Decision and further consultation

RIIO-2 Sector Specific Methodology Decision and further consultation - Electricity System Operator

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In December 2018, we consulted on how the RIIO-2 regulatory framework should be applied to the Electricity System Operator (ESO). This document sets out our decision on this, including the roles and responsibilities of the ESO, the price control process, outputs and incentives and approach to innovation funding. It also provides an update on our approach to cost assessment and a summary of responses we have received to our December consultation. The ESO will use this information to develop its business plans over the remainder of 2019. We will then assess these business plans over 2020 and the RIIO-2 price control will commence on 1 April 2021.

In Chapter 7 – Finance – of this document we set out our current views on the type of funding model and elements of the design of incentives, which we are consulting on further before confirming our decision. **We request stakeholder views on these questions by 5 July 2019.**

This document is an annex to the RIIO-2 Sector Methodology Decision Core Document and should be read alongside it.

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Executive Summary

The Electricity System Operator (ESO) has a central role in our energy system. This rapidly changing system needs an ESO that proactively responds to system challenges and maximises consumer benefits across the full spectrum of its roles. This includes playing a prominent role in the transformation to a low carbon energy system. We want the ESO to work closely with its stakeholders and other energy system parties to ensure there is a coordinated approach to electricity system planning and operation. We also want a more dynamic ESO that readily responds and adapts to new developments.

In July 2018 we published the RIIO-2 Framework Decision, which set out our proposed approach to the RIIO-2 price control as a whole and highlighted the main areas of proposed change from the current RIIO-1 price control. Following this, in December 2018, we published a consultation on the sector specific methodologies for the new price control. As part of this we sought stakeholder views on the design of the ESO price control.

The RIIO-2 price control, to come into effect in April 2021, is fundamental to delivering these aims. The new price control should reflect the legal separation of the ESO from other National Grid group businesses as of April 2019 – we expect its price control to be different to reflect its markedly different nature to that of the other RIIO-2 sectors.

Our work on the new price control follows the introduction of a new ESO incentives framework in April 2018. This framework rewards or penalises the ESO based on how well it has delivered the roles we have set for it and gives stakeholders an important role in determining ESO priorities and assessing its performance.

Our decision

We intend to introduce a price control for the ESO that builds on the existing legal separation and incentives arrangements. The new control follows the overarching RIIO-2 framework and cross-sectoral design principles, but is tailored to reflect the unique nature of the ESO and to be reasonably flexible to changes in its activities across the price control period. Of course, in the future, it is possible that system operation arrangements may need to change more significantly, for example from changing government policy or new legislation, Ofgem's review of the ESO separation arrangements or other developments affecting the energy system. If such changes are needed then the RIIO-2 price control and incentive arrangements may have to be adjusted or amended to respond to emerging needs. If this happens, we will work with the ESO and other relevant stakeholders to identify and develop revised arrangements, should they be needed.

Given the current environment, the new price control:

- builds on the principles-based framework put in place for the new incentives scheme in order to ensure that the ESO's focus is on delivering good outcomes for consumers and the energy system as a whole. We will continue to scrutinise the ESO's costs and will take these into account in determining the level of any incentives reward
- gives stakeholders a strong voice in determining the ESO's priorities and scrutinising its performance across the price control period. We intend to do this by building on the existence of an ESO Performance Panel and the processes for evaluating ESO performance, as part of which wider industry stakeholders play a crucial role

- has a shorter business planning cycle of two years, in order to provide flexibility to adapt the activities of the ESO in response to changes in the energy system and the ability to adjust its priorities where appropriate
- will use historical, international and cross-sectoral benchmarks to enable us to effectively scrutinise the ESO's costs and performance on an activity-by-activity basis and ensure it is delivering value for money for consumers
- we will continue to investigate how the ESO can have an expanded role in relation to facilitating early competition to meet electricity system needs. As part of this the ESO will be required to submit an early competition plan alongside its business plan in December setting out how it intends to develop proposals and arrangements for early network competition.

Following two business plan cycles (ie after four years), we will assess the effectiveness of the new arrangements and consider whether to continue with the biennial approach to business planning or re-align with the other transmission sectoral price controls.

Further consultation

Having considered responses to our December consultation, and conducted additional analysis to better understand the risks the ESO assumes in fulfilling its various activities, we have decided to consult further with stakeholders before confirming all aspects of the funding model and incentives design for the ESO.

In December we envisaged a funding model that provided returns for the ESO in the form of a margin on internal costs, based on the level of risk that applied to it both in general and on an activity-specific level. Having conducted further work since then we consider that by putting in place certain mitigations the ESO could be exposed to relatively low levels of risk. If this is the case there may be benefits in moving away from the approach we outlined in December. We want to get further stakeholder views on two alternative options for the funding model for the ESO before making our decision.

Both models would honour the existing ESO Regulatory Asset Value (RAV) that will be carried over from RIIO-1 and would not apply a Totex Incentive Mechanism (an incentive rate) to any overspend or underspend. Under both models there may be benefits in moving towards an asymmetric incentives framework, where the upside is greater than the downside – and that downside may be zero. This may help to ensure the ESO is not risk averse in its investment decisions and mitigate potential concerns that a large downside incentive may have an impact on the ESO's financeability.

The first model would remunerate the ESO using a RAV-based, 'slow money' model for capital expenditure, and fund operational expenditure as 'fast money' via cost pass-through. The second model would remunerate both capital and operational expenditure as 'fast money' via cost pass-through. In either case a margin could be applied to internal or external costs, if necessary. Figure 1 below shows the key features of the two models under consideration.

Figure 1: RIIO-2 Sector Specific Methodology Decision document map

Features of the model options we are consulting on	Model 1: RAV	Model 2: All 'fast money'
Honours the existing RAV from RIIO-1		
Cost trigger mechanism		
WACC applied to RAV on slow money		
Fast money on capex (plus a margin if necessary)		
Fast money on opex element of totex (plus a margin if necessary)		
No sharing factor		
Cost disallowance mechanism (aligned with other RIIO sectors)		
External costs passed through (plus a margin if necessary)		
Working capital facility (costs of which would be passed through)		
Upside-only incentives scheme		

Before making a decision on the appropriate remuneration model, we want to get stakeholder views on certain key aspects of the price control. In particular, we want to get stakeholder views on the following questions that apply to both models:

> **ESOQ1**: Which funding model would most effectively remunerate the ESO and support its financeability? Would either model have any risks or unintended consequences that you can foresee? Are there other funding models you think would be more appropriate?
>
> **ESOQ2**: Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered – via a higher WACC or a margin on internal or external costs?
>
> **ESOQ3**: Would a working capital facility adequately cover the full range of risks the ESO is exposed to in fulfilling its revenue collection activities (in relation to collecting TNUoS and BSUoS charges)?
>
> **ESOQ4**: Would the ESO require additional funding or regulatory mechanisms to be able to procure a working capital facility? Please explain your answer.
>
> **ESOQ5**: Do the benefits of retaining the ability to apply a downside incentives penalty outweigh the potential costs in terms of the impact on ESO financeability?

We welcome stakeholder feedback on the questions raised in this document. **Please send your responses to RIIO2@ofgem.gov.uk by 5 July 2019.** Should it reduce the burden for stakeholders we are happy to convene bilateral conversations to receive verbal feedback instead of written responses.

Following consideration of responses, later in the summer we will issue a further decision on the funding model we intend to take forward, along with a consultation on the ESO financial methodology and working assumptions and then confirm our approach in the autumn.

1. Introduction and document structure

Purpose of this document

1.1 This document sets out how we envisage applying the RIIO-2 framework to the Electricity System Operator (ESO). It explains the roles and responsibilities we expect the ESO to have for RIIO-2, including its expanded role in relation to competition in electricity networks, how we envisage the price control process functioning in practice, the approach we intend to adopt for ESO incentives and the innovation stimulus we consider should apply to the ESO. It also provides an update on our approach to cost assessment and a summary of responses we have received to our December consultation. In relation to the ESO's funding model for RIIO-2, we have set out our current thinking in Chapter 7 and are consulting on key questions we want to get stakeholder views on before making our decision.

1.2 We describe below how this document fits within the context of other RIIO-2 publications. We also outline the structure of the rest of this document. This decision and consultation is intended to be read in conjunction with the RIIO-2 Sector Specific Methodology Decision (the 'Core Document').

Overview of the current price control

1.3 The ESO's current funding for its internal costs and incentives come from several different sources:

- RIIO-T1: Its internal costs[1] are currently funded via the NGET RIIO-T1 price control. This places general obligations on the ESO, along with NGET, to deliver certain outputs (for example around customer satisfaction). Its level of allowed revenue is determined by calculating its Regulatory Asset Value (RAV) times the Weighted Average Cost of Capital (WACC), plus depreciation and other allowed costs not part of the RAV. The ESO is incentivised to keep its costs down through the application of a sharing factor (47%) on any difference between allowed costs and actual spend

- ESO regulatory and incentives scheme: In April 2018, we introduced a new incentives scheme for the ESO, based around an ex post evaluation of its performance. This scheme replaced a previous incentives framework that set mechanistic ex ante targets for the ESO to achieve on certain metrics. We introduced the new scheme as we were concerned that the old framework was not functioning as effectively as it could have done for consumers. Specifically, we were concerned that it was difficult to independently verify the appropriate level for the ESO's targets. We were concerned that the old arrangements did not incentivise the ESO to be proactive in responding to system changes – rather it may have encouraged the ESO to focus on certain metrics, potentially at the expense of broader positive initiatives. The new arrangements specify the roles and principles for the ESO's activities, and its performance against these determines the amount it will be rewarded or penalised at the end of each year. Industry stakeholders are central to the new scheme. We have convened a Performance Panel, made up of industry

[1] Internal costs are the operational and capital costs the ESO incurs in operating its business (eg human resources, IT costs). It excludes external costs, such as those associated with the balancing of the electricity system, for which the ESO is responsible for revenue collection and settlement activity and which are passed through.

and independent experts, to scrutinise the ESO's plans and performance at the start, middle and end of each year. The ESO is also required to consult with industry in developing its forward plan each year

- Electricity Market Reform (EMR) incentives: The ESO is the delivery body for some of the government's EMR reforms. It is responsible for activities including producing annual Electricity Capacity reports, administering key elements of the Capacity Market and allocating Contracts for Difference. The ESO, in its function as EMR delivery body, has incentives around customer and stakeholder satisfaction, dispute resolution and demand forecasting accuracy

1.4 In designing the new RIIO-2 price control for the ESO we want to make sure the funding and incentives arrangements are coherent and provide a clear framework for the ESO to be cost efficient while also spending where it can deliver consumer value. In doing so this may mean the price control of the ESO looks different from that of the other network companies.

1.5 The new price control is being designed in light of the ESO's recent legal separation, on 1 April 2019, from National Grid Group. Of course, in the future, it is possible that system operation arrangements may need to change more significantly, for example from changing government policy or new legislation, Ofgem's review of the ESO separation arrangements or other developments affecting the energy system. If such changes are needed, then the RIIO-2 price control and incentive arrangements may have to be adjusted or amended to respond to emerging needs. If this happens, we will work with the ESO and other relevant stakeholders to identify and develop revised arrangements, should they be needed.

