



REGULATORY ALTERNATIVES FOR THE NATIONAL ENERGY SYSTEM OPERATOR

A report for Centrica plc



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9A. Overview80



1 Introduction and executive summary

The National Energy System Operator (NESO) is set to play a crucial role in the future energy system. Proposals for its regulatory framework have developed rapidly since the Government and Ofgem's April 2022 Decision to establish it (then known as the Future System Operator, or FSO). The establishment of an independent NESO was deemed necessary to drive progress towards net zero while maintaining energy security and minimising costs for consumers, which the Government's Impact Assessment (IA) found to be beneficial in cost-benefit terms. However, the current proposals raise concerns around the incentive power on the NESO, as well as the recourse options available to energy market stakeholders. This could lead to significant consumer detriment compared to the IA, if not remedied. Therefore, Centrica has asked us to consider and develop regulatory alternatives for the NESO, which are consistent with the Government and Ofgem's current policy proposals and proposed licence conditions, but which would mitigate the risk of material consumer detriment arising.

1A. Background

The NESO is set to play a crucial role in the future energy system, helping to: (i) drive progress towards net zero; (ii) maintain security of supply; (iii) minimise costs to consumers; (iv) provide impartial advice to the Government; and (v) ensure a 'whole systems' approach to network planning, driving competition across the energy sector.¹

¹ *'Future System Operator - Government and Ofgem's response to consultation.'* BEIS and Ofgem (April 2022).

THE NESO WILL TAKE ON A RANGE OF ROLES ACROSS THE ENERGY SYSTEM.

Accordingly, the NESO has been given a range of duties under the Energy Act 2023 which govern how it carries out its functions and it will take on the following roles (illustrated in Table 1), as well as potentially additional ones.

Table 1: NESO roles

Role	Description
Electricity	The NESO will continue delivering the existing roles currently carried out by NGESO (National Grid Electricity System Operator), ² whilst also promoting a new approach to system operation enabling the success of net zero.
Gas	<p>The NESO will take on gas strategic planning, gas forecasting, and market strategy functions.</p> <p>For the NESO to fulfil its gas functions, the Government and Ofgem have proposed that the NESO becomes a new class of signatory in the Uniform Network Code (UNC). This would include being able to provide modification proposals and representations, as well as a representative to the UNC Panel.</p>
Advisory	Over the coming years, the Government and Ofgem will make important policy and regulatory decisions across many areas of the energy system to ensure progress towards net zero, which would benefit from the expertise of the NESO. Section 171 of the Energy Act 2023 places an obligation on the NESO to comply with requests for the provision of advice, analysis, or information from Ministers or Ofgem.
Energy Resilience	The NESO will take on a whole energy system role to understand and plan system security and resilience across electricity and gas and the interactions between them.
National Security	The Secretary of State can direct the NESO to take, or not take, certain actions, including where there is a risk relating to national security that may detrimentally impact the resilience, safety, or security of the energy system, or the continuity of essential services.
Whole System Planning Role	The NESO will be responsible for whole system planning. It will do so by way of a Strategic Spatial Energy Plan (SSEP), which will be developed to define the optimal mix and location of generation and energy infrastructure to meet GB forecast demand and net zero targets. The NESO will work with the Government and other parties to develop this plan. The outputs of this plan will clarify the network infrastructure needed to accommodate this generation siting, with further network infrastructure planning subsequently carried out via the Centralised Strategic Network Plan (CSNP). The NESO will be responsible for creating a new CSNP that will provide an independent, coordinated, and longer-term approach to wider network planning in GB to help meet the Government’s net zero ambitions

Source: ‘*Statutory consultation on National Energy System Operator licences and other impacted licences.*’ DESNZ and Ofgem (March 2024).

² Existing NGESO roles include the electricity control centre operations; electricity market development and transactions; and electricity system insight, planning, and network development.

