In May 2019, we made decisions on key aspects of the RIIO-2 price control methodology for the Electricity System Operator (ESO). Alongside this decision we ran a further consultation on the funding model for the ESO. This was to obtain additional stakeholder views on the most appropriate remuneration approach prior to making a final decision. This document confirms our approach to the funding model for the ESO.

In this document, we are also consulting further on two aspects of the ESO’s RIIO-2 price control. The first is the methodology we will use to calculate the financial parameters within the chosen funding model. The second is on potential changes to the ESO’s incentives scheme.

We aim to publish a decision on the financial methodology and key aspects of the incentives in the autumn. For the incentives, where possible and appropriate, we may bring in some changes early for the incentives scheme in 2020/21.

Once these consultations are closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at Ofgem.gov.uk/consultations.

If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Please note: this document sets out decisions and consultation proposals with respect to the ESO’s medium term RIIO-2 price control, commencing April 2021. It is separate from the ongoing Ofgem investigation into the power cuts of 9 August 2019 announced on 20 August 2019. In the event there are issues arising from this investigation pertaining to the medium term framework, they will be addressed at the RIIO-2 determination stage in 2020.
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Executive Summary

The Electricity System Operator (ESO) has a central role in our energy system. The decarbonisation of the system presents both challenges and significant opportunities for the ESO to unlock substantial benefits for consumers. To make the most of these opportunities, and to ensure the ESO maintains a reliable, resilient and efficient system throughout this energy system transition, we need it to be flexible, collaborative and ambitious. Our regulatory framework for the ESO is key to achieving this. In April 2021, we will introduce the first standalone price control for the ESO under the RIIO-2 framework. This follows its legal separation from National Grid Electricity Transmission in April this year.

In May 2019, we set out how we intend to apply the RIIO-2 framework to the ESO in our Sector Specific Methodology Decision. As part of that document we also ran a further consultation on the ESO’s funding model, to seek views prior to making a final decision on this aspect of the price control. This document confirms our approach to the ESO’s funding model. It also launches further consultations on the financial methodology used within the funding model, and our initial thinking on changes to the ESO’s incentives framework.

Decisions on ESO funding model

We have decided on a funding model that is broadly consistent with Model 1 in our May consultation.¹ The ESO will be funded through a ‘totex’ (total expenditure) approach with fast and slow money. Fast money will be passed through in the year it is incurred whereas ‘slow money’ will be added to the regulatory asset value (RAV) and will receive a return for the weighted average cost of capital (WACC). There will be no ‘totex incentive mechanism’ (ie, no sharing mechanism, which allows under or over-spends on totex to be shared between the ESO and consumers) and therefore all of the ESO’s efficiently occurred costs will be recoverable for the ESO and passed through to consumers.

We are continuing to analyse the full set of risks held by the ESO in the run up to the RIIO-2 determinations process, to ensure these risks are appropriately remunerated. Our chosen model includes the option of providing additional remuneration for certain risks, if it would not be appropriate to remunerate these through the return provided by the RAV*WACC calculation.

We have decided to retain the ability to apply a downside financial incentive. Final incentive parameters will be set out during the determination stage in 2020. As part of setting the specific details of the ESO’s incentives we will consider the potential advantages in asymmetric incentives for the ESO, where there is greater financial reward for outperformance than financial penalties incurred for not meeting expectations.

These decisions build on our previous ones, to ensure that the components of our price control work together as a coherent package. The combination of a two-year business planning process; a pass-through of efficient costs; the appropriate remuneration of risks; a strong incentives scheme; access to RIIO-2 innovation allowances; and a proportionate cost monitoring process, will together enable the ESO to be ambitious, proactive and flexible. It can have a reasonable expectation that investments made to benefit consumers within a price control period will be funded and that excellent performance will receive additional incentive returns.

¹ See page 38 in our May RIIO-2 ESO Sector Specific Methodology Decision and Further Consultation: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_eso.pdf
Consultation on financial methodology

Now we have confirmed the ESO’s funding model, we are consulting further on our approach to setting the financial parameters within this model. We welcome views on the allowed returns methodology; approach to financeability; the inflation index for the WACC allowance and for RAV adjustments; our updated thinking in relation to risks associated with the ESO’s revenue collection function; and other financial issues.

We welcome views on these topics by 25 September in order for us to make a decision this autumn, which can then inform the ESO’s final business plan submission in December 2019. We will confirm the final financial parameters used in the price control, as part of the determinations process in 2020.

Consultation on regulatory and incentives framework

We confirmed in May our decision to maintain the evaluative incentives approach we introduced for the ESO in April 2018. We recognised that the evaluative incentives model was still new and therefore committed to reviewing the first year of the scheme and consulting on potential changes prior to the start of RIIO-2. Chapter 4 of this document is the next stage in that process.

Several key learnings have become apparent from the first year of the scheme. Firstly, we must ensure the ESO’s overall regulatory framework works effectively as a package, with coherence between different incentives and their links back to baseline business plan expectations. And secondly, we must also strike the right balance between predictability and flexibility around the evaluation process. This could include setting clear outcomes through our roles framework; introducing a more direct role for Ofgem in performance metric setting; strengthening behavioural incentives on the ESO to develop stretching and well-specified plans; streamlining the evaluation criteria; and potentially tailoring the evaluation approach to different areas of ESO activity.

We are also considering how best to align the existing incentives scheme processes with the RIIO-2 business plan cycle, as well as ways to reduce administrative burden.

We welcome stakeholder views on our initial incentives thinking, ideally by 25 September 2019 when the consultation on the price control financial methodology closes. However, if stakeholders require additional time to consider the incentives-related questions and prepare responses, we will consider carefully all responses to the incentives consultation questions (questions Q15 to Q28) until 9 October 2019. We would also be happy to meet and discuss stakeholders’ responses bilaterally.

We aim to confirm any key incentives policy changes for RIIO-2 this autumn. Where possible and appropriate, we may also consult on introducing some changes early for the 2020/21 ESO incentives scheme. We expect this to involve more detailed follow-up consultations on changes to scheme documents later this year. We welcome stakeholder views on which, if any, changes should be prioritised and introduced early for the start of the 2020/21 regulatory year.

Responses to both the financial methodology and incentives consultation, and any questions about this document in general, should be sent to RIIO2@ofgem.gov.uk and addressed to the ESO Regulation team.
1. Introduction

Context

1.1. The Electricity System Operator (ESO) has a central role in our energy system. It performs a number of important functions from the reliable real time operation of the system, through to market development and longer term network planning.

1.2. The decarbonisation of the energy system presents both challenges and significant opportunities for the ESO to unlock substantial benefits for consumers. To make the most of these opportunities, and to ensure the ESO maintains a reliable, resilient and efficient system throughout this energy system transition, we need the ESO to be ambitious, forward-looking and proactive. We also need it to work closely with other industry parties and wider stakeholders to ensure there is a coordinated approach to solving system challenges. Finally, we need the ESO to be dynamic and flexible, so that it readily adapts to emerging issues and new developments.

1.3. On 1 April 2019, the ESO separated from National Grid Electricity Transmission (NGET), and became a legally distinct company within the National Grid group. This separation should further embolden the ESO to develop its own vision for its system operator role and to place wider system and consumer interests at the heart of its decision-making. Our regulatory framework for the ESO is a key enabler for this. In April 2021 we will introduce the first standalone price control for the ESO, under the RIIO-2 framework.

1.4. Our work in this area fits within our forward work programme for 2019-21 and is aligned with our strategic narrative from 2019-2023. In particular, it is aligned with our priority to facilitate the decarbonisation of the energy system at lowest cost to consumers. Our work also follows our regulatory stance on Driving Value in Monopoly Activities through Competition and Incentive Regulation. This includes our aim to design our price control mechanisms to ensure that the governance of monopoly companies, and the development and delivery of their strategies, are aligned with the interests of consumers.

1.5. We set out how we intend to apply the RIIO-2 framework to the ESO in our sector specific methodology decision in May 2019. As part of this document we also ran a further consultation on the ESO’s funding model. This was to seek further views prior to a final decision. This consultation closed on 5 July 2019.

Document overview

1.6. This document is both a decision and a consultation.

Decision on funding model

1.7. Chapter 2 sets out our decisions on the funding model for the ESO and outlines our rationale for these decisions. This involves two interrelated decisions on:

- the core funding approach for the ESO, in particular, how it will recover its capital and operational costs and be remunerated for the risks it faces; and

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3 https://www.ofgem.gov.uk/publications-and-updates/ofgems-regulatory-stances
1.8. We then summarise how the ESO’s price control works as a whole, why we are confident that this model will provide fair returns that are commensurate with the ESO’s risks, and ultimately why this price control package will drive efficient, ambitious and flexible decision-making.

1.9. Following this decision, we are consulting further on two key aspects of the price control. The first is the methodology we intend to use in order to set the final financial parameters within the chosen funding model. The second is on the regulatory and incentives framework we intend to apply in order to drive the ESO’s performance.

Consultation on financial methodology

1.10. In Chapter 3, we are consulting on several aspects of the financial methodology. This includes our methodology for allowed returns; our approach to financeability; the inflation index for WACC allowance and RAV adjustments; updated thinking on revenue collection risks; as well as other finance issues.

Consultation on regulatory and incentives framework

1.11. In Chapter 4, we are seeking views on potential changes to the ESO’s incentives framework for RIIO-2. In May, we set out our decision to keep in place the evaluative incentives framework we introduced in April 2018, but to adapt and refine this framework following a review of the first year of its operation.

1.12. The chapter sets out the key lessons learned from 2018/19 and our initial thinking on potential changes, including how the framework might interact effectively with the new price control.

1.13. This consultation is primarily to inform the design of the RIIO-2 incentives. However, where possible and appropriate, we may consult on introducing some changes early, for the start of the 2020/21 incentives scheme.

Timelines

1.14. Figure 1 outlines the key stages we will progress through to get to a final decision on the ESO’s financial methodology and incentives.

Figure 1 - ESO RIIO-2 price control timelines
1.15. We are seeking responses to the questions consulted on in this document by 25 September 2019. This will enable us to make a decision in autumn in order to inform the ESO’s business plan submission on 9 December. However, our initial thinking and potential changes to the incentives framework are less directly relevant to the business plan submission. We are therefore happy to receive responses to questions Q15 to Q28 later, by 9 October, if stakeholders require additional time to prepare their responses.

1.16. Our decisions in autumn will confirm the approach to the financial methodology we will use as part of the ESO’s funding model. We will also make decisions on any key areas of the regulatory and incentives framework that may need clarification prior to the business plan submission (eg, any changes to the ESO’s roles framework).

1.17. Later in autumn, we are also aiming to launch a more detailed consultation on any changes to the incentives scheme we propose to bring in early for the 2020/21 scheme.

**How to respond**

1.18. We want to hear from anyone interested in this consultation. Please send your response to RIIO2@ofgem.gov.uk, addressed to the ESO Regulation team.

1.19. We’ve asked for your feedback in each of the questions throughout (summarised in Appendix 3). Please respond to each one as fully as you can. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

**Your response, data and confidentiality**

1.20. You can ask us to keep your response, or parts of your response, confidential. We’ll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

1.21. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you do wish to be kept confidential and those that you do not wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we’ll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

1.22. If the information you give in your response contains personal data under the General Data Protection Regulation 2016/379 (GDPR) and domestic legislation on data protection, the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

1.23. If you wish to respond confidentially, we’ll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won’t link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.
General feedback

1.24. We believe that consultation is at the heart of good policy development. We welcome any comments about how we’ve run this consultation. We’d also like to get your answers to these questions:

Do you have any comments about the overall process of this consultation?
Do you have any comments about its tone and content?
Was it easy to read and understand? Or could it have been better written?
Were its conclusions balanced?
Did it make reasoned recommendations for improvement?
Any further comments?

1.25. Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

1.26. You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website, Ofgem.gov.uk/consultations.

Notifications

Would you like to be kept up to date with Domestic supplier-customer communications rulebook reforms? subscribe to notifications:

Notify me +

Email *

CAPTCHA
Check the box below to verify you're human

I'm not a robot

Submit

1.1 Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:

- Upcoming
- Open
- Closed (awaiting decision)
- Closed (with decision)
2. Decisions on ESO funding model

Background to decisions

2.1 In our Sector Specific Methodology Decision for the ESO in May 2019, we decided to consult further on the funding model for the ESO. This was due to new developments in our thinking since our initial consultation in the Sector Specific Methodology Consultation in December 2018.

2.2 In December 2018, we proposed a funding model that remunerated the ESO using a cost pass-through approach for its internal costs with targeted margins to remunerate its risks. The margins would comprise a base level of return for ‘generic’ risks and a return on risk for specific activity-related risks (where these are different from the generic risks). This was proposed to be determined on an activity-by-activity basis.

2.3 Following our December consultation, our subsequent analysis of the ESO’s activities and the risks that apply indicated that two alternative models would better reflect the risks faced by the ESO. In particular, we concluded that distinct margins for each activity would be overly complicated.

2.4 In the consultation section of our May document we proposed two alternative models which we considered to be more suitable for funding the ESO.

- **Model 1** proposed funding the ESO’s efficient expenditure using a totex approach utilising ‘fast money’ and ‘slow money’ but without a Totex Incentive Mechanism (TIM) as applied to networks. The slow money funding would be remunerated using a RAV*WACC approach and the fast money would be on a cost pass-through basis. The proposed split of fast and slow money would be in line with the split of capex and opex outlined in the business plan.

- **Model 2** proposed adopting an entirely fast money approach for both capex and opex, thus potentially simplifying the funding model through removing the need for financing.

2.5 Our thinking at the time of the May publication was that both models would share the following features:

- Honour the existing RAV carried over from RIIO-1.
- No TIM applied to any overspend or underspend.
- Apply a cost trigger mechanism to require the ESO to notify Ofgem when its spending reaches a certain proportion of its allowances.
- A cost disallowance mechanism in line with existing mechanisms for other RIIO sectors – whereby we would allow all spend, unless demonstrably inefficient.
- External costs to be passed-through with a margin, if necessary. We indicated that we proposed to require the ESO to procure a working capital facility

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4 Under the RIIO-1 totex incentive mechanism, companied faces a percentage share of the value of any differences in spend from their agreed internal total expenditure (totex) allowances.
(WCF)⁵ to mitigate the risks involved with the ESO’s revenue collection role, the costs of which would be passed-through.

- The incentives scheme would be upside only, rewarding the ESO only when it provides a high quality service above what we expect of an economic and efficient system operator.

2.6 We asked stakeholders which of these models would most effectively remunerate the ESO for the risks it holds, whether any additional remuneration would be needed, and if so, via what means this should be provided. We also asked if a WCF would sufficiently mitigate the range of risks held by the ESO in fulfilling its revenue collection activities and whether the ESO would need additional funding or mechanisms to procure a WCF. We also sought views on the benefits of retaining a downside incentive. Further detail can be found in our May 2019 document.

Stakeholder responses

2.7 We received nine written responses, and held two additional bilateral meetings with stakeholders who chose not to provide a written response. The overarching message from stakeholders was that it was imperative that the price control framework empowered the ESO to be ambitious and to be proactive in improving its quality of service. Stakeholders stressed the important role the ESO has in tackling the challenges within the GB energy system and that the funding model must ensure they are well positioned to undertake this role.

2.8 Regarding the proposed funding models, there were a range of views and a slight majority preference for Model 1. The stakeholders who supported the use of Model 1 suggested it was appropriate for meeting the objectives of the price control, it ensured the ESO’s financeability and it delivered value for consumers. A couple of stakeholders, including the ESO, suggested that Model 1 would be appropriate with an additional margin. Two stakeholders favoured Model 2 citing simplicity and flexibility.

2.9 The ESO proposed a variant of Model 1, which it called a ‘layered model’. This model includes a RAV*WACC component for funding slow money as well as a margin on operational costs and a margin on external costs (the industry revenues the ESO collects, eg BSUoS⁶ and TNUoS⁷). In its July 2019 submission the ESO presented margins of 0.25% on BSUoS and 0.5% on TNUoS (together equivalent to around £16.75 m per year).⁸ The ESO considered that Model 1 did not appropriately recognise all the risks within the activities undertaken and suggested Model 1 could lead to perverse behavioural incentives (such as favouring capex spend) or risk averse behaviour. The ESO proposed that its preferred model better met the objectives of the price control and would enable more ambitious behaviour.