Structure of this document and associated documents

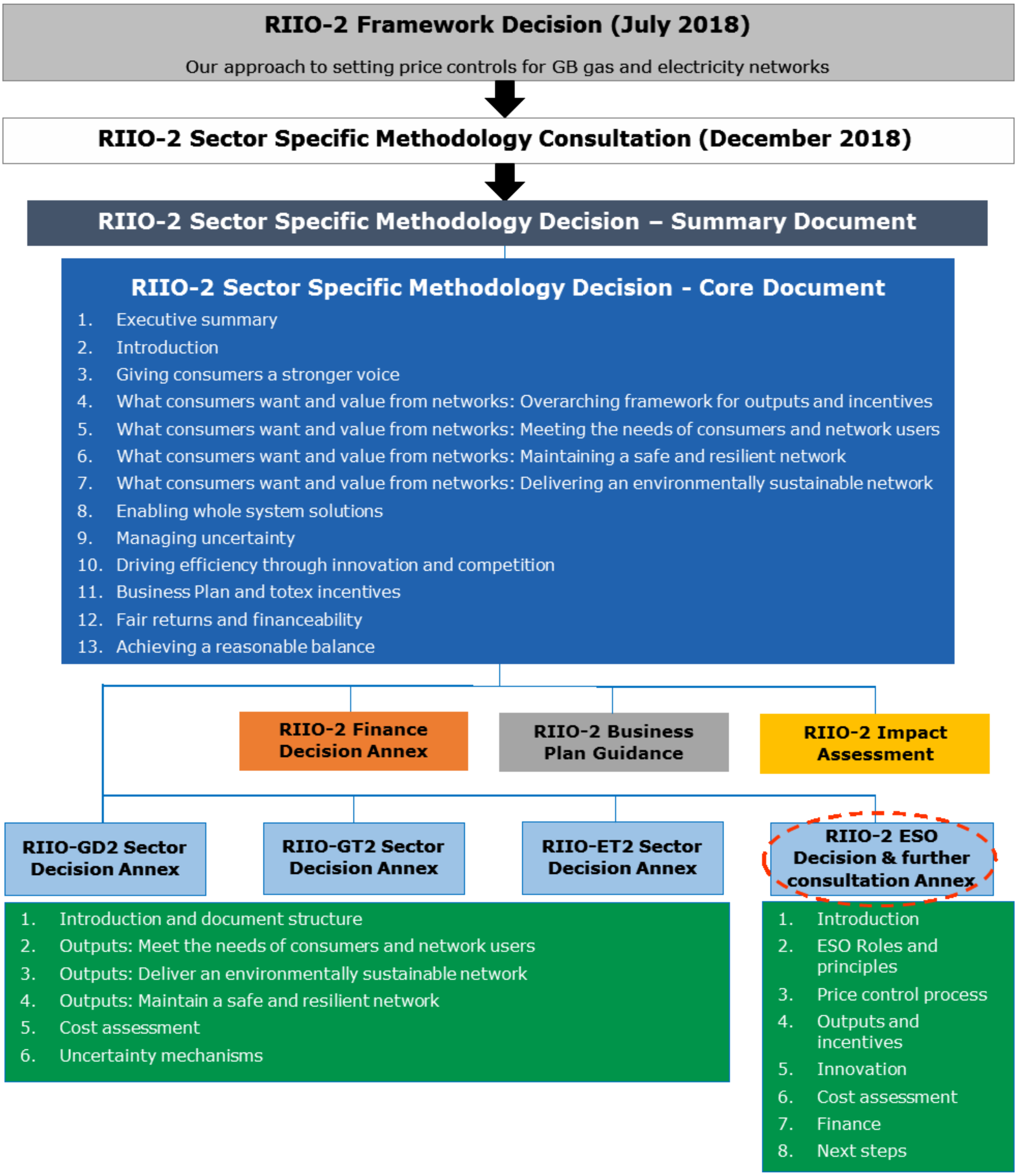
1.6 In July 2018 we published the RIIO-2 Framework Decision,[2] which set out our proposed approach to the RIIO-2 price control, and highlighted the main areas of proposed change from the current price control, RIIO-1. Following this, in December 2018, we published our detailed proposals for the design of the sector-specific price control methodologies.[3] The suite of documents published today represent our decisions on key aspects of what we consulted on in December, as well as a few areas where we are now consulting further.

1.7 The RIIO-2 Sector Specific Methodology Decision comprises a Core Document and sector-specific annex documents for gas distribution (GD), gas transmission (GT), electricity transmission (ET) and the ESO. The sector-specific annex documents are intended to be read alongside the Core Document. Figure 2 below sets out a map of the RIIO documents that we have published today.

1.8 Our decisions take into account the responses to the December consultation (including the annexes associated with it) and ongoing discussions with stakeholders.

[2] Ofgem, RIIO-2 framework decision, July 2018
[3] Ofgem, RIIO-2 sector specific methodology consultation, December 2018

Figure 2: RIIO-2 Sector Specific Methodology Decision document map



The Core Document

1.9 The decisions in the Core Document apply across the GD, GT and ET price controls and some elements apply to the ESO. The Core Document also includes response summaries for the cross-sector related decisions.

1.10 It is recognised that the ESO is markedly different, in many respects, from other transmission network companies. As such, a price control that mirrors the same principles of the other transmission network companies would not necessarily be in the interests of consumers nor meet the desired outcomes of what the RIIO-2 framework is trying to achieve. However, there are certain areas where decisions set out in the Core Document will apply to the ESO, either wholly or in part. These include:

- Outputs and Incentives: We do not intend to introduce new or amended outputs for the ESO price control. Instead we intend to build on the evaluative framework we have already applied through the new incentives regime. We expect the general spirit, though not the precise detail, of the outputs and incentives messages set out in Chapter 4 of the Core Document to continue to apply to the ESO

- Competition: Chapter 10 of the Core Document sets out our considerations on how we can best facilitate and develop enhanced competition in networks. We consider the ESO may well have a key role to play in supporting this goal through its engagement with networks and other stakeholders. We also outline our investigation of a greater role for the ESO in facilitating early competition in Chapter 2 – Roles and Principles – of this document. Our wider rationale for exploring changes to competition in networks is set out in the Core Document.

- Enhanced Engagement and Whole Systems: Our work on Enhanced Engagement and Whole Systems are also directly relevant to the ESO. Our positions on these areas are covered in Chapters 3 and 8 of the Core Document respectively.

- Resilience: In general, we do not expect the proposals in Chapter 6 of the Core Document around asset resilience to apply to the ESO. However, we would expect the cyber and physical security proposals to apply to it, together with the general principles around workforce planning.

- Innovation: In Chapter 5 – Innovation – of this document, we outline ESO-specific considerations in relation to innovation funding. Chapter 10 of the Core Document considers wider innovation stimulus issues, which are also relevant to the ESO.

Structure of this document

1.11 This document is structured as follows:

- Chapter 2 – ESO Roles and Principles: presents our decision on the roles and responsibilities of the ESO, the performance principles that apply to it and details the decision regarding an expanded role for the ESO in early electricity network competition

- Chapter 3 – Price Control Process: summarises how the price control will operate in practice, including its duration

- Chapter 4 – Outputs and Incentives: details the incentives regime we intend to apply to the ESO

- Chapter 5 – Innovation: sets out the innovation funding mechanisms we intend to put in place for the ESO

- Chapter 6 – Cost Assessment: outlines how we intend to scrutinise the ESO's costs and how we will ensure that any changes in costs are justified

- Chapter 7 – Finance – Consultation: presents further analysis and options for the financial remuneration model for the ESO's internal and external costs, building on what we set out in our December consultation and our work since then. This chapter includes **new consultation questions** for stakeholders as we need more information before we make our decision on the ESO funding model and elements of the incentives design

- Chapter 8 – Next Steps: summarises the future actions we intend to take ahead of the implementation of the start of the RIIO-2 price control period.

Stakeholder engagement and next steps

1.12 Engaging with stakeholders is an essential part of developing the RIIO-2 price control for the ESO. In addition to formal consultations we have organised a stakeholder forum and held numerous bilaterals to obtain stakeholder input.

1.13 We received 20 responses to our December consultation. We have published non-confidential responses on our website. The chapters that follow include a high level summary of respondent views in relation to the specific topics covered and Appendix 1 contains an overall summary of the points we have heard from stakeholders in their responses.

1.14 We have carefully considered stakeholder feedback to our December consultation and today set out our decision and areas for further consultation on the sector specific methodology.

1.15 For the ESO price control we consider there is merit in consulting further on aspects of the financial remuneration model in light of further work conducted since December. In Chapter 7 – Finance – we set out a revised set of options for how the ESO's internal and external costs could be remunerated and how the incentives could be designed. **We request stakeholder views on these options by 5 July 2019.** Subject to consideration of the views received we aim to confirm our approach to the ESO finance methodology in the summer.

1.16 Separately, for the rest of this year, the ESO will be working with its stakeholders to develop its business plans ahead of final submission in December. This will include working with Ofgem and relevant stakeholders in developing its Early Competition Plan. Additional information on this process, including key timings, are set out in the Core Document. Although we are re-consulting on aspects of the ESO's finance arrangements, we consider that this should not interfere with the ESO's ability to develop a high quality, stretching business plan for RIIO-2 in conjunction with stakeholders.

1.17 We intend to update and re-issue the Business Plan Guidance Document to reflect the decisions made in this document and in the Core Document. We will continue to develop the draft data templates for the ESO – a version of which will be published early this summer. We also intend to publish wider business plan guidance for all network companies in late summer/early autumn. This will be for network companies to use when submitting final Business Plans in December.

2. ESO roles and principles

Section summary

In December we proposed to keep the ESO's current roles in place and to consider making some changes to the ESO's principles through our regulatory and incentives framework. We received broad support for this proposal. This chapter confirms our proposal to maintain the ESO's roles and principles framework for the RIIO-2 period and ensure they are adaptive to change. We will also continue to investigate and develop the ESO's ability and capacity to facilitate early network competition.

Summary of ESO roles and principles decisions	
Decision	Retain the ESO's code administration, data administration, revenue collection and EMR delivery body functions.
Decision	Adopt a roles and principles framework for RIIO-2 that is consistent with that currently in place for the incentives scheme and any changes that may be made to that framework between now and the start of the RIIO-2 period.
Decision	Continue investigating and developing the ESO's ability and capacity to facilitate early network competition.

Summary of issue

2.1 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. In December, we considered whether changes to the ESO's roles and principles for RIIO-2 would be beneficial. In general, as part of RIIO-2 we intend to introduce competitive pressures where doing so is likely to provide consumer value. This chapter sets out our decision on whether any adjustments should be made to the ESO's roles and principles for the RIIO-2 period.

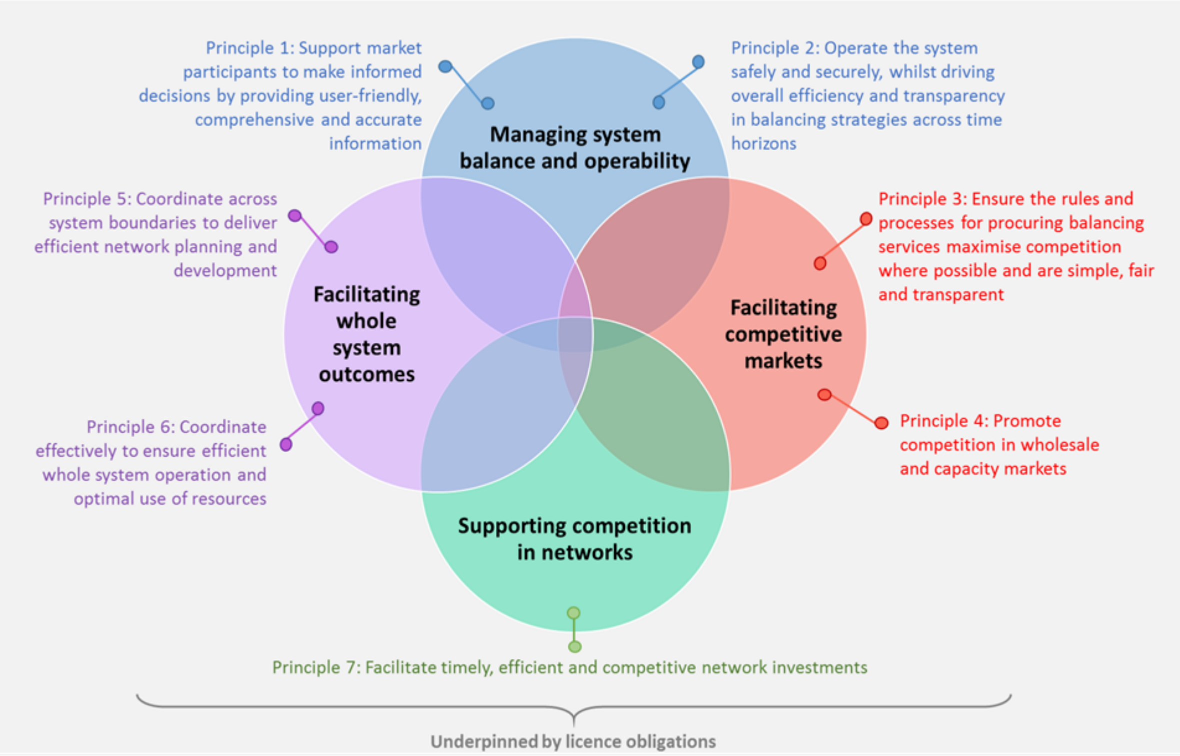
2.2 We introduced the ESO roles and principles from April 2018[4] as part of our new framework for incentivising and regulating the ESO. The most recent version of the ESO roles and principles was published in March 2019.[5] These are summarised in Figure 3 below.

2.3 Their purpose is to help to align expectations between the ESO, Ofgem and stakeholders, support the enforceability of the ESO's obligations and create a more transparent framework overall. The principles should be considered as overarching requirements and behavioural standards that can be applied flexibly to a rapidly changing electricity industry. The roles and principles aim to capture all of the key roles and responsibilities of the ESO. The framework is designed to incentivise the ESO to deliver benefits for consumers across all of its activities.