These proposed duties and roles have evolved through various Government and Ofgem consultations, as set out in more detail in Appendix A. The current proposals for the NESO's regulatory framework can be summarised as follows:³

- It will be a **not-for-profit public corporation** owned by the Government (sole shareholder), where the Government will not receive an enduring financial return or be exposed to downside losses.⁴
- It will be funded on a cost-pass-through basis by consumers, using a **100% fast money approach**.
- There will be **no organisational- nor (mandated) staff-level financial incentives**, instead relying purely on **reputational incentives**.
- The NESO will be **licensed and regulated by Ofgem**, where financial regulation will be on an actual, rather than a notional basis.
- The **Business Plan (BP) process will be streamlined**, with a focus on key priorities.

1B. Overview

Key issues

The proposals set out above for the regulatory framework for the NESO are a marked change from how NGESO was regulated.⁵ These changes give rise to the following concerns:

- **The NESO may not be focused on undertaking the right activities.**
- **The NESO may face low / no incentive power to outperform on cost and quality.** This is because:
 - **The initial contract (i.e. the BP) may be mis-specified** relative to the needs of consumers and network / system users, due to the proposed light touch approach. Here, the NESO may not focus on the 'right' outcomes, outputs, or service levels. Additionally, it may not choose the most effective approach for delivering the outcomes and / or the associated costs may be inefficient.
 - **Low overall incentive power to outperform the initial contract**, due to the current regulatory framework proposals set out above. This may further lead the NESO to overspend (relative to its BP), with quality stagnating or declining. Additionally, the NESO may increase the scope of its activities, without added benefits for wider energy market stakeholders or consumers.

³ *'Statutory consultation on National Energy System Operator licences and other impacted licences.'* DESNZ and Ofgem (March 2024); page 20.

⁴ *We note that financial reporting principles will still apply to such corporations. Specifically, the NESO will have to comply with applicable requirements in the Companies Act 2006.*

⁵ *This is not surprising, given the NESO will be a publicly-owned, not-for-profit company, whereas NGESO is a privately-owned, for-profit company.*

Thus, against the above concerns, Centrica has commissioned Economic Insight to consider the following questions:

- **How well do the current proposals meet the Government's stated aims for the NESO, and are there potential alternatives, which would better meet those aims?**
- **What consumer detriment may arise, where the NESO's incentives are not sufficiently strong?**

Key findings

To help answer the above questions, we have used the following approach:

- First, we have reviewed the regulatory framework and governance of 30 organisations, to help inform regulatory alternatives and means of recourse for the NESO. Additionally, we have used economics first-principles, and our knowledge of other regulatory frameworks, to identify and consider alternative arrangements to those currently proposed.
- Second, to estimate the consumer detriment arising from Ofgem / Government proposals, we have followed the Government's original impact assessment (IA) approach to benefits estimation for the NESO, to demonstrate the potential detriment arising from a situation where the NESO does not perform strongly (given the lack of incentives).

Regulatory framework

Following from the above, we find that the current proposals for the NESO lack the incentive power for it to do the 'right' things and to subsequently outperform on cost and quality. We identify three alternative options for regulatory models, which would be consistent with the policy direction set out by the Government and Ofgem (and with the proposed licence conditions). All three of our alternative models would provide greater incentive power for the NESO to both do the right things and outperform on cost and quality. Compared to the current proposals, we find that:

- Our alternative models score more favourably than the Government's original proposals and Ofgem's more recent policy options.
- Our alternative Model 1 (high incentive power) scores most highly, due to it being most likely to drive high performance by the NESO. Model 1 places financial incentives on the NESO at an organisational-level, in terms of both its service quality performance and cost efficiency. It also remains consistent with Government and Ofgem's proposals of a not-for-profit company.

Means of recourse

Regardless of what regulatory proposals the Government and Ofgem alight on in relation to incentives placed on the NESO, we recommend that they should provide energy market stakeholders with *at least as many options for recourse of equivalent standing under the NESO's regulatory framework, as currently exist under the framework for NGESO*.⁶ In particular, we suggest that the Government and Ofgem should consider the following route of recourse:

Decisions in the business planning stage

- Detailed and timely engagement should be sought from energy market stakeholders in the NESO's BP development. This includes giving energy market stakeholders a means to feed into, and challenge, Ofgem's assessment of the NESO's costs.
- Energy market stakeholders should have the right to appeal Ofgem's determinations on the NESO's BP to the CMA or a separate independent body.

