedded carbon and natural capital, output targets would not be suitable for these areas. We also highlight that it is premature for targets on waste and resources given the data quality and system maturity in this area. As noted in **ETQ33**, our internal Environment policy incorporates the importance of local environment stakeholder concerns, such as pollution, oil management and noise.

We acknowledge the requirements, as stated by Ofgem, regarding the detail and analysis that would need to be provided to justify positions.

ETQ35. We welcome views on the option of an annual reporting framework to increase transparency of the transmission networks' impact on the environment.

We agree that transparency is a good step. Why not publish the annual reports on the Ofgem website, rather than the ENA? Simplicity is a good thing.

We note that there needs to be alignment in metrics between TOs to allow data to be compared and benchmarked that should be based on internationally accepted measures. Annual reporting should not be limited to environmental reporting but broader sustainability to include stakeholder ask to show performance relative to stakeholder expectations.

Comparing and benchmarking results across the TOs would be subject to normalisation that sufficiently accounts for the significant differences between the different network area, for example: scale, existing asset base, stakeholder expectations (including environmental regulatory and statutory bodies) and future development requirements. In some environmental reporting areas normalisation may not be achievable due to the complexity of these variations. Wider scope 3, waste, resources and embedded carbon reporting could begin to be included once common approaches and methodologies on these areas are defined.

In some of the new areas of environmental focus, such as embedded carbon and waste and resources, there is no consistency between the TOs in terms of current baselines and data availability. While the TOs are working collaboratively to address this, it will impact on ability to publish common metrics at the outset of the price control period.

ETQ36. We welcome views on whether we should introduce an option for the TOs to develop bespoke ODIs with stakeholders for delivering an additional contribution to the low carbon transition.

An ODI must be available for impact areas captured under the environmental framework PCD and for broader sustainability to meet stakeholder expectations. An environmental framework PCD would only cover the activities and actions costed for the price control so would remove any incentive for delivering beyond this. Limiting to an environment PCD would also restricts TOs to foreseeable actions and new opportunities arising during RIIO-T2 would not be capitalised on.

We accept Ofgem's position that striking the right balance is important. We share this view. However, with no strong incentive package, consumers are at significant risk of not receiving the full benefits that should be available to them within 2021-26 and securing them beyond this period. We believe that it is right to be rewarded for pushing progress in the low carbon transition. We do not believe that Ofgem has created any incentive that drives this behaviour.

The RIIO-T2 package looks to be much tougher and tighter without a corresponding upside for TOs. At this stage we are concerned that Ofgem has pushed too far in the other direction. We believe that incentive-based regulation provides the upside for consumers too and there needs to be an upside to push for.

We believe that the lack of inclusion from Ofgem does not sit well against what has already been claimed by Ofgem as important for the sector and stakeholders have been actively pushing for work within this space. We would like to develop a comprehensive suite of measures, as part of our wider sustainability focus, that targets directly what SHE Transmission can do within this space. We believe that our sustainability approach is industry leading, pushes the boundary of what companies should be targeting, and goes significantly further than anyone else has done so to date. We intend to demonstrate our leading position, and subject to the agreement of our User Group, we intend to develop a comprehensive package that targets what our stakeholders want and need us to deliver. These are big issues that need addressing and within RIIO-T2. Waiting is not an option.

We believe that it is wrong for TOs to have to demonstrate ambition through bespoke ODIs. We believe that Ofgem should only be encouraging bespoke measures in a minority of areas.

We are conflicted at this stage in sharing more detail, particularly with other TOs, due to uncertainty around the Business Plan assessment and whether the quality of our submission would be reduced if we appeared similar, rather than leading, compared to others.

ETQ37. We invite views on the kind of activities, not captured elsewhere, that could be captured through such ODIs.

Please refer to our response to ETQ33 whereby social sustainability should also be included within an ODI to meet our stakeholder ask and Ofgem expectations (particularly around diversity and inclusion).

Furthermore, as highlighted in our response to ETQ36, we believe that it is right that TOs can propose bespoke ODIs. The enhanced engagement process should allow these views to emerge, be developed and then be agreed. There appears to be conflicting messages from Ofgem on whether bespoke ODI can or cannot be in areas covered elsewhere in RIIO-2. This could reduce the ability of TOs to propose new incentives? We respect Ofgem's desire to remove double funding, but there is concern that Ofgem is closing potential avenues at this stage if measures are included as PCDs but also proposed as bespoke ODIs. Further clarity is requested around intentions and opportunities here.

ETQ38. We invite views on how such an ODI might operate, and any other factors we should take into account in considering bespoke ODI for the low carbon transition.

We acknowledge that we are working within a framework where legitimacy has been challenged and confidence needs to be rebuilt, but where needs have been identified there has to be a route to include if deemed valued by stakeholders. It is therefore important that any new ODI is clearly defined and that its objectives and targets are known and understood. We believe that where value for money and benefit to consumers can be demonstrated then TOs need to have the ability to propose new incentives, as per 4.43 of the ET Annex.

However, we believe that ODIs, and certainly bespoke ODIs, should not form the majority of any output incentive package. We regard this prospect as a failing on Ofgem to identify joint areas of activity that warrant incentives. We believe firmly that the challenges that the transmission sector faces have not been addressed and therefore we believe that same behaviours need to be incentivised and encouraged. In the face of a significantly weaker output incentives package, among other general RIIO-T2 tightening, we are concerned that Ofgem is making the wrong decisions. We do not consider reducing the incentive package to be the right thing to be doing to incentivise companies to take more risk for less reward, in the face of a broader tightened package.

The sustainable low carbon transition needs to be incentivised. The language used by Ofgem places this towards the TOs to propose options. This approach could either lead to diverse range of views and

options, that could be endorsed by the respective User Groups, that allows for a combined approach in RIIO-3, or it could be too broad that achievements are not as optimal than if they were concentrated on a narrow definition. SHE Transmission believes that Ofgem in allowing a broader range of views, does not close off options or areas that might have been precluded otherwise. These might be company specific and hence SHE Transmission is happy with this proposal. However, we note that benchmarking for RIIO-3 could be more difficult with this approach.

SF₆ and other insulation and interruption gases (IIG) leakage - ETQs 39-42

ETQ39. We welcome views on whether we should retain a financial reward and penalty incentive for the leakage of SF₆ in RIIO-ET2 or move to a penalty only or reputational incentive.

We believe that there is no rationale to remove the small financial reward opportunity for doing the right thing in relation to SF₆. Removing and compelling companies to remove/reduce at the exposure of purely penalties could be seen as a symbolic tightening of the price control and a ratcheting down on companies' performance risks, albeit only a small downgrade.

SHE Transmission remains concerned at the direction of travel, which puts a risk much of the good work within the sector. It is important to recognise that there is a lack of commercially available alternatives to SF₆ (expected within RIIO-T2 period) and with projected network growth during RIIO-T2 it limits our ability to reduce our holdings. Ofgem needs to consider the impact, against a changing risk profile for TOs and the backdrop of significant change within the sector expected over the medium term. SHE Transmission urges Ofgem to retain upside potential, albeit only a small upside, in efforts to retain a balanced incentive package. We suggest that Ofgem should consider increasing the SF₆ incentive to encourage companies to push for further reductions. The work that SHE Transmission undertakes in this space and effort it puts in to finding a less environmentally damaging alternative is not covered by the small incentive on offer. Given the squeeze on incentives, and not wanting to take a backward step, SHE Transmission suggests that it would maintain the incentive and the move towards reducing SF₆ by increasing the reward potential.