2.10 Regarding the need for additional returns, of those stakeholders who responded, most considered that the WACC could be sufficient to remunerate the ESO for the

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⁵ A WCF allows credit to be drawn, as needed, to meet operational requirements during the course of ordinary day-to-day business.
⁶ Balancing Services Use of System (BSUoS) charges, recover the day-to-day operation of the electricity transmission system: https://www.nationalgrideso.com/charging/balancing-services-use-system-bsuos-charges
⁷ Transmission Network Use of System (TNUoS) charges, recover the cost of installing and maintaining the electricity transmission system in England, Wales, Scotland and Offshore: https://www.nationalgrideso.com/charging/transmission-network-use-system-tnuos-charges
⁸ See paragraph 3.27 and Table 1 for further information and context.
risks it holds. Four stakeholders considered that the disallowance risk (once clarified to be in line with other networks) would not warrant additional return beyond the WACC. A couple of stakeholders considered an additional return was needed and this could be provided by the WACC, but that if this resulted in a distortionary level of the WACC then a small margin may be more suitable. One stakeholder suggested that if a downside penalty remains through the incentives framework then an internal margin would be needed, but that the downside penalty should be positioned as a loss of this margin. They also noted that a risk of regulatory penalty through licence breach is a company risk that should be appropriately managed through good corporate governance.

2.11 There were fewer stakeholder views regarding whether a WCF would adequately cover the risk related to the ESO’s revenue collection role and how the ESO should procure a WCF. Two stakeholders, both network companies, thought that a WCF would be sufficient to manage the risk from the ESO’s revenue collection role. Two stakeholders felt that the WCF was the best way to manage the ESO’s cashflow risk but that any residual risk should be remunerated through a small margin. One of these explicitly stated this should be on external costs. The ESO also advocated for the application of a margin on external costs. One stakeholder proposed that the best way to manage the risk would be to reallocate the risk to the transmission owners (TOs) given the TOs’ larger asset base. In this scenario, the ESO could operate a “pay when paid” model, where the ESO would continue to collect the revenue and pay the TOs the revenue it collects when paid, so the TOs would hold the risk for uncollected money (that could be reconciled at a later point).

2.12 Three stakeholders, who responded to the level of risk management provided by a WCF, considered that the ESO should be given additional regulatory funding and that this should be passed-through to consumers. One stakeholder felt that no additional funding was needed as the ESO would already be remunerated for its revenue collection role.

2.13 The majority of stakeholders considered that the benefits of retaining a downside incentive outweighed the costs. For these stakeholders, it was important to retain a potential downside penalty to help ensure that performance does not fall below baseline expectations. It was noted that retaining a two-sided incentive would be in line with wider RIIO-2 principles and that the cost would be relatively minimal if the ESO is remunerated for other risks. Two of the supporters of a downside incentive suggested it should be limited to the value of any margin so that it is positioned as a loss of margin. One stakeholder supported the use of upside only incentives, considering that this approach would drive ambitious behaviours.

Our Decisions

2.14 After further analysis, consideration of the stakeholder consultation responses and significant engagement with the ESO, we are making two decisions; (1) the funding model and (2) incentive upside and downside.

Decision 1: The Funding Model

Recap of our May position

2.15 In May we confirmed our approach to introduce a price control framework that recognises the ESO’s unique nature, builds on the existing legal separation and incorporates the current incentives arrangements. The new price control will be
Consultation - RIIO-2 methodology for the Electricity System Operator

tailored to reflect the role the ESO plays at the heart of the GB energy system. It will provide a stable platform for the ESO to pursue its ambitions and for it to be proactive and provide leadership in the energy system transition. The price control framework will therefore be designed to encourage and incentivise the ESO to deliver positive outcomes for consumers rather than to focus most on minimising internal costs. A key aspect of this framework is the shorter business planning cycle, which is designed to enable greater flexibility and to put stakeholders at the heart of the ESO’s planning and performance evaluation.

2.16 The funding model should take account of the ESO’s financeability and mitigate and/or remunerate appropriately the risks it bears. In the run up to the May document our analysis and engagement with the ESO enabled us to identify three significant risks that we believed required mitigation: cashflow risk related to revenue management activities; incentives downside risk; and non-recovery of inefficient costs. For each of these risks, we outlined in May the mitigating actions we could take. Given these mitigations, our proposals in May were based on the assumption that the level of risk the ESO holds would be greatly reduced. We sought views to determine if additional returns were warranted to remunerate the ESO for any residual risks.

Decision

2.17 The ESO will be remunerated broadly in line with Model 1 (‘RAV*WACC’).

2.18 It will be funded through a totex approach with fast and slow money. There will be no totex incentive mechanism and therefore efficiently incurred costs will be passed through. The total planned spend of the ESO will be scrutinised and efficient allowances set as part of the two-year business planning process. Any differences in expenditure from these allowances will be considered as part of the incentives scheme, discussed further in Chapter 4 of this document.

2.19 Fast money will be passed through the year it is incurred. Slow money will be added to the RAV and will receive a return for the weighted average cost of capital, using a RAV*WACC approach. The split of fast and slow money should be proposed and justified by the ESO in their business plan. The detailed methodology for how we expect to calculate this return is described further in Chapter 3 of this document. The final values for the parameters within the calculation will be consulted on in our Draft Determination in 2020.

2.20 We are continuing to analyse the risks held by the ESO to ensure these risks are appropriately remunerated or mitigated. Our chosen model includes the option of providing additional remuneration for risks, where it would not be appropriate to remunerate these risks through the WACC. We discuss the possibility of additional remuneration further in Chapter 3, and provide our latest assessment of the ESO’s risk in Appendix 2.

2.21 We also have amended our positions on three aspects of Model 1 compared to our consultation position in May:

<table>
<thead>
<tr>
<th>What we said in May</th>
<th>Updated position</th>
</tr>
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<tbody>
<tr>
<td>The proposed split of fast and slow money would be in line with the split of capex and opex outlined in the business plan.</td>
<td>Whilst we expect this split to broadly reflect the opex to capex ratio, we are asking the ESO to propose and justify a fast money/slow money split in its business plan in each two year period before we make a decision.</td>
</tr>
<tr>
<td>We would require the ESO to procure a working capital facility to mitigate</td>
<td>We are further considering treatment of revenue collection risks, including who is best placed to</td>
</tr>
</tbody>
</table>
the risks involved with the ESO’s revenue collection role, the costs of which would be passed through to manage them (see Chapter 3 for further discussion).

Upside only incentives scheme | See ‘Decision 2’ below.

Rationale for our decision

2.22 A fast and slow money approach has a number of advantages over a purely fast money approach (ie, Model 2 in the May document). Of particular relevance:

- Utilising the slow money method supports the fair distribution of costs between current and future consumers. Investments that have a multi-year lifetime, predominantly capex, will not be paid for by only the consumers that are present in the year in which the investment is made but by the consumers benefiting from the investment over the asset’s lifetime.

- The slow money method may also lead to a more stable charging of the ESO’s costs through BSUoS, reducing the potential for year-on-year investment spikes, which also serves to make BSUoS more predictable.

- A purely fast money approach would make it difficult for the ESO to manage short-term losses. This could limit our ability to impose financial penalties on the ESO, for example if it does not comply with its licence obligations.

2.23 By moving away from the activity-by-activity margins approach we are simplifying the funding model. This will allow the ESO to deploy its resources in an agile manner, without having to further consider the impact that these decisions could have on the different margins on each activity layer.

2.24 The proportions of total ESO costs that will be remunerated as fast money and slow money will be fixed ex ante for each two-year business planning cycle, initially proposed by the ESO and decided by Ofgem. This gives the ESO certainty over how much funding it will receive in-year and what will be deferred until later years. By calculating the ratio ex ante, we limit the possibility of creating perverse incentives for the ESO to divert spending towards a particular category of spending. By allowing the ESO to propose the fast and slow money split every business planning cycle we ensure that the funding method remains relevant to the proposed spend.

Decision 2: Incentive upside and downside

Recap of our May position

2.25 In December, we originally proposed a symmetrical incentives approach. However, in May, after considering further the interactions between the different elements of the price control, as well as the behaviours we wanted to drive, we indicated that an asymmetrical scheme could be preferable. As this was a departure from our December position, we requested further stakeholder views.

Our decision

2.26 We will retain the option for downside incentives and whether incentives will or will not be symmetric. The value of the incentives reward and potential penalty will be influenced by our decisions on the incentive framework later this year and determined in conjunction with parameters for the funding model. This will be consulted on at the draft determination stage in 2020.
Rationale for our decision

2.27 In the evolving system, we need the ESO to be proactive and willing to try new and innovative types of solutions. In our May publication (see page 26 in particular) we identified the following potential risks following stakeholder feedback: that a substantial downside penalty would have the potential to impact the ESO’s financeability; that it could lead the ESO to being risk averse and unwilling to invest in new solutions; and that the ESO might need to be remunerated for the risk of exposure to a substantial downside penalty.

2.28 Following our consultation, we are retaining the option to apply a downside incentive, acknowledging stakeholder feedback that the potential benefits of doing so might outweigh the costs. We note that maintaining some downside may need to be reflected in the ESO’s remuneration. We will further consider this as we conduct further financial modelling in the run up to the determinations process.

2.29 In doing so, we retain the flexibility to tailor the incentives framework to different roles and to drive specific behaviours. In certain areas of ESO activity the use of upside only incentives could drive more proactive behaviour and reduce risk aversion to novel approaches. In contrast, downside penalties may be effective if tailored to a role where the ESO has more direct control of outcomes and where incentives can be more metric-focussed. We outline our initial policy considerations in Chapter 4.
How the building blocks link together: overview of the price control framework

2.30 It is important that we explain how the links between the different elements of the price control form the full picture of our intended regulatory approach. Having made a series of decisions on the ESO’s price control, this section provides an overview of the wider ESO RIIO-2 regulatory framework. We then explain why we believe this framework will drive a financeable, ambitious and flexible ESO.

Key regulatory framework features

2.31 The price control is made up of the following key components (as illustrated in Figure 2):

- A requirement for the ESO to develop a long-term vision for the energy system that includes the ESO’s views on its own future roles and responsibilities (potentially to 2030 or beyond).

- A roles framework that clearly defines the ESO’s key responsibilities and functions, as well as our expectations for how the roles should be delivered. This framework forms the foundations of both the business plans and incentives. It has a governance process which ensures the roles can adapt as the system evolves, and it is informed by the ESO’s long-term vision. We are consulting on ways to streamline the roles and set out more explicitly the outcomes we expect the ESO to achieve through its activities (see the ‘Roles framework’ section in Chapter 4).

- A requirement on the ESO to outline a medium-term strategy that describes how it will progress towards the long-term vision over the five-year RIIO-2 period from 2021 to 2026.

- A shorter term, two-year business planning period. The ESO will detail its costs, activities, deliverables and performance metrics for delivering its strategy over the first two years of the RIIO-2 period.9

- Licence conditions designed to capture the key baseline obligations for the ESO. Where appropriate, we will aim to adopt a ‘principles-based’ approach to designing these conditions to ensure they are flexible to the changing energy system. We will also ensure there is coherence with obligations placed on other network companies. The licence conditions underpin the baseline expectations set under the roles framework.

- A funding approach that ensures the ESO is provided with returns which are commensurate to the risks it bears. This will include:
  
  - A pass-through of efficiently incurred internal costs. There will be business plan allowances set before the start of the period, and a totex incentive mechanism will not be applied to any differences between incurred outturn costs and the agreed business plan allowances.
  
  - A split between fast money and slow money.

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9 We note that a future decision will be required regarding the approach to year five of the price control. For example, the two-year business planning cycles could be continued indefinitely or we may require a temporary one-year solution to continue alignment with other RIIO-2 sectors. Our experience gained in the early years of the price control will inform this decision.
○ A depreciation and RAV*WACC approach to remunerating the ESO’s slow money costs.
○ An option to include additional funding to account for any risks which cannot be appropriately remunerated through the WACC.

- To align with other RIIO-2 sectors, we have a provisional view that the key financial decisions that we propose to make using the methodology in Chapter 3, would be fixed for a five-year price control period for the ESO. Exceptions can be made to this, for example the fast money/slow money split can be revisited at two-year cycles. As usual, allowances for Pension Scheme Established Deficits will, we propose, continue to be revisited at three-year cycles.

- The opportunity to receive RIIO-2 innovation funding including:
  ○ An additional Network Innovation Allowance where the ESO can demonstrate the need for this in its business plan. These allowances would enable the ESO to fund additional projects, including those focussed on solving problems relating to longer term energy system transition.
  ○ A new innovation funding pot, replacing the RIIO-1 Network Innovation Competition, focussed on the energy system transition and strategically important issues, which is aligned with wider public sector R&D funding.

- An incentives scheme which will reward/penalise the ESO based on its performance. This will provide the ESO with returns (in addition to the baseline returns provided by the funding model) where the ESO has delivered exceptional performance. The performance and incentives framework will:
  ○ Follow an evaluative approach, involving an ex post decision on the ESO’s performance relation to its roles framework. We are consulting on initial thinking on potential changes to aspects of this framework in Chapter 4.
  ○ Offer an upside reward, although with the potential for both upside and downside.
  ○ Have a standalone cost efficiency check on Black Start costs.

- A proportionate governance approach for internal expenditure:
  ○ A cost assessment process which will set efficient allowances for the ESO following scrutiny of the two-year business plan.
  ○ A cost trigger process which will aid our monitoring of the ESO’s spend against its allowances.
  ○ Differences between outturn expenditure and agreed business plan allowances will be considered in the incentives framework, alongside the outputs the ESO has delivered.

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10 This framework will also govern the ESO’s spending on ‘external’ balancing costs and will likely include metrics to track performance in this area.
Figure 2 – overview of ESO RIIO-2 regulatory framework components

The business plan details the ESO’s activities, deliverables and costs needed to meet the five-year strategy over the next two years. It evidences how the ESO’s activities and deliverables will drive positive outcomes for consumers and provides justifications for the proposed costs. It should also include proposed performance metrics that will be used to track the ESO’s performance against its plan.

**Funding model**
- Pass-through of efficiently incurred costs
- Fast money/slow money split
- Slow money remunerated via depreciation and RAV x WACC *
- Option for additional return to appropriately remunerate risks *

**Innovation**
- Opportunity for additional funding for innovation projects

**Incentives**
- Evaluative scheme, focussed on wider industry costs/benefits **
- Upside reward, and potential also for downside penalty
- Standalone Black Start efficiency check

**Cost scrutiny**
- Allowances for efficient costs set following business plan review
- Cost trigger process to aid monitoring
- Deviation from agreed allowances factored into incentives

**Licence obligations**
- Legal requirements on ESO (using ‘principles-based’ approach)

**Roles framework **
- The ESO’s key functions. Expectations for the way functions should be performed and what the ESO should achieve

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* See Chapter 3 for consultation on the financial methodology

** See Chapter 4 for consultation on potential changes to roles framework and incentives
Consultation - RIIO-2 methodology for the Electricity System Operator

What we think this will achieve

2.32 We strongly agree with stakeholders that the price control framework needs to empower the ESO to be ambitious. We also agree that the ESO has a vital role in tackling the challenges within the GB energy system and our approach must ensure they are well positioned to flexibly and proactively undertake this role. We explain in the table below why we believe our model will enable the ESO to be financeable, ambitious and flexible.