Decisions in the price control operational stage

- Energy market stakeholders should have the right to challenge whether the NESO's actual expenditure is 'uneconomical, wasteful or inefficient' and should be able to assist Ofgem in triggering issuing the NESO with a *Cost Efficiency Notice*.
- The NESO should continue reporting on its performance regularly, in sufficient detail and with sufficient transparency, that gives energy market stakeholders accurate and meaningful information in that regard. Relatedly, a separate body (e.g. NESO Performance Panel)⁷ and Ofgem should continuously review its performance. Performance below expectations in any aspect of the NESO's operations should trigger immediate action by Ofgem.
- Energy market stakeholders should have the right to challenge decisions made by the NESO to an independent body (i.e. the *NESO Review Panel*). This is set out in more detail in Towerhouse LLP's Annex to Centrica's submission.⁸

Additionally, we find that Ofgem could consider introducing **minimum standard levels** into the licence conditions, such that Ofgem or affected stakeholders would be able to enforce them.⁹ This would help drive quality of service elements of the NESO.

⁶ *The recourse options do not need to be equivalent, but their effect needs to be so. For example, where energy market stakeholders were previously able to appeal Ofgem BP Determinations to the CMA, a recourse option of equivalent standing must exist. This could take the form of stakeholders being able to appeal Ofgem BP Determinations to a separate independent body instead, if not the CMA.*

⁷ *Or the NESO Review Panel, as we understand it, Towerhouse LLP suggests that the NESO Review Panel also takes on the ESO's Performance Panel roles. See: 'Annex to Centrica Submission: A Model for Establishing an Expert Review Panel to Enhance NESO's Accountability and Decision Making Process,' Towerhouse LLP (May 2024); paragraph 37.*

⁸ *'Annex to Centrica Submission: A Model for Establishing an Expert Review Panel to Enhance NESO's Accountability and Decision Making Process,' Towerhouse LLP (May 2024).*

⁹ *For example, Ofgem could either apply an operational performance regime in the licence (akin to Section 104 in the Communications Act 2003, which allows affected parties to take direct court action if they suffer loss because of breach of licence conditions, subject to Ofcom's consent), or operational performance obligations in the codes to which NESO is subject and to which affected parties are signatories. We set this out in more detail subsequently in Chapter 4.*

Consumer detriment

Finally, building on the Government's IA of the NESO, we note that, where the NESO does not perform as well as expected, this could amount to a £1.6bn consumer detriment. This arises due to the foregone cost savings (across the whole energy system) from NESO's underperformance arising from the lack of incentive power in the Government and Ofgem's proposals.

1C. Structure of this report

We provide more details on the above in the following sections of the report.

- Chapter 2 summarises the evidence we relied upon to help us develop the alternative regulatory models.
- Chapter 3 identifies a range of alternative regulatory models, designed to ensure that the NESO is appropriately incentivised to deliver high quality outcomes at an efficient cost, to the long-term benefit of consumers and the environment.
- Chapter 4 sets out the recourse options that the Government and Ofgem ought to provide for the NESO.
- Chapter 5 estimates the consumer detriment arising from the Government and Ofgem's proposals.
- Appendices provide more details on: (a) the evolution of the regulatory proposals for the NESO; (b) our review of other organisations' governance and regulatory arrangements; (c) how negotiated settlements could work in practice; as well as (d) how the currently proposed options for recourse for the NESO compare to the NGESO's.