2.4 For RIIO-2 we want to ensure the ESO has a framework that enables it to play a leading, proactive and coordinating role in the transformation to a low carbon energy system. The framework should also ensure the ESO maximises value for consumers in the activities it performs and is sufficiently flexible to adapt to changes in market conditions.

[4] Ofgem, The Electricity System Operator regulatory and incentives framework from April 2018, February 2018
[5] Ofgem, ESO Roles and Principles, March 2019

Figure 3: Current ESO roles and principles



2.5 The ESO carries out a wide range of different services and functions. A number of these services are very specific functions of the ESO, while others could potentially be opened up to competitive pressures and provided by another party. Opening up some of these roles to competition could provide consumer benefit in certain cases. At the same time, doing so could lead to fragmentation of the ESO's services and could introduce unnecessary complexity.

December proposal

2.6 In December we proposed to keep the ESO's current roles in place for RIIO-2, while also ensuring that the price control framework is designed so the ESO's activities can evolve over time in response to changes in the energy system. The roles that could potentially have been opened up to competition included:

- Code administration: The ESO currently acts as code administrator for the Connection and Use of System Code (CUSC), the Grid Code and the System Operator – Transmission Owner Code (STC). We proposed to retain the existing code administrator roles as a function within the ESO in light of improvements in its performance and considering that future code governance work may consider a wider set of changes to industry code arrangements
- Electricity Market Reform (EMR) delivery function: The ESO's EMR delivery body role includes allocating Contracts for Difference, demand forecasting, running the Capacity Market auction, conducting the pre-qualification process, agreement management following Capacity Market contract award and managing the appeals process. We proposed that the ESO should retain these roles as it appears to be the correct body to deliver some of these roles and given the potential consequences of separating the activities across different bodies

- Data administration and information provision: The ESO's data administration and information roles, while separable, relate closely to other parts of the ESO's work and could become more important in the future. As such, we proposed that it should retain these functions for RIIO-2
- Revenue collection and pass-through: The ESO is responsible for collecting and passing through Transmission Network Use of System (TNUoS) and Balancing Services Use of System (BSUoS) costs to market participants. Linked to this role is the ESO's forecasting of these costs. We proposed that the ESO should retain this role, noting that stakeholders were unconvinced that there would be significant benefit for consumers in assigning this role to another party.

2.7 Separately in the cross-sectoral Core Document in our December consultation we considered whether the ESO's role in relation to early and late network competition should be expanded upon, though we did not present any firm proposals at that stage.

2.8 On the ESO's performance principles, we noted in December that we had received stakeholder feedback that the current principles could be enhanced with certain changes and that we intended to consider this feedback now, rather than waiting for the start of RIIO-2 to make changes.

Summary of responses

2.9 The majority of stakeholders agreed with the proposal to maintain the current roles and principles framework for RIIO-2, deeming it to be appropriate going forward and consistent with the likely energy system challenges that are upcoming. Several stakeholders noted that the current roles and principles framework is still in its first year of operation and that it is therefore too early to draw firm conclusions. Some felt it would cause unnecessary uncertainty to make significant changes before they had been in operation for a full cycle of the incentives scheme. The RIIO-2 Challenge Group agreed with the roles and principles as being in line with their vision for the ESO, though suggested that going forward there could be greater clarity over where the ESO is responsible for making decisions and where it is providing advice only.

2.10 Many stakeholders emphasised how important it is that the roles and principles can be reviewed regularly and evolve as necessary. One stakeholder was uncertain whether the roles and principles would remain fit-for-purpose for the full RIIO-2 period. They argued that continuous review would be necessary in the coming years as all parties adapt to the new arrangements of a legally separate ESO. There was also a call for the mechanisms for how changes will be identified and implemented to be set out, with one stakeholder suggesting that due to the influence the roles and principles have on guiding stakeholder's expectations, formal consultation with stakeholders on any changes may be appropriate.

2.11 While agreeing with our proposal, one stakeholder also suggested that the ESO should be made responsible for the operation of the network across all voltage levels to support whole systems outcomes and nationally optimal solutions.

2.12 One stakeholder disagreed with the proposal, suggesting the roles and responsibilities of the ESO should be reviewed in light of the changing energy system. They noted that consideration should be given to coordination between transmission and distribution networks and the role of the ESO in facilitating this, as well as the relationship between the ESO and the gas system operator.

2.13 The majority of respondents indicated they did not see any compelling case for opening up any of the ESO's current functions to competition and suggested this would not currently result in significant consumer benefits. However, many noted that these functions should remain discrete, to enable them to be opened up to competition in the future. They suggested that the outcomes of ongoing reforms could alter the case for change but emphasised any future changes must consider the potential negative consequences that could arise from further fragmentation or delegation of governance.

2.14 A small number of stakeholders suggested there could be potential benefits from opening up the code administration function to competition and Elexon stated that the code administration function should be merged into its responsibilities.

2.15 Regarding a possible role for the ESO in early or late competition there was support for the ESO running network competitions from a wide variety of stakeholders. This was due to its technical capacity and ability to consider whole system solutions. However, a number of stakeholders, including some of those indicating support for an enhanced ESO competition role, raised concerns over whether the ESO had sufficient independence to take on certain functions. Other stakeholders were concerned that the ESO is not well-placed due to its relatively asset-light nature and in light of the resource requirements of late competitions. Gas licensees were concerned that the ESO would lack technical competence in gas. Some of these stakeholders argued that Ofgem would be better suited to running competitions and the ESO could hold an advisory role.

2.16 The ESO was supportive of its potential role in running early competition, but indicated that developing its capacity to undertake some of the pre-construction processes would require significant investment.

Decision

Existing ESO roles

2.17 We will adopt a roles and principles framework for RIIO-2 that is consistent with that currently in place for the incentives scheme and any changes that may be made to that framework between now and the start of the RIIO-2 period. Feedback from stakeholders on the wording of some of the principles has been considered as part of our separate March 2019 decision on the incentives framework.[6] This decision refined some of the principles and we will mirror these changes, as well as any further ones made over the next two years, for RIIO-2. We will ensure the roles and principles of the ESO evolve over time as appropriate and reflect any changes in the energy system or with the operation or functions of the ESO.

2.18 For now, we do not intend to change the ESO's functions of code administration, revenue collection and pass-through, data administration and information provision services and EMR delivery body. However, we will ensure they remain discrete functions to enable them to be opened up to competition in future if significant evidence emerges that this will be beneficial to consumers. Our cost assessment arrangements, in particular the activity-by-activity based assessment

[6] Ofgem, Decision on the Electricity System Operator regulatory and incentives framework for 2019-20, March 2019

process, are in part designed to enable some of these roles to be modular such that this decision can be easily revisited if appropriate.

2.19 In making this decision, we confirm that, as with the present arrangements, any future significant changes to the ESO's roles and principles framework would be taken forward in consultation with stakeholders.

Competition in networks

2.20 In Chapter 10 of the Core Document we explain that we are continuing to investigate and develop the ESO's ability and capacity to facilitate early competition, noting that the ESO is already required to report on its progress on facilitating timely, efficient and competitive network investments. To this end, as part of its RIIO-2 Business Plan to be submitted in December, we are requesting the ESO to include an Early Competition Plan.

2.21 In this Plan, the ESO must set out how it intends to develop proposals and arrangements for early competition. This should, at a minimum, include:

- the proposed scope and form of early competition, and the associated processes and functions for delivering those competitions, noting the ESO has proposed a two-phase approach in its consultation response. The processes could be usefully grouped as: (i) before the competition, (ii) the competition itself and (iii) post-competition processes
- identifying which early competition functions and capabilities the ESO is already undertaking or possesses, and those that would reflect a new skillset, function or capability for the ESO to obtain in order to support an expanded role in facilitating competition
- pathways and timeframes for achieving the ESO's plan to deliver early competition (including its development of skills, functions and capacities). Where development can occur against varying timeframes, these should be considered and their implications discussed. The ESO should be explicit around which aspects can be reasonably achieved prior to the commencement of RIIO-2 and which (for reasons of practicality or cost-effectiveness) should be delivered during RIIO-2
- the ESO's view on roles and responsibilities to support its proposed arrangements, including identification of other parties where appropriate. Where the view is that a particular role or responsibility is less appropriate for the ESO to undertake or develop, the steps or mitigations that could address this should be outlined
- the ESO's view on which legislative provisions and/or licence conditions would empower the ESO to undertake the identified functions
- the ESO's view on possible regulatory or legislative barriers to its proposed arrangements.

2.22 We are keen to work iteratively with the ESO as this work develops prior to (and after) December and the ESO should consider arranging workshops or working groups. This should not preclude the ESO consulting with its stakeholders, where doing so is likely to improve the quality of its Early Competition Plan. For the avoidance of doubt, the requirement for the ESO to develop an Early Competition Plan does not represent a commitment by Ofgem to proceed with any changes that it may recommend. We will consider its findings and recommendations, and consult further with stakeholders as appropriate, before deciding how to proceed.

2.23 We note the concerns from stakeholders around potential conflicts for the ESO. As we focus on developing the ESO's capability to introduce early competition into the electricity transmission system, we will continue to monitor whether the ESO exhibits sufficient independence from National Grid group and other National Grid businesses, as well as other potential biases.

2.24 In response to some stakeholder concerns, we note that, in addition to the new legal framework the ESO operates under, we have in place some mitigations for potential bias, including requiring three Sufficiently Independent Directors on the ESO Board, requiring an annual Compliance Statement and Report, instituting an ESO Compliance Subcommittee (chaired by one of the Sufficiently Independent Directors) and our review of developments since separation to be undertaken in 2020/2021. We will also continue to keep the need for further mitigation under review as these arrangements are developed further.

2.25 Finally, we note that depending on the outcome of the Competitively Appointed Transmission Owner (CATO) legislative process, we will need to consider the potential role of the ESO in facilitating some aspects of late competitions under the CATO model.

Rationale/evidence to support decision

2.26 The consultation responses support our view that the ESO’s roles and principles framework should be maintained for RIIO-2 as it continues to reflect our vision for the ESO. Namely that the ESO should play a proactive role in coordinating the energy system transformation and should provide value to current and future consumers by delivering sustainable, resilient and affordable services. From our learnings during the first year of the roles and principles framework being in use and the consultation responses, we are confident this vision for the ESO is still appropriate and supported by stakeholders.

2.27 To achieve the desired outcomes from the ESO, it is necessary for the ESO roles and principles to evolve in a changing system. The consultation responses show this is a priority shared by stakeholders and we believe the current framework is designed to be adaptive to change. The current roles and principles are underpinned by Standard Licence Condition C16 (Procurement and use of balancing services) and in a guidance document[7], which may be updated under the incentives framework. We therefore have existing processes in place to ensure the ESO roles and principles can be reviewed and in so doing we would have regard for stakeholders' views. We will pursue changes to the roles and principles by consulting on any licence change or change to the incentives framework and also through the stakeholder engagement process associated with the ESO's Forward Plan. We do not, at this stage, envisage creating any other specific mechanisms for updating the roles and principles.

2.28 We have not received any compelling evidence to suggest that the ESO's functions of code administration, revenue collection and pass-through, data administration and information provision services and being the EMR delivery body should be opened up to competition. In its consultation response and recently published[8]

[7] https://www.ofgem.gov.uk/system/files/docs/2019/03/eso_roles_and_principles_guidance_2019-20.pdf
[8] National Grid ESO, Our ambition – RIIO-2, April 2019

Forward Plan 2019-2021 and RIIO-2 ambition document, the ESO outlined how it expects to deliver these functions. We think the ESO remains currently best-placed to deliver them. The RIIO-2 cost assessment framework will ensure the functions remain distinct and can be reviewed in the future to assess whether they remain best-placed with the ESO or if greater consumer value could be derived from opening these functions up to other parties.

2.29 Furthermore, the joint Ofgem and BEIS code review is in its early stages. This will consider reform to the purpose, contents, governance, change process and transition (post-reform) of 11 industry codes, including those administered by the ESO.[9] The outcome of the code review may alter the ESO's function in regards to code administration. This further reinforces our view that there are limited benefits to opening up the function to competition at this stage, though this view may alter in the future.

2.30 The decision to investigate a broader role for the ESO in facilitating early competition arises from our consultation in December on which institutions where best placed to undertake competition. In particular, we considered arguments around the ESO technical capability to compare different solutions to system needs and the relevance of its existing processes in coming to our decision. Further discussion is set out in the Chapter 10 of the Core Document.