<table>
<thead>
<tr>
<th>Aim</th>
<th>How the framework achieves this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financeable</td>
<td>The price control is designed to remunerate the ESO in a way that is commensurate to the risk its holds. The combination of RAV*WACC and (if necessary) an additional remuneration for residual risks will enable the ESO to finance its activities, whilst minimising the risk of distorted incentives. We are carefully considering the size and nature of the ESO’s risks and this will inform our draft determination on financial parameters. We also believe the framework ultimately provides the ESO with a ‘fair bet’ on investments. The pass-through of efficient expenditure significantly reduces the cost risks associated with investments. In addition, incentive downside will be limited and we have designed a proportionate cost monitoring approach that would only disallow demonstrably inefficient costs.</td>
</tr>
<tr>
<td>Ambitious</td>
<td>We consider the framework will encourage the ESO to be ambitious, proactive and forward looking. Firstly, the ESO has significant scope to define the role it will play in the system transformation through the long-term vision, five-year strategy and two-year business plans. The business planning process will encourage the ESO to work with stakeholders to identify and develop deliverables that can achieve better consumer outcomes. Assuming the ESO’s deliverables and costs are justified, the ESO will have transparent, predefined allowances to provide comfort on efficient expenditure. Where costs differ from allowances, these differences are not exposed to a direct total incentive. This significantly reduces the risks to the ESO from having an ambitious investment strategy. This is because all efficient outturn expenditure will be recoverable. We have also designed a proportionate cost monitoring approach, so deviations from allowances would not be penalised unless they are demonstrably inefficient. The incentives will be focussed on the ESO’s performance in delivering its strategy, business plan and wider outcomes for consumers. This should further encourage the ESO to identify and progress ambitious deliverables that will maximise benefits for industry and consumers. Finally, the ESO’s access to RIIO-2 innovation allowances ensures it can fund additional, innovative investments that have the potential to solve problems related to the long term energy system transition.</td>
</tr>
<tr>
<td>Flexible</td>
<td>The price control design ensures the ESO can be flexible with its investments, making it suitable for the rapidly changing system. Firstly, activities and priorities can be adjusted every two years. Secondly, the pass-through model enables the ESO to fund new efficient investments within a business planning cycle. And thirdly, an evaluative incentive creates a focus on broader outcomes, rather than narrow and inflexible targets.</td>
</tr>
</tbody>
</table>
3. Consultation on ESO financial methodology

Introduction to the financial methodology

3.1 In this chapter we seek stakeholder views on the following issues:

- Allowed returns methodology
- Approach to financeability
- Inflation index for WACC allowance and for RAV adjustments
- Revenue collection, financial resources and the working capital facility
- Other finance issues

Allowed returns methodology

3.2 To date, for other energy licensees that are subject to price controls beginning 1 April 2021, significant progress has been made on the methodology for setting allowed returns. For example, in May 2019, the Sector Specific Methodology Decision Finance Annex set out in detail the considerations and decisions for gas distribution and transmission networks.\(^{11}\) For the ESO, a number of parallels can be drawn, although there are also potential differences to be considered.

3.3 With this as background, we now seek stakeholder input on the following three sections:

- A method for setting an allowance for the cost of debt finance
- A method for setting an allowance for the cost of equity finance
- A method for considering whether additional funding is required (in addition to allowances for debt & equity finance)

3.4 In combination, the first two sections propose a methodology for setting an allowance for WACC, to reflect the RAV*WACC decision we describe in Chapter 2. To conclude the allowed returns methodology, we propose a method for considering additional funding. For working assumption purposes, we propose the ESO should use a WACC allowance of 3.65% CPIH-real\(^{12}\) and zero for additional funding (see Appendix 1 for further detail).

A method for setting an allowance for the cost of debt finance

3.5 In March 2018\(^{13}\) we proposed, and in July 2018\(^{14}\) we decided a set of principles for the cost of debt, as follows:

- Consumers should pay no more than an efficient cost of debt.

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\(^{11}\) [https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-_finance.pdf)

\(^{12}\) In other words, the WACC allowance should be assumed to be relative to the CPIH measure of consumer price inflation.


Consultation - RIIO-2 methodology for the Electricity System Operator

- The cost of debt allowance should be a fair and reasonable estimate of the actual cost of debt likely to be incurred by a notionally geared, efficient company.
- Companies should be incentivised to obtain lowest cost financing without incurring undue risk.
- The calculation of the allowance should be simple and transparent, while providing adequate protection for consumers.

3.6 We believe these principles apply to a cost of debt methodology for the ESO.

3.7 Following additional sector specific consultation in December 2018, we decided in May 2019 that full indexation (where allowances are mechanically linked to published market rates), would be used to set allowances for RIIO-2. We believe the consideration we gave to the merits and challenges of different methodologies for debt allowances (debt sharing, debt pass-through and partial indexation) also apply to the ESO price control. We therefore propose to retain full indexation for the ESO, in relation to term debt\(^\text{15}\) (see paragraph 3.44 below our separate thoughts on working capital facilities).

3.8 However, we believe that, relative to other networks licensees, the ESO has a notably different asset base, history and risk profile. These differences arise for various reasons, including:
- different assets with generally shorter asset lives
- smaller RAV and debt base
- different responsibilities
- more recent embedded debt following the recent separation from NGET on 1 April 2019.

3.9 This means that the ESO may have, relative to other network licensees, shorter dated, or smaller debt requirements. In addition, the ESO may have a lower quantum of embedded debt and/or, debt that has been issued more recently. In RIIO-1 we devised a bespoke indexation mechanism for a transmission network (SHETL) because it exhibited a significantly different RAV, capex spend and business profile compared to the other networks. We therefore believe it is possible to devise bespoke indexation mechanisms where justified.

3.10 For the ESO we believe the potential options for a bespoke cost of debt index include:
- Using a shorter maturity benchmark (for example the iBoxx £ non financials 5-7yr or 7-10yr indices, rather than the 10yr+ indices used for the networks), recognising the likely shorter term debt to be raised by the ESO given its generally shorter asset lives
- Calculating the index based on a shorter trailing average period, for example an extending trailing average starting on 1 April 2019, to reflect an assumption that the ESO had not raised debt prior to this date

\(^{15}\) We use the phrase ‘term debt’ to mean borrowings that are repaid over a set period, as distinct from other facilities that are drawn as needed, such as a revolving credit facility or working capital facility.
Using the credit spread of the index and adding that to an interbank borrowing rate (LIBOR or its replacement) if we consider it likely the ESO would have a high proportion of floating rate debt.

- Weighting the index according to when ESO debt is raised (likely to be more relevant if we consider it likely the ESO would raise non-floating rate debt).
- Providing a small-company-premium allowance.

3.11 We propose using the same method for deflating nominal cost of debt indices to real CPIH figures for each date to be included in the allowance calculation as will be used for the networks (final method to be proposed at Draft Determination and decided at Final Determination). For working assumption purposes the 5-year Office of Budget Responsibility forecast for CPI is used to deflate nominal rates to CPIH using the Fisher equation.

Cost of Debt Questions

Q1. Do you agree that full indexation for the Cost of Debt allowance is appropriate for the ESO?

Q2. Do you agree with the proposal for a bespoke debt indexation mechanism for the ESO?

Q3. Do you have a view on whether the options set out in 3.10 for a bespoke debt indexation mechanism are appropriate for the ESO?

A method for setting an allowance for the cost of equity finance

Consultations and responses to July 2019

3.12 In March 2018, the Framework Consultation sought stakeholder views on 1) the methodology for estimating the cost of equity for RIIO-2, and 2) whether it would be desirable to update allowances annually for changes in the risk-free rate (equity indexation).16

3.13 In response, the ESO stated that the equity range should reflect the specific roles and risks of the ESO. The ESO also argued that, in its view, the range presented at that time (3-5% RPI real) did not seem to do this.17 In addition, the ESO stated that, depending on the framework adopted for the ESO, it would be open to discussions about equity indexation.

3.14 In December 2018, the Sector Specific Methodology Consultation sought further stakeholder views in two separate ways that are relevant to equity financing. First, within the Finance Annex, we sought views on an updated methodology, proposing a method that is consistent across the sectors.18 Second, we simultaneously consulted on the funding model for the ESO (see the ESO

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Annex\textsuperscript{19}, to help us assess whether specific arrangements were beneficial for the ESO. Therefore, at that time, given that we were considering alternative funding models (other than $\text{RAV} \times \text{WACC}$), it is understandable that the ESO did not, in its response to the December consultation, provide detailed views on the equity methodology proposed in the Finance Annex.

3.15 However, in its response to the Sector Specific Methodology Consultation, the ESO listed its views on risks it is exposed to, including: cost disallowance, incentives downside, cash timing and risk of customer non-payment.\textsuperscript{20}

3.16 In May 2019, we sought specific views from stakeholders on five finance questions for the ESO price control.\textsuperscript{21} In response (July 2019), the ESO provided the outputs of financeability modelling using a 4.8\% CPIH-real cost of equity assumption, consistent with Ofgem’s Sector Specific Methodology Decision dated May 2019.

Our proposed methodology for baseline allowed return on equity capital

3.17 In the SSMD, we decided to apply a three-step methodology for estimating baseline allowed returns on equity capital. Given our decision, as described in Chapter 2 above, to apply a $\text{RAV} \times \text{WACC}$ methodology, we have considered whether the methodology from the SSMD could also be applied to the ESO. Our initial view is that it provides a useful framework. For brevity, we refer stakeholders to the May 2019 Finance Annex\textsuperscript{22} for further background information and context for our ESO specific views, as set out below.

Step 1: The Capital Asset Pricing Model (CAPM\textsuperscript{23}) evidence

- The risk-free rate and Total Market Returns are not company specific values and therefore the relevant analysis, and regulatory policy issues, as set out in the May 2019 Finance Annex, also apply to the ESO. In addition, we have also considered whether the potential benefits of equity indexation may be smaller, given a shorter business planning period. However, our current view is that avoiding forecasting risk is beneficial, even with a shorter business planning period, and in any case equity indexation has the potential to make frequent updates, and regulatory judgements, unnecessary. The third CAPM parameter, the equity beta, is, in contrast with the Total Market Return (TMR) and the risk-free rate, investment specific. We propose therefore, when estimating an equity beta for the ESO, to consider a variety of listed companies, in addition to the five companies we presented in the SSMD (SSE, NG, SVT, UU and PNN). We will also consider the ESO specific risks, as listed at Appendix 2 below, when conducting this assessment, outlining the risk factors that are included within this step, to provide clarity on whether residual risks remain for separate assessment.

Step 2: Cross-checking the CAPM-implied cost of equity

\textsuperscript{19} See page 39 here: https://www.ofgem.gov.uk/system/files/docs/2018/12/riio-2_eso_annex_0.pdf
\textsuperscript{20} See “National Grid ESO” folder here: https://www.ofgem.gov.uk/system/files/docs/2019/05/responses_f_r.zip
\textsuperscript{21} See page 35 here: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-eso.pdf\#page=35
\textsuperscript{22} https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_-finance.pdf
\textsuperscript{23} The Capital Asset Pricing Model (CAPM) is a model used to estimate equity investor expectations. It is grounded in extensive financial theory and practice.
We have considered the four cross-checks from the SSMD Finance Annex in terms of inferring a cost of equity for the ESO. Two of these, infrastructure fund discount rates and OFTO bids, may be less relevant given scale of asset infrastructure underlying those two cross-checks. The third cross-check, Market-to-Asset-Ratios, may have information value, particularly if the transaction value is near the ESO’s market value/RAV value. The fourth cross-check, professional forecasts from investment managers and advisors, is also, in our view, a valuable source of information, as it helps to reveal the overall level of equity investor expectations. In summary, we propose to utilise available evidence on all four cross-checks, being mindful of any inference, when estimating the cost of equity for the ESO.

Step 3: Expected versus allowed returns

The principle of step 3, that investors can expect returns to equity capital (from financial incentives in the price control design) in addition to the baseline allowed return on equity, applies equally to the ESO price control. However, expected returns for the ESO, and information asymmetries, may differ relative to other network companies. For example, the absence of a totex incentive mechanism in the ESO’s remuneration framework is a notable difference between the ESO and other network companies.

The completion of step 3 provides a baseline allowed return to equity for the price control period, on average. From this, to implement equity indexation, we must set a starting year value by reversing out the market-implied interest rate forecast that we will have included within step 1. This approach is demonstrated in the SSMD May Finance Annex.24

We set out further detail below, on how this three-step process can be combined with our approach to estimating and remunerating the total risk exposure of the ESO.

Allowance for equity finance questions

| Q4. | Do you agree with our proposed approach to use the three-step methodology to assess baseline allowed returns to equity? |
| Q5. | When estimating equity beta, which listed companies should we consider? |
| Q6. | Do you agree with our proposal to update the allowed returns on equity for changes in the risk-free rate, as described in the SSMD Finance Annex? |

A method for considering additional funding (in addition to allowances for debt and equity finance)

To check whether the allowances for debt and equity finance, as described above, would be sufficient in isolation, an assessment of the total risk can be conducted. This additional step is useful for a number of reasons. First, it allows us to separate and assess different types of risk. Second, it allows greater flexibility for implementation and incentive effects. For example, some risks may not be related

24 See appendix 1 here: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision - finance.pdf#page=121
to the size of the RAV (as implied by RAV*WACC) and some risks may be better remunerated by specific funding, rather than an increase in the WACC allowance.

3.21 To date, the ESO has stated it is exposed to a number of specific risks, including:
- Revenue collection risk
- Performance risk
- Cost risk
- Operational risk
- Reputational/Political risk
- Legal risk (including third party claims)
- Regulatory risk.

3.22 At Appendix 2 below, we set out our further detail on these claims. To assess whether further remuneration is required, we propose to test each risk claim as follows:

**Test 1: CAPM and double-count test**
- Has remuneration been provided elsewhere in the price control?
- Is this risk already factored into the beta judgement?
- Is this risk symmetrical?

**Test 2: Mitigation**
- Can the ESO/investors address this risk in whole or in part?
- To what degree does the regulatory framework mitigate this risk?

**Test 3: Scale**
- How significant is this risk for the ESO?
- What drives the scale of the risk?

3.23 As we assess whether any additional remuneration is required for these risks, the same information will inform our consideration of how any additional funding is best provided.

3.24 In our December publication we used the term margin, but the term ‘margin’ implies that funding is mechanically linked to some other variable. In practice, there are several options to provide any additional remuneration, and our thinking on this will be informed by the reasons for providing remuneration and the need to avoid creating perverse incentives. Perverse incentives are a greater concern if we and others have limited ability to recognise and challenge where this has happened, and if the potential impact on consumer bills is high.

3.25 To take one example: if funding is mechanically linked to BSUoS, which the ESO could influence, this could introduce a bias towards increasing (or choosing not to take actions to decrease) BSUoS costs, which could otherwise be reduced. When the ESO incurs balancing costs, for example, it is often considering a series of complex, bespoke system issues at once. Given the volume of these ESO actions and decisions, it is difficult for us make appropriate cost-efficiency assessments.

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25 Balancing Services Use of System (BSUoS) charges, recover the day-to-day operation of the electricity transmission system: [https://www.nationalgrideso.com/charging/balancing-services-use-system-bsuos-charges](https://www.nationalgrideso.com/charging/balancing-services-use-system-bsuos-charges)
Balancing costs are very significant, so the impact of a change on consumers could be substantial.

3.26 We recognise that similar considerations, to a greater or lesser extent, could apply to any form of margin. For these reasons, our current thinking is that any additional funding, if required, might best be achieved through a fixed allowance.

3.27 To supplement its view on risk exposure, the ESO presented in its July 2019 submission as part of its financeability tests, the following assumptions.

### Table 1: ESO’s additional funding assumptions (July 2019)

<table>
<thead>
<tr>
<th>Driver</th>
<th>Annual Average (£m)</th>
<th>‘Margin’</th>
<th>Additional funding assumption (£m)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNUoS</td>
<td>2,700</td>
<td>0.50%</td>
<td>13.50</td>
<td>ESO’s July submission (page 6 &amp; 36)</td>
</tr>
<tr>
<td>BSUoS</td>
<td>1,300</td>
<td>0.25%</td>
<td>3.25</td>
<td>ESO’s July submission (page 6 &amp; 36)</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>150</td>
<td>2.00%</td>
<td>3.00</td>
<td>ESO’s July submission (page 35)</td>
</tr>
<tr>
<td>Connections</td>
<td>200</td>
<td>0.50%</td>
<td>1.00</td>
<td>ESO’s July submission (page 6 &amp; 13)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>20.75</strong></td>
<td></td>
</tr>
</tbody>
</table>

3.28 Although the ESO presented these assumptions as illustrative, it sought to establish a link between additional funding and financeability. The ESO stated that “The introduction of margins on operational and external costs improves the majority of metrics, suggesting that this model has the greatest potential to enable a financeable framework. Further calibration of the parameters and baseline assumptions will be required to achieve this, and we look forward to working with Ofgem to develop this.”

3.29 However, in our view, risks should be assessed on their own merits, distinct from the financeability tests.\(^{26}\) Clearly, higher funding assumptions, and thus higher charges to consumers, will improve any credit metric, but it does not follow that risks are therefore appropriately assessed. Further, the financeability metrics used by the ESO (for example EBIT margin on Controllable revenues) are not directly related to the relevant risks. The link to EBIT margin can be traced back to Moody’s credit rating methodologies, for other industries including telecoms and post, as listed in KPMG’s report for the ESO.\(^{27}\) However, these methodologies may be less relevant for the ESO given: 1) our decision to implement a RAV*WACC framework, and 2) the lack of a reliable link to revenue collection obligations.