2 Review of regulatory governance and funding arrangements

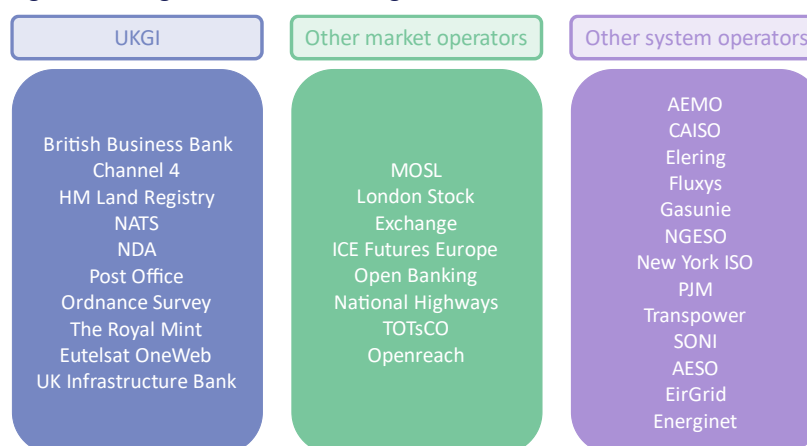
This Chapter summarises our review of 30 organisations with similar characteristics and / or objectives to the NESO, to help us inform our alternative regulatory options, as set out in Chapter 3. We find that the current proposed approach to regulating the NESO (which lacks financial incentives) appears to be something of an outlier, when compared to the other organisations we reviewed, including other system operators.

2A. Overview

This Chapter sets out a summary of the key findings from our review of 30 organisations with similar characteristics and / or objectives to the NESO. We have reviewed their regulatory framework; governance; and incentive arrangements, to gain deeper knowledge of the approaches applied, and to help us better understand and evaluate the currently proposed approach to the regulation of the NESO (in appropriate context). In turn, this has also helped inform our approach to developing alternative regulatory models, as addressed in Chapter 3.

As shown in Figure 1, we have classified the organisations we reviewed into: (i) UK Government Investments (UKGI) organisations; (ii) other market operators; and (iii) other system operators (of which some are outside the UK).

Figure 1: Categories of reviewed organisations



Source: Economic Insight

For each organisation included in our review, we collected information as to its: (i) ownership; (ii) funding; (iii) profit objective; (iv) organisational-level financial incentives; (v) reporting of financial key performance indicators (KPIs); and (vi) staff-level financial incentives. In the remainder of this Chapter, we summarise the key statistics, which we use to compare and contextualise the currently proposed approach to regulating the NESO. Appendix B provides an in-depth review of the key evidence relied upon.

2B. Summary of key findings

Given the importance of the NESO to the energy system, the limited mandatory incentives on it, relative to comparators, are notable. Specifically, as illustrated in Table 2 overleaf:

- 60% of reviewed organisations have *some* form of organisational-level financial incentives (such as the *ability to make a profit*);
- 73% apply short-term financial incentives as part of their staff remuneration package; and
- 40% apply long-term financial incentives as part of their staff remuneration package.

In summary, most organisations have financial incentives, at the organisational- and / or staff-level, even when they are state-owned, or operate on a not-for-profit basis. Therefore, it would appear that the current proposals for regulating the NESO are an outlier, when viewed in context (although we accept this is a matter of degree).

Accordingly, in the following Chapter, we explore alternative regulatory frameworks, which are intended to demonstrate how greater incentive power could be applied to the NESO, without compromising the Government and Ofgem's policy decisions regarding the organisational design of the NESO, nor the currently proposed licence conditions.

'Most organisations have financial incentives, at the organisational- and / or staff-level, even when they are state-owned, or operate on a not-for-profit basis.'

Table 2: Comparison of incentive structure findings from Economic Insight review and proposed incentives on the NESO

		Funding	Profit objective	Organisational-level financial incentives	Staff-level financial incentives	
NESO Ofgem Proposal		Pass-through (regulated)	Not-for-profit	Not envisaged (but possible)	Not mandated (but possible)	Not mandated (but possible)
Organisation type	N	% regulated revenues	% not-for-profit	% ability to make a profit	% short-term incentives	% long-term incentives
UKGI	10	20%	20%	80%	90%	70%
Other market operators	7	14%	43%	57%	57%	43%
Other system operators	13	85%	54%	46%	69%	15%
Total	30	47%	40%	60%	73%	40%

Source: Economic Insight analysis



3 Alternative regulatory models

This Chapter identifies a range of alternative regulatory models, designed to ensure that the NESO is appropriately incentivised to deliver high quality outcomes at an efficient cost, to the long-term benefit of consumers and the environment. In turn we: (i) provide an overview of our alternative models; (ii) set out each alternative model more fully; (iii) explain the compatibility of our models with current policy direction and proposed licence conditions; and then (iv) evaluate the models, including Ofgem's own proposals, against the regulator's evaluation framework.