[9] The Connection and Use of System Code (CUSC), the Grid Code and the System Operator – Transmission Operator Code (STC)

3. Price control process

Section summary

In this chapter we set out how the price control process as a whole will work, including price control frequency, business planning and stakeholder engagement. We intend to move to a two-year business planning cycle, to maintain a role of an ESO Performance Panel and to put in place certain requirements around the types of content to be included in the ESO's business plan.

Summary of price control process decisions	
Decision	Move to a two-year business planning cycle for the ESO's price control under RIIO-2.

Summary of issue

3.1 We aim to put in place a price control framework for the ESO that not only has appropriate funding and incentives arrangements, but which functions effectively in practice.

3.2 It is crucial that the plans produced by the ESO reflect industry and stakeholder priorities and that the processes for developing these plans, and scrutinising the ESO's performance against them, have stakeholders at their heart. We also want to ensure that we put in place a set of arrangements that can be flexible over time – so that we can account for, and adapt to, changes in the energy system and the nature of the ESO's roles and activities.

3.3 In general we expect our design of the RIIO-2 framework for the ESO to follow the approach for all other sectors – for instance following the Challenge and User Group process set out in Chapter 3 of the Core Document. However, we may look to build on this in certain cases.

December proposal

3.4 In our December consultation, we proposed to move to a two-year business planning cycle for the ESO. Under our proposed model the ESO would develop its business plans in line with its long-term vision. The business plans would set out the detailed activities and associated costs expected over the subsequent two years.

3.5 We suggested that this model, in conjunction with a remuneration framework that does not apply a sharing factor to any underspend or overspend, would ensure that the price control is sufficiently flexible to account for future uncertainties in the development of the energy system, while providing sufficient certainty for the ESO to plan for the longer term.

3.6 We proposed to continue to convene a Performance Panel, similar to that established as part of the new incentives scheme, in addition to any cross-sectoral forums such as the RIIO Challenge Panel and sectoral User Groups that may exist. In convening the Performance Panel we signalled our intention for its members to be in post for two years and to review arrangements for its functioning on an ongoing basis.[10] There may, therefore, be changes to the Panel ahead of RIIO-2.

3.7 In relation to the ESO's business plans for RIIO-2, we proposed to build on the current requirements for the ESO's annual forward plans, submitted as part of the new ESO incentives scheme. We proposed to outline the types of content we would expect to see in its business plan, though noted that given significant differences between sectors the ESO's business plan would likely look different to that of other network companies.

Summary of responses

3.8 The majority of respondents agreed with our proposal to move to a two-year business planning cycle for the ESO, suggesting that it would provide greater flexibility to respond to changes in the energy system. Stakeholders welcomed our intention for the plan to be developed in accordance with the ESO's long-term vision for the energy system and for stakeholders to have the ability to influence ESO priorities.

3.9 While supportive of our proposal stakeholders generally emphasised that a move to a shorter business planning cycle should not lead to a short-term mentality on the part of the ESO. They suggested that in all planning there must be an appropriate balance of focus between short and long-term priorities. With this in mind the RIIO Challenge Group recommended that the ESO should develop long-term strategic plans (possibly looking forward ten or more years) and that its business plans should specify the actions to be taken in the next two years to deliver this strategy. The Group suggested that this approach would be key in developing long-term plans in the context of the need to decarbonise and the transition to an increasingly digital energy system.

3.10 Some stakeholders urged us to consider a slightly longer business planning cycle, of perhaps three years. One of the reasons provided for this was that a shorter cycle could place a significant administrative burden on the ESO, Ofgem and wider industry.

3.11 Three respondents, including the ESO, opposed a shorter cycle entirely and argued in favour of a five-year approach in line with the other sectors. They suggested that anything shorter than five years would encourage short-term thinking and that our proposal may cause unnecessary complexity and uncertainty. The ESO recommended that, instead of a shorter cycle, proportionate reviews could be undertaken at points in time during a five-year cycle.

3.12 Respondents were generally supportive of the emphasis placed on enhanced stakeholder engagement. Most agreed with the specific proposal to retain the role of a Performance Panel for RIIO-2, though cautioned that as a full regulatory cycle of the Panel had not yet been completed it was difficult to effectively assess its success or otherwise. Respondents also emphasised the importance of having a diverse range of stakeholders participate in the Panel and in informing ESO priorities generally – with environmental and consumer groups specifically cited. Other respondents, while welcoming the proposals, noted that increased engagement could result in a higher resource burden and urged a balanced approach to ensure this burden was not excessive.

[10] Ofgem, Electricity System Operator Performance Panel, July 2018

Decision

3.13 We intend to proceed with the proposals we put forward in December to adopt a two-year business planning cycle for the ESO's RIIO-2 price control and to retain a role for a Performance Panel in the process of setting ESO priorities and scrutinising its performance.

3.14 It is important that the ESO's plans are coherent across time horizons. The ESO's shorter term plans must be aligned with its medium-term strategy. This strategy must, in turn, align with the ESO's long-term vision for the energy system and its role within it.

3.15 To ensure a common understanding we would like to clarify our terminology and expectations regarding what our decision means in practice. By the beginning of the RIIO-2 price control period the ESO must have in place:

- a **long-term vision** for the energy system that includes the ESO's views on its own roles and responsibilities in future. This vision could look out to 2030 or beyond
- a medium-term **strategy** that outlines the ESO's strategy for progressing towards the long-term vision over the five year RIIO-2 period. This strategy should take into account those elements of the price control arrangements that are expected to be fixed across the full five years
- a shorter term **business plan** that details the ESO's costs, activities, deliverables and performance metrics for delivering its strategy over the first two years of the RIIO-2 period.

Rationale/evidence to support decision

3.16 We consider that moving to a shorter business planning cycle for the ESO, combined with a remuneration model that doesn't apply a sharing factor to underspend or overspend, will ensure that the price control framework is sufficiently flexible to account for future uncertainties in the development of the energy system, while providing sufficient incentives, risk management and certainty for the ESO to deliver most value for consumers in the near term and the longer term.

3.17 We acknowledge the stakeholder concerns that have been raised about the potential administrative burden of a shorter planning cycle. This point has been made by the ESO itself. However, we consider that in practice a two-year cycle is unlikely to be significantly burdensome as many of the price control features are likely to remain unchanged between cycles. Aspects such as the remuneration approach, the activity categories used for cost assessment, the scope of any cost disallowance mechanism, the incentives framework and regulatory depreciation and other financing arrangements should all be set for five years and apply to the entirety of the ESO's medium-term strategy.

3.18 The main items that would change more frequently, and therefore will form the basis of the ESO's biennial business plan, are the ESO's costs, activities and deliverables, performance metrics and the forecast RAV.

3.19 We also note the views that stakeholders have put forward to emphasise the importance of the ESO having a long-term vision for the energy system and the certainty they need to invest for that longer period. We consider that the framework we put in place should help to support this longer term thinking. The remuneration models we put forward in this document, in particular, would provide certainty for the ESO that its legacy RAV and any efficiently-incurred future capital spend would be honoured. They would also ensure that they would be able to recover all of the costs of delivering its activities, as long as these have been efficiently incurred.

3.20 A funding model that is more pass-through in nature (ie that doesn't apply a cost sharing factor to overspend or underspend), combined with a prominent role for stakeholders in the setting of ESO priorities and in assessing its performance, should ensure that the ESO is responsive to the short and long-term demands and needs of the industry and consumers and can invest as appropriate to meet these expectations.

3.21 We note that in December we suggested that the ESO should aim to build consensus among stakeholders around its business plans. We would like to clarify that this referred more to the process for developing the business plan rather than necessarily the outcome. We recognise that it may be extremely difficult at times to secure agreement across the industry and consumers on the way forward on a particular issue and that a requirement for the ESO to deliver this may be unrealistic. We expect instead that the process for developing its business plans is open and inclusive, providing opportunity for a wide range of stakeholders to input and for their views to be taken on board.

4. Outputs and incentives

Section summary

This chapter outlines the outputs and incentives framework we propose to adopt for the ESO under RIIO-2. We intend to continue with the incentive arrangements introduced in April 2018 – which adopts an ex post, evaluative approach to the ESO incentives, rewarding or penalising the ESO depending on how well it has delivered against performance criteria defined by us. We have developed our thinking further on elements of how the incentives framework may need to be adapted to align better with the remuneration model and explain our indicative position that asymmetrical incentives may be suitable.

Summary of outputs and incentives decisions	
Decision	Maintain the current evaluative, ex post approach to incentives for the ESO for RIIO-2.
Decision	Retain a separate, standalone cost disallowance for Black Start incentives.
Decision	Consult further on whether ESO incentives should be asymmetric, with a greater upside than downside (where the downside could be zero) – see Chapter 7 for questions for stakeholders.

Summary of issue

4.1 We use incentives to encourage the ESO to innovate and continually improve its performance by exposing it to the types of reputational and financial risks and rewards that a company might face in a competitive market place. In April 2018 we introduced a new incentives scheme for the ESO, based around an ex post evaluation of its performance against certain outcomes we set for it to achieve. The new arrangements specify principles for the ESO's activities and its performance against these determines the amount it will be rewarded or penalised at the end of each year.

4.2 We want to incentivise the ESO to consider and deliver value to consumers across the full spectrum of ESO activities and across short-term and long-term horizons - as the industry transitions towards a smarter, competitive and more flexible electricity system.

4.3 As part of our overall approach to the design of the RIIO-2 price controls we intend to apply incentives to companies' outputs where they deliver value for consumers above any baseline performance expectations that apply. We will apply this differently for the ESO, where we currently also include outcomes-focused aspects within the incentives framework. Nevertheless, the general spirit of the principles set out in Chapter 4 in the Core Document will continue to apply.

4.4 In this chapter we set out the framework for outputs and incentives that should apply to the ESO under RIIO-2.

December proposal

4.5 In December, we proposed to continue with our new ex post, evaluative ESO incentives framework and expand on this to incorporate certain incentives that currently sit outside of this. Under this framework, we would retain the single 'pot' approach rather than creating multiple separate incentives. We suggested that we would, however, consider the outcome of our separate consultation on the incentives arrangements in January and any further consultation on the incentives framework between now and the start of the RIIO-2 period. Should any such consultation result in changes to the workings of the incentives scheme for the ESO we would expect to mirror these changes for the RIIO-2 price control. We also proposed to retain the focus on financial incentives, recognising that some of these may have an additional reputational element. We consider these types of incentives are likely to be more effective in driving the behaviours we want to see in the ESO, while also allowing for a more holistic assessment of performance.

4.6 We did not propose a maximum size for the incentive reward or penalty that could be applied to the ESO. Our view of this will necessarily be influenced by the financial arrangements and level of return we allow for the ESO. Should the downside incentive pot size be too large, this may have an impact on the ESO's financeability, should the level of risk be disproportionate in light of its relatively small asset base.

4.7 We signalled our intention to use symmetric incentives wherever possible, to avoid creating any unnecessary distortions in the ESO's behaviour, unless we receive compelling evidence to the contrary.

4.8 We proposed that Black Start incentives should remain as a standalone cost disallowance. In line with our decision following ESO separation, the Environmental Discretion Reward and stakeholder engagement incentive from RIIO-1 would be removed and would not apply to the ESO from April 2019 onwards.

Summary of responses

4.9 The majority of stakeholders who responded supported the proposal to continue with the current ex post, evaluative incentives arrangements, but noted that a full regulatory cycle has not yet been completed therefore feel it is too early to offer firm conclusions. Most stakeholders believe the ex post, evaluative incentives approach has the potential to unlock benefits for consumers and has already driven increased stakeholder engagement and accountability. They argued that the effectiveness of such an approach in the long run is dependent on transparency, making use of industry and market knowledge and having robust success criteria.

4.10 A small number of stakeholders raised concerns with the proposal and did not agree it should be retained. Two stakeholders felt the ex post, evaluative approach should be reviewed as it does not clearly define what success is, therefore reducing its efficacy in driving the ESO to deliver beyond baseline expectations.

4.11 One of these stakeholders argued that an evaluative regime would be too subjective and that it would be too difficult for the ESO to sufficiently evidence good performance to earn rewards under the scheme. They suggested that this would be particularly the case in relation to long-term actions on the part of the ESO, where the effect of investment may not be clear for a significant amount of time. Instead they argued in favour of a set of ex ante, outputs-based incentives.

4.12 The ESO disagreed with the proposal, believing the current approach to be lacking clear focus on where it can create most value. It suggested the incentives approach must have clear success criteria, predictable financial outcomes for pre-agreed deliverables and be focused on where it can deliver the most value for consumers. The ESO also believes the decision could not be made until the funding model was agreed due to the parallels between the incentives arrangement and funding model in driving its behaviours and revenues. This close calibration between the incentives arrangements and proposed financial approach was also noted by other stakeholders.