ETQ40. We welcome views on the potential impact of a move away from a financial incentive (or move to penalty-only) on TO behaviours.

SHE Transmission considers the move to be negative and should therefore be avoided, within the context of a reduced incentive package and a move towards penalty only measures. This moves TOs towards a compliance culture and away from delivering further benefits to customers, stakeholders and the wider environment. We are not proposing reward only but argue that penalty only is the wrong move.

ETQ41. We invite views on whether leakage from other IIGs should also be captured in the incentive measure.

SHE Transmission is prepared to factor in other IIGs in an attempt to illustrate and demonstrate the impact that leakage has. However, it is important that the calibration is scaled appropriately, as they each have different global warming potential (GWP) impacts.

The issue of measuring leakage has not specifically been addressed here by Ofgem within the consultation, but SHE Transmission highlights the difficulty around the metric and whether it is a mass reduction, existing leakage reduction or an absolute carbon emission reduction. Whilst it is not explicit in the consultation, Ofgem has indicated that it is considering introducing for RIIO-T2 an expectation that any replaced assets will not result in an increase in the baseline SF₆ target. This would be a significant change to policy and we will need to carefully evaluate the impact on the programme of work we plan to carry out and the associated costs. We agree with the intent and do accept that it might be right that by the end of 2026 the measurement of total leakage might be appropriate as an ambition but introducing this to start in 2021 is a different proposition. This is on the basis that evidence from suppliers is that the commercial availability of new assets that can utilise alternatives will be commercially available at the end of the T2 period.

We believe that there is a critical difference in strategy and approach between ensuring new assets utilise alternatives, as and when they become available, and the more difficult and challenging exercise of replacing existing assets earlier than would have been scheduled in normal asset replacement cycles to remove SF₆. SHE Transmission supports both views to deal with the broader environmental concerns, but to ensure best value for consumers, the most economic approach needs to be taken.

SHE Transmission shares a similar view to Ofgem regarding reducing SF₆ across our network, as soon as practically and economically possible. In RIIO-T2, similar to RIIO-T1, we will continue to explore all avenues to do this, working with the best alternatives that our supply chain provides. If opportunities arise through new products, we will continue to trial these assets and assess these against both planned whole life replacement cycles and where cost effective we will accelerate the pace of replacement. However, it is important to note that at the present time the likely pace of change is uncertain. We would caution Ofgem from introducing hard targets, if these are going to incur additional costs.

Refer to response **ETQ30** for the justification for a relative target as it is too soon for an absolute target given technical and commercial viability of alternatives during RIIO-T2. An absolute target could drive development of new sites with insulation solutions that are not in the best interest of customers and the environment (e.g. cost and visual amenity impact) and early replacement of existing SF₆ assets at cost to the customer.

ETQ42. We welcome views on whether some leakage events should continue to be excluded from the incentive.

We continue to believe that where an incident is beyond the reasonable control of a licensee that it should be excluded from the incentive. There is value in reporting the scale of the excluded issue and for Ofgem to make an assessment on whether there are issues or practices within the industry that need to be changed.

Ofgem needs to provide further clarity on what defines an excluded event, as experience in submitted events for exclusion has resulted in rejections in T1.

Electricity losses from the transmission network - Q43-44

ETQ43. Do you have any views on the proposed approach for integrating any losses reporting requirements into the proposed business plan and annual public reporting framework?

We support this proposal. We also note that if there was a value for money way to incentivise lower losses, we would welcome this move.

ETQ44. Do you have any views on the introduction of a target or measure for improving metering at and the energy efficiency of substations? How could this work in practice?

We support any move to reduce losses on the network, where deemed efficient and economic. If losses are within TO control and are easily measured and monitored there could be scope for investment in this space. We, like Ofgem, are open to the ongoing SPT trial in this area and whether anything can be implemented following these results. There needs to be careful evaluation of the benefits from introducing anything new in this area against the cost of measuring the impact. It is not clear without significant investment in reporting there would be a corresponding benefit to consumers. However, if it can be demonstrated that there are positive gains to be achieved in this area we would examine what we could do further.

Visual amenity impacts of transmission network - Q45-48

ETQ45. We welcome views on incentivising the TOs' engagement with stakeholders on the development of new transmission projects through our stakeholder engagement proposals, for example through the use of a survey.

SHE Transmission believe that stakeholder engagement is a key element of the development of new transmission projects. We agree with Ofgem's proposals to incentivise TOs engagement with stakeholders for the development of new transmission projects through the TO User survey.

ETQ46. Do you have views on the retaining the existing scheme to mitigate the visual impact of pre-existing transmission infrastructure in designated areas? Do you agree that any decision to implement new funding arrangements should be subject to updated analysis around willingness to pay?

We are supportive of retaining the existing scheme. However, following further detailed stakeholder feedback, the overwhelming view is that the scope of the current VISTA policy should be extended beyond National Parks and National Scenic Areas to our wider network, focusing on existing assets that have not

been through modern consenting regimes (EIA) where significant landscape and visual benefits can be achieved.

We agree with Ofgem and believe that the willingness to pay is a reliable mechanism to support TO's when submitting project proposals to Ofgem. We understand that if the consumer is willing to pay this is a positive to any project submissions.

ETQ47. Do you agree with our proposals to modify the implementation process by which funding requests for mitigation projects are submitted and approved?

We believe that the current mechanism for RIIO-T1 is recognised within the industry and by stakeholders. As such, we believe the current implementation model is effective. The benefit of the existing mechanism is that it genuinely facilitates stakeholder led proposals and a mechanism for project scopes to be developed and refined throughout the price control period. This will be particularly important in a situation whereby the scope of the scheme is extended into areas not assessed as part of the RIIO-T1 process. Again, this approach has been recognised by our stakeholders as being effective at delivering the desired outputs.

ETQ48. We welcome stakeholders' views on any other considerations they think are relevant to policy development for visual amenity issues in RIIO-ET2.

SHE Transmission are supportive of the current mechanism and believe it should continue into RIIO-T2. We also propose, with stakeholder support, broadening the scope of the policy to include non-designated sensitive landscapes where pre-existing infrastructure was consented and built pre-EIA Directive where full and robust landscape and visual assessment may not have been undertaken as part of the consenting regime. In the North of Scotland, there are many areas not currently designated that are sensitive to existing landscape and visual impacts from our network. As the designated sites were listed after the installation of our assets, the presence of the assets will have contributed to the considerations on whether an area should be designated. In addition, due to the extensive landscape qualities found in the north of Scotland, many areas although highly sensitive and valuable in a local and regional context, will not have been listed under the current designations.

We propose that an extended scope beyond National Parks and National Scenic areas would be progressed through the following steps:

- Additional areas of consideration would be defined through a set of parameters agreed with stakeholders and submitted to Ofgem (in the same way that the RIIO-T1 policies were developed).
- As per RIIO-T1, we would propose a mechanism to recover development funds for such projects:
 - That come out of this would be considered through CBA and where they meet stakeholder and efficiency expectations would be progressed to detailed design.
 - An application would be made to Access funds for a pre-agreed fund, as per T1.

SHE Transmission believe that it would be inappropriate to define these 'wider scope' schemes at this point, as the success of VISTA in RIIO-T1 has been the collaborative stakeholder led refinement. We don't want to pre-judge and have a track record in promoting 'appropriate' schemes that benefit the landscape without providing undue burden on the consumer.