3.30 Lastly, we will consider the relevant period for any additional funding.

3.31 For example, it may not be optimal to set a fixed amount for a 5-year period, as the underlying risks may change during this period. This will therefore be considered further (as indicated at paragraph 2.31).

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\(^{26}\) In the following section we propose our approach to financeability.

\(^{27}\) Published alongside this consultation.
Methodology for considering additional funding questions

Q7. Do you believe that we should categorise ESO risks into seven categories (see our taxonomy at Appendix 2) for the purposes of assessing additional funding claims?

Q8. Do you believe that the three tests we propose are suitably comprehensive?

Q9. What are your views on the ESO’s additional funding assumptions, as summarised above (from its July 2019 submission)?

Approach to Financeability

3.32 Financeability relates to licence holders' ability to finance the activities which are the subject of obligations imposed by or under the relevant licence or legislation.

3.33 In the Framework and Sector Specific Consultations and Decisions, we proposed a focus on the notional company in assessing financeability but noted that we believe it is important for network companies to assess financeability of their RIIO-2 business plans on both a notional and actual basis.

3.34 We propose this approach should apply to the ESO but note that the methodology for assessing financeability could be different for the ESO and that some of the suggested actions network companies could use to address financeability concerns may be less relevant for the ESO (for example refinancing expensive historical debt is not likely to apply to the ESO).

3.35 We are also conscious that it is necessary to propose working assumptions for the structure of the notional company and that these may be different to those used for the networks. For example, the networks notional company working assumption is that it has 25% inflation linked debt, which is broadly in line with the industry average proportion of inflation linked debt. However, we are not sure this assumption should apply to the ESO, because of its materially smaller debt levels and likely much shorter profile debt may not support this assumption. In addition, it may be appropriate to consider a different working assumption for notional gearing, given the different risk profile of the ESO compared to other networks.

3.36 Further, it is not yet apparent to us that there is a clear and consistent methodology for assessing the credit worthiness of an independent ESO and as far as we are aware no ratio guidance has been provided by ratings agencies for this type of business in the UK.

3.37 Following review of the ESO’s response to the May consultation and the CMA’s judgement on the Utility Regulator’s approach to assessing financeability of System Operator Northern Ireland we propose that the particular risks that the ESO faces, potential mitigations, and how and what level of remuneration is appropriate for each risk, are assessed as part of the proposed methodology for considering additional funding (as set out in paragraphs 3.20 to 3.29 above).

3.38 We accept that as no ESO specific financial parameter working assumptions had previously been provided by Ofgem that the ESO had used the working assumptions that were set out in the May SSMD in its initial financeability assessment included in its July response. However, we believe the working assumptions set out in this consultation provide a better ESO specific set of
working assumptions and would encourage further financeability analysis based on these working assumptions. To date, the ESO has not shared its financeability tests with us, and the supporting analysis by KPMG lacked transparency.

3.39 In the absence of a clear methodology for assessing debt financeability of the ESO we propose that the following ratios be calculated. We seek stakeholder input, and welcome views from the ESO on how it intends to satisfy its licence conditions with regards to financial resources, financial facilities and maintaining an investment grade credit rating. We set out the rationale in the table below for the calculation of these ratios.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash Flow from Operating Activities (CFO) pre Working Capital (WC) changes + interest / interest</td>
<td>Is included in the Moody’s “Regulated Electric and Gas Utilities” rating methodology, which was used to initially rate NG ESO and is used to rate US ISOs</td>
</tr>
<tr>
<td>CFO pre WC / Debt</td>
<td>As above</td>
</tr>
<tr>
<td>CFO pre WC - dividends / Debt</td>
<td>As above</td>
</tr>
<tr>
<td>Debt/Capitalisation</td>
<td>As above</td>
</tr>
<tr>
<td>Debt/RAV</td>
<td>Given the decision to remunerate the ESO via RAV*WACC this measure of gearing is relevant</td>
</tr>
<tr>
<td>Debt/Earnings Before Interest Tax and Deprecation (EBITDA)</td>
<td>Used in S&amp;P’s rating of US ISOs and is a metric used for a wide range of business types</td>
</tr>
<tr>
<td>Adjusted Cash Interest Coverage Ratio (AICR)</td>
<td>Used as an interest cover metric in assessing regulated networks</td>
</tr>
<tr>
<td>Opex/Total revenues</td>
<td>Provides a measure of operational gearing for comparability to other precedents</td>
</tr>
<tr>
<td>Opex/RAV</td>
<td>Provides a measure of operational gearing for comparability to other precedents</td>
</tr>
<tr>
<td>EBIT/ K factor revenues</td>
<td>Provides a measure of significance of K factor revenue to profitability</td>
</tr>
<tr>
<td>RAV/K factor revenues</td>
<td>Provides a measure of significance of K factor revenue to RAV</td>
</tr>
</tbody>
</table>

3.40 We do not propose to provide threshold guidance for any of these metrics but would look to benchmark these metrics against other businesses facing similar risks with additional consideration of the results in light of any potential differences in the nature, mitigation and/or scale of those risks across different peers/comparators.

Financeability questions

Q10. Do you agree the above metrics are relevant for consideration of financeability of the ESO? Are there any other metrics that should be added?

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28 See for example Standard Licence Condition B7 here: https://www.ofgem.gov.uk/licences-industry-codes-and-standards/licences/licence-conditions

29 Ibid, Standard Licence Condition B10
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Inflation index for WACC allowance and for RAV adjustments

3.41 Inflation assumptions are required to estimate a real-term WACC allowance and to update the value of the Regulated Asset Value.

3.42 The SSMD Finance Annex set out our decision, following consultation on both a framework and sector specific basis to:

- implement an immediate switch from RPI to either CPIH or CPI from RIIO-2 onwards (1st April 2021 for GT, ET and GD) for the purposes of calculating RAV indexation and allowed returns. We will not phase the move away from RPI.
- consider again whether to use CPIH or CPI, in light of factors listed in the consultation and in terms of the most accurate reference point for estimating real returns. We will provide an updated position in this regard at draft determinations.

3.43 We propose to adopt the same approach for the ESO RAV and WACC allowance.

Inflation indexation questions

Q11. Do you agree that the ESO RAV indexation and WACC allowance should follow the approach decided for the networks, i.e. immediate switch to either CPIH or CPI from RIIO-2 onwards?

Revenue collection, financial resources and the working capital facility

Summary of issue

3.44 In our ESO Annex to the RIIO-2 Sector Specific Methodology publication in May 2019 we asked two questions regarding the procurement of a Working Capital Facility (WCF). We asked whether a WCF would adequately cover the full range of risks the ESO is exposed to, in fulfilling its revenue collection activities (eg, in relation to collecting TNUsoS and BSUsoS charges) and whether the ESO would require additional funding or regulatory mechanisms to be able to procure a WCF.

3.45 We proposed in May that regardless of the funding model chosen we would require the ESO to procure a WCF. We anticipated that the WCF would be in place to mitigate the risks involved with the ESO’s revenue collection role, and that the costs of this facility would be passed-through without a sharing factor.

3.46 It was proposed by one respondent to the May consultation that it may not be efficient for the ESO to bear all of this risk, given its relatively small size. Further, the ESO, in its July 2019 response, argued that a WCF would not mitigate all of its exposure and that there were other risks associated with revenue collection such as profit volatility and credit risk.

Proposals

3.47 We believe it is important that the ESO sets out its plans to remain licence compliant, including its obligation to secure financial resources, financial facilities
and to maintain an investment grade credit rating.\textsuperscript{30} We propose that the ESO should address this in its business plan for RIIO-2, explaining the steps it has taken, and/or will take, under a range of plausible circumstances. For Ofgem to make an informed decision at Draft Determinations in summer 2020, we will need to understand in detail the cost and size of the ESO’s financial resources and facilities.

3.48 To this end, we require further clarity from the ESO on its financial resources and facilities. In July 2019, the ESO explained it has financial facilities in place until March 2021 only, because of the uncertainty around RIIO-2. Based on our recent discussions with the ESO in August 2019, we understand that it can extend its current financial facilities to March 2022, leaving uncertainty for periods thereafter. The ESO explained that part of its financial facilities included a large revolving credit facility. Moody’s, in its March 2019 report, referred to this facility as being “in place with a consortium of high-rated banks” adding “We believe the facility would be sufficient to support several years of plausible under-recoveries and other downside scenarios”.

3.49 At the same time, we recognise the issue raised by a stakeholder over who is best placed to bear the TNUoS revenue collection risk associated with the onshore transmission networks, and their questioning of whether that is the ESO or TOs. We propose to explore further the current requirements, and whether they are clear and appropriate. We note that TNUoS is composed of a number of different elements which could require different treatments. In terms of scale, for the year ending March 2019, 87% of TNUoS charges relate to onshore transmission network owners (NGET 61%, Scottish Power 13% and SSE 13%) with the remaining 13% split between OFTOs (11%), over-recovery (-2%) and other items (4%), according to 2019 Revenue Return.

3.50 Given that we expect the ESO will, to some degree, remain exposed to revenue collection risk, we continue to believe that an important element of its plans may be a WCF. In part, this is informed by the ESO’s current arrangements, which include a substantial revolving credit facility to manage revenue collection obligations. Should the ESO plan to meet its obligations through use of a WCF, a pass-through arrangement can be used to cover efficient WCF fees and costs (including the arrangement fee, extension fee and annual commitment fee). We note the ESO’s argument that, even if these costs are covered, there may be some residual risk. If this is the case, our view is that an allowance could also be provided to remunerate appropriately the residual risk.

3.51 For a number of reasons, this ‘pass-through + allowance’ approach could be better than setting only an allowance to cover all revenue-collection obligations. The merit of a pass-through approach is that it would reduce the ESO’s risk that the WCF is undersized. Further, it would reduce the risk that an allowance for all revenue-collection obligations is too small (or too large), given the lack of available evidence and benchmarks. Moreover, we would prefer to incentivise the ESO to direct its skills and resources towards the economic and engineering challenges of the energy system transition, rather than the challenge of outperforming an allowance for revenue-collection obligations.

\textsuperscript{30} Ibid Condition B7 and Condition B10.
Question(s) for consultation

Revenue collection questions

Q12. Do you agree that it could be more efficient if Transmission Network Owners bear TNUoS revenue collection risk, to reflect respective variances between allowed and actual revenue?

Q13. Do you agree that, to the extent not funded through other mechanisms, WCF costs could be passed-through? Could this arrangement be limited to arrangement fees, extension fees and commitment fees?

Other Finance Issues

3.52 We propose to adopt the same approach as was set out in the SSMD Finance Annex for the other finance issues, such that:

- Regulatory depreciation will be assessed following business plan submission taking into consideration useful economic lives of assets.

- We will review our assumptions for the fast/slow money split in light of operational practice to date and the information in company business plans. In addition, we will, following submission of company business plans, consider the impact of the implementation of IFRS16\(^{31}\), which effectively brings all leased assets on to company balance sheets.

- We will continue to review notional gearing in light of the riskiness of the overall price control settlement and the ability of the notional efficient company to sustain downsides. We propose a notional gearing assumption of 55% for the purposes of WACC working assumptions and business plans. However, the ESO should assess the overall risk of its business plan and make realistic and well-justified proposals for notional gearing.

- The equity issuance transaction cost allowance will be assessed following business plan submission. The ESO should consider and report potential and planned equity issuance as part of their business plan submission.

- The three options set out in the SSMD Finance Annex\(^{32}\) for setting tax allowances will also be considered for the ESO, with assessment of these options informed by business plan submissions and RFPR submissions.

- Consistent with the Sector Specific Methodology, we will not change the current policy for Pension Scheme Established Deficits and will set allowances as part of the next triennial review. We will also align ESO with electricity distribution in how we treat Admin and PPF\(^{33}\) costs, with these costs being included as part of totex.

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\(^{31}\) IFRS 16 is a recently updated International Financial Reporting Standard regarding leases. See additional info here: [https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/](https://www.ifrs.org/issued-standards/list-of-standards/ifrs-16-leases/)


\(^{33}\) The Pension Protection Fund “protect millions of people throughout the United Kingdom who are members of defined benefit pension schemes, to make sure that they’ll be looked after if the scheme they’ve paid into fails”. They do this by charging levies on eligible pension schemes. See here for further info: [https://www.ppf.co.uk/](https://www.ppf.co.uk/)
• The ESO should submit its plans for Directly Remunerated Services (DRS) as part of its business plan. We will consider treatment of DRS in light of operational practice to date and the information in company business plans.

• The ESO should propose as part of its business plan its strategy on the disposal of assets.

**Question on other finance issues**

Q14. Do you agree with adopting the same approach for the ESO to the other finance issues as was proposed in the SSMD Finance Annex for the networks?
4. Consultation on regulatory and incentives framework

Background to consultation

4.1. In this chapter we are consulting on our initial thinking on potential changes to the ESO’s regulatory and incentives framework for RIIO-2.

4.2. In April 2018, we introduced a new evaluative approach to regulating and incentivising the ESO. This approach is built around us being clear up front about the behaviours and outcomes we expect of the ESO; and it puts the onus on the ESO to engage with stakeholders to identify how to best deliver against these expectations.

4.3. Under the scheme, incentives payments or penalties are determined by us at the end of the year, following an evaluation of how well the ESO has performed its different roles. The evaluation is centred around a forward plan that the ESO develops with its stakeholders at the start of the year. The ESO then reports on its progress against this plan throughout the year and receives feedback from stakeholders, ourselves and an external performance panel. The final incentives decision is based on defined evaluation criteria and the recommendations of the performance panel. This broader incentives approach replaced the package of discrete, target-based financial incentives that existed previously.34

4.4. In May 2019, we set out our decision to maintain the evaluative, ex post approach to incentives for the ESO for RIIO-2. We believe this approach is better aligned with driving the proactive, flexible and collaborative behaviours we need from the ESO in the rapidly changing system. At the same time, we also recognised that the framework was still new. There are likely to be lessons to be learned and ways to refine it. We therefore noted our intention to review the first year of the scheme this summer and consult on any potential changes.

4.5. This chapter outlines the key lessons learned from the first year of the new incentives scheme, and the potential changes this could imply for RIIO-2. This includes our views on how incentives could evolve to align with our new approach to ESO business plans and funding.

4.6. Our thinking builds on the changes we introduced to the existing framework before the start of the 2019/20 scheme.35 It also draws from the independent review of the framework we published in March 201936, and the feedback we’ve received from the ESO, stakeholders and the performance panel members over the last year.

4.7. We welcome stakeholder views on this initial thinking and any other feedback on how the incentives scheme should evolve. We aim to make a decision on key aspects later this autumn, and where possible, we may also further consult on introducing some changes early for the 2020/21 ESO incentives scheme.

Key lessons learned from first year of scheme

4.8. Over the course of the first year of the new incentives framework we have learned more about what works well in practice and what could work better. Overall, we believe there have been improvements from the previous incentive approach in a number of areas. In particular, the move to bring more stakeholder and external perspectives into the framework has been a key success. It has helped to create greater transparency about the ESO’s performance across a larger range of its activities. We believe this has helped to make the ESO more responsive to stakeholder needs and we have seen examples of deeper industry engagement. Several stakeholders have fed back to us how they value this additional transparency on ESO activity and their greater ability to robustly discuss ESO plans.

4.9. Since April 2018, we have seen the ESO consider its performance across a broader range of areas. Additionally, the ESO has better recognised its potential to deliver consumer benefits not only now, but also in the future. We have seen more examples of the ESO thinking about its longer term strategy (for example, through initiatives such as the Network Options Assessment Roadmap). These changes are a fundamental step in aligning the ESO’s focus with the outcomes and behaviours we expect from it as part of the energy system transformation. Nevertheless, we also agree with stakeholder that there is room for further tangible progress by the ESO against its plans and aims.

4.10. We think there have been two key overarching lessons from the first year of the framework. This is the importance of:

- coherence between the different incentives within a price control; and
- balancing predictability and flexibility when setting performance expectations and the evaluation process.

Coherence between incentives

4.11. Under the RIIO-1 totex incentive mechanism, the ESO faces a percentage share of any differences in spend from its agreed internal cost allowances. Our experience is that this creates a relatively sharp, direct cost-efficiency incentive. This may cause a mismatch between the incentives on the ESO to drive internal costs efficiencies versus incentives to invest resources to create wider benefits for consumers during the price control.