4.13 In regards to whether to apply a single pot of incentive payments and whether this should be symmetrical or asymmetrical, many stakeholders agreed with the proposal and felt it was appropriate at the current time. A minority of stakeholders noted that moving towards multiple pots could improve the framework, enabling greater flexibility to tailor the scheme and apply different weightings to different roles. It was also suggested multiple pots would maximise transparency.

4.14 Some stakeholders suggested that symmetrical incentives may not continue to be the most appropriate and further consideration should be given to asymmetric incentives. In particular, that a greater upside may be more suitable. There was concern that retaining a significant downside incentive penalty could lead to risk averse behaviour. This sentiment was shared by the ESO – it argued that to remain financeable it can only absorb a small downside and that this would limit the strength of the overall upside if the design was symmetrical. Furthermore, it was suggested that the design of the incentive must reflect the symmetry or asymmetry of the risks and investments of the ESO and be proportionate to its costs.

Decision

4.15 We will continue to use an ex post, evaluative incentives framework. This approach will reward or penalise the ESO depending on how well it has delivered against the roles and principles framework.

4.16 Our March 2019 decision[11] on the incentives framework moved to evaluating the incentives against three role areas. We will mirror this decision and will consult further in the summer on the future design of the incentives framework.

4.17 We will continue to keep the Black Start incentive as a stand-alone cost disallowance. For the Electricity Market Reform (EMR) incentive, there is an ongoing consultation[12], as part of the five year review of the Capacity Market. We will publish our review of the rules in the summer and at the same time implement some of the changes currently being consulted on. Our indicative position is that the EMR incentives may be more effective if merged into the overall incentives framework. However, this will be considered further as part of the five-year review.

4.18 We intend for the summer consultation on the future design of the incentives framework to give consideration to the structure of the ESO roles, the arrangements for the panel, adopting multiple pots and the possibility of using asymmetric incentives. Following ongoing policy development regarding the ESO's risk and reflecting on consultation responses, our current preference is to adopt an

[11] Ofgem, Decision on the Electricity System Operator regulatory and incentives framework for 2019-20, March 2019
[12] Ofgem, Five Year Review of the Capacity Market Rules – First Policy Consultation, April 2019

asymmetric incentive approach. As this, in conjunction with the remuneration model, differs from our December proposal we are consulting further to get views from stakeholders on whether there are benefits in retaining a two-sided incentive. The areas we request further stakeholder views are set out in Chapter 7 – Finance.

Rationale/evidence to support decision

4.19 The ex post evaluative incentives framework was implemented to encourage the ESO to proactively identify opportunities for delivering consumer value across the spectrum of its role. The design of this approach incorporated lessons learned administering the previous ex-ante mechanistic scheme. Consultation responses are supportive of our view that the evaluative approach enables a more holistic assessment of the ESO's performance and is moving towards the desired outcomes. Stakeholders already consider there is greater meaningful engagement and accountability. At this stage we believe significant reform to the approach could sacrifice some of the positive changes made by the ESO as well as ourselves and stakeholders and would limit our ability to incorporate lessons learned from the new approach.

4.20 We recognise, as raised by multiple stakeholders, that the framework is still in its first iteration and therefore stakeholders noted it may be too soon to draw firm conclusions on its efficacy. We will continue to ensure that lessons are learnt from the process and refine the framework, as appropriate, to ensure it incentivises the desired outcomes from the ESO. We have demonstrated this refinement already in our previous consultations[13] in the 2018-2019 regulatory period and will continue this approach going forward.

4.21 We said in December that if compelling evidence emerged regarding the appropriateness of symmetrical incentives we would reconsider this. Since then we have become concerned that maintaining such a large downside incentive could lead to adverse consequences. Such thinking has emerged in response to consultation responses and our ongoing policy development regarding the remuneration model and the impact this would have on the incentives.

4.22 There are three key concerns that have emerged. Firstly, should there be a significant potential downside incentive penalty, were the ESO to underperform for several years running, this could have an impact on its financeability. One mitigation for this could be to reduce the downside incentive. However, if a symmetrical design was maintained, this would lead to a small upside incentive. This is unlikely to provide adequate encouragement for the ESO to make investments that could deliver exceptional performance.

4.23 Secondly, regardless of the upside potential maintaining a significant downside penalty could result in the ESO, as a newly separate organisation, being more risk-averse and unwilling to invest in new solutions where the outcome may be uncertain. This is contrary to the behaviours we are trying to foster in the ESO and could undermine the goal of the evaluative incentives approach.

4.24 The third risk is that if a significant downside penalty is retained the ESO may need to be remunerated for this risk, which may add to the overall cost and complexity of the price control. The ESO could be remunerated for this potential

[13] Ofgem, Consultation on the evaluation process for the 2019-20 ESO regulatory and incentives framework, February 2019

risk via a margin (either on internal or external costs) or through adjustments to the WACC.

4.25 Our current view is that the most suitable approach to mitigating these concerns may be to move to an asymmetric approach. This could retain a smaller downside penalty with a greater upside reward or, depending on the remuneration model, have no downside. We think there are benefits in the remuneration model placing a greater onus on the incentives scheme as a means of making a profit. Therefore, we believe having a greater potential upside incentive will be more valuable in incentivising the ESO to go above and beyond the minimum expectations of an efficient and economic system operator. The exact size and ratio of this incentive will be considered within our draft determination for RIIO-2 next year.

4.26 We have explored whether the benefit of retaining a downside penalty, as part of an asymmetric incentive, outweighs the costs of doing so. In particular we want to ensure the ESO is incentivised to meet and exceed baseline expectations. There may be merit in retaining a small downside incentive for this purpose and ensuring the upside incentive is only rewarded for high quality delivery above baseline expectations. Depending on the final remuneration model it may be appropriate to remove the risk of a downside penalty entirely to enable the ESO to pursue high quality outcomes with confidence. If we maintain a downside incentive we will consider how this interacts with the financial remuneration model.

4.27 Stakeholder responses to the consultation indicated that asymmetric incentives warranted further consideration for many of the reasons outlined above. Nevertheless, as we are considering moving away from a symmetrical approach, **we want to get stakeholder views and evidence on our proposed approach, alongside some further questions on the remuneration model to inform a final decision.** Specifically, we request stakeholder views on whether the ability to apply a downside incentives penalty outweigh the potential costs involved, in light of the potential impact on ESO financeability.

4.28 Black Start provision continues to be an area of importance. Therefore, it is important to retain a specific incentive to drive the right long-term outcomes for consumer protection in this aspect of system security. The assessment of the incentive for Black Start is based on an audited report of how the ESO complied with its obligations, based on an approved strategy and procurement methodology at the start of the year. We then conduct an efficiency check and can disallow any non-compliant costs, up to a maximum threshold of 10%. This is separate from the current incentives scheme, so as to avoid double-penalties. We believe it remains appropriate to have a standalone efficiency check due to the evolving nature of Black Start provision and significance of the costs. The ESO can still be rewarded for high quality deliverables related to Black Start provision under the evaluative incentives framework.

5. Innovation

Section summary

This chapter confirms our decision to provide the ESO access to innovation stimulus funds and broadly align the design and operation of those funds with the design and operation of the innovation stimulus for wider network companies. We also confirm we will consider tailoring specific aspects of the ESO innovation stimulus to address some of the ESO-specific issues that arise due to differences between it and other network companies.

Summary of innovation decisions	
Decision	Retain an innovation stimulus for the ESO.

Summary of issue

5.1 Innovation is important to ensure that the ESO can support a smarter, more flexible, sustainable low-carbon energy system and help reduce costs to consumers. The ESO will also have a key role within the energy system transition and it should be innovative to find new help new ideas and solutions to meet future challenges.

5.2 Within the RIIO-2 Sector Specific Methodology - Core Document, we have set out our decision to retain a strong innovation funding programme for both big transformational R&D projects, as well as smaller scale process for technological innovations. This innovation funding will primarily focus on projects around the key energy transition challenges in power, heat and transport as well as improving outcomes for consumers in vulnerable situations. We have also set out a clear expectation that network companies should do more innovation as part of their business as usual activities using their totex allowance.

5.3 We, however, appreciate that the design and operation of the ESO price control is different to the price controls for electricity transmission, gas transmission and gas distribution companies. The ESO is comparatively asset light and, as explained in other chapters within this document, we are adopting a different price control regime for it. The ESO will also have a wider incentive regime which seeks to encourage the company to be innovative and consider future challenges.

5.4 We have therefore considered whether an innovation funding mechanism is necessary for the ESO and how it should be designed.

December proposal

5.5 In December we proposed to provide the ESO access to innovation stimulus funds and broadly align the design and operation of those funds with the design and operation of the innovation stimulus for wider network companies. We proposed to consider tailoring specific aspects of the ESO innovation stimulus to address some of the ESO-specific issues that arise due to differences between it and other network companies.

5.6 We also welcomed additional views on ESO-specific issues that we should consider in the design of the ESO innovation stimulus package.

Summary of responses

5.7 The majority of respondents to our proposals to provide the ESO access to innovation stimulus funds, including the ESO, agreed with the proposal to retain an innovation stimulus for the ESO, but tailor it to take account of the nature of the ESO business. Some respondents noted that the ESO should compete alongside other network companies for innovation funds as there are significant benefits from ESO innovation. Another response indicated concern that a two year ESO business planning process may hinder the ESO's innovation.

5.8 One network company agreed that the ESO should have access to innovation stimulus funding but disagreed that it should be tailored to take account of the nature of their business. Additionally, responses from a couple of suppliers indicated that they did not believe the ESO needed an innovation stimulus given the design of their price control with a standalone incentives regime which rewarded the ESO for innovation and also had a cost pass-through approach. While in response to wider innovation questions in the Core Document there were some responses from other suppliers which indicated disagreement with the provision of additional innovation funds to network companies across the board.

Additional issues that we should consider in the design of the ESO innovation stimulus package

5.9 Stakeholders raised a variety of additional issues that we should consider in the design of an ESO innovation stimulus package. Some responses repeated that they do not believe an ESO innovation stimulus was needed or that it should not be tailored for the ESO, while others constructively suggested several ways in which the ESO innovation stimulus should be tailored.

5.10 The ESO's response indicated that its stimulus should be tailored to enable them to pursue dual fuel gas/electricity projects, trace direct/indirect and financial/non-financial benefits from projects, enable them to spend a higher proportion of funds internally and recover funds from balancing charges (Balancing Services Use of System (BSUoS) Charges)).

5.11 Other responses suggested that all of the ESO's innovation stimulus funds should be spent externally given the cost pass-through approach to its price control, and the funds recovered from BSUoS. It was also suggested that other network companies and third parties should be provided with increased transparency of the ESO's innovation activities and have increased involvement within the ESO's innovation portfolio. For example, one respondent suggested wider industry should have oversight of the ESO's innovation spending to ensure it is consistent with activities in wider industry.

5.12 Others suggested the ESO price control needs to ensure the ESO cannot receive double reward as a result of the co-existence of the separate innovation stimulus and the ESO incentives framework, while another suggested the ESO needs to be incentivised to do projects which deliver whole system or wider environmental benefits.

5.13 There were also responses to the ESO consultation and Core Document which suggested that the ESO's unique role in the energy market means that they could play a role leading and steering industry innovation.

Decision

5.14 We confirm we will retain an innovation stimulus for the ESO and tailor the stimulus to take account of the ESO's business and wider price control framework.

5.15 Work considering the design of the ESO's innovation stimulus will take place as part of the wider RIIO-2 workstream considering the design and operation of the new network innovation funding pot and NIA.

Rationale/evidence to support decision

5.16 Consultation responses to these questions reaffirm our view that the ESO should be able to access dedicated innovation funds, but that the ESO's innovation funds need to be refined to take account of the nature of its business and price control.

5.17 We believe this is important to ensure the ESO is able to participate in and undertake collaborative innovation projects that have the potential to deliver whole systems benefits. The innovation stimulus will also enable the ESO to undertake innovation projects that it may not be inherently incentivised to do using its own allowances – for example, if the ESO perceives that the risk of failure would count against it through the performance evaluation process.

5.18 We share concerns that the ESO should not gain double reward as a result of the co-existence of the ESO incentives regime. Although we do not believe this is reason for not having an innovation stimulus for the ESO, we will consider this point as part of the detailed development of the innovation stimulus, alongside considering other feedback received.

5.19 We did not consult specifically on providing the ESO with an additional role steering or coordinating wider energy industry innovation and, at this time, we do not seek to provide additional powers or responsibilities to the ESO. We continue to encourage the ESO to collaborate and partner with other network companies and third parties when innovating, and similarly encourage other network companies to seek collaboration and partnership with the ESO on its projects.