3A. Overview of alternative models

We have developed three alternative regulatory models that could be applied to the NESO. In each case, they are intended to address the potential problems that could arise under the current proposed approach – namely, a lack of sufficient incentives to ensure that the:

- Initial contract is '*right*' (by which we mean the NESO's BP focuses on doing the '*right things*', to the '*right standard*' and at an '*efficient cost*').
- NESO subsequently seeks to outperform / drive improved performance against its Plan over time (including by achieving further efficiencies).

Setting the initial contract

In relation to the first of the above issues, the options for incentivising a well-specified BP (the initial contract) can be somewhat decoupled from the ongoing regulatory model, and so are common across our three regulatory models, set out subsequently. These options can be summarised as follows:

- **Light touch BP review.** This option is included with the intent of it reflecting Ofgem's current indicated direction of travel under its (December 2023) policy consultation. Although the details of this are to be determined, Ofgem has indicated that: (i) the BPs themselves may be '*light touch*'; (ii) it may perform a less detailed up-front assessment of whether the NESO's activities are correct; and (iii) whilst Ofgem will wish to ensure value for money, its assessment of this may be based on '*streamlined information*'.¹⁰ We further note that, under the March 2024 DESNZ and Ofgem licence condition consultation, it would be the case that: (a) the NESO is required to engage with stakeholders when developing its Plans; and (b) Ofgem will review the NESO's Plans and publish a Determination, setting out its views on the priorities, activities and costs proposed within it. We therefore assume this would also apply, under a '*light touch*' approach.
- **Detailed BP review.** This option would be more in line with Ofgem's historical approach to regulating the Electricity System Operator (ESO). For these purposes, we therefore envisage this option would include:
 - The NESO submitting detailed BP to Ofgem for review, and its Plans containing supporting evidence relating to its proposed objectives; activities; and efficiency of costs.
 - Energy system stakeholders being able to make submissions on the NESO's Plans to Ofgem, offering their own view on the proposed objectives; activities; and efficiency of costs.
 - Ofgem evaluating both the evidence submitted by the NESO, and from other stakeholders, and then making its own Determination on the Plan. By this, we mean Ofgem itself could *impose its own judgement* in relation to objectives; activities; and efficiency of costs (in place of those submitted by the NESO), where Ofgem's views differed from the NESO. To be clear, this is distinct from a formal (*ex-ante*) price control, whereby a regulator makes a price determination in its entirety. Rather, it is merely envisaged that Ofgem's critical review of the evidence is detailed and, in specific instances where the regulator disagrees with the NESO, it is able to overwrite the relevant element(s) of its Plan.

¹⁰ '[Consultation on the policy direction for the Future System Operator's regulatory framework](#),' Ofgem (December 2023); page 18.

- **Negotiated settlement.** Under this option, the NESO would outline a shortlist of ‘packages’ that it could deliver under its Plan. This would include different combinations of: (i) outputs delivered (priorities); (ii) quality to be achieved; and (iii) costs incurred. These options would then be put to consumer and network / system user representatives as a starting point, who would negotiate with the NESO until a final package was arrived at that was deemed acceptable to the NESO and the representatives. Whilst negotiated settlement approaches come with certain practical challenges, they are by no means insurmountable (and, in this case, the approach may have several advantages). For example, the Civil Aviation Authority’s (CAA) *Constructive Engagement* (CE) process for aviation economic regulation has required the airport operator to discuss its BP with the airlines, before the CAA reaches a decision on the appropriate price control.¹¹ A fuller description of how the NESO’s Plan might be set via negotiated settlement is set out in Appendix C.