4.12. We see this as primarily a legacy issue, resulting from the fact that the RIIO-1 price control was developed for NGET rather than specifically for the ESO. We have already addressed this through the design of our RIIO-2 price control for the ESO. In May, we confirmed our decision to remove the ESO’s totex incentive mechanism for RIIO-2. This means that we will better focus the ESO’s incentives on the best overall outcomes (and value) for the energy system and consumers. The scheme we introduced in April 2018, which created a broader incentive on the ESO’s performance across all of its roles, is a key stepping stone towards this.

4.13. Nevertheless, the way we incentivise internal cost efficiency during RIIO-2, and how we balance this against incentives on wider outcomes, will be an important consideration. We discuss this in the section on the evaluation approach below (pages 48-51).
Balancing predictability and flexibility when setting performance expectations and the evaluation process

4.14. It is important to ensure there is clarity and an aligned understanding between all parties around performance expectations for the ESO. This includes what constitutes baseline performance and what we expect for it to outperform expectations. Clarity ensures there is a more powerful incentive, because the ESO has more certainty about what it needs to do in practice to unlock incentive rewards.

4.15. The ESO has told us that it would welcome greater certainty in the evaluation approach and a clearer understanding of what excellent performance looks like.

4.16. At the same time, it is not possible to achieve 100% certainty in this evaluative framework. Certainty can only be provided by a set of mechanistic, short term, target-based incentives. Some areas of performance are not suited to numeric, target-based incentives, and we made a conscious decision to expand beyond this because we do not believe it will achieve the behaviours we are trying to incentivise in the evolving system. During a period of transition, there is a limited ‘steady state’ baseline and the past can be a relatively weak predictor of the future. Pre-determining performance targets is difficult and subject to undue influence from external shocks. Our aim is to strike the best possible balance between clear, predictable incentives which can robustly shape behaviour, whilst ensuring the ESO is effectively incentivised across all of its roles, in both the short and long term.

4.17. We have reviewed all components of the existing framework to establish where we might want to reinforce predictability for RIIO-2. Figure 3 illustrates how each element of the framework currently provides clarity on expectations.

Figure 3 – definition of performance expectations under the current framework

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4.18. Our previous decision on the ESO RIIO-2 methodology in May will already support clarity and predictability in one of the key parts of the framework:

- **Business plan**: the RIIO-1 price control was developed for NGET as a whole, of which the ESO was a relatively small part (in financial terms). This meant the price control and the NGET business plan were not as explicit about the outputs and deliverables expected from the ESO as they could have been. The length of the RIIO-1 price control period also meant that it was not possible to be specific about deliverables towards the end of the period. For RIIO-2, we have decided to have separate, more regularly updated ESO business plans. This presents the ESO and ourselves with an opportunity to clearly define baseline outputs and link these to back to incentives. This will remove the need for an additional ESO forward plan.

4.19. Additionally, we think we could provide further clarity and predictability for the ESO in the following areas of the framework:

- **Roles framework**: we think we could build on and further refine the existing roles, in order to ensure they set out distinct areas of ESO activity, which minimise the potential for overlap. We are also considering setting defined, high level outcomes for the ESO in order to further support an aligned understanding between all parties about what we want the ESO to achieve.

- **ESO plan & Ofgem opinion**: the forward plan process was introduced to help define baseline versus exceeding performance expectations under the evaluative scheme during the last three years of RIIO-1. As noted above, the business plan will replace the separate forward plans during RIIO-2, and our assessment of the business plan will replace the formal opinion.

The forward plans should set out measurable deliverables and well-specified and stretching performance metrics. The formal opinion (which provides our assessment of the plan) has been an incentive on the ESO to deliver this. In practice, for the ESO’s first two forward plans, our formal opinion has been unable to conclude that the deliverables and metrics have met all of our expectations. This has meant that there has been more onus on the ESO to demonstrate evidence of its performance throughout the year. As a result, some of the ex ante elements of the scheme were relatively reduced.

Building on our practical experience from the formal opinion process, we believe we need a strong incentive on the ESO to develop robust plans. This could include more explicitly setting out the financial incentive implications to the ESO if it does not meet our business plan expectations for RIIO-2. We may also want to include a direct role for Ofgem in ensuring that some key metrics in the plan are robust, and in setting reporting requirements to ensure that successful delivery of the plan can be easily tracked and measured.

- **Evaluation criteria**: currently the same evaluation criteria are applied consistently to each role area, although different weight can be placed on them. In practice each role area differs. Some may be more suited to within-year metrics whilst other may require more assessment of the ESO’s longer-term strategies and its progress against those strategies. There may therefore be merit in more expressly tailoring the evaluation criteria to different areas in order to reinforce predictability. We also think there might be a case to streamline some of the criteria for RIIO-2.
Summary of initial thinking on RIIO-2 incentives

4.20. We intend to work closely with the ESO, performance panel and stakeholders to develop an incentives design which is most appropriate for RIIO-2. A summary of our initial thinking on how the approach could work is as follows:

- As confirmed in May, we will continue to define the roles the ESO should carry out and the behavioural standards it should meet when performing these roles. We are considering using a streamlined roles framework that groups the ESO’s functions in a way that supports transparency and minimises the potential for overlap. We also propose that the framework could introduce specific high level outcomes and impacts that the ESO should achieve through the development and delivery of its activities.

- As also confirmed in May, the ESO would set out how it will deliver against these roles in its two-year business plan. For each role, the ESO should set out specific outputs and deliverables which have clear and justified timelines, as well as well-specified, stretching performance metrics. The ESO should explain how the outputs, deliverables and metrics in the plan link back to our defined outcomes and impacts, and therefore maximise benefits for consumers. It should also justify how the plans deliver value for money through robust cost benchmarking.

- Ourselves, stakeholders and the performance panel will then assess the ambition and value for money in the plan, and the extent to which it has clearly evidenced the delivery of consumer benefits. This will involve scrutiny of the costs, timelines and performance metrics. We will then develop allowances for efficient spend. In addition, we propose to introduce the ability for Ofgem to develop and set metrics in key areas, if the ESO’s performance metrics have not met our expectations.

- The business plan assessment will then inform the size of the ESO’s incentives pot across the two-year period, which we will set out and consult on at the draft determination stage. Where the ESO meets our business plan expectations and develops a well-specified and stretching plan, then the incentives pot will be kept at the maximum level. If areas of the plan are lacking, then we may we may adopt a lower value. This should reinforce incentives on the ESO to develop a robust plan.

- Assuming the ESO develops a plan that has ambitious aims, timelines and metrics, then our within-period monitoring could be streamlined by being more focussed on how well the plan is delivered. The performance panel would assess the ESO’s performance after one year and provide a final assessment at the end of the two-year period. This assessment would be carried out for each role, using potentially revised evaluation criteria. The criteria may also be tailored to each role to reflect their differences. Given our decision to move to a cost pass-through model for RIIO-2, we also intend to incorporate internal cost efficiency in our evaluation framework.

- The one and two-year evaluation by the panel would then inform our final decision on an incentives value at the end of the two-year business plan period. We are developing our views on how and when this reward or penalty would be recovered by the ESO in practice (eg whether it should be proportionately recovered across the two-year period, and what should happen at the one-year point).
4.21. This is our initial thinking and we welcome any feedback stakeholders have on this approach. More detailed explanation and rationale can be found below. In particular, we discuss our current thinking and set out a number of consultation questions in the following five areas:

- Roles framework;
- Incentive scheme purpose and scope;
- Process for agreeing plans and assessing performance;
- Evaluation approach;
- Stakeholder input and performance panel.

**Roles framework**

**Summary of issue**

4.22. The ESO is a unique entity, performing a wide variety of different roles, functions and activities and interacting with a large number of different industry parties and other stakeholders. In summer 2017, we first introduced the ‘ESO roles and principles’ as part of our new framework for regulating the ESO.

4.23. This was part of our intention to introduce a more principles-based approach to ESO regulation. Principle-based regulation means moving away from reliance on detailed, prescriptive rules and relying more on high-level, broadly stated rules or principles to set the standards by which the ESO should manage the energy system. The roles and principles have since been adapted, with the most recent version published in March 2019.

4.24. The key purpose of the roles framework is to encourage the ESO to focus on delivering benefits for consumers across all of its activities. It is designed to align expectations between the ESO, Ofgem and stakeholders, and support the enforceability of the ESO’s obligations. The roles aim to capture all of the key responsibilities of the ESO, whilst the principles have helped to outline our expectations for how each role should be performed. The roles framework is also the foundation of our current incentives approach. It defines the groupings of activities against which the evaluation process relates to, and therefore presents a structure for the ESO’s plans and performance reports.

4.25. In May, we confirmed our approach to adopt a roles framework for RIIO-2 that is consistent with the existing framework, and which would include any changes that are made between now and the start of the RIIO-2 period. For RIIO-2, this roles framework will also provide a structure for the ESO’s business plans.

4.26. Now we have more practical experience from seeing how the ESO has approached reporting against the roles and principles in its existing forward planning process, we believe there could be a number of potentially beneficial changes which we are seeking views on.

4.27. We think that the four roles broadly capture all the high level functions that we expect the ESO to perform. However, on review, we think they could be streamlined. In particular, we think ‘Facilitating whole systems outcome’ (Role 3)


may be less of a clear grouping of functions, and more of a fundamental, cross-cutting behaviour we would expect to see across all roles. Similarly, we think ‘Facilitating competitive markets’ (Role 2) could be partly recast, recognising that facilitating competition is an expected approach the ESO should take across all areas.

4.28. We think that the seven principles (and their associated guidance) are a useful articulation of behavioural standards we expect to see when the ESO delivers its roles. However, we and the ESO have found them a rather complex way to set a structure for the ESO’s plans and reports. Some stakeholders have also suggested it could be beneficial to adapt the principles in order to more explicitly articulate the full range of outcomes we expect the ESO to achieve through its different activities.

4.29. In March 2019, we made changes to the incentives evaluation process for 2019/20 in light of our practical experiences from 2018/19.40 In particular, we moved to evaluating performance against three ‘role areas’ rather than against the seven principles. For 2019/20 we are jointly considering the ESO’s performance under ‘Facilitating whole system outcomes’ (Role 3) and ‘Supporting competition in networks’ (Role 4). This recognised the synergies between the ESO’s reported activities under these two roles, and aimed to create a streamlined process which could minimise the scope for reporting overlap.

Initial thinking on future changes

4.30. We propose to build on our previous thinking and evolve the roles framework for RIIO-2. The current ‘roles and principles’ framework is displayed in Figure 4. We would like to move towards a roles framework more in line with that displayed in Figure 5. Our intention is to develop this further and, based on feedback, confirm our thinking in autumn, so we can also consider if it should apply for the 2020/21 ESO incentives scheme.

4.31. Building on our decision to combine roles 3 and 4 for reporting and evaluation purposes, we are considering moving from four roles to three. These roles would broadly represent what we see as the three key areas of ESO activity: shorter term operations; market development and procurement; and network development and planning. We think the first role could predominantly capture the ESO’s shorter term activity, whilst the second two roles would relate more to the medium to longer term. These roles would form the structure for the RIIO-2 business plan and we propose our incentive evaluation would then be performed against each of these three roles.

4.32. We believe the proposed structure is a streamlined way of grouping the ESO’s diverse set of functions, which can further minimise the scope for overlap in the ESO’s reporting and the evaluation process. In addition, splitting activities in this way would potentially facilitate a tailored approach to the performance evaluation for each role (as discussed in paragraphs 4.81 to 4.82 of this chapter).

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4.33. As part of the roles framework, we propose introducing a defined set of outcomes for the ESO which would replace the ESO principles. These would build on the existing principles but with a shift in focus from behavioural standards towards more tangible outcomes. These outcomes would be linked to high level consumer impacts.
4.34. An illustration of what these outcomes and impacts could look like is in the table below. **This is initial thinking designed to stimulate wider debate and views.** It has been informed by the work the ESO has carried out developing its long-term vision and evidencing benefits in its existing forward plans.

<table>
<thead>
<tr>
<th>Impacts</th>
<th>Lower consumer bills</th>
<th>Environmental benefits</th>
<th>Service excellence</th>
<th>Safe and reliable networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A reliable and resilient system now and in the future</td>
<td>Competitive balancing, capacity and wholesale markets</td>
<td><strong>ESO as a trusted, thought leader</strong></td>
<td></td>
</tr>
</tbody>
</table>

4.35. We believe using explicit outcomes would help further align expectations between Ofgem, the ESO and the performance panel about what the ESO should be trying to ultimately achieve through its activities.

4.36. In practice, we see the outcomes being used in the RIIO-2 framework as follows. The ESO’s incentives would still be based on performance in each of the roles, but the ESO should explain how the activities, deliverables and metrics supporting the roles will achieve these defined outcomes and therefore deliver benefits. Assuming the ESO can robustly show this in the business plan (and can also justify its costs, timelines and metrics) then ourselves and the panel should have confidence the plan maximises benefits for the wider industry and consumers. The incentives evaluation process could then be streamlined to focus more on the delivery of outputs, metrics and stakeholder feedback (as discussed further in the ‘evaluation approach’ section below). However, the ESO could also refer to the outcomes to when explaining any new activities or deliverables brought forward during a price control period.

4.37. We would not expect the ESO to report on every outcome for each role in its business plan. Instead the ESO should determine which outcomes are most relevant to the different aspects of its plan.

4.38. A key proposed change to the roles from the current framework is that facilitating whole system outcomes would become a behaviour embedded across all ESO roles. We still believe that whole system thinking by the ESO is absolutely fundamental to supporting the energy system transformation, and we continue to expect the ESO to be proactive in this area. We propose to amend the roles guidance to ensure this is clearly reflected throughout each role. We also note feedback from stakeholders that the ESO should have obligations and incentives on whole system working that are consistent with those on the DNOs and TOs. We are currently clarifying the licence conditions for DNOs and TOs to reflect our expectations for whole electricity systems coordination.\(^{41}\) As these are finalised,

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we will consider whether any further clarifications are necessary in the ESO’s existing licence requirements to ensure consistency.

4.39. For the avoidance of doubt, we are not proposing to remove the guidance\(^\text{42}\) on behavioural standards we expect from the ESO (which is currently described against each of the principles). This would instead stand as guidance on the standards and behaviours we expect to see from the ESO under each role. We also still see value in using a principles-based approach to regulating the ESO and setting its licence obligations. This is firstly because we want to drive a proactive ESO that takes ownership of its objectives, and secondly because overly prescriptive rules can soon become outdated in a rapidly changing environment.

4.40. The current roles framework is underpinned by Standard Licence Condition (SLC) C16 (Procurement and use of balancing services). This licence condition was updated in April 2017\(^\text{43}\) in order to clarify what we expect from the ESO as part of its obligation to direct the flow of electricity onto and over the transmission system in an efficient, economic and coordinated manner. We believe it would now be worthwhile reviewing the existing licence requirements to see if they need to be improved, expanded or adapted in any way. We will also consider whether SLC C16 is the right vehicle for providing clarity on obligations across the diverse set of ESO roles.

Roles framework questions

Q15. Do you have any views on our initial thinking for how the ESO roles framework should evolve?

Q16. Do you support the introduction of a defined set of ESO outcomes and impacts? If so, what should these outcomes and impacts be?

Q17. Do you think any changes are needed to ESO’s licence conditions in order to further clarify its baseline obligations?

Incentive scheme purpose and scope

Summary of issue

4.41. The ESO’s current incentive scheme was designed to encourage the ESO to unlock additional value for consumers across the full range of its activities. It has a symmetrical upside and downside value of ±£30m per year. This value was determined in the context of the ESO’s existing RIIO-1 funding model. It recognised the significant scope the ESO has to influence wider energy industry costs and benefits; and it was partly chosen to encourage the ESO to invest resources in newer activities that exceeded expectations under its licence and agreed RIIO-1 allowances.

4.42. The ESO will have different funding arrangements in RIIO-2 and a new business planning process with cycles of two years, rather than eight years (as was the case for RIIO-1). We think this has potential implications for both the size of the current incentives as well as the main behaviours and actions they are trying to encourage.

\(^\text{42}\) This can be found on pages 7 to 18 of our Roles and Principles guidance: https://www.ofgem.gov.uk/system/files/docs/2018/02/eso_roles_and_principles.pdf

4.43. As explained in Chapter 2, we think meaningful upside incentives can encourage the ESO to be ambitious and that downsides can similarly discourage poor performance, but they must be carefully assessed to understand the inducements and risks they may place on the ESO, in particular given the ESO’s size. We will undertake further work on the appropriate size of the incentives in RIIO-2, alongside further modelling of the ESO’s finances. The values will be consulted on as part of our Draft Determination in 2020.