6. Cost assessment

Section summary

This chapter sets out our intended approach for assessing the internal costs of the ESO under the RIIO-2 price control. We intend to assess the costs of the ESO on an activity-by-activity basis, using a combination of different tools and processes.

Summary of cost assessment decisions	
Decision	Assess ESO costs on an activity-by-activity basis using historical, international and cross-sectoral benchmarks to scrutinise costs and performance.

Summary of issue

6.1 The ESO incurs a range of different internal costs in performing its various roles as system operator. Accurately predicting these costs is not always possible. Given the diverse set of activities performed by the ESO there is no single benchmark or comparator organisation we can use to effectively assess whether it is being efficient in its spending. Additionally, its costs can vary year on year, so past performance is not always the most reliable indicator of future costs.

6.2 It is essential that the internal costs incurred by the ESO are transparent and can be effectively scrutinised, to provide Ofgem and industry with confidence that its resources are appropriately targeted to deliver good outcomes for consumers.

6.3 In this chapter we set out the cost assessment arrangements we intend to put in place for the ESO under RIIO-2.

December proposal

6.4 In December we proposed to use a combination of different tools and processes for our cost assessment of the ESO as part of RIIO-2. We proposed to introduce requirements for the ESO to include a number of key pieces of content in its business plans including costs broken down by activity, historical costs and comparable benchmarks, as well as proportionate cost benefit analysis to justify key spending.

6.5 In the development of the business plan we signalled that we expect the ESO to consult closely with stakeholders and as a result:

- propose activities, deliverables and performance metrics that are set at stretching levels
- build stakeholder consensus around activities, deliverables and performance metrics and seek to ensure that its priorities are developed in light of those of stakeholders
- demonstrate long-term thinking in terms of whole system approaches, innovation and consumer value.

6.6 We also proposed to introduce requirements for a third-party audit of the ESO’s costs. We signalled that we would consider whether this should be on the projected costs in the business plans and/or an ex post audit of the actual costs incurred by the ESO.

Summary of responses

6.7 The majority of respondents agreed with our proposed approach to assess costs on an activity-by-activity basis, split by operational and capital expenditure (opex and capex). They suggested that this approach would provide greater transparency around the ESO's spending and reduce the risk of cross-subsidisation of costs across sectors. Stakeholders emphasised that it is important the ESO is held to account against its business plan and that cost assessment is an essential part of this.

6.8 Stakeholders broadly agreed that the cost assessment activities we outlined in the December consultation were appropriate, though requested further detail about how they would be deployed in practice. Respondents emphasised that their key requirement was transparency. Several noted that historic benchmarks are not always the best measure of efficient costs.

6.9 One stakeholder noted that the ESO had, in the past, participated in international benchmarking activities (eg the International Benchmarking of Electricity Transmission Operators e3 Grid Project). They suggested that there may be ongoing projects that the ESO could participate in to provide a view of its costs relative to other system operators.

6.10 Several respondents, while supporting our proposed approach, emphasised that any activity that could potentially be done by an entity other than the ESO should be costed separately. They suggested that this could facilitate future changes in who performs those roles should they be considered beneficial. One electricity distribution company disagreed with the activities framework we had tentatively proposed, as they were concerned that the activities do not necessarily translate into meaningful outputs for consumers.

6.11 One network company disagreed with the proposed approach, arguing that a granular approach to cost assessment may be disproportionate in light of the relatively small costs involved. The ESO itself echoed this concern in part. While supportive of the overall approach and our intent to create a comprehensive toolkit, it suggested the cost assessment must be proportionate. The ESO argued that utilising all of the tools[14] put forward in the December consultation would be disproportionate. Another company noted that a granular approach may not be suitable or possible for shared services.

Decision

6.12 We intend to proceed with the proposals we set out in our December consultation, while recognising stakeholder concerns around the need to be proportionate. To ensure the ESO's costs are transparent and we are able to effectively assess the efficiency of these, we expect its plans to include:

[14] Third party audits, cost trigger mechanism, benchmarking, cost benefit analysis, stakeholder assessment and identification of uncertainties in relation to business plan expectations.

- costs broken down by activities and sub-activities[15], with clear, well-defined metrics and deliverables assigned to each of these
- historical costs and associated deliverables for each activity and, where possible, each sub-activity
- clear links between activities, sub-activities and the performance criteria or a distinct measure of the output or deliverable to be achieved through the activities and sub-activities
- separate reporting of business support costs, with a clear description of how these have been allocated from wider National Grid group
- comparable external benchmarks for activities and deliverables, where relevant, to allow assessment of their relative efficiency and evidence of the ESO's steps to determine the efficiency of these, eg external benchmarking or market testing
- proportionate cost benefit analysis and justification for the proposed expenditure
- identification of uncertainties around deliverables, with cost ranges for potential outcomes, where applicable
- clear demonstration of the ESO's consideration of its longer term vision for the energy system, for example in terms of whole system approaches, innovation, consumer value and long-run costs and benefits.

6.13 In the development of the business and delivery plans we expect the ESO to closely consult with stakeholders, seeking and taking on board feedback in relation to its proposed activities, deliverables and performance metrics. This engagement should inform the ESO's priorities and help to ensure that the plans and metrics are appropriately stretching.

Rationale/evidence to support decision

6.14 We consider an activity-based cost assessment of the ESO will help to provide greater transparency around the areas the ESO is focusing its resources. It will also help to provide industry parties with reassurance that their views are considered as part of the ESO's planning and the delivery of its role, by allowing spending across different categories to be tracked over time and thus demonstrate that stakeholder priorities are being taken forward by the ESO. The addition of sub-activities allows for greater granularity of cost assessment against deliverables, allowing a more effective process of evaluation for the purposes of the incentives scheme.

6.15 As a relatively unique organisation, there is no single benchmark or comparable organisation that we can look to in order to develop a clear picture of the relative efficiency of the ESO's spend. Instead, we consider that we will need to adopt a mixed-mode approach, utilising data from different sources – historical, international and cross-sectoral – and combining these to provide a holistic picture of ESO costs. This scrutiny will be central to giving us, as well as industry, an

[15] We consider the activities to be broad categories such as 'facilitating Electricity Market Reform' or 'code administration'. The sub-activities would be specific activities contributing to the overarching category. For example, in the case of Electricity Market Reform this could include things such as stakeholder and compliance activities, or modelling work.

appropriate level of confidence that the new price control framework is functioning as intended and that the removal of any Totex Incentive Mechanism does not lead to increases in ESO costs.

6.16 That said, we acknowledge stakeholder comments about the need to be proportionate in our cost assessment. We will continue to work closely with the ESO to develop the business plan data templates, which will be used to gather much of the information we use to scrutinise. Through this approach we will attempt to gather all that we need, though only what we need, to provide confidence in the ESO's spend.

6.17 This equally applies to the use of third party audits and the cost benefit analyses to be produced by the ESO. While we continue to consider that each of these could have a key role to play in scrutinising and justifying ESO costs, we consider that they should be deployed only when needed and be proportionate to the investment in question.

7. Finance – Consultation

Section summary

In this chapter, we set out our updated thinking on the remuneration model for the ESO and are consulting further on specific points. We have conducted further analysis since December and carefully considered consultation responses. As a result of this work we now consider that a funding model that broadly aligns with our December proposal, but differs in certain aspects of its practical application, may be more appropriate. We are consulting further with stakeholders to obtain views before making a decision on the funding model. **We are asking for responses to be sent back to us by 5 July 2019.**

Questions for stakeholders:

ESOQ1: Which funding model would most effectively remunerate the ESO and support its financeability? Would either model have any risks or unintended consequences that you can foresee? Are there other funding models you think would be more appropriate?

ESOQ2: Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered - via a higher WACC or a margin on internal or external costs?

ESOQ3: Would a working capital facility adequately cover the full range of risks the ESO is exposed to in fulfilling its revenue collection activities (in relation to collecting TNUoS and BSUoS charges)?

ESOQ4: Would the ESO require additional funding or regulatory mechanisms to be able to procure a working capital facility? Please explain your answer.

ESOQ5: Do the benefits of retaining the ability to apply a downside incentives penalty outweigh the potential costs in terms of the impact on ESO financeability?

Summary of finance decisions	
Decision	Do not apply the Totex Incentive Mechanism (cost sharing factor) to the ESO.
Decision	Align the ESO with other RIIO sectors in relation to conditions around cost disallowance – ie allowing efficiently-incurred costs.
Decision	Consult further with stakeholders on the remuneration model for the ESO, including whether the benefits of being able to apply a downside incentives penalty outweigh the costs, and whether additional funding or regulatory mechanisms are warranted to reflect risks that may apply to the ESO, or to support procurement of a working capital facility.

Summary of issue

7.1 In order for the ESO to fulfil its role efficiently and effectively it is important that the price control has a remuneration framework that supports investment and allows for fair returns, while also keeping costs that will ultimately be borne by consumers to a minimum.

7.2 The ESO performs a crucial role within the energy system. While relatively small in terms of its internal spend, it manages and has the ability to influence much greater sums of industry costs. As such, the ESO can, by investing in the right systems and processes, help to reduce overall network and system costs. We want to implement a price control regime that supports effective investment, allocates risk efficiently and ensures fair returns for the services that the ESO provides.

7.3 The ESO, unlike other network companies covered by the RIIO price control, is relatively asset-light. Therefore, its funding arrangements may look different to those of the other sectors. Its remuneration framework should reflect the unique role the ESO has within the energy system and incentivise it to deliver most value for energy consumers, as opposed to always focusing on minimising its internal costs.

7.4 In this chapter we set out our current thinking on the financial arrangements we propose to put in place for the ESO under RIIO-2. Our current thinking represents an evolution of the position we set out in December. We welcome further views from stakeholders before confirming our decision.

December proposal

7.5 In December we proposed to remunerate the ESO using cost pass-through for its internal costs with a margin. This margin would comprise a base level of return and a return on risk (which could be zero), to be determined on an activity-by-activity basis. We proposed to not apply a sharing factor to any underspend or overspend against the agreed allowances.

7.6 To ensure that consumers are protected from any demonstrably inefficient spending on the part of the ESO, we proposed to introduce a cost disallowance mechanism to enable us to recoup such spending. In addition, to provide additional transparency around the ESO's spending, we proposed to introduce a cost trigger mechanism, whereby the ESO would notify Ofgem when spending exceeds a certain proportion of agreed allowances for a given activity. We would also expect that any underspend or unjustified overspend would be taken into account in deciding the reward or penalty to be applied through the incentives scheme.

7.7 The performance evaluation (including the role of the Performance Panel) and application of the incentives arrangements would play a key role in incentivising efficiency in the ESO's costs.

7.8 Noting the significant cashflows the ESO manages as part of its TNUoS and BSUoS revenue collection activities, we suggested that some form of working capital facility may be needed to ensure it has sufficient liquidity to manage any periods of under-recovery.

Summary of responses

7.9 The majority of stakeholders supported our proposal to move to a cost pass-through plus margin remuneration model. They considered it could provide the right incentives to the ESO to focus on strategic investments for wider system and consumer benefits. The ESO strongly supported the proposal to apply a margin to all reasonably incurred costs. However, concerns were raised that the proposed remuneration model would not explicitly incentivise the ESO to be efficient, with a couple of stakeholders arguing in favour of an approach that would place some downward pressure on costs. The Elexon funding model – a zero percent sharing factor with a budget agreed by industry – was proposed as a suitable alternative.

The ESO disagreed with the approach being characterised as a cost pass-through model due to the risk of cost disallowance and the evaluative financial incentive framework, arguing there would be increased uncertainty regarding the ESO's investment risk.

7.10 A small number of stakeholders disagreed with our proposal to move away from the approach utilised by the other RIIO sectors – whereby a Weighted Average Cost of Capital (WACC) is applied to the Regulatory Asset Value (RAV). They argued that although the ESO is an asset-light entity, this approach could be deployed effectively. They also argued that, assuming the level of the WACC or any margin was set correctly, the overall ESO return should be the same in either case.

7.11 Stakeholders had differing views over how to appropriately manage the risk the ESO assumes from its role, in particular the revenue collection role, and provide it additional security. A couple of stakeholders felt that the most cost efficient way to manage these risks would be to follow practices adopted in a competitive market environment and that therefore a financial or capital facility would be appropriate. Many stakeholders expressed that they did not feel a parent company guarantee would be appropriate because it would undermine the ESO's effective separation within National Grid. A similar number of stakeholders did not agree with our assessment of the ESO holding risk and did not believe any additional facility was needed. The special administration requirements in the licence were deemed sufficient to manage the ESO risk of financial difficulties. The ESO proposed that a margin on the external costs it manages as part of the revenue collection role would be appropriate.