STAKEHOLDER ENGAGEMENT
IS KEY TO ENSURE THE INITIAL
CONTRACT IS WELL SPECIFIED.

We have considerable reservations regarding the ‘light touch’ BP review option. Whilst it includes stakeholder engagement on the NESO’s Plans, and a review of them by Ofgem, ultimately the approach largely gives the NESO significant latitude to put forward the priorities; activities; and costs it considers appropriate, with relatively limited scrutiny. Both the ‘detailed’ review and ‘negotiated settlement’ options would address this concern. For the purpose of subsequently evaluating our proposed alternative regulatory models (set out in the following) we assume that the ‘detailed BP review’ option is used.

Relevant assessment period

Finally, any of the above options to agree an initial contract needs to do so over a ‘relevant assessment period’. Intuitively, this would need to be a period of time spanning multiple years, to:

- appropriately incentivise and measure performance; and
- avoid short-termism (i.e. avoid incentivising cost ‘cuts’, rather than efficiency).

‘The relevant assessment
period would intuitively
need to be a period of time
spanning multiple years.’

¹¹ See: ‘*Strategic themes for the review of Heathrow Airport Limited’s charges (“H7”) A discussion document*,’ CAA (March 2016); Chapter 5. We note that under the CAA’s CE process, the regulator still reaches the final decision. In a negotiated settlement as set out in Appendix C, the agreement is reached between the NESO and the representatives and is then binding. The regulator would only have a role where the NESO and the representatives are unable to reach an agreement.

This might imply the NESO having to develop BPs that span multiple years (rather than the current annual proposals), or the NESO developing binding longer-term strategic plans, alongside annual plans. On the former, we note that the proposal to have annual BPs stands at odds with the following:

- At RIIO-2, Ofgem proposed (and decided on) a two-year business planning cycle for the ESO. The regulator considered this provided sufficient flexibility “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.”¹²
- Notwithstanding Ofgem’s RIIO-2 decision above, various stakeholders (including the ESO itself) argued for *longer* business planning cycles. Key reasons stakeholders favoured longer business planning cycles included shorter cycles: (i) placing greater administrative burden on the ESO, Ofgem, and the wider industry; (ii) encouraging short-term thinking; and (iii) causing unnecessary complexity and uncertainty.¹³
- In line with reasons provided by various stakeholders at RIIO-2, we consider that longer business planning cycles reduce the burden both on Ofgem and stakeholders and could lead to better engagement and challenge from the latter.
- Looking ahead at the requirements placed on the NESO by the Government and Ofgem, again, these tend to lend themselves to longer business planning cycles. For example, we note that: (i) the proposed licence conditions require the NESO to develop various Plans (FEP, SSEP, CSNP, etc.)¹⁴ that are to be submitted in three-year cycles; and (ii) that the NESO’s focus on a whole system-view and the long-term suggests multi-year business planning cycles might be more appropriate.

Incentivising ongoing performance against the contract

Irrespective of how the initial contract is set (i.e. the Plan is approved) or for how long (i.e. the ‘relevant assessment period’), the incentivisation of the NESO’s performance against that contract going forward is crucial. As such, the three alternative regulatory models we have developed each seek to do this, but in slightly different ways and with different points of emphasis. In developing them, we have ensured they are each compatible with: (i) Ofgem’s consulted policy options;¹⁵ and (ii) DESNZ and Ofgem’s consulted licence conditions.¹⁶ Hence, there is no legislative or policy impediment that would, at this junction, preclude them.