Initial thinking on future changes

4.44. We want the funding model and incentives scheme to have clear and distinct purposes during RIIO-2. We believe the funding model will allow the ESO to invest in the right activities for industry and consumers, and will provide it with appropriate returns which are commensurate with its risks. The incentives scheme will provide additional (or reduced) profits for the ESO, over and above the returns from the core funding model, according to its performance.

4.45. We believe that the move to a pass-through funding approach will better encourage the ESO to take on new deliverables and activities within a business planning period and to deliver these to a high standard. In addition, a two-year planning cycle will help ensure that plans can be more easily refined and adapted when beneficial new projects or responsibilities are identified. On top of this, the ESO will have access to RIIO-2 innovation allowances, which will enable it to fund additional, innovative projects which focus on solving problems relating to the longer term energy system transition. We think this means that as a baseline expectation, the ESO has significant scope to fund activities that deliver in industry and consumers’ interests.

4.46. Our initial view is that this means the incentives scheme should be focussed on encouraging the ESO to provide an exceptional quality of service when developing and delivering its funded activities. An exceptional quality ESO service could include:

- the development of exceptionally clear, comprehensive and ambitious future strategies, backed by robustly-defined and tangible short-term plans;
- strong progress and timely delivery against these clear, tangible and ambitious strategies and plans;
- robust stakeholder engagement and a high level of industry trust and respect;
- the maximisation of benefits in the way funded activities are performed, (including outperforming past performance levels and maximising short and long-term efficiency in wider industry costs, such as balancing costs); and
- the delivery of innovative and future looking internal business models and processes, in order to maximise short and long run internal cost efficiency.

4.47. We believe focussing the incentive scheme on exceptional quality of service would give clear and distinct functions to both the business planning process and the incentives in RIIO-2, creating coherence in the framework. This has potential implications for our evaluation criteria for RIIO-2, as discussed further below in the evaluation approach section of this chapter.

4.48. We think that an efficient cost pass-through model, an incentive scheme with sufficient strength, and access to innovation funds will drive the ESO to be ambitious in its strategy. This is because the ESO should have a reasonable
expectation that any efficient investments made to improve service quality (in the hope of unlocking incentive rewards) will be fully funded. This may mean that a different overall incentive value is needed in RIIO-2. We will also consider further whether or not asymmetric incentives would be appropriate, as discussed in paragraph 4.86.

4.49. We also need to be mindful of setting a maximum incentive upside at a value that provides an appropriate maximum return for the now legally separate ESO company, and the impact that the maximum incentive downside could have on financing considerations.

Incentive scheme aims and scope questions

Q18. Do you agree the incentives scheme should be focussed on encouraging the ESO to provide an exceptional quality of service when delivering its price control funded activities? Do you agree with our initial views on what an exceptional quality of service would include?

Process for agreeing plans and assessing performance

Summary of issue

4.50. The incentives scheme currently runs for one year from April to March. The ESO is required to publish a forward plan ahead of the regulatory year, following stakeholder engagement. This plan should set out key deliverables and performance metrics for each of its roles, demonstrating how and where the ESO will add additional value for consumers. Stakeholders, the performance panel and Ofgem are able to challenge the deliverables and metrics when the draft version of the plan is published. However, the ESO decides on the deliverables and metrics included in the final plan.

4.51. We then publish a formal opinion following our review of the final forward plan, stakeholder responses and the feedback of the performance panel. This formal opinion sets out our views on the level of ambition in the plan and is designed to create clarity over the extent to which the ESO can expect to score highly from successfully meeting its deliverables and outperforming its performance metric benchmarks. The formal opinion is therefore intended to be a tool to incentivise the ESO to develop strong forward plans and metrics in the first place.

4.52. The ESO is currently required to produce within-year performance reports, including monthly reporting on performance metrics, quarterly reports, a mid-year report and an end of year report. This facilitates ongoing dialogue between the ESO and stakeholders on its performance and progress against its plan. The performance panel evaluates the ESO at the mid-year stage to provide it with feedback on where it may want to focus its attention for the rest of the year.

4.53. We have now been through two iterations of the forward planning process. On both occasions, we did not think the ESO has consistently developed sufficiently justified, well-specified or stretching performance metrics.44 We also believed

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some of these metrics could have been better adapted by the ESO in response to stakeholder feedback.

4.54. As a result, the panel and Ofgem placed less weight on these metrics in the performance evaluation. There has therefore been more onus on the ESO to demonstrate how it has exceeded expectations with additional evidence provided throughout the year. This ultimately increases the ex post elements and reduces the ex ante elements of the scheme, and can also create additional reporting burden for all parties.

4.55. Our original rationale for encouraging the ESO to develop and set its own metrics is that it is best placed to understand how and where it can maximise consumer benefits. We still believe this is the case. However, we think we may need to introduce a strong incentive on the ESO to develop well specified and challenging benchmarks in RIIO-2.

4.56. Another key learning is the importance of clear and consistent reporting. As 2018-19 was the first year of the scheme, it is inevitable that there would be an element of learning by doing for all involved. We believe the ESO’s reporting has significantly improved over the course of the year, which in turn has increased transparency and helped to streamline the monitoring and evaluation processes. For the end of year evaluation to be effective, the reporting on deliverables and metrics proposed at the start of the year need to be as consistent as possible with those reported on at the end of the year. There may therefore be a need for us to be more specific about reporting requirements on the ESO.

4.57. Finally, stakeholders have also told us that they would like the forward planning process to provide them with a longer window to comment on the ESO’s draft plan. Some have also fed back that the formal opinion could be brought forward, to provide a view before the start of the regulatory period.

Initial thinking on future changes

4.58. We are considering a number of changes to ensure consistency with the RIIO-2 business plan process, to ensure the appropriate level of administrative burden and to ensure strong scheme governance. Below we discuss our thinking on scheme length, metric governance and the plan assessment process.

Scheme length

4.59. There are two main options for the length of the incentive scheme. One is it to keep the existing annual process, whilst the other is to extend to scheme to two years, to align with the RIIO-2 business plan cycles. There is also the possibility of having a two-year scheme with certain aspects adjusted at the one-year point.

4.60. Our current favoured option is to lengthen the incentive scheme to two years. The existing ESO forward plans will be replaced by the RIIO-2 business plans, which will contain the ESO’s costs, activities, deliverables and performance metrics. Our initial view is that any performance metrics would be fixed for the two-year period. However, we want to explore further whether this is feasible and preferable for all metrics, or whether certain adjustments may be needed at the mid-period point. In a two-year cycle, the existing mid-year evaluation by the performance panel would then instead occur after one year. This would provide the ESO with a clear view on its performance after the first year, which could then influence the payments or penalties it should recover for that year.
4.61. We believe this approach will help reduce the overall administrative burden of the scheme, and we note that many of the ESO’s activities are multi-year undertakings. This would also align with the period over which the ESO’s business plan activities are defined and allowances set. We welcome views from stakeholders on whether this approach strikes the right balance in providing opportunities for feedback.

4.62. As the existing forward plan is incorporated into the ESO’s RIIO-2 business plans, there will not be a formal opinion process for the 2021-23 period. Instead, our assessment of business plans will take place following the business plan submission in December 2019, and our views will be published as part of the determinations phase. This means that the ESO will have certainty on the outcomes of the plan assessment (including what this means for incentives) prior to the start of the price control.

4.63. We are considering the appropriate timelines for the business plan assessment process from 2023 onwards, including when and how stakeholders should be involved. Our current position is that the conclusions of the plan assessment process would be made prior to the start of the period, and that the window for stakeholders to comment on draft plans would be more in line with RIIO-2 timescales (and therefore longer than the 2018/19 and 2019/20 schemes).

4.64. We are also further considering what a two-year incentive scheme would mean for when and how the ESO receives and recovers incentive payments or penalties. In particular, we are keen to ensure there is not an inappropriate level of volatility in ESO revenues (or BSUoS charges). We will consider this in the context of wider thinking on revenue collection risks, as well as work from the BSUoS task force.

**Metric governance**

4.65. We propose introducing the concept of ‘core’ metrics for the ESO. These would be metrics on areas that are particularly important to ESO performance and where metrics could add significant value. Our initial view is that this could include metrics on balancing costs, network reliability, forecasting, stakeholder satisfaction and internal cost efficiency.

4.66. In the first instance, we would still look to the ESO to develop high quality metrics across its different activities, recognising the particular importance of core areas. However, if the ESO is not able to meet our expectations in core areas, we will develop and set the metrics ourselves in further consultation with the ESO and stakeholders.

4.67. These core metrics would feed into the overall evaluation process in the same way as the metrics do now. However, this proposal would help limit the risk of there being misaligned expectations around what constitutes a high quality metric, which would help reinforce baseline certainty for the ESO.

4.68. We have already set out our expectation that the ESO’s RIIO-2 business plan should be setting out clear, well-defined metrics that have been closely consulted on, and that are appropriately stretching. These proposals do not change those expectations. Instead, the ESO’s own metric development will inform our thinking on if and where Ofgem-led metrics might be needed. Metrics developed

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45 Please see page 31-32: https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodology_decision_eso.pdf
by the ESO which are already well-defined, justified and stretching would still feed into the evaluation framework.

4.69. Subject to stakeholder views, our intention is to start considering whether any potential core metrics are needed following the ESO’s December business plan submission. This will enable us to assess the ESO’s proposed set of metrics and establish whether these need to be improved or supplemented. We expect to work with the ESO between January and May to define any core metrics and consult on these through the determinations process.

4.70. We also note that the ESO’s forward plan for 2020-21 is due to be consulted on and published in early 2020. Given this overlap, we will work closely with the ESO prior to the draft determination to incorporate any developments or updates that may come out of the 2020/21 forward planning process.

Plan assessment process

4.71. Under RIIO-2 we will be assessing the ESO’s business plan every two years. We believe this plan assessment process needs to ensure the ESO has an incentive to develop ambitious plans. This is particularly the case as our incentives are likely to directly relate to how well the business plans are delivered, which could lead to a perverse incentive to develop plans that are easy to outperform.

4.72. Therefore as well as introducing the concept of core metrics, we are considering how we ensure the plan assessment process is as strong as possible - in particular by more clearly setting out the implications for incentives following the business plan review.

4.73. As part of the plan assessment we will consider how well defined, justified and stretching the ESO’s metrics and deliverables are (including the ambition of the timelines); the extent to which stakeholder feedback has been factored into the plan; and the justifications for value for money.

4.74. We propose that following the plan assessment and inclusion of any additional core metrics, the overall value of the incentive pot could be reduced to reflect the extent to which the plan has met our expectations. This provides a stronger incentive than the formal opinion which does not directly influence the overall incentive pot size.

4.75. We would explain how we have reached the incentive value by clearly identifying which plan requirements have or have not been sufficiently met. As with the formal opinion, this would provide further guidance to the panel on the quality of different aspects of the plan to help guide their evaluation.

4.76. We are conscious that the ESO needs to submit its final business plan by December 2019. We are therefore planning to work closely with the ESO and stakeholders to ensure there is clarity about the implications from the plan review at the determinations stage. Nevertheless, our considerations here do not change the expectations for the ESO’s business plan that we consulted on in December 2018 and confirmed in May 2019. We expect the ESO to meet these business plan expectations.

Scheme process questions

Q19. Do you agree with our proposal to align the length of the incentive scheme with the two-year business planning cycle?
Q20. Do you agree we should introduce the possibility of ‘core’ metrics for the ESO?
And, do you have views on which areas of ESO performance we should consider for any core metrics?

Q21. Should there be financial incentive implications for the ESO as a consequence of the business plan assessment process?

**Evaluation approach**

**Summary of issue**

4.77. The ESO’s performance is currently evaluated across each ‘role area’ using the following predefined evaluation criteria:

- a) Evidence of delivered benefits
- b) Evidence of future benefits / progress against longer term initiatives
- c) Stakeholder views
- d) Plan delivery
- e) Outturn performance metrics and justifications

4.78. These criteria were designed to be considered together in order to establish an overall picture of the ESO’s performance. They have no explicit weighting, and the panel can use its judgement to consider which of the criteria is more relevant to each role area. For more information on how these criteria are used in practice, please see our Electricity System Operator Reporting and Incentives (ESORI) arrangements guidance document.46

4.79. As discussed above, a key lesson learned from the first year of the scheme is the importance of ensuring there is the right balance between predictability and flexibility in the evaluation process for the ESO.

4.80. Our experience in practice is that the ESO’s roles vary in nature. This means that the focus of the evaluation for each role has also been different in practice. Whilst our current evaluation criteria are designed to allow for these differences, this flexibility could also mean the incentive effect is less sharp than it could be. It could also result in the ESO disproportionately reporting against criteria which might be viewed as less relevant.

4.81. The independent review of the incentives framework47 we published in March 2019 suggested that we should consider tailoring the evaluation criteria to the nature of the activity being incentivised. In particular, the evaluation could recognise the different time dimensions of the ESO’s activities and introduce a ‘time-based scorecard’. The shorter-term roles could have relatively more focus on metrics (as these are easier to define and measure for short-term activities), whilst the longer-term roles could rely more on the assessment of qualitative evidence and delivery against milestones.

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4.82. Some stakeholders have expressed views that it could be difficult for the ESO to provide concrete evidence of future benefits of its initiatives (criterion b). They believe that this could drive overly risk averse or short-term behaviour because the ESO may not believe it could unlock rewards (or it could be concerned about incurring penalties as a result of failing to demonstrate the anticipated long term benefits in practice). We note that our ESORI guidance does not require the ESO to precisely quantify future benefits. It provides scope for the panel to use judgement to recognise concrete steps by the ESO to identify solutions to longer-term challenges, as well as the clear progression of longer-term plans. We also note that the ESO was successful at unlocking rewards for roles which had a longer-term focus during the first year of incentive scheme. Nevertheless, it is important to ensure there is clarity about our approach to incentivising longer-term outcomes through the performance framework.

Initial thinking on future changes

4.83. We are considering some adjustments to the evaluation criteria in order to target and streamline the evaluation process. We also think that certain criteria may need to be reviewed to ensure they work effectively in conjunction with the RIIO-2 business planning process and funding model. Our initial thinking on this is summarised in the table below.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Initial views</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Evidence of delivered benefits</td>
<td>We are reviewing the use of these criteria, particularly given the move to the new two-year business planning process. For RIIO-2, as part of the business planning process, the ESO must provide robust cost-benefit analysis and justification for all new and significant areas of spending. We then set allowances for efficient expenditure based on the assumption these benefits will be delivered. If the ESO is able to develop well-justified and ambitious business plans, which clearly demonstrate strongly positive consumer benefits, then we believe the ESO should rewarded for successfully delivering these plans. Many plans will run for a number of years before they fully deliver. Whilst the ESO should regularly review their plans, it may be either duplicative or difficult to try and biennially reassess whether the cost-benefit analysis put forward in the business plan has started to or fully materialise. It may be more practical to focus on plan delivery, stakeholder satisfaction performance against metrics. More generally, we also recognise there could be potential overlap between these criteria, and criteria (c)-(e). Strong stakeholder feedback, the delivery of an ambitious plan and outperforming a relevant metric, can all be considered by some as evidence that the ESO is ultimately delivering current and future benefits. It could therefore be argued that demonstrating additional benefits is more of an overarching consideration for the evaluation. If we do keep the demonstration of benefits as explicit criteria, our current view is that it could be helpful to merge both the ‘evidence of delivered benefits’ and the ‘evidence of future benefits’ in to one single category. We believe that this would allow the ESO to provide a clear body of evidence that has a consistent message in terms of the overall benefits from its activities.</td>
</tr>
<tr>
<td>b) Evidence of future benefits</td>
<td></td>
</tr>
<tr>
<td>c) Stakeholder evidence</td>
<td>We see a continued role for stakeholder evidence in the evaluation framework. This is an important measure of the quality of service provided by the ESO. At the same time, we recognise that it is not always possible to achieve high satisfaction from all stakeholders. The ESO may sometimes need to take steps that at least some stakeholders don’t agree with in order to achieve consumer outcomes. This highlights the importance of ensuring this criterion is appropriately explained and calibrated.</td>
</tr>
</tbody>
</table>

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d) Plan Delivery
We want to encourage the strong delivery of plans and this is relevant to the ESO providing a high quality of service. However, we want to further consider how we can best mitigate possible perverse incentives this criterion could create for the ESO not to be ambitious around its deliverables or timelines in its business plan. This links to our thinking on scheme governance above.

e) Outturn performance metrics & justifications
We want the performance metrics to have an important role in the framework, as they help provide clarity about performance expectations. As discussed in the sections above, we are considering ways to support strong metric governance to ensure this is the case in RIIO-2.