7.12 Two stakeholders also raised the Elexon funding model as a possible option to be considered for the ESO. Under this model Elexon agrees its funding for the year ahead with industry. They argued that this model works well in supporting a clear understanding of where Elexon's spend is targeted and provides informed consent from its customer base.

7.13 With regards specifically to the proposed removal of a sharing factor there were also mixed views. A majority of stakeholders supported the proposal, with one stakeholder noting that the ESO's internal costs are generally small relative to the significant potential benefit they can generate for consumers, therefore a remuneration model focusing disproportionately on cost management could be a higher risk for consumers.

7.14 However, there were concerns raised by multiple parties over the effect this would have on costs. One stakeholder felt that the removal of the sharing factor was signalling a removal of incentives to keep costs down. Instead they indicated a preference to maintain a totex approach with a sharing factor and output incentives. The ESO also proposed the use of sharing factor. It was also suggested that while it may be appropriate to remove the sharing factor for the beginning of RIIO-2, consideration should be given to reintroducing a sharing mechanism once confidence has been gained in the ESO's cost targets and incentives.

7.15 Generally there was support for a cost disallowance mechanism for demonstrably inefficient costs but several stakeholders did question whether the introduction of such mechanism would have the desired effect of encouraging the ESO to be more efficient. They suggested that it may make the ESO risk-averse and unwilling to make beneficial investments. They argued that any such mechanism should be carefully scoped to make clear where we would consider spend to be inefficient.

7.16 The ESO proposed an alternative model, the full details of which are detailed in its response published alongside this consultation. The ESO proposed an activity-based model which breaks down the ESO into layers of activities with similar levels of risk. There would be an ex ante agreement of business plan costs, plus margins according to the level of risk, for all layers. The approach would include an agreed sharing factor for variation in business plan costs, which could be softer on overspend to reduce the risk of encouraging underspend. There would be a deadband within which the sharing factor would not apply. For new activities and investments unknown at the business plan stage, there would be a flexibility mechanism enabling immediate spend and subsequent review. Following review this spend would be subject to margins and sharing factor. Disallowance should be an exception and not applicable to ex ante agreed baseline costs.

Decision and further consultation

7.17 Since the December consultation we have carefully considered the risks that apply to the ESO, engaging with the ESO as we have done so. We have also worked to identify potential mitigations that could be put in place to reduce or remove these risks.

7.18 As a result of this further analysis and having reviewed consultation responses, we are considering enhancements to our December proposals. We intend to proceed with our proposals to align the ESO with other sectors in terms of the cost disallowance mechanism (ie in allowing efficient costs), and to not apply a Totex Incentive Mechanism to the ESO. Our thinking in these areas remains consistent with what we set out in December, though we will take into account stakeholder feedback in determining how the precise cost disallowance conditions are worded.

7.19 On other key aspects of the remuneration model we do not make a decision at this point, but request further stakeholder views on alternative arrangements. We consider there are two potentially viable funding models that could be applied to the ESO. We want to get further stakeholder views on these models, and some of their individual components that could vary from the base models described.

7.20 We are consulting on two models. Our current thinking is that both models would have the following features:

- honour the existing RAV carried over from RIIO-1
- do not apply a sharing factor to any overspend or underspend
- apply a cost trigger mechanism to require the ESO to notify Ofgem when its spend reaches a certain proportion of its allowances
- framing the 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 would require the ESO to procure a working capital facility 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

- the financeability of the ESO would be assessed as the model is developed.

7.21 Model 1 has the following additional features:

- this model would follow a totex approach. Totex is short for total expenditure. It is a concept used in the RIIO framework to avoid debate about what is capital expenditure (capex) and what is operating expenditure (opex). Totex is made up of 'fast money' and 'slow money'

- fast money is funded in the year incurred. It is usually, but not necessarily, equivalent to opex. Slow money is added to the RAV and is funded over time through allowances for depreciation and return on capital. Slow money is usually, but not necessarily, equivalent to capex.

- the approach for calculating the WACC would follow that of other RIIO sectors, though would reflect any ESO-specific considerations in relation to its gearing, cost of debt and cost of equity.

7.22 Under this model, the ESO would earn returns via the WACC, but would also then have the ability to outperform and make additional returns under the incentives scheme.

7.23 Model 2 has the following additional features:

- remunerates both the capex and opex of the ESO in the form of 'fast money', thus potentially removing the need for financing.

7.24 Before making a decision on the appropriate remuneration model, we want to get stakeholder views on the alternative proposals presented above and certain elements within each.

Figure 4: Financing models and consultation topics

Features of the model options we are consulting on	Model 1: RAV	Model 2: All 'fast money'	Individual elements we are consulting on
Honours the existing RAV from RIIO-1			
Cost trigger mechanism			
WACC applied to RAV on slow money			Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered - via a higher WACC or a margin on internal or external costs?
Fast money on capex (plus a margin if necessary)			
Fast money on opex element of totex (plus a margin if necessary)			Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered - via a higher WACC or a margin on internal or external costs?
No sharing factor			

Cost disallowance mechanism (aligned with other RIIO sectors)			
External costs passed through (plus a margin if necessary)			Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered - via a higher WACC or a margin on internal or external costs?
Working capital facility (costs of which would be passed through)			Would a working capital facility adequately cover the full range of risks the ESO is exposed to in fulfilling its revenue collection activities (in relation to collecting TNUoS and BSUoS charges)? Would the ESO require additional funding or regulatory mechanisms to be able to procure a working capital facility? Please explain your answer.
Upside-only incentives scheme			Do the benefits of having the ability to apply a downside incentive penalty outweigh the costs?

7.25 In particular, we want to get stakeholder views as to whether they consider an additional return (in the form of a higher WACC or a margin applied to costs) is warranted to reflect the potential risk the ESO may be exposed to as a result of its costs being disallowed (or other regulatory financial penalties applied), or whether the working capital facility would not adequately cover the full range of risks the ESO is exposed to in fulfilling its revenue collection activities. We also want to understand whether additional funding would be necessary to help the ESO secure a working capital facility.

7.26 Additionally, we request stakeholder views on whether there would be benefits in retaining the ability to apply a downside incentives penalty – assuming that the risk of penalty may need to be reflected in the ESO's remuneration.

Summary of questions for stakeholders:

ESOQ1: Which funding model would most effectively remunerate the ESO and support its financeability? Would either model have any risks or unintended consequences that you can foresee? Are there other funding models you think would be more appropriate?

ESOQ2: Is an additional return needed to reflect the potential risk of cost disallowance or other regulatory penalty? How would this additional return be best delivered - via a higher WACC or a margin on internal or external costs?

ESOQ3: Would a working capital facility adequately cover the full range of risks the ESO is exposed to in fulfilling its revenue collection activities (in relation to collecting TNUoS and BSUoS charges)?

ESOQ4: Would the ESO require additional funding or regulatory mechanisms to be able to procure a working capital facility? Please explain your answer.

ESOQ5: Do the benefits of retaining the ability to apply a downside incentives penalty outweigh the potential costs in terms of the impact on ESO financeability?

7.27 **We welcome stakeholder responses to the questions raised in this chapter by 5 July 2019**. Should it reduce the burden for stakeholders, we are happy to convene bilateral conversations to receive verbal feedback instead of written responses.

Rationale/evidence to support decision

7.28 Our work following the December consultation enabled us to identify three key risks that would apply to the ESO in the absence of specific mitigations:

- Revenue management/cashflow: The ESO manages TNUoS and BSUoS cashflows that far exceed its own internal costs. There can be lags between the ESO paying out to certain parties and receiving payments from others. These lags can lead to the ESO being exposed to large under-recovered amounts at certain points in time, amounting to more than £100m, and in some cases substantially more
- Incentives downside: Currently the maximum performance penalty the ESO can receive under its incentives scheme is £30m. Although this figure may change in future to reflect that the ESO is now a legally separate entity from NGET, should the ESO perform poorly for several consecutive years this may have an impact on its financeability
- Cost disallowance: To ensure the ESO's spend remains efficient we proposed to put in place a mechanism to disallow inefficient costs. If there is a perception that this mechanism would be deployed regularly this may negatively impact the ESO's financeability and drive risk investment decisions.

7.29 For each of these, we could put in place mitigations to reduce the actual and perceived risk to the ESO:

- Revenue management/cashflow risk: To reduce the cashflow risk we could require the ESO to procure a working capital facility, the costs of which would be passed through. This would ensure the ESO has sufficient financial liquidity at all times

- Incentives downside: To mitigate the risk that persistent underperformance leads to the ESO becoming unfinanceable, we could reduce the relative size of the incentives downside, possibly to zero, possibly making the scheme upside only
- Cost disallowance: We would clarify our description of the cost disallowance mechanism to ensure that it properly reflects our intention that it is used only where the ESO has been demonstrably inefficient. To provide reassurance, we would ensure that our envisaged mechanism aligns with requirements that already apply to the other sectors - this would provide a precedent for disallowances in the past, which we expect would mitigate ESO and investor concerns.

7.30 If the above risks are the main risks being faced, in light of the mitigations we could put in place (coupled with the wider price control design), we think that the level of risk that the ESO would hold could be much reduced. This being the case, there may be benefits in moving away from the approach we outlined in December towards one of the models we outline above.

7.31 We do not, at this stage, have strong evidence to suggest that a margin on internal costs is appropriate. Because of this, we are seeking stakeholder feedback, and intend to work further with the ESO to understand whether one is justified based on the level of operational risk borne by the ESO.

7.32 Similarly, we do not, at this stage, have strong evidence to suggest a margin on external costs is appropriate. We believe it is unlikely that there is a simple linear relationship between ESO risk and the value of external revenue collection. We are also concerned that this could give the ESO perverse incentives if an increase in TNUoS and BSUoS costs provides a direct greater return for the ESO. It is also not clear to us how a model that provides the ESO with a proportion of external costs would be more efficient than simply converting this risk into a cost, through procuring a working capital facility and passing through these costs. As above, we are interested in stakeholder views on all of these points and will also continue to work further with the ESO in this area.

8. Next steps

8.1 We welcome stakeholder responses to the questions raised in this document by 5 July 2019. Responses should be sent to RIIO2@ofgem.gov.uk

8.2 Should it reduce the burden for stakeholders we are happy to convene bilateral conversations to receive verbal feedback instead of written responses. We intend to work with the ESO and other stakeholders to understand whether our alternative proposals for the funding model and incentives would ensure the ESO is financeable and is suitably remunerated for the risks it assumes in delivering its activities.

8.3 We aim to conduct further analysis, consider further responses and confirm our way forward in the summer. Following publication of this decision and our further consultation questions today we intend to develop a set of assumptions to be used as part of an ESO financial methodology. Following consideration of responses to the questions raised in this document, we would issue a further decision on the funding model we intend to take forward, along with a consultation on the ESO financial methodology and working assumptions, later this summer. We would then confirm our approach in the autumn.

8.4 For the avoidance of doubt, we consider that this ongoing work should not prevent the ESO from developing a high quality, ambitious business plan for RIIO-2 in December 2019. With this in mind we will separately publish the ESO's business plan data template early in the summer.

8.5 In relation to innovation we intend to develop the stimulus package jointly across all sectors for the RIIO-2 price control. Although we will look to tailor specific aspects for the ESO, where relevant, we believe it is important that the innovation stimulus package is developed together with electricity transmission, gas transmission and gas distribution companies to ensure companies are able to work together on innovation projects which is developed jointly across sectors.

8.6 As set out in Chapter 10 of the Core Document, further work is necessary to develop the detailed operation and governance of the new network innovation funding pot and the NIA. This consultation will include proposals on the level of funding available, the operation and governance of the innovation stimulus package and the role of wider requirements to publish innovation strategies. Work considering the design of the ESO's innovation stimulus will take place as part of this wider RIIO-2 workstream.

8.7 Separately, we also intend to consult with stakeholders over the future design of the incentives framework this summer. This consultation will consider the detail of the framework beyond the arrangements outlined in this document. It will reflect on the lessons learnt during the first year of the operation of the new incentives arrangements. While the future arrangements for RIIO-2 will clearly be an important feature of that consultation, it may also propose more immediate changes for 2020, ahead of the new price control.

Appendices

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Appendix 1 - Summary of responses to our December consultation

We received 20 responses from stakeholders to our ESO sector-specific questions from a mix of network companies, consumer bodies and environmental representative groups and suppliers. There were similar levels of interest across the six different question areas: Roles and Principles, Price Control Process, Outputs and Incentives, Cost Assessment, Finance and Innovation, although the questions regarding finance provoked the most detailed and mixed responses. Overall, stakeholders were generally supportive of the proposed package. However, they suggested that the cost assessment process, the financial arrangements and the business plan process would benefit from clarification. A second consistent theme of responses was that, due to the recent legal separation of the ESO, future review is likely to be appropriate once the effects of the separation changes are clearer.

Roles and Principles Questions

ESOQ1: Do you agree with our proposal to maintain the current roles and principles framework for RIIO-2?

There were 16 responses to this question, with 13 respondents agreeing with our proposal to maintain the current roles and principles framework. These stakeholders deemed the framework to be appropriate going forward and consistent with the likely energy system challenges that are upcoming. Many noted the fact that the framework had only recently been implemented, and that it had widespread stakeholder approval, as justification for retaining it at this stage.

One stakeholder, who agreed with the proposal, suggested that the ESO should become responsible for the operation of all networks across all voltage levels. In their opinion having a single party accountable for the balancing and operation of the entire network would ensure that the most nationally-optimal solution is followed. While we consider such a change to be beyond the scope of this price control, we note that there is ongoing work led by Ofgem and the ENA Open Network projects that may be relevant to this suggestion.

One stakeholder agreed with the need for a clear set of roles and principles but was uncertain that the existing framework would be most appropriate going forward. Instead they put forward the view that continuous review is necessary over the coming years while all parties gain experience of working with the legally-separate ESO. Another stakeholder, who advocated review of the framework, suggested that the following themes should be reflected in the ESO's roles and principles framework:

- the extent to which the ESO undertakes activities that encompass other networks
- the role of the ESO in resolving system constraints including those that occur on the distribution network
- the role for distribution system operators and the extent to which they provide either residual roles (if the ESO has greater responsibility) or local roles (such as resolving constraint issues at lower voltages in the distribution networks)
- the role of the ESO in setting network charges in a coordinated, economic and efficient way, with coherent locational signals for network investment based on marginal costs

- the extent to which third parties may be able to undertake some roles under the umbrella of the system operator such as the code modifications process and capacity market administration
- the relationship between the ESO and the gas system operator.

The ESO also suggested that the roles and principles would need to be re-shaped to work alongside an activity based funding model.

ESOQ2: Do you agree with our proposals to keep the ESO's code administration, EMR delivery body, data administration, and revenue collection functions in place for RIIO-2? Do you believe that any of these functions (or any other functions) should be opened up to competition, either now or in future?

There were 13 responses to this question, with nine of those agreeing with our proposal. These stakeholders did not believe there was significant evidence of potential benefits from opening up the functions to competition at this time. However, many stakeholders suggested this should be open to review in future and supported Ofgem's intention to keep some of these functions discrete in terms of our cost assessment, such that they could be separated in future if the benefits case changes.

Four stakeholders suggested there could be benefits to be derived from opening up the code administration function to competition or a third party. Elexon suggested that the ESO code administration function could be merged into Elexon. They also outlined their view that there is an opportunity to move to a three-code, dual fuel model. This would merge the Smart Energy Code into the Retail Energy Code. The Balancing and Settlement Code and the Uniform Network Code would be consolidated together. The third code would bring together the Connection and Use of System Code, the Distribution Connection and Use of System Code, the Distribution Code and the System Operator Transmission Owner Code. As noted in Chapter 2 of this document, there is an ongoing Code Governance review which may consider wider changes to industry code arrangements.

ESOQ3. Do you consider the ESO is best-placed to run early and late competitions?

There were 16 responses to this question, with nine of these considering that the ESO could be best-placed to run early and late competition. A couple of these stakeholders stated that the ESO would be better set up to run early competition, but not late competition due to its structure as an asset-light organisation.

A couple of respondents suggested that Ofgem would be better placed to run early and late competitions. This was because, in their opinion, Ofgem would be free from a perception of bias and has the necessary access to skilled resource. It was also noted that Ofgem would be granting the licences so should therefore be the ultimate decision maker.

A DNO stated network companies are best placed to understand needs in their areas and scrutinise plans, but recognise the potential perceived conflict of interest. They advocated using an independent body, such as Consumer Engagement group, to challenge the decision making process.

The majority of electricity distribution companies that responded considered the ESO could be well-placed to run early and late competition at a transmission system level but that DNOs would be better placed at a distribution level.

ESOQ4. Do you agree with our proposal to move to a two-year business planning cycled price control process for the ESO? If not, please outline your preferred alternative, noting any key features (eg uncertainty mechanisms or re-openers) that should be included.

We received 16 responses to this question. The majority agreed with our proposal, with 3 responses disagreeing and 2 responses expressing uncertainty. Stakeholders were largely supportive of our rationale that a two-year business planning cycle would enable flexibility in a changing energy system and provide the option for review after two cycles. The summary in Chapter 3 of the document fully captures the scope of stakeholder responses, so we do not duplicate this feedback here.

ESOQ5. What stakeholder engagement mechanisms should be put in place for the ESO's business planning and ongoing scrutiny of its performance? Do you agree with our proposal to maintain, and build upon, the role of the Performance Panel?

We received 18 responses to this question, with respondents supportive of the emphasis placed on stakeholder engagement and the proposal to build upon the Performance Panel role. The summary in Chapter 3 of the document fully captures the scope of stakeholder responses, so we do not duplicate this feedback here.

ESOQ6. Do you agree with our proposed approach of using evaluative, ex ante incentives arrangements for the ESO?

We received 15 responses to this question. Most stakeholders agreed with our proposals, while two stakeholders disagreed. One stakeholder suggested it was too early to comment and that the proposal should be revisited when the incentives had been in place for long. Another stakeholder suggested that these arrangements may not be suitable for a DSO, but that they had no specific view in relation to their suitability for the ESO. Two stakeholders noted concerns over how the ESO has classified as 'meeting baseline' and 'exceeding baseline' for some outputs under the new evaluative arrangements. However, they note that progress is being made and they expect the process to develop further.

An electricity distribution company raised a concern over inconsistency in approaches for incentivising whole system outcomes. Namely, that for electricity distribution companies a whole systems licence was being proposed whereas for the ESO, whole systems outcomes are incentivised under the evaluative framework.

We note that there was a typo in this question, but stakeholders recognised this and considered ex post incentives arrangements.

ESOQ7. Do you agree that we should continue to apply a single 'pot' of incentives to the ESO, and that this should be a symmetrical positive/negative amount? If not, why not?

There were 16 responses to this question. Stakeholders did not express disagreement, and instead put forward considerations around whether to apply multiple 'pots' of incentives and their views on symmetry and asymmetry. Six stakeholders suggested it was appropriate to consider using asymmetric incentives and three stakeholders suggested using multiple incentive pots.

One network company suggested that the incentive pot could be segmented by introducing a balanced scorecard approach that is assessed against a set of high-level metrics based around the ESO's areas of consumer benefit laid out in its Forward Plan.

These are: improved safety and reliability; improved quality of service; lower bills than would otherwise be the case; reduced environmental damage and benefits for society as a whole.

Two stakeholders put forward views on the Black Start incentive remaining stand alone cost disallowance, suggesting it could be made symmetrical to incentivise the ESO to move beyond an incumbent-based approach.

ESOQ8. Do you agree with our proposed approach to assessing the costs of the ESO under RIIO-2? Do you think we should assess costs on an activity-by-activity basis? How would you go about defining the activity categories? Are there alternative approaches we should consider?

There were 15 responses to this question. The vast majority of respondents agreed with our proposal, with two stakeholders disagreeing. Some of those that supported our proposal, while agreeing, suggested that the cost assessment must remain proportionate and that Ofgem should not be overly-reliant on stakeholder views and evidence to form a key part of cost assessment as stakeholders will not necessarily have the necessary expertise.

Two network companies disagreed with the proposal. One noted the cost assessment procedure appeared too complex relative to the operational costs of the ESO and that it could lead to excessive reporting and analysis that is not in consumers' interest. The second stated that Ofgem should develop a process that is consistent with the rest of RIIO-2. They shared concerns over complexity and felt there were a lack of comparators to justify activity-based benchmarking.

ESOQ9. Do you consider the types of cost assessment activities we outline in this chapter are the right ones? Are there additional activities you think we should consider?

There were 14 responses to this question. The majority supported the activities we set out in December, with one stakeholder actively disagreeing.

Stakeholders did not propose additional activities but did suggest some alternative considerations. One stakeholder suggested that there would merit in using roles-based cost categories, which would then be broken down into activities with different levels of risk and margins. Several stakeholders also suggested that those activities that could be opened up to competition in future must remain separately costed.

A few stakeholders commented on the proposed tools for cost assessment and considered these were suitable and comprehensive.

The stakeholder that disagreed felt that it was too early to be breaking these activities down and were concerned that the activities did not translate into outputs for consumers. They argued that the activities of 'operate the system in real-time' and 'facilitate and run markets to balance the system' were the same in terms of desired outcomes. They also argued the proposed activities were not as measurable or independently auditable compared to the outputs defined for companies in RIIO-ED1.

ESOQ10-ESOQ13 – These questions will be discussed together as stakeholders provided combined answers in multiple cases.

EQOQ10. Do you agree with our proposed remuneration model for the ESO under RIIO-2? Do you think it provides the right incentives for the ESO to deliver value for money for consumers and the energy system? Are there other models you think are better suited?

ESOQ11. Are there any risks associated with our proposed remuneration model that you do not think have been effectively captured and addressed? Do you think that we should put in place any of the mechanisms intended to provide additional security to the ESO outlined in this chapter – eg parent company guarantee, insurance premium, industry escrow or capital facility?

ESOQ12. Do you agree with our proposal relating to remove the cost sharing factor? Can you foresee any unintended consequences in doing so, and how could these be mitigated?

ESOQ13. Do you agree with our proposal to introduce a cost disallowance mechanism for demonstrably inefficient costs? What criteria should we apply in considering what constitutes 'demonstrably inefficient'?

The proposed remuneration model

The majority of stakeholders agreed with the proposed model. There were concerns raised by a consumer body that the model placed no downward incentive on costs. However many stakeholders felt that this was a positive and that it would incentivise the ESO to fulfil its role and proactively seek opportunity to deliver consumer benefits. They noted that as the ESO's costs are much smaller than many other network companies that the lack of downward pressure on costs was not concerning.

Elexon believed its funding model would be suitable. This is to have a zero percent sharing factor with an annual budget agreed by industry.

There was some support for a RAV*WACC approach by network companies, with several noting that while the ESO is an asset-light entity, a RAV-based model could be an effective way of funding it. One stakeholder noted that this approach would be preferable to the model we proposed.

Risks associated with the proposed model

Stakeholders noted the following risks:

- risk of disallowance could lead to a risk-averse ESO that does not spend where doing so could deliver consumer value
- removal of the sharing factor and a cost pass-through approach could lead to more inefficient spend
- the cost disallowance mechanism could cause BSUoS charges to become more volatile
- the ESO may not be able to absorb a large incentive penalty, and may therefore be unfinanceable.

One stakeholder, while supportive of our proposals in general, noted that they considered it a priority that the future price control should provide effective checks to ensure there is no inappropriate cross-subsidisation of gas and electricity system operators. We consider that our cost assessment will be central to providing transparency around the efficiency and appropriateness of the ESO's spend.

Sharing Factor

The summary in Chapter 7 of this document represents the range of stakeholder views expressed.

Mechanisms to manage risk - parent company guarantee, insurance premium, industry escrow or capital facility

The summary in Chapter 7 of this document represents the range of stakeholder views expressed.

Cost Disallowance Mechanism

The sentiments expressed by stakeholders are reflected in the risks outlined above and in the main summary in Chapter 7. In addition, one stakeholder suggested the disallowance mechanism should be extended to disallow any costs associated with the gas sector. As part of our ongoing development of the cost assessment framework we will be considering shared services and dual-fuel costs. We will take this consideration on board as part of this policy development.

ESOQ14. Do you agree with our proposals to retain an innovation stimulus for the ESO, but tailor aspects of this innovation stimulus to take account of the nature of the ESO business?

There were 12 responses to this question, with stakeholders broadly supportive of our proposal to retain an innovation stimulus for the ESO. The main caveat emphasised was that this stimulus should be tailored specifically to the ESO. The summary in Chapter 5 captures the range of stakeholder views posed.

ESOQ15. What ESO-specific issues should we consider in the design of the ESO innovation stimulus package?

There were 10 responses to this question, however some stakeholders provided similar responses as to ESOQ14. Stakeholders suggested we should: consider recovering funds through BSUoS; build upon the ESO's unique role in the energy market; provide stakeholders with increased transparency; and ensure the ESO does not receive double rewards as a result of innovation funding.