¹² [‘RIIO-2 Sector Specific Methodology Decision and further consultation - Electricity System Operator.’ Ofgem \(May 2019\); paragraphs 3.5.](#)

¹³ [‘RIIO-2 Sector Specific Methodology Decision and further consultation - Electricity System Operator.’ Ofgem \(May 2019\); paragraphs 3.10-3.11.](#)

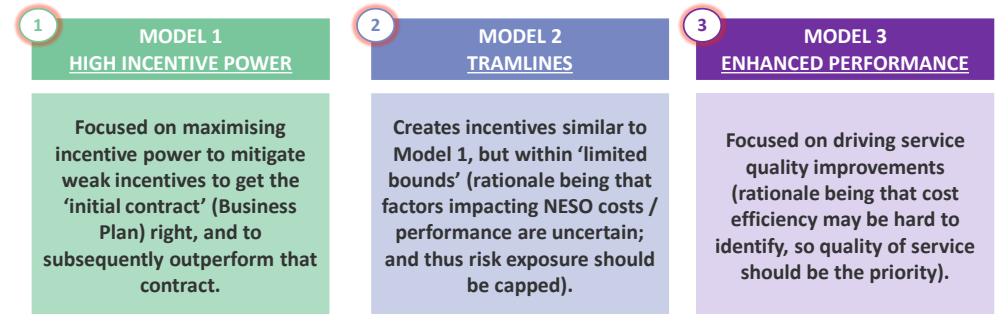
¹⁴ [‘Annex E – Electricity System Operator Licence Conditions.’ DESNZ and Ofgem \(March 2024\); Condition C15, Condition C16, and Condition C17; ‘Annex G – Gas system Planner Licence Conditions.’ DESNZ and Ofgem \(March 2024\); Condition C10, Condition C11, and Condition C12.](#)

¹⁵ [‘Consultation on the policy direction for the Future System Operator’s regulatory framework.’ Ofgem \(December 2023\).](#)

¹⁶ [‘Statutory consultation on National Energy System Operator licences and other impacted licences.’ DESNZ and Ofgem \(March 2024\).](#)

Figure 2 summarises our alternative regulatory models, which we set out more fully in the subsequent sections.

Figure 2: Overview of alternative regulatory models

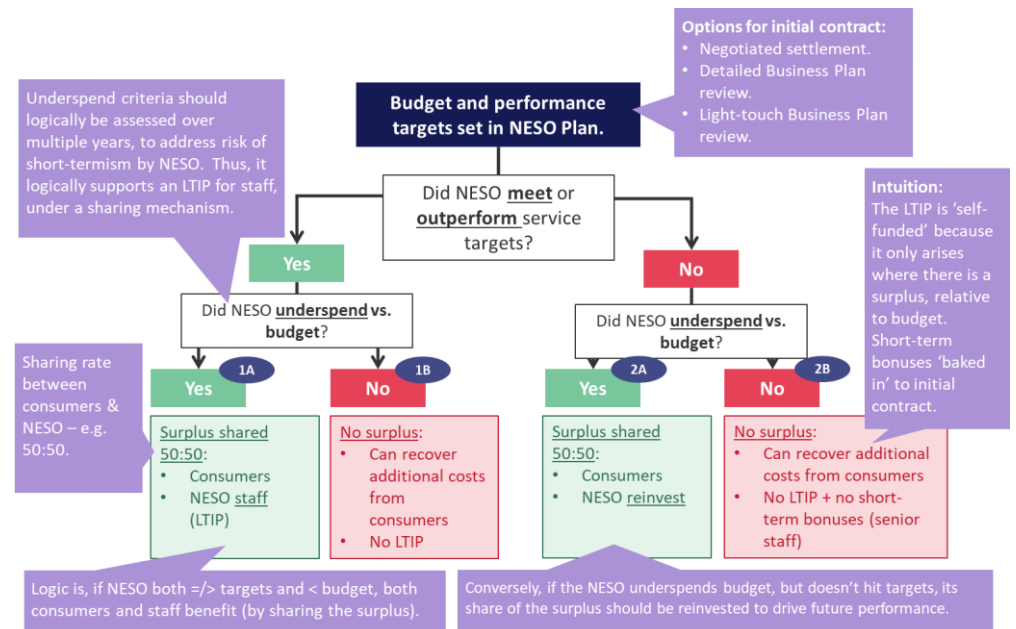


Source: Economic Insight

3B. Model 1: high incentive power

Our first model, 'high incentive power', places financial incentives on the NESO at an organisational-level, in terms of both its service quality performance and cost efficiency. In addition, it has staff-level incentives in the form of both an LTIP (long-term incentive plan) and shorter-term bonuses (the former funded entirely from any operational surplus, should one arise; and the latter being budgeted for 'in Plan'). Figure 3 illustrates the model, and in the passages below we briefly expand on how it would function.

Figure 3: Illustration of 'high incentive power' model



Source: Economic Insight

Once the NESO's initial contract is set (i.e. there is an agreed BP, with associated performance targets and budgeted costs across all of the NESO's roles), the regulatory model acts to incentivise the NESO to outperform against that. The model would work such that, at the end of the 'relevant assessment period', the NESO's performance would

be evaluated, both in relation to whether it had: (i) out / underperformed against service targets in its Plan; and (ii) under / overspent against costs budgeted for in its Plan. That assessment would then determine how benefits were shared between the NESO (including its staff) and consumers. Four outcomes are possible (as highlighted in the above figure), following from that assessment:

- **1A.** If the NESO **meets or outperforms** its service quality targets, and the NESO has also **underspent** against its Plan costs, this means the organisation will have accumulated a financial surplus over said assessment period. In that event, the financial surplus would be shared between consumers (in the form of reduced bills) and NESO staff, via an LTIP.
- **1B.** If the NESO **meets or outperforms** its service targets, but has not underspent (i.e. either spent in line with Plan costs, or **overspent**), there is, by definition, no financial surplus. As the NESO is funded by consumers on a cost-pass-through basis, any *additional* costs (where it is overbudget) are recovered from consumers. However, the absence of a financial surplus means staff do not benefit from an LTIP (i.e. the NESO itself does not benefit, because it has not delivered cost efficiencies).
- **2A.** If the NESO **underperforms** on its service targets, but **underspends** relative to its Plan, again a financial surplus will have arisen (over the assessment period). This would again be shared between consumers and the NESO. However, rather than the NESO's share of the surplus being paid to staff in an LTIP, in this instance the NESO would be required to reinvest it, to reflect the fact that service targets had not been met (i.e. the reinvestment is intended to boost future performance).
- **2B.** If the NESO **underperforms** on its service targets, but also has not underspent relative to its Plan (i.e. has spent in line with its Plan, or **overspent**) no surplus will have arisen. In this case, again, any additional costs incurred over and above those in the Plan are funded by consumers on a cost-pass-through basis. Further, absent a surplus, the NESO does not benefit via the staff LTIP (or the ability to reinvest).¹⁷ Finally, as this outcome reflects poor performance (both under delivery and no additional cost efficiency) NESO staff would forego short-term bonuses (which would have been budgeted for, and funded, under its Plan). In that eventuality, the 'budgeted' short-term bonuses would be returned to consumers.

Further to the above outcomes, we note that where the NESO has been found to breach any of its licence conditions, no benefit-sharing would occur. That is, where the NESO would be in category 1A or 2A, all surplus would go to consumers.

This proposed model has a number of similarities with the regulatory framework and funding arrangements that apply to Welsh Water, as highlighted in the case study overleaf.

¹⁷ Because, by definition, absent a financial surplus, there is nothing to be 'shared' with the NESO.

Box 1: Welsh Water case study - A not-for-profit company subject to incentive regulation

Welsh Water is the water and sewerage provider for most of Wales. Since 2001, it has been wholly owned by *Glas Cymru*, a single-purpose not-for-profit company with no shareholders, created to own and run Welsh Water “for the benefit of its customers”. Like other English and Welsh water companies (the rest of which are shareholder-owned for-profit companies), it is regulated by Ofwat through a common framework of incentive regulation, where returns are linked to efficiency and performance.

Charges to customers (i.e. water bills) are capped, and set up-front for five-year control periods, via a “price review”. This sees Ofwat conduct: (i) a detailed review of the companies’ proposed BPs; and (ii) its own assessment of efficient costs.

During the price control, any under- or overspend relative to Ofwat’s allowances is directly shared (generally 50:50) with customers, with the difference recovered via water bills.