Potential new criteria
We are further considering whether any new criteria might be needed. This will build on our thinking about what constitutes an ‘exceptional quality of service’ noted elsewhere in this document. We welcome views on whether any criteria are currently missing from the framework.

One area we are considering further is how to factor ‘value for money’ into the evaluation framework. We have moved to a pass through model on ESO internal costs, recognising that the impact the ESO can have on wider system costs is an order of magnitude greater than its internal expenditure. Nevertheless, the ESO’s internal expenditure is still a significant cost, and we want to ensure the ESO continues to have an incentive to find ways of running its business more efficiently. One option is that this could be a specific criterion for the panel to consider. Alternatively, the ESO’s outturn cost expenditure versus its agreed allowances could form a performance metric for each role. This metric could then be considered in conjunction with evidence on what the ESO has delivered in practice to create wider benefits for consumers. We welcome views on the most appropriate approach.

4.84. In addition to considering ways of streamlining the criteria, we are also considering whether tailoring the evaluation criteria to the different areas of activity (as suggested in the independent review of the framework) could further strengthen predictability in the evaluation process.

4.85. Our current view is that we would continue to perform an evaluation for each role. However, for the shorter-term role, the criteria could place a relatively higher focus on metrics and data. For the medium to longer-term roles, it could place more focus on the quality of the ESO’s strategy, robust engagement, and timely progress against this strategy.

4.86. We are also considering the case for including relatively more upside than downside for the incentives on medium-term and longer-term roles. For these areas, success may be harder to define up front and only clearly evidenced once those longer term outcomes have been delivered. Up front expectations on cost and precise outputs may also be more uncertain and susceptible to change. We are inviting views on whether relatively more upside focus could mitigate the risk of the ESO not stretching itself in more novel areas due to loss aversion bias, in particular in relation to longer term behaviours and outcomes. We note that in Ireland, an upside only incentive was recently introduced on EirGrid’s delivery against its strategy in supporting and managing the transition to a low carbon energy system.49

Evaluation approach questions

Q22. What if any changes might be needed to the incentives evaluation criteria?

Q23. How should we best include internal cost efficiency in the evaluation framework – should it be a performance metric or explicit criteria?

Q24. Should we continue to evaluate the ESO’s performance by role? If so, do you agree that we should we tailor the evaluation approach to each role?

Q25. Do you think medium to longer term roles should have relatively more upside incentives focus than short term roles?

Stakeholder input and performance panel

Summary of issue

4.87. Stakeholder feedback is a key aspect of our ESO regulatory framework. In many areas, industry is better placed to help shape ESO priorities and judge its performance than we are. Stakeholders and external parties are also crucial for helping us to address the inherent information asymmetry in monopoly regulation. We therefore want to continue providing stakeholders with the right platforms to shape ESO activity and hold it to account for its performance.

4.88. The ESO performance panel is a vital part of our effort to factor in more stakeholder and external perspectives into ESO regulation. The panel plays a key role in our current incentives framework. It helps to define the ESO’s priorities at the start of the year, challenges its performance throughout the year, and makes recommendations to Ofgem which guide our incentive decisions. The panel is made up of three industry representatives, three independent experts, and a consumer representative. It is chaired by an Ofgem senior leader, who sits outside of the team which leads on the ESO’s performance monitoring and regulatory framework.

4.89. In May, we decided to retain a role for the performance panel in RIIO-2. We have also previously committed to reviewing the panel arrangements as we gain more experience around how it operates in practice. This would include reviewing its role, size and structure (including whether to introduce an independent chair).

4.90. During 2018/19, we believe the panel has successfully brought greater transparency into the incentive evaluation process. It has helped to ensure that stakeholder views and independent expertise are now much more explicitly factored into incentive decisions than under the previous framework. We believe the panel report for 2018/19 was a balanced and fair reflection of how the ESO had performed during this year.

4.91. The ESO performs a vast array of different functions, some of which can be very detailed and technical. The panel may therefore have a challenging task considering the large volume of complex information published by the ESO. It should become less challenging as the ESO’s reporting is streamlined and the panel get further experience with the processes. Nevertheless, for RIIO-2 we want to ensure the panel’s task is manageable. We also want to ensure there is the right mix of skills and knowledge, for example ensuring there is sufficient in-depth technical system operation expertise.
4.92. The administration of the panel was more resource intensive than we had anticipated. We think this is partly due to the fact this was the first year of the arrangements, which resulted in a learning curve for all parties. We expect the resource burden to reduce as the arrangements bed in. At the same time, we also think it would be wise to avoid introducing any changes which significantly expand the role of the panel or increase resource burden further at this point. For this reason, we are not considering expanding the size of the panel.

Initial thinking on future changes

4.93. We welcome stakeholder views on whether the role of the panel should change going forward or stay the same as it is now. Our current view is that its role would stay broadly the same, noting that our proposals also mean the panel would consider the ESO’s inputs costs as an element within the assessment.

4.94. As set out in paragraphs 4.59 to 4.61 above, we are considering the option of a two-year incentive scheme. For the panel, this would mean extending the times between panel meetings. In particular, the panel would convene to:

- **Scrutinise business plans**: the panel would comment on the ambition and cost efficiency of the two-year business plan and associated performance metrics. For the first business plan cycle (2021-2023), we think the performance panel will have a reduced role in this area, as this task is currently being carried out by the ‘RIIO-2 Challenge Panel’. However, we will consider whether to provide the performance panel with some form of role in this process for 2021-2023 (for example, aiding our determinations process).

- **Provide feedback at the mid-period stage**: the panel would evaluate the ESO mid-way through the business planning cycle (after one year) and provide feedback on where it should focus its performance for the final year.

- **Perform an end of period evaluation**: the panel would assess the performance of the ESO at the end of the two-year period. This forms a recommendation to Ofgem on incentive payments or penalties.

4.95. We recognise that asking the panel to perform a holistic evaluation of the ESO’s performance, which cuts across multiple different and complex areas, can be a challenging task. Asking the panel to consider both inputs costs and the ESO’s outputs/wider performance may increase the scope of this task. At the same time, there are likely to be synergies from the panel considering both inputs and outputs when evaluating overall performance. We also think that strong business plan and metric governance, streamlined reporting and refined (potentially tailored) criteria should make its task much manageable. This is because it should lead to less focus on the ex post assessment of new, additional evidence provided by the ESO throughout the year, and more focus on assessing how the ESO’s performance is tracking against elements defined ex ante in the plan (and the reasons why).

4.96. We are not currently proposing any major changes to the structure or make-up of the panel. The mix of industry representatives and independent experts has worked well to date. The current chair is an Ofgem member of staff who is a largely a neutral facilitator that does not cast a vote or typically express a performance opinion unless the other members of the panel seek clarity. The additional resource burden required to chair the panel and the need to liaise frequently with the panel’s secretariat suggests that an Ofgem chair is most appropriate for the time being. However, we can see the merits of eventually...
transitioning to an independent panel chair, and we will continue to review whether and when this could be appropriate.

4.97. We will continue to review whether we have the right mix of skills and expertise on the panel prior to the start of RIIO-2. Our experience so far suggest that the panel could benefit from greater in-depth technical system operation knowledge, but we would welcome any views on other key skills we should consider.

Performance panel questions

Q26. Do these arrangements give stakeholders the right platform to shape ESO activity and hold it to account for its performance?

Q27. Do you have any further suggestions for improving the existing ESO performance panel arrangements?

Next steps and interactions

4.98. We welcome your views on our initial thinking for the ESO’s RIIO-2 incentives. We would like ideally any written responses to be submitted to us by **25 September 2019** when the consultation on the price control financial methodology closes. However, if stakeholders require additional time to consider these issues and prepare responses, we will consider carefully all responses to the incentives consultation questions (Q15-Q28) until **9 October 2019**. We would also be very happy to arrange bilateral meetings if that is more convenient.

4.99. We will confirm our changes for the incentives framework for RIIO-2 at appropriate points between this autumn and the determination stage. For priority areas, we are aiming to confirm our position this autumn. This could include changes to the roles framework, as well as any other areas that may be more directly relevant to the ESO’s business plan submission. For other aspects, including areas which link to the ESO’s overall financial framework such as the precise incentive values, we intend to provide proposals as part of the determination process. This aligns with the treatment of output incentives for other network companies under RIIO-2.

4.100. Where possible and appropriate, we may introduce some changes early for the 2020/21 scheme. We expect this to require follow-up detailed consultations on the Roles and Principles guidance and ESORI Arrangements guidance later this year. We welcome stakeholder views on which if any changes should be prioritised and introduced early for the start of the 2020/21 regulatory year.

4.101. We remain committed to ensuring the roles framework evolves over time as appropriate and reflects any changes in the energy system or functions of the ESO. As outlined in May, we are continuing to investigate and develop the ESO’s ability and capacity to facilitate early competition in networks. We stated our intention to request the ESO to develop an 'Early Competition Plan' alongside its business plan submission in December.\(^5\) We will further consider any changes needed to the ESO roles framework to account for this, once we have received and reviewed this plan.

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\(^5\) See page 16 of our May document: [https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodoloy_decision_-_eso.pdf](https://www.ofgem.gov.uk/system/files/docs/2019/05/riio-2_sector_specific_methodoloy_decision_-_eso.pdf)
4.102. We are currently considering the best way to incentivise the ESO’s Electricity Market Reform (EMR) Delivery Body function. We consulted on this topic in April 2019 as part of our Five Year Review of the Capacity Market Rules. This included the option of incorporating the EMR incentives into the wider ESO incentives framework. We plan to confirm our position on EMR incentives by Prequalification 2021.

**Priority areas question**

Q28. What if any changes should be prioritised and introduced early for the 2020/21 incentives framework?

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Appendices

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Appendix 1 - Working Assumptions for WACC allowance, additional funding and notional company modelling

We provide assumptions for the 5-year period ending 31st March 2026, in line with our view that the ESO should plan for the long term, notwithstanding that other elements of the price control will be set for 2-year periods. At draft determinations, we will confirm the relevant period for each funding element.

WACC allowance

The following working assumptions are provided for business planning purposes only and do not indicate proposals or decisions relating to WACC or any of the component parts.

Table 2: Allowed return on capital (CPIH-real), our working assumption for the ESO

<table>
<thead>
<tr>
<th>Component</th>
<th>5-year period ending 31st March 2026</th>
<th>Ref</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed return on debt</td>
<td>0.25%</td>
<td>A</td>
<td>See below</td>
</tr>
<tr>
<td>Allowed return on equity</td>
<td>7.81%</td>
<td>B</td>
<td>Table 6</td>
</tr>
<tr>
<td>Notional gearing</td>
<td>55%</td>
<td>C</td>
<td>Working assumption</td>
</tr>
<tr>
<td>Allowed return on capital</td>
<td>3.65%</td>
<td>D</td>
<td>D = A *C + B *(1-C)</td>
</tr>
</tbody>
</table>

Allowed return on debt capital, working assumption

We do not yet have a view on which index or combination of indices would be most appropriate for the ESO. However, a selection of potential indices is provided below. All of these indices are iBoxx £ non-financial indices. Forecast iBoxx values have been calculated using market implied 5yr zero coupon government forward rates and adding the average spread over the last 3 years to that forecast government yield for each future date. Indicative annual allowances have been calculated on the basis of an extending trailing average period from the relevant reference end date for the allowance year up to 5 years backwards, subject to a start date no earlier than 1st April 2019. CPIH real figures for each date have been calculated using the Fisher equation and 5yr OBR forecast for CPI available on the given date.

Table 3: Potential ESO Cost of Debt Indices Indicative Allowances (nominal)

<table>
<thead>
<tr>
<th>Index/Nominal %</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7 A/BBB average</td>
<td>1.82</td>
<td>1.83</td>
<td>1.86</td>
<td>1.92</td>
<td>1.99</td>
<td>1.88</td>
</tr>
<tr>
<td>5-7 A</td>
<td>1.37</td>
<td>1.39</td>
<td>1.43</td>
<td>1.49</td>
<td>1.57</td>
<td>1.45</td>
</tr>
<tr>
<td>5-7 BBB</td>
<td>2.27</td>
<td>2.26</td>
<td>2.29</td>
<td>2.34</td>
<td>2.40</td>
<td>2.31</td>
</tr>
<tr>
<td>7-10 A/BBB average</td>
<td>2.16</td>
<td>2.18</td>
<td>2.22</td>
<td>2.28</td>
<td>2.37</td>
<td>2.24</td>
</tr>
<tr>
<td>7-10 A</td>
<td>1.84</td>
<td>1.86</td>
<td>1.90</td>
<td>1.96</td>
<td>2.05</td>
<td>1.92</td>
</tr>
<tr>
<td>7-10 BBB</td>
<td>2.48</td>
<td>2.50</td>
<td>2.55</td>
<td>2.60</td>
<td>2.69</td>
<td>2.56</td>
</tr>
</tbody>
</table>
Table 4: Potential ESO Cost of Debt Indices Indicative Allowances (CPIH real)

<table>
<thead>
<tr>
<th>Index/CPIH Real %</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7 A/BBB average</td>
<td>-0.17</td>
<td>-0.17</td>
<td>-0.13</td>
<td>-0.08</td>
<td>-0.01</td>
<td>-0.11</td>
</tr>
<tr>
<td>5-7 A</td>
<td>-0.61</td>
<td>-0.60</td>
<td>-0.56</td>
<td>-0.50</td>
<td>-0.42</td>
<td>-0.54</td>
</tr>
<tr>
<td>5-7 BBB</td>
<td>0.27</td>
<td>0.26</td>
<td>0.29</td>
<td>0.34</td>
<td>0.40</td>
<td>0.31</td>
</tr>
<tr>
<td>7-10 A/BBB average</td>
<td>0.16</td>
<td>0.18</td>
<td>0.22</td>
<td>0.28</td>
<td>0.36</td>
<td>0.24</td>
</tr>
<tr>
<td>7-10 A</td>
<td>-0.16</td>
<td>-0.14</td>
<td>-0.09</td>
<td>-0.04</td>
<td>0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td>7-10 BBB</td>
<td>0.48</td>
<td>0.49</td>
<td>0.53</td>
<td>0.59</td>
<td>0.67</td>
<td>0.55</td>
</tr>
</tbody>
</table>

The RIIO-2 average forecast using these indices ranges from -0.54% to 0.55% depending on the tenor and rating selected. Although it may be possible for a company to have a negative real cost of debt (because current real rates are so low), for working assumptions purposes we propose the use of 0.25%. Selection of indices and trailing average periods will be considered further following business plan submission and proposed at draft determination.

Allowed return on equity capital, working assumption

In May 2019 we published working assumptions for transmission and gas distribution sectors, using a risk-free rate assumption of -0.75% and a TMR central estimate of 6.5% (both values in CPIH-real terms). We believe these assumptions for risk-free and TMR are also appropriate for the ESO. For the purposes of initial business plans, we believe the following assumptions are appropriate for equity beta.

Table 5: Notional Equity Beta, working assumption

<table>
<thead>
<tr>
<th>Component</th>
<th>RIIO-2</th>
<th>Ref</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt beta</td>
<td>0.125</td>
<td>A</td>
<td>Working assumption</td>
</tr>
<tr>
<td>Asset beta</td>
<td>0.60</td>
<td>B</td>
<td>SONI/CMA precedent</td>
</tr>
<tr>
<td>Notional gearing</td>
<td>55%</td>
<td>C</td>
<td>Working assumption</td>
</tr>
<tr>
<td>Notional equity beta</td>
<td>1.18</td>
<td>D</td>
<td>D = [ B - (C * A) ] / (1 - C)</td>
</tr>
</tbody>
</table>

Combining this with the risk-free rate and TMR, gives a CAPM-implied cost of equity as follows.