Chapter 5 questions – Maintain a safe and resilient network

General output questions – ETQs 49-52

ETQ49. What are your views on the overall outputs package considered for this output category?

The safety element is largely covered by existing HSE legislation to cover safe operation. Annual System Performance C17 reports show the number of faults within a TO network for comparison. They are an indicator of TOs behaviour in maintaining a safe and resilient network.

The additional third-party engagement referred to through this section appears to refer to DNOs and generators. Both are already part of the outage planning processes in transmission, largely via National Grid OC2 obligations. This has been a significant area of improvement throughout RIIO-T1, largely as a result of the twice yearly OC2 Forums hosted by National Grid.

The DNO relationship between TO and ESO will need continuous review as DSOs roles and responsibilities become more understood by all parties involved, especially with a view to whole system planning and operation.

Monitoring of the NAP impact and benefit has proved difficult to measure throughout RIIO-T1. However, the proposed measures proposed by SHE Transmission should assist in measuring the impact and benefit of the NAP.

ETQ50. For each potential output considered (where relevant):

- a) Is it of benefit to consumers, and why?**
- b) How, and at what level should we set targets? (e.g. should these be relative/absolute)**
- c) What are your views on the design of the incentive? (e.g. reward/penalty/size of allowance)**
- d) Where we set out options, what are your views on them and please explain whether there are further options we should consider?**

NAP

TOs should have a NAP in place and published, to ensure engagement between TO and ESO. The NAP is now established and all parties involved agree it has significant benefit, a common NAP across all TOs would ensure consistency for all users and customers of the GB network. This will maximise efficiencies and encourage cross TO engagement and sharing of best practice. This should be extended to all OFTOs,

and SPVs / CATOs should this model be pursued. The target relates to having a NAP in place and this is monitored by the relevant TO having to publish their NAP on their company website. As such we don't think a target requires to be set.

Merely having a NAP in place would not seem to merit a reward but a penalty may be deemed necessary by the regulator if a TO does not publish its NAP to ensure transparency for the Users and Customers of their network. NAP availability is a license condition, so this particular output is not part of multiple options.

Large Capital Investment Projects

Please refer to the additional information provided in our response to **ETQ 57-62**.

ETQ51. What other outputs should we be considering, if any?

A safe and reliable network is essential to robust black start security. TOs should be able to demonstrate that they have worked with the ESO to deliver any black start tests requested by the ESO. Reporting of this should be considered carefully as it may be deemed unsuitable for wider publication and therefore reportable only directly to the ESO and/or Ofgem.

ETQ52. What are your views on the RIIO-ET1 outputs that we propose to remove?

We have not identified any outputs which Ofgem is proposing to remove.

ETQ53. Do you agree with our proposed approach to safety?

SHE Transmission agree with Ofgem's acknowledgement that existing HSE legislation exists to ensure TOs act in a safe and responsible manner at all times.

ETQ54. Do you agree with our proposal to retain the NAP as a licence obligation?

Yes. The working group communications have enhanced communication between TOs and ESO and encouraged continuous improvement of processes. The new STCP 11.4, an output from NAP driven stakeholder engagement, gives the ESO an extra tool to deliver consumer savings should the opportunity arise. It has also highlighted to all that to deliver the greatest savings, greater collaboration is required as far ahead as possible.

ETQ55. Do you have any views on the potential risks and benefits of introducing a single, consolidated NAP, and of expanding the NAP to cover interactions with third parties?

A single GB wide NAP for all TOs is required for RIIO-T2 to ensure a level playing field amongst TOs and to ensure all GB customers receive the same level of service. With competitively appointed TOs a possibility in the future, this makes a level playing field essential to ensure existing safety, operability and reliability standards are maintained and to avoid a “race to the bottom”. Any SPVs / CATOs should also be subject to the common NAP for the same reasons.

Best practice benefit: Collaboration across all GB TOs should also mean greater opportunities for sharing best practice and innovative ideas. The third parties referenced in the text are DNOs and generators. Generators and DNOs are already accounted for in the NAP as stakeholders. The stakeholder engagement meetings held since the NAP existed have greatly increased stakeholder involvement. The greater engagement has also contributed to recent Mod-Apps in both SPEN’s and SHE Transmission’s areas being initiated by generators to minimise the impact of long duration outages in future years.

Access to information risk: The future role of DSOs needs to be more clearly defined before the communication channels can be defined within the NAP or indeed, any licence condition. At the moment, the ESO and TO jointly plan the necessary reinforcement on the transmission network but this will need to involve the DSOs in the future. *Reflecting TO specific issues risk:* While a single NAP may bring benefits in service and best practice it must also be able to accommodate issues or activity which is TO specific.

ETQ56. We welcome views on these proposals, and on any potential interactions and/ or duplications between these proposals, the NAP and the STC.

The NAP encourages engagement with users and stakeholders further ahead of real time and this has realised benefits for users via the aforementioned Mod Apps to reduce outage impact. However, there is a risk that making all users aware of outages beyond current obligations in OC2 and STCP 11.1 timeframes could undermine the ESOs ability to secure the most efficient outcomes for the consumer. For example, the ESO may determine that a short-term commercial contract is the most efficient means of securing a TOs outage. If the TO has already notified customers of these outages, then it strengthens their bargaining power.

It may also lead the ESO to contracting further ahead of time than they do at present to “hedge” against certain projects going ahead. It should also be noted that due to the volatility of outage programmes more than two years ahead of current year, the ESO and TOs are not greatly resourced to deal with greater interaction in these timescales. Combined with the increased workload likely to be needed to deliver efficient whole system outcomes, this could require significant recruitment and training to achieve.

Caution would also need to be exercised when notifying customers in longer timescales to ensure they are aware of potential volatility of outage placement and external influences which can disrupt outage programmes.

Successful Delivery of Large Capital Investment Projects – ETQs 57-62

Large capital investment projects are often uncertain as they are often highly dependent on the level of future generation and/or demand. We agree with Ofgem's view that companies should not benefit from delay in delivery or failure to deliver PCDs. However, as the delay in the delivery of large capital investment projects is often the result of delays resulting from third parties or other delays which are outside the control of the TO, we do not feel that TOs should be unfairly penalised either.

Therefore, including a mechanism or regulatory tool for dealing with large capital projects that are not successfully delivered on time and/or expected standard will add further risk on to the TO. This additional risk for the TOs makes it less likely that they will be willing to progress with these large capital projects without off-setting these risks, for example the TO may look to reduce the risk with its contractors by pushing any potential delays into liquidated damages. This approach will ultimately lead to higher overall project costs.

Where projects are not delivered to an expected standard, there is already a legal and regulatory framework in place to ensure that TOs develop and maintain an efficient, co-ordinated and economical system (Section 9 of the Electricity Act 1989). There are also industry codes which the TOs must comply with including the National Electricity Transmission Security and Quality of Supply.

We also note that Ofgem is proposing a penalty only approach and does not intend to provide any reward for early delivery of large capital projects. If a TO is to be penalised for the late delivery or for failing to meet expected standards then it should also be incentivised, particularly considering the uncertainty surrounding the large capital load related projects as the TO is often relying on future generation or demand.

We would also note that the consultation does not outline the characteristics of Large Capital Projects. Are they defined by value, capacity, duration or another metric? This is important as the assessment of whether reporting metrics and / or financial incentives are relevant depends on the characteristics of the project type. This is of particular relevance to the design and introduction of milestones.

ETQ57. Do you agree with our proposed approach for ensuring TOs do not benefit financially from delays in delivering large capital investment projects?

Yes, we agree that TOs should not benefit financially from delays in delivering large capital investment projects. However, as outlined above, the delay in the delivery of large capital investment projects is often the result of delays resulting from third parties, or other delays which are outside the control of the TO, we do not feel that TOs should be unfairly penalised either.

A fair approach to attributing the driver of a delay would be required in this area; this could easily become another example of where uncontrollable risk is materially increased for TOs without this impact also being reflected in the financial package. Consistent with many other proposed policy changes, the implementation must be considered in the round and as part of a comprehensive impact assessment.

ETQ58. We invite views on the suitability of the milestone approach, the types of milestones or delivery criteria we should be considering and any potential challenges associated with implementing such an arrangement.

We do have concerns regarding the milestone approach and whether such an approach is feasible in the Transmission sector, given the bespoke nature of the projects of the projects involved. We would welcome further clarity from Ofgem on this proposed approach.

- At what stages in a project it would plan to apply these project milestones?
- Does Ofgem intend to apply generic milestones to these large capital investment projects or is the intention for the TO to set its own project milestones?
- Is the intention to apply this methodology to all large capital schemes, and if so how will this be managed on an ongoing basis throughout the price control period e.g. for schemes being delivered under the uncertainty mechanism.
- How would milestones be measured and action taken? These would have to be quantitative and qualitative to ensure TOs were not penalised for the impact of exogenous events.
- Ofgem has also not identified what the value to consumers, connecting parties and stakeholders is of a milestone approach? We support clear and enforceable price control outputs and therefore customers are already protected. There is no evidence of additional benefits to be realised through milestone setting, monitoring and assessment.
- We would also request Ofgem carefully consider how re-profiling of allowance would work and could seriously impact a network's cash flow. There is almost a two year gap between revenue being calculated and the regulator directing changes to revenue through the Annual Iteration Process. Ofgem should seriously consider whether there is a practical route for implementation without introducing an unreasonable level of volatility.

Until there is further information on how Ofgem intends to implement a milestone approach for large capital investment projects then it is difficult to comment on the suitability of the approach. We reserve the right to comment on the suitability of the milestone approach as further details are provided. Careful consideration should be given to the level of additional reporting and bureaucracy that the milestone approach will bring, our view is this contradicts the overall principles set out for the RIIO approach.

ETQ59. Are there any alternatives which we should also consider?

We do not understand the problem which Ofgem is trying to resolve through these proposals which is not or could not be more easily addressed through existing mechanisms. In our view there have not been any issues during RIIO-T1 and we believe that the proposed milestone approach will bring undue regulatory burden with no real benefit. For the majority, if not all, transmission schemes the overall progress (against milestones) is irrelevant unless the final stage is completed (i.e. the price control deliverable).

ETQ60. We invite views on the circumstances we should consider options for minimising consumer detriment and/ or sharing consumer detriment with consumers.

As outlined above, there is already a Legal and Regulatory framework in place to minimise consumer detriment resulting from unsuccessful, delayed or poor quality delivery. Section 9 of the Electricity Act requires TOs develop and maintain an efficient, co-ordinated and economical system and the TOs are also signed up to multiple industry codes which they must comply with including the National Electricity Transmission Security and Quality of Supply. This should prevent consumers from suffering from poor quality delivery.

In addition to this, TOs already have licence obligations relating to timely connections under standard licence obligation D4A Obligations in relation to offers for connections and special licence condition 3G Financial Incentive for Timely Connections Output. This should prevent any customer detriment from unsuccessful or delayed schemes.

A final provision currently in place to minimise consumer detriment is the Totex Incentive Mechanism which protects consumers by ensuring that the consumer will only be exposed to a share of any justified overspend.

On this basis, we're not clear on the problem which Ofgem is trying to resolve by introducing a mechanism for dealing with large capital projects that are not successfully delivered on time and/or to an expected standard. Absent any meaningful impact assessment, we struggle to see why this proposal should be taken forward.

We strongly oppose Ofgem's proposal to introduce penalties based on either constraint payments or agreed day rates for the following reasons:

- Delays to projects are more often due to factors out with the control of the TO's – e.g. extreme weather, equipment failure, consenting issues etc,
- Consideration of constraint costs would mean significant exposure for the TO's in comparison to overall project costs,
- TO's will be encouraged to offset any penalties within their construction contracts, which could result in significant additional costs for the consumer

Given our performance in T1 and considering the level of renewable generation that has connected during the period as a result of the new infrastructure delivered on time and within budget, we don't feel this the introduction of delay penalties is required or reasonable for RIIO-T2. As well as introducing additional delivery costs, this approach could lead to more conservative program commitments which in the long term will be to the detriment of the end consumer.

ETQ61. We are seeking views on these two options, including ways in which we could measure and reflect consumer detriment.

As per the response above.

ETQ62. Are there any alternatives not identified here which you think we should be considering?

We have noted above the existing mechanisms and tools within the RIIO framework which already protect consumers and are at Ofgem’s disposal.

Chapter 6 questions – Cost assessment – ETQs 63-67

ETQ63. Do you agree with our intention to evolve the RIIO-ET1 approach for RIIO-ET2?

In general, we agree with the proposal to evolve the RIIO-T1 approach for cost assessment of the RIIO-T2 business plan. We acknowledge the benefit of using a wide range of tools to assess the submitted cost proposals using both ‘bottom up’ and ‘top down’ assessment techniques. We are, however, concerned that the evolution may mean moving to the distribution cost assessment approach which is inappropriate for transmission with large bespoke schemes. It is vital that any changes are focused on effective targeted cost assessment for the transmission sector.

Specific recognition should be given to the bespoke nature of the transmission sector where a significant proportion of proposed investments will be based on high value and bespoke capital investment programs. The associated challenges of delivering projects of this nature, including key cost drivers, needs to be acknowledged as part of the overall assessment process for the RIIO-ET2 business plan. A key factor in this assessment should be the assessment of the procurement and decision-making processes that have been undertaken to determine the proposed costs, this should include an assessment on whether the costs have been derived on a competitive basis.

Also, as noted in our response to **CSQ65** we have concerns on the **late introduction of new draft business plan data templates (BPDTs)** which has no associated guidance yet drafted. This will mean that the data being used by Ofgem to inform the RIIO-2 cost assessment is placing significant weight on data from templates which have not been used in anger during the annual Regulatory Reporting process. This is a very different to the situation in the distribution sectors. There are well documented risks with this (as noted as far back as a decade ago when data templates were in their infancy in DPCR4⁹³). The likelihood of inconsistencies in approaches to completing the templates across the TOs will result in incorrectly setting allowances and punishing/rewarding companies (through the business plan incentive and the setting the TIM sharing factor). This is inequitable for both consumers and companies. This is exacerbated by Ofgem’s focus on “predictability” which requires the backfilling of the new templates to the beginning of the RIIO-1 period to allow Ofgem to rely on historical information. However, the backfilling and re-cutting of data retrospectively will reduce data accuracy and reliability, despite the best efforts of the TOs. Ofgem has previously considered three years of annual reporting necessary to have confidence in new data templates.⁹⁴

⁹³ https://www.ofgem.gov.uk/sites/default/files/docs/2007/12/elec-dist-cost-review-200607-ref-28907_0.pdf

⁹⁴ https://www.ofgem.gov.uk/sites/default/files/docs/2007/12/elec-dist-cost-review-200607-ref-28907_0.pdf

While historical trends have an important role to play, this is more limited in the transmission sector and should be assessed alongside a qualitative review. This is particularly where TOs expected to deliver more within the baseline allowances in comparison to T1. An example of this is where an incentivised activity is now expected to be a price control deliverable and therefore business as usual. Likewise, where deliverables over and above the standard set in T1 are requested by our stakeholders (e.g. biodiversity net gain). **Therefore, our view is that a qualitative review should be added as a vital element to the toolkit.**

ETQ64. Do you have any comments on appropriate cost categories, cost drivers or approaches to cost assessment?

As outlined in our response to **ETQ63**, a large portion of expenditure within TO business plans are made up of large value and bespoke capital projects.

It's important that the cost assessment process considers some of the key factors associated with delivery of such schemes:

Cost Categories: Given the complexity associated with delivery of large-scale transmission schemes, it's crucial that cost categories are accurately defined to ensure consistent reporting and assessment across all parties. This is particularly important when defining unit cost categories to ensure all parties are allocating costs in a consistent and meaningful manner. Our view is that a pragmatic approach to costs categorisation should be taken to ensure a manageable and meaningful collection and assessment process. For example, our view is that collection of data at individual asset level would be impractical and unmanageable i.e. potentially resulting in unmanageable levels of data points. A balance should be struck between manageable levels of data.

Cost Drivers: Identification of cost drivers is critical to fair assessment of transmission projects and should be a key factor in the overall cost assessment process for the RIIO-T1 business plan. Our experience in delivery of our RIIO-T1 business plan has highlighted the importance of cost drivers, some examples of the most significant cost drivers that need to be considered for transmission schemes are outlined below:

- Site location – recognition that site location can have a major impact on the overall cost for a scheme due to
 - Premium of attracting resource to work in certain (usually remote) areas
 - Additional costs due to travel time
 - Weather conditions can have a major impact in certain locations due to, for example, long periods of snow during winter months
- Greenfield versus Brownfield site – e.g. significant additional costs associated with working in existing 'live' sites
- Site terrain – potential for significant additional costs associated with remote site, additional access costs.

Site ground conditions – potential for significant additional costs for sites with poor ground condition.

It is also important that we agree the definition of cost drivers versus regional/special factors early in the process. We understand that cost driver benchmarking has been used extensively in the distribution sector but feel this has limited value for transmission. Failure to capture the impact of these cost drivers could lead to false conclusions that SHE Transmission is inefficient. In our response above, we are using the term cost driver in the purest sense i.e. these factors drive our costs, but we feel Ofgem may see these as unique regional factor adjustments. It is important to work together in the coming months to clarify the purpose and terminology of these drivers.

ETQ65. We invite views on the appropriateness of our proposed cost categories for RIIO-ET2.

We broadly support Ofgem’s proposal for the three cost categories – Load Related Expenditure, Non-Load Related Expenditure & Indirect and Non-Operational Expenditure. Our understanding is that direct costs associated with inspection & maintenance activities will be reported under Non-Load Related Expenditure with Closely Associated Indirect and Business Support Costs reported as indirect expenditure.

ETQ66. We invite views on the principles of a good cost driver and our approach to identifying suitable RIIO-ET2 cost drivers is appropriate.

See response to ET6Q4 above.

ETQ67. We welcome any early views on how we can combine the analysis in order to ensure ex ante allowances reflect efficient costs.

We are concerned that combining analysis may not, on its own, provide an appropriate means to reflect efficient costs, and thus ex ante allowances to deliver required outputs. As outlined in our response to ET63-66, the scale and bespoke nature of large capital transmission projects means that like for like assessment across similar projects can often be difficult, especially when relevant cost drivers are considered.

We believe an evaluation of a business plan efficiency should be based on an assessment of the TO demonstrating effective decision making based on the relevant information. There is a danger that a combination of assessment techniques may create obscure ex ante allowance that do not truly reflect the factors that impact our submission. The evaluation process should consider the procurement strategy that has been used to determine the costs presented in the business plan and should recognise:

- Where a competitive tendering exercise has been undertaken, therefore leading to efficient cost proposals;
- The bespoke nature and challenges of transmission projects, including the impact of key cost drivers; (see below)

- Some of the key factors that need to be considered by the TO's in delivering large capital Transmission projects, e.g. deliver safely, ensure adequate welfare provisions, drive for quality etc.

Our preference would be to demonstrate to Ofgem how we will be efficient operators, whilst ensuring our business plan commitments and outputs are not compromised.

To facilitate and accommodate the continued growth of renewable generation in the North of Scotland, a significant proportion of our business plan will be made up of large, high value and bespoke transmission upgrade schemes. To ensure a fair and accurate assessment of the cost submissions for such schemes, the associated cost drivers need to be understood and assessed accordingly. Our discussions at the working group level have identified several key cost drivers for such schemes:

- Recognition that the portfolio of scheme costs presented in the TO's business plans will contain a suite of projects with different levels of project maturity. For example, a scheme that is due to provide a connection in the early part of the T2 period is likely to be well developed and have a higher level of cost accuracy when compared to a scheme that is scheduled for later in the price control. Schemes scheduled for later in the price control will therefore have more uncertainty (i.e. may not actually proceed at all) and therefore higher levels of risk included within the cost forecast. This needs to be recognised in the cost assessment process with associated means of cost recovery put in place (e.g. uncertainty mechanisms where appropriate).
- For most large transmission schemes, the cost of the plant and materials delivered often pales into insignificance when compared to other key factors which drive costs on the project.

Specific examples of such cost drivers include:

- Ground condition and associated stabilisation works
- Site access and associated access costs (access tracks, additional labour costs for travelling etc)
- Challenges and costs associated with working in a live compound
- Challenges associated with working in harsh environments – more protection and costs required for equipment
- A key cost driver for delivering infrastructure in the North of Scotland relates to the challenges and additional costs of working in remote areas with challenging terrain. This can lead to significant additional costs associated with attracting the required skills to these areas, not to mention the associated additional travelling and accommodation expenses

We generally agree with Ofgem's views on what makes a good cost driver with the following additional comment:

- Cost drivers should generally be justified using historic costs and experience from previous schemes
- The relative uncertainty associated with some cost drivers should also be acknowledged. A good example is the high degree of uncertainty associated with ground conditions and the associated unpredictability of associated stabilisation works

- We agree with Ofgem assertion that other developments may change how cost drivers relate to network companies' costs (whole system planning, access arrangements) and support the need to recognise this in the business plan assessment.

Chapter 7 questions – Uncertainty mechanisms – ETQs 68-70

ETQ68. We would welcome views on the design and suitability of existing uncertainty mechanisms for RIIO-ET2, and whether any of these should be removed.

SHE Transmission believes uncertainty mechanisms are a key component of incentive-based price controls that ensures consumers only pay for the outputs that are actually delivered. SHE Transmission supports the use of uncertainty mechanisms, ranging from volume drivers to re-openers. The pace of the energy transition will quicken in RIIO-2, but there remains uncertainty around the direction and scale of this change and therefore, we support and encourage the continued use in RIIO-ET2. The design of the uncertainty mechanisms should also provide enough flexibility to ensure the TO's are incentivised to deliver the most economic and efficient solutions.

Volume Driver

The Volume Driver has been a successful uncertainty mechanism within the RIIO-T1 period. Successful in delivering renewable generation quickly and efficiently to the benefit of consumers and we expect this uncertainty to continue for the RIIO-T2 period. SHE Transmission supports a similar approach to the design of the volume driver of a combination of an ex ante allowance with a mechanism based on a £/MW that allows flexibility within period. However, Ofgem will need to reflect the lessons learned from RIIO-T1 in the design of the mechanism:

1. The banding approach for typical & atypical schemes and the potential for continued use in T2.
2. Management of schemes that change in categorisation during the period e.g. between sole use and shared use schemes.
3. Ofgem need to consider how the cross over between price control periods will be managed.
4. Cost recovery needs to better reflect the delivery profile of the schemes.
5. Interaction of schemes with multiple drivers – e.g. schemes with both Load & Non Load drivers.

Strategic Wider Works (SWW)

SHE Transmission considers that the Strategic Wider Works (SWW) has worked well through the RIIO-T1 period and it remains suitable to be retained in RIIO-ET2. It has provided a robust and challenging approval process for network companies projects, ensuring that the interests of consumers are protected. As highlighted in our response to the 'Extending competition in electricity transmission: commercial and regulatory framework for the SPV Model'95, we believe the carefully developed SWW mechanism is designed to protect the interests of existing and future consumers by allowing

⁹⁵ https://www.ofgem.gov.uk/system/files/docs/2018/12/ssen_scottish_and_southern_electricity_networks.pdf

reinforcement or development of the transmission system, unforeseen at the point the price control was set, to proceed only where the 'need' is demonstrated.

SWW promotes competition to the extent appropriate, consistent with the TOs' statutory duties to develop and maintain an efficient, coordinated and economical transmission system, facilitating supply and generation competition (there is no statutory obligation to promote competition in transmission). The consequences for non-delivery under the SWW mechanism are transparent and accountability is clear. Furthermore, this mechanism is sufficiently flexible allowing TOs' to integrate mitigation measures or changes in design arising from unforeseen issues associated with the reinforcement. Therefore, we believe that the SWW mechanism should be retained in RIIO-T2.

Price Control Reopeners

The use of re-openers in RIIO-T1 has been successful and SHE Transmission supports the continued use for the RIIO-T2 period. Given that for some cost categories where there is uncertainty about expenditure requirements at the time of setting allowances, such as Physical and Cyber security costs, the re-opener mechanism should continue to allow network companies to recover any efficient and justified costs which may not be foreseen at the outset of RIIO-2.

Overall, SHE Transmission believes the existing uncertainty mechanisms from RIIO-T1 remain suitable for use in RIIO-T2 with design modifications that ensure that the mechanisms remain appropriate to provide protection for both the networks and consumers.

The specific design of the mechanisms will have to take a number of key factors into consideration. Ofgem will have to consider that if uncertainty mechanisms are to be sector wide across all three TOs and there will need to be careful thought in design of these mechanisms, given the differences between the networks. The design of the mechanisms should consider the unique aspects to our network – e.g. the remoteness, maturity of our network and potential scale of shared use infrastructure upgrades. There may also be scope for networks to propose cross sector uncertainty mechanisms through their business plan submissions to accommodate the energy system transition.

ETQ69. Are there any additional mechanisms that we should consider across the sector and if so, how should these be designed?

SHE Transmission thinks that as well as the continued use of RIIO-T1 mechanisms, additional uncertainty mechanisms will be required as we move into RIIO-T2. We believe that the volume driver mechanism could be extended for SHE Transmission to manage the uncertainty in the areas of:

- **New demand-related infrastructure:** Given the uncertainty of demand connections as we move into RIIO-T2 and the potential impacts on the Transmission system from the uptake of EV's and electrification of heat.
- **Schemes Delivering Boundary Uplift (below SWW threshold):** The use of a volume driver to fund schemes which deliver boundary uplift - above the agreed ex ante funded baseline wider works output - and are funded through flexible baseline with volume driver to adjust allowances if delivery turns out to be different.

- **Funding for the delivery of outputs in RIIO-T3:** We believe that Ofgem also need to consider the cross over between funding for outputs that will be delivered in RIIO-T3, this is particularly important given the shorter length of the price control period. As well as building on the current mechanism that is in place for the volume driver schemes in T1, consideration should also be given for the associated uncertainty relating to T2 preconstruction works required to deliver schemes in T3.

SHE Transmission believes that as well as the need for an extension of the volume driver, there is a need for additional uncertainty mechanisms that we believe will be required across the Electricity Transmission sector are mechanisms that manage potential uncertainty in the areas of:

- Schemes required for System performance (e.g. voltage control);
- Whole System; and
- Preconstruction for Non-Load Related Expenditure.
- Industry code reviews

However, until the business plan development process is more advanced, it is too early to design how these mechanisms will operate and further engagement will be required. Furthermore, we will seek to consider our wider stakeholder's views on the drivers of and need for uncertainty mechanisms.

Regarding the ongoing industry codes reviews, the significant code review to access and charging being led by Ofgem and the energy code review being led by BEIS, could have a significant impact on SHE Transmission's business plan. The impact of these code reviews is uncertain. The significant code review could impact the business models for SHE Transmission's already connected customers and future connection customers. For example, an increase in costs could drive disconnection of already connected generation or a decrease in costs could cause a spike in connection applications and works in the future. Similarly, the energy code review which is not only looking at technical design standards but the whole energy industry framework could have an impact on the role of all TOs and in turn business plans and the price control. We will continue to engage with both Ofgem and BIES on these code reviews however we feel the unknown impact of these reviews should be highlighted as an uncertainty in the price control.

In designing sector wide uncertainty mechanisms, Ofgem must consider the regional factors that come with the unique aspects of three Transmission Operators. SHE Transmission believes that the design of the uncertainty mechanisms and the unit cost allowances (UCAs) have to be appropriate for each of the different networks. SHE Transmission looks forward to working with Ofgem and industry to further develop the sector wide uncertainty mechanisms.

This list is not exhaustive, and through the business plan development period, we may propose more bespoke mechanisms to manage uncertainty. The current proposed competitive design of the business plan incentive unfortunately encourages networks to be hesitant on sharing this more widely ahead of our plan submission. At this moment, SHE Transmission believes that further work is required to develop these uncertainty mechanisms, as more information becomes available.

ETQ70. We would welcome views from respondents on the continuing relevance of these mechanisms and any changes to the way that they operate if they are to continue.

Cross Sector uncertainty mechanisms

SHE Transmission believes that all the cross-sector uncertainty mechanisms remain relevant for the RIIO-2 period.

- **Ofgem Licence Fees:** Remain as pass through cost as these are outwith SHE Transmission's control.
- **Business Rates:** Remain as pass through cost as these are outwith SHE Transmission's control.
- **Real Price Effects (RPEs):** We support ex ante RPE allowances relative to indexation. See CSQ 35, whereby selection of indices is the critical factor for RPEs.
- **Physical Security & Cyber Security:** We believe that a reopener in year 2 or 3 of the price control will be required given the uncertainty of costs within an ex ante allowance.
- **Disapplication (Financial Distress):** This should remain in current format.

ET2 Specific uncertainty mechanisms

Landowner compensation (SHETL)

SHE Transmission believes that the Landowner compensation uncertainty mechanism is required to continue into the RIIO-T2 period as these costs will continue to be uncertain. This is especially the case in relation to the injurious affection claims that SHE Transmission may encounter during the RIIO-T2 period. We believe the existing arrangements of establishing a materiality threshold to trigger a reopener, while a logging up approach for those cost incurred under the threshold with an ex post efficiency assessment and RAV or cash adjustment at the end of the period continues to be the most appropriate mechanism and limits the use of re-openers within the price control.

BT 21st Century Networks (SHETL)

The current BT 21st Century Network project, as presently defined, is due to come to an end within the RIIO-T1 price control. However, BT have set out proposals for the upgrade to 'Voice Over IP' technology and the withdrawal of wholesale products and services – which is due to close in 2025. SHE Transmission believe that there will need to be an uncertainty mechanism that will protect from costs arising from the BT project that are outwith the control of SHE Transmission.

We will develop this mechanism as we have more detail, however, a similar approach to the reopener in RIIO-T1 that provided an efficient risk sharing arrangement that allowed a reopener mechanism for costs that exceed a materiality threshold with a reopener window in year 3 of the price control.

Finance Questions

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

Questions FQ1 through to FQ19 have been addressed in general in the main Finance response to the consultation. Where more detail or a specific response has been required in answer to the questions, this has been outlined below.

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

We agree that debt outperformance should not be shared at this stage of the price control. However, as with previous price controls, we believe Ofgem should leave options open as the price control develops. The cost of debt mechanism should continue to be discussed and refined up to Final Determination stage.

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

We have provided our views on cost of debt indexation in the main part of our response to the consultation. This is supported by a report provided by NERA to the ENA on the cost of debt.⁹⁶ The cost of debt index should be calibrated so that it fairly covers debt costs while complying with Ofgem principles. We do not believe adopting a weighted average approach to calibrating the sector is appropriate as we have set out in our wider response. This is akin to a pass-through on the largest network in each sector and ignores the treatment of actual costs of debt by company. This is a break from regulatory precedent and contradictory to Ofgem's principles including retaining the incentive properties of the mechanism. Relatively smaller companies will be benchmarked against relatively larger companies which is not appropriate.

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

The methodological issues around using nominal and real bonds and then adjusting for the RPI/CPIH wedge or using forecast CPI from the OBR to deduct from nominal bonds requires further analysis. We believe that the true-up for inflation needs to be developed as part of the wider impact assessment of transitioning to CPIH from RPI and ensuring value neutrality as we have set out in our wider response.

⁹⁶ *Cost of debt at RIIO-2*, NERA, prepared for the ENA, March 2019

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

We have set out our views in our main finance response to the consultation with reference to the NERA report on cost of equity indexation using the RFR.⁹⁷

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

We have set out our views in our main finance response to the consultation with reference to the NERA report on cost of equity indexation using the RFR.

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

We have set out our views in our main finance response to the consultation with reference to the NERA report on cost of equity indexation using the RFR.

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

We have set out our views in our main finance response to the consultation with reference to the NERA report on cost of equity indexation using the RFR.

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

We have set out our views in our main finance response to the consultation with reference to the NERA report on cost of equity indexation using the RFR.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

⁹⁷ Cost of equity indexation using RfR, NERA, prepared for the ENA, March 2019

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

FQ14. What is your view on Indepen's report?

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

We have set out our views on the cost of equity in our main finance response to the consultation.

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

Appendix 4 does not provide any context around outperformance of price controls. Firstly, it should be noted Ofgem has changed its methodology in its most recent publication of RoRE. It has also included tax and financing out/underperformance. Putting aside whether this is an accurate and up-to-date reflection of outperformance, we do not believe this is a guide to future performance. Ofgem has also failed to recognise that each company which performs well is delivering value for consumers including better service and lower bills due to efficiency savings. The assessment performed by CEPA and Ofgem does not provide any evidence that RIIO-1 was incorrectly calibrated or that the range of outcomes is not due to genuine strong performance by energy networks. The nature of a shorter price control, which Ofgem is adopting for RIIO-2, will allow this strong performance to be “banked” for future consumers to their benefit.

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

As we have set out, we believe an up to date view of performance should be the main focus. The methodology for measuring performance needs to be agreed given recent changes made unilaterally by Ofgem in their published RoRE figures. We believe that we should be focused more on future performance potential as the past or present is not an appropriate guide to the future given the substantial changes Ofgem has proposed for RIIO-2 compared to RIIO-1. Proposed changes to the Totex incentive mechanism, size and scale of the Totex expenditure in each business plan, the cost assessment analysis for each sector and performance incentives makes the RIIO-2 landscape very different from RIIO-1.

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

Ofgem should focus on investment grade credit rating metrics and rating agency metrics. Deviation from this has no value given that these metrics are key drivers in how companies are viewed by both debt and equity investors. In terms of assessment of the notional and actual company, we believe Ofgem has a duty to consider notional but refer to actual where this deviates materially. It would be for each company to justify variations to the price control based on their actual circumstances compared to the notional version

of themselves. This is consistent with RIIO-1 and is an appropriate consideration. We would note that there is concern around the regulatory developments in the UK and that this is a qualitative aspect of the ratings methodology. The new mechanisms being introduced alongside the reduced returns and heightened risks in the industry have the potential to have a material adverse impact on ratings and therefore financeability for debt and equity investors.

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

The possible measures stated in the consultation are valid suggestions but there are restrictions attached to each. Dividend policies are within each company's control and so, could be adjusted to retain cash. However, the companies will not be earning enough in order to bank large amounts of cash annually and so, there are limitations in terms of how much cash would be able to be retained especially depending on capital investment programmes.

In relation to equity injections, the companies are not a financially attractive as they have been in the past due to current thoughts around RIIO-2. Hence, it is not guaranteed that equity injections will be possible to address financeability. Furthermore, the option to re-finance debt is something which the companies can consider however is also limited in terms of both the leeway it would bring to companies and the success rate of negotiating cheaper debt. In relation to alternative capitalisation rates and depreciation rates, these are parameters which we agree should be driven by company business plans and justified accordingly. We do not however support the view that these should be flexed in order to manage financeability. The parameters should be commensurate with spend profile rather than being relied upon to support the financeability of the company. These are not levers to be used to solve financeability problems. As stated in the Sector Specific Methodology, "Ofgem has a duty to have regard to the need to secure that companies are able to finance the activities which are the subject of obligations imposed by or under the relevant legislation"⁹⁸. The approach to ensure financeability should not be any different to RIIO-1. Ofgem should ensure that the price control package as a whole is designed such that a company which is performing in line with expectations remains financeable throughout the period. Proper calibration of the package is key when considering financeability and assessing whether companies are fairly remunerated for the service they are providing.

Both debt and equity need to be considered in the assessment of financeability, not solely debt holders. At this stage, the low cost of equity and the risks associated with the price control cause concern about equity financeability in RIIO-2. Ofgem are concerned about the impact of lower returns having an adverse impact on debt financeability as they have proposed the bailout mechanism (cashflow floor). We do not believe that this mechanism is appropriate and, as set out in our main finance response, the triggering of the mechanism would be to the detriment of consumers and should not be implemented in RIIO-2.

⁹⁸RIIO-2 Sector Specific Methodology, section 4.1, p.55

FQ24. Do you agree with the objectives and principles set out for the design of a cashflow floor?

We do not agree with the principles of a cashflow floor (CFF). The introduction of this mechanism has been proposed in order to deal with potential headroom issues influenced by the lower cost of equity currently tabled for RIIO-2. This is in effect a bailout mechanism for companies which cannot meet their debt repayments during the price control period. The presence of such a mechanism within Ofgem's proposals implies that the availability of the mechanism has been considered as being necessary. There is therefore a considered possibility that companies could fail to meet their debt repayments in the next price control period and trigger the mechanism.

The principles stated in the sector specific methodology around the CFF is required where there is no alternative to the company to manage their debt payments. Ofgem state that customers should not be adversely affected by the CFF.⁹⁹ Companies would not however trigger the CFF if the price control is calibrated appropriately. However, Ofgem fail to recognise that customers will be adversely affected as they will have to 'bailout' any company which triggers the CFF. In essence, every UK customer is exposed as if the CFF is triggered by any operator, all customers will fund it. Customers will receive full repayment in the future but there are intergenerational issues in that it will not necessarily be the same customers who bailed out' the company who are repaid. In essence the CFF increases bills to consumers today to the benefit of future consumers who should receive a refund as the CFF is repaid.

The mechanism has limited credit value for debt holders and distorts the risk associated with equity holders. As we have set out in our main Finance response, we believe this will lead to an increase in the cost of capital which has an adverse impact on consumers.

In relation to the objectives stated in the sector specific methodology, in our opinion, an appropriately settled price control which is calibrated accordingly would meet each of the objectives stated. and avoid the need for the introduction of the complex cashflow floor. There is no need to introduce a mechanism around creditworthiness and protection from downside scenarios if the price control is properly calibrated as companies would earn a reasonable and fair return as a result. This would mean that credit metrics would be stable and any downside could be managed through sensible business decisions being made, thus achieving the third stated objective of the cashflow floor in relation to financial structures being managed appropriately.

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

As referred to in the above answer, we do not think that the cashflow floor is the most likely way to meet the objectives stated in the sector specific methodology. In our view, the price control should be calibrated fairly so that companies are able to recover their costs and earn a reasonable return. This in effect would

⁹⁹ RIIO-2 Sector Specific Methodology, section 10.8, p.110

remove the need for a cashflow floor and would achieve the objectives which have been stated around the cashflow floor.

Recent credit rating agency reports have referred to the lack of value in the floor. Moody's state that the "Bailout mechanism would socialise debt service shortfalls, but likely to have significant limitations" and comment that "future regulators may find it difficult to renew the scheme...there is a significant risk that the mechanism could be removed or modified as soon as 2026."¹⁰⁰ They go on to state that "If a mechanism is eventually devised that successfully removes the need for Ofgem to allow any headroom to financing costs, the credit quality of the sector is likely to be weakened." Moody's therefore see this as credit negative. S&P have stated that they "see limited credit value in the proposed mechanisms". S&P "question whether the introduction of the mechanism signals the regulator's willingness to allow credit quality in the industry to decline."¹⁰¹ Such commentary contradicts the aim to support creditworthiness and protect consumers and debtholders. We agree that there is an over-riding sentiment in the current proposals is that credit quality is set to decline and do not support the introduction of the cashflow floor.

KPMG prepared a report for the ENA to evaluate the bailout mechanism and they see little value in the mechanism. They note that the marginal cost for an equity investor to take an energy network out of financial distress would need to be materially greater than the cost of equity for normal investment. This is because the marginal return would need to be greater to reflect the greater risk to equity holders. KPMG also note the distortionary impact this mechanism would have on the fairness between equity and debt investors and that it is not Ofgem's place to favour one funder over another. KPMG also suggest already established regulatory mechanisms which would be more appropriate for handling financeability issues.¹⁰²

Furthermore, linkage to the RAMs 300bps upward adjustment when returns fall below the sector average should be explored, as mentioned at CSQ86.

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

Yes, we support the proposal that companies should seek to obtain the "Fair Tax Mark". As stated in our response to the RIIO-2 Framework decision¹⁰³, we believe there is value attributed to companies having clear and transparent corporation tax policies. As part of the SSE plc group, we have been designated a Fair Tax Mark and were the first FTSE listed company to achieve such recognition. We believe that the transparency which is offered alongside this status is something which our customers value and so should Ofgem and other Network Operators. We have set out our view on tax in the main finance response.

¹⁰⁰"Credit quality likely to weaken in RIIO-GD2 regulatory period", Moody's Investor Service

¹⁰¹"Ofgem's Proposed RIIO-2 Regulatory Framework Will Test U.K. Energy Networks", S&P Global Ratings

¹⁰²"Assessment of Ofgem's Cashflow Floor Proposals", KPMG LLP

¹⁰³ SSEN Framework consultation Response, May 2018

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

The other options proposed are valid but are not as fully formed methods or recognised widely by the general public. The Fair Tax Mark (FTM) has been publicised and customers recognise the value which comes along with the mark as it is a sign that companies are paying a fair amount of tax and are being transparent in their tax dealings. Publishing a tax strategy and appointing an SAO feel like inferior options to the FTM. All companies should comply with the FTM framework in the absence of well-developed alternatives.

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

We do not support a tax re-opener mechanism as our view is that tax should be a pass through. Companies should be fair and transparent in their dealings and should therefore recover all of their tax costs. Adoption of the FTM framework should support this and will give confidence that companies are recovering a fair amount of tax.

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

We have set out our views in our main finance response on the switch to CPIH.

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

We have set out our views in our main finance response regarding securing NPV-neutrality.

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

We feel that the current useful economic lives in place, including the transition period for the SHE Transmission, are appropriate. There would need to be a high bar of evidence and justification, particularly in relation to the transition period to a 45 year asset life for SHE Transmission being over 16 years, to change either asset lives or transition period from the commitments made in RIIO-1.

FQ32. Do you agree with our proposed approach to consider capitalisation rates following receipt of company business plans?

Yes, we support the approach that capitalisation rates should be underpinned by company business plans and consideration of the company view on the spend profile across the price control period. Any adjustments to the capitalisation rates should be supported by appropriate analysis and justification including any requirements to maintain financeability during the price control as was done during RIIO-1, where a 90% capitalisation rate was agreed for SHE Transmission.¹⁰⁴

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

We believe that working assumption for 60% has been set based on maintaining financeability metrics. We believe this may need adjusted depending business plans and various other financial parameters. Moody's and S&P noted, when reviewing the AICR coverage for a notional company, that metrics are only maintained in RIIO-2 due to the transition to CPIH. As we have set out in our main finance response, we do not believe that the transition to CPIH should be used as a means to *boost* short term cash flows. In the absence of those cash flows the gearing would need to be materially lower than 60%. We believe this supports the view that the cost of equity is too low.

FQ34. Do you agree with our proposed approach to consider notional equity issuance costs in light of RIIO-2 business plans and notional gearing?

We do not believe the transaction costs for issuing equity are as low as 5% and therefore Ofgem should await further evidence from companies as part of their business plan submissions. We believe that requires further analysis of both the proposed capital structure and expenditure plans for RIIO-2 is required before determining equity issuance requirements and circumstances. We also believe that there has been insufficient time to undertake the analysis on the breadth and depth of issues highlighted by Ofgem during this consultation period.

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

We agree that ET is aligned with ED treatment of Admin and PPF costs as part of Totex.

¹⁰⁴ RIIO-T1: Final Proposals for SP Transmission Ltd and Scottish Hydro Electric Transmission Ltd, Ofgem, April 2012

FQ36. Do you have any views on the categories of Directly Remunerated Services and their proposed treatment for RIIO-2?

In relation to ET DRS1, Sole Use Connections, we believe there are practical limitations in attempting to align with GD and ED due to the historical treatment of sole use connections. We would support retention of the current treatment of these connections at this stage but an annual true-up of the allowances and revenue through the AIP process.

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

Any financial proceeds or fair value transfers of asset disposals should be offset against Totex. This is consistent with RIIO-ED1 and therefore allows network companies to retain the incentive properties of asset disposals within the Totex incentive mechanism.