Table 6: CAPM-implied allowed return on equity, working assumption, (CPIH-real)

<table>
<thead>
<tr>
<th>Component</th>
<th>RIIO-2</th>
<th>Ref</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free-rate</td>
<td>-0.75%</td>
<td>A</td>
<td>Working assumption</td>
</tr>
<tr>
<td>Total Market Return</td>
<td>6.50%</td>
<td>B</td>
<td>Working assumption</td>
</tr>
<tr>
<td>Notional equity beta</td>
<td>1.18</td>
<td>C</td>
<td>Table 5</td>
</tr>
<tr>
<td>Allowed return on equity capital</td>
<td>7.81%</td>
<td>D</td>
<td>D = A + C * (B - A)</td>
</tr>
</tbody>
</table>

It should be noted however that the SONI/CMA precedent for asset beta may not be appropriate for the ESO, given for example that SONI bears cost risk, and is much smaller than the ESO. In summary, we propose to revisit these assumptions at draft determinations in line with the final methodology, as decided in the autumn of 2019. To avoid spurious accuracy, we propose for business planning purposes that the same return on equity capital is used for each year.
Additional funding

In its July 2019 response the ESO argued that “RAV*WACC with margins” may be suitable for RIIO-2. Using the ‘margin’ inputs from the ESO’s submission, additional funding can be valued at approximately £20.75m per annum, most of which is designed to remunerate revenue collection obligations (see demonstration at paragraph 3.27). At this time however, we do not consider it necessary to provide working assumptions for the ESO’s claims. This primarily reflects two issues. First, the possibility that the ESO may not be exposed to identical revenue collection activity during RIIO-2. Second, in the absence of actual long-term financing resources and facilities, we do not have sufficient information on actual financing facilities or residual risks, upon which to base any assumptions. This will be revisited at Draft Determinations in summer 2020, following review of the ESO’s business plan as submitted in December 2019.

Notional Company modelling

For the purposes of modelling the notional company we provide guidance as follows:

1. Totex allowances are assumed to equal ESO totex cost forecast for RIIO-2
2. Net debt is reset to the working assumption notional gearing level (55% net debt to RAV) at the start of RIIO-2, with any opening de-gearing assumed to be achieved by an equity injection
3. Debt costs are assumed to equal the working assumption for allowances set out in table 2 above in each year of RIIO-2
4. 0% of the ESO debt is assumed to be inflation linked
5. Tax allowances are equal to tax costs, as calculated using the price control financial model
6. Immediate transition to CPIH from 1st April 2021 for WACC allowance and RAV calculations
7. Opening RAV values to be based on totex forecasts for RIIO-1 as provided in Business Plan Data Template submission, and inclusive of any known logged up adjustments (for instance the effect of site disposals)
8. Lagged revenue impacts arising from RIIO-1 are excluded (e.g. inflation true-up, cost pass-through adjustments, output incentive revenue and over / under collection of revenue)
9. Revenue and cost timing differences that may arise in RIIO-2 are included within scenario tests (including revenue collection variances, performance incentives and pass-through adjustments)
10. Depreciation rates to be proposed by the ESO based on useful economic lives and/or evidenced justification
11. Capitalisation rates to be proposed by the ESO based on operational practice to date, consideration of expected levels of opex and capex, balance of affordability, financeability and customer support
12. Dividend yield assumption to reflect scale of RAV growth and RAV inflation, with modelled RAV gearing to begin at notional gearing (55% in our working assumption) then varying with model calculations
13. Equity issuance transactions costs of up to 5% of any amount issued
Appendix 2 - ESO risk exposure

Submissions by ESO regarding risk exposure

We asked the ESO for its view on risk. We gathered information from its responses to consultations and sought further clarity in bilateral meetings and emails. The following table summarises our understanding of the ESO’s view, regarding its risk exposure.

<table>
<thead>
<tr>
<th>Category</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>General risk</td>
<td>Disallowance risk (including specific Black Start disallowance of up to 10%)</td>
</tr>
<tr>
<td></td>
<td>Downside risk of incentives, if the incentive scheme is designed with the potential for downside</td>
</tr>
<tr>
<td></td>
<td>High operational gearing, so limited ability to manage downside or shocks</td>
</tr>
<tr>
<td></td>
<td>Uncertainty of investment given the rapidly changing energy system</td>
</tr>
<tr>
<td>Operating the system</td>
<td>Risk from system or operational errors (incl power outage), which could have a significant reputational and/or financial impact</td>
</tr>
<tr>
<td></td>
<td>Financial and operational risks of having to redesign the system</td>
</tr>
<tr>
<td></td>
<td>Failure to meet operational requirements leading to regulatory action / third party claims</td>
</tr>
<tr>
<td></td>
<td>Attract/retain workforce skills</td>
</tr>
<tr>
<td></td>
<td>Cost overrun risk due to illiquid supply chain</td>
</tr>
<tr>
<td></td>
<td>Cyber-attack risk could result in being locked out of key systems or a power outage which could lead to a reputational and/or financial impact. This demonstrates that system/operational errors could be caused by internal or external issues, with large variations in scale.</td>
</tr>
<tr>
<td>Market and industry services</td>
<td>Regulatory action or third party claims from errors / process failure / late delivery</td>
</tr>
<tr>
<td></td>
<td>Reputational risk from errors / process failure / late delivery</td>
</tr>
<tr>
<td></td>
<td>Operational risk such as IT failures, data loss, cyber security</td>
</tr>
<tr>
<td></td>
<td>Attract/retain workforce skills</td>
</tr>
<tr>
<td></td>
<td>Cost overrun risks</td>
</tr>
<tr>
<td>Industry revenue management</td>
<td>Cash flow risk related to timings of revenues coming in and going out</td>
</tr>
<tr>
<td></td>
<td>The size of this cashflow risk is unknown, has no potential upper limit, and no certain timeframe in which it would be resolved – so represents a significant risk.</td>
</tr>
<tr>
<td></td>
<td>Profit volatility risk. Linked to cashflow risk as the revenue impacts the ESO’s accounting profile. Under-recovery of revenues shows up as a loss in the ESO accounts</td>
</tr>
<tr>
<td></td>
<td>Credit rating risk. If financial resources turn out to be too small and the ESO needed extra funding at short notice, it could negatively affect the ESO’s credit rating</td>
</tr>
</tbody>
</table>
The credit rating risk is not just limited to the size of the WCF – financial (cash and profit) volatility and liquidity are both important considerations by rating agencies, as part of the financeability of the business as a whole.

Investor perception. If financial resources turn out to be too small and the ESO needed extra funding at short notice, it could negatively affect investors’ general perception of risk.

Investor perception risk is not limited to the size of the WCF. Investors want assurance around the provision of adequate returns, which is negatively impacted by high and unpredictable profit volatility.

Credit risk if users do not pay charges on time or in full.

General service business risk including: errors, fraud, IT failure, cyber risk, cost overrun.

Regulatory action or third party claims due to failure to comply with obligations.

### Ofgem’s taxonomy of potential risk exposure

To assess these claims, we believe the ESO’s submissions can be represented in a different format, allowing for a more structured assessment. In addition, we extend the ESO’s claims to include a number of additional risks, in an attempt to provide the most comprehensive and thorough assessment possible. For each risk identified, we provide a short description, some examples and considerations.

<table>
<thead>
<tr>
<th>Risk category</th>
<th>Risk identified</th>
<th>Description &amp; examples</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue collection risk</td>
<td>Cash flow risk</td>
<td>Uncertain value of cash collected, and difference between cash collected and cash paid, for example regarding TNUoS and BSUoS</td>
<td>We need to clarify where this risk is most efficiently borne as some revenue collection risks could reside with other parties.</td>
</tr>
<tr>
<td></td>
<td>Credit rating risk</td>
<td>If the ESO is unable to obtain sufficient financial resources, such as a Working Capital Facility (WCF), it could negatively affect the ESO’s credit rating</td>
<td>Financial resources should be in place, or a suitable option available, prior to Draft Determinations in summer 2020, to allow the ESO to meet its licence obligations (investment grade credit rating and suitable resources) and role, including any revenue collection obligations.</td>
</tr>
<tr>
<td></td>
<td>Profit volatility risk</td>
<td>Volatility in reported profits, where under-recovery (over-recovery) of revenues are presented as a loss (profit), within the ESO’s financial accounts</td>
<td>RIIO-2 price control will provide funding for any revenue collection costs and risks.</td>
</tr>
<tr>
<td></td>
<td>Investor perception</td>
<td>Investor uncertainty given ESO’s revenue collection role</td>
<td>Profit volatility and investor perception can be mitigated with prudent ESO planning, for example through the use of shareholder loans and a long term financial resources.</td>
</tr>
<tr>
<td>Risk Type</td>
<td>Description</td>
<td>Financial Implications</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Performance risk</td>
<td>Uncertain performance against targets</td>
<td>ESO performance could be lower (or higher) than baseline expectations for services and outputs leading to a lower (or higher) allowances. We will appropriately calibrate the incentives upside and downside at the determination stage. This could include the introduction of asymmetric incentives with more upside if further analysis suggests this is appropriate.</td>
<td></td>
</tr>
<tr>
<td>Cost overrun risk</td>
<td>Higher opex or capex costs than expected, due to for example, an illiquid supply chain, unidentified cost lines or lower productivity</td>
<td>Cost-Pass-through policy (no Totex Incentive Mechanism) means that ESO will be protected from cost overruns during RIIO-2</td>
<td></td>
</tr>
<tr>
<td>Cost disallowance risk</td>
<td>Inefficient costs (including specific Black Start provision) may not be recovered by the ESO</td>
<td>This risk is partially mitigated by the business planning process and the move to two year planning cycles. The Black Start risk is mitigated by the fact that the ESO authors the related methodology. A maximum exposure can be placed on cost disallowances to limit the downside for the ESO, including for Black Start provision.</td>
<td></td>
</tr>
<tr>
<td>Price inflation</td>
<td>Uncertain input prices, and purchasing power of sunk investments</td>
<td>We propose to use CPIH or CPI for indexation of RAV and calculation of WACC allowance.</td>
<td></td>
</tr>
<tr>
<td>Interest rates</td>
<td>Uncertain costs for equity and debt finance</td>
<td>We propose to update allowances for equity and debt on an annual basis to reflect market movements.</td>
<td></td>
</tr>
<tr>
<td>Third party claims</td>
<td>Process failure, failure to comply with obligations, failure to meet operational requirements</td>
<td>Efficiently incurred costs will be passed through.</td>
<td></td>
</tr>
<tr>
<td>Bad debt</td>
<td>Uncertain recovery of receivables</td>
<td>We are reviewing the recovery of bad debt costs. We have sought further information from the ESO regarding bad debt.</td>
<td></td>
</tr>
<tr>
<td>IT failures</td>
<td>Hardware or software failure or loss of data</td>
<td>Two year business plans reduce the investment risk making the business fairly resilient to changes to the energy system.</td>
<td></td>
</tr>
<tr>
<td>Stranded investments</td>
<td>Uncertain requirements given the changing energy system. May need to redesign the system to meet new requirements</td>
<td>ESO can mitigate workforce/skills shortages through knowledge management best practice.</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Risk Factor</td>
<td>Description</td>
<td>Mitigation</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Power outages</td>
<td>Failure to maintain power flows</td>
<td></td>
<td>Cost-pass-through policy means that security expenditure is supported</td>
</tr>
<tr>
<td>Workforce / skills shortage</td>
<td>Attracting and retaining workforce skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management or operational errors</td>
<td>Poor project management, development planning, resource planning, contingency planning and/or poor execution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber security</td>
<td>Information theft, data protection and access to control systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reputational or political risk</td>
<td>News coverage</td>
<td>Exposure to public scrutiny</td>
<td>Good stewardship and prudent management will mitigate these risks</td>
</tr>
<tr>
<td></td>
<td>Political interference</td>
<td>Exposure to political scrutiny or step changes in policy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Industry reputation</td>
<td>Exposure to scrutiny from industry participants</td>
<td>Good operational performance is necessary to protect ESO from reputational, political and legal risks</td>
</tr>
<tr>
<td>Legal risk</td>
<td>Third party claims</td>
<td>Third parties may claim that ESO has failed to comply with obligations, or has made errors, failed due process, failed to meet operational requirements or delivered late on obligations</td>
<td>Regulatory risk minimised through extensive consultation, ongoing development of ESO framework and underlying appeal framework</td>
</tr>
<tr>
<td>Regulatory risk</td>
<td>Regulatory action</td>
<td>Failure to comply with licence conditions, or other regulatory requirements, perhaps due to errors, process failure, late delivery, or operational requirements, resulting in a financial penalty/fine</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulatory uncertainty</td>
<td>Uncertain framework design or unexpected re-opening of price control. Regulatory hold-up, expropriation or inadequate allowances</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3 – Consultation questions

Part 1: Financial methodology consultation (chapter 3)

Cost of Debt Questions
Q1. Do you agree that full indexation for the Cost of Debt allowance is appropriate for the ESO?
Q2. Do you agree with the proposal for a bespoke debt indexation mechanism for the ESO?
Q3. Do you have a view on whether the options for a bespoke debt indexation mechanism are appropriate for the ESO?

Allowance for equity finance questions
Q4. Do you agree with our proposed approach to use the three-step methodology to assess baseline allowed returns to equity?
Q5. When estimating equity beta, which listed companies should we consider?
Q6. Do you agree with our proposal to update the allowed returns on equity for changes in the risk-free rate, as described in the SSMD Finance Annex?

Methodology for considering additional returns questions
Q7. Do you believe that we should categorise ESO risks into seven categories (see our taxonomy at Appendix 2) for the purposes of assessing additional funding claims?
Q8. Do you believe that the three tests we propose are suitably comprehensive?
Q9. What are your views on the ESO’s additional funding assumptions, as summarised above (from its July 2019 submission)?

Financeability questions
Q10. Do you agree the above metrics are relevant for consideration of financeability of the ESO? Are there any other metrics that should be added?

Inflation indexation questions
Q11. Do you agree that the ESO RAV indexation and WACC allowance should follow the approach decided for the networks, i.e. immediate switch to either CPIH or CPI from RIIO-2 onwards?

Revenue collection questions
Q12. Do you agree that it could be more efficient if Transmission Network owners bear TNUoS revenue collection risk, to reflect respective variances between allowed and actual revenue?
Q13. Do you agree that, to the extent not funded through other mechanisms, WCF costs could be passed-through? Could this arrangement be limited to arrangement fees, extension fees and commitment fees?

Question on other finance issues
Q14. Do you agree with adopting the same approach for the ESO to the other finance issues as was proposed in the SSMD Finance Annex for the networks?

Part 2: Regulatory and incentives consultation (chapter 4)

Roles framework questions
Q15. Do you have any views on our initial thinking for how the ESO roles framework should evolve?
Q16. Do you support the introduction of a defined set of ESO outcomes and impacts? If so, what should these outcomes and impacts be?

Q17. Do you think any changes are needed to ESO’s licence conditions in order to further clarify its baseline obligations?

**Incentive scheme aims and scope questions**

Q18. Do you agree the incentives scheme should be focussed on encouraging the ESO to provide an exceptional quality of service when delivering its price control funded activities? Do you agree with our initial views on what an exceptional quality of service would include?

**Scheme process questions**

Q19. Do you agree with our proposal to align the length of the incentive scheme with the two-year business planning cycle?

Q20. Do you agree we should introduce the possibility of ‘core’ metrics for the ESO? And, do you have views on which areas of ESO performance we should consider for any core metrics?

Q21. Should there be financial incentive implications for the ESO as a consequence of the business plan assessment process?

**Evaluation approach questions**

Q22. What if any changes might be needed to the incentives evaluation criteria?

Q23. How should we best include internal cost efficiency in the evaluation framework – should it be a performance metric or explicit criteria?

Q24. Should we continue to evaluate the ESO’s performance by role? If so, do you agree that we should tailor the evaluation approach to each role?

Q25. Do you think medium to longer term roles should have relatively more upside incentives focus than short term roles?

**Performance panel questions**

Q26. Do these arrangements give stakeholders the right platform to shape ESO activity and hold it to account for its performance?

Q27. Do you have any further suggestions for improving the existing ESO performance panel arrangements?

**Priority areas question**

Q28. What if any changes should be prioritised and introduced early for the 2020/21 incentives framework?
Appendix 4  - Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, “Ofgem”). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

With whom we will be sharing your personal data

(Include here all organisations outside Ofgem who will be given all or some of the data. There is no need to include organisations that will only receive anonymised data. If different organisations see different set of data then make this clear. Be a specific as possible.)

For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for (be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. ‘six months after the project is closed’)

Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
• be safeguarded against risks where decisions based on your data are taken entirely automatically
• tell us if we can share your information with 3rd parties
• tell us your preferred frequency, content and format of our communications with you
• to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

Your personal data will not be sent overseas
(Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use “the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this”.

Your personal data will not be used for any automated decision making.

Your personal data will be stored in a secure government IT system.
(If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

More information
For more information on how Ofgem processes your data, click on the link to our “Ofgem privacy promise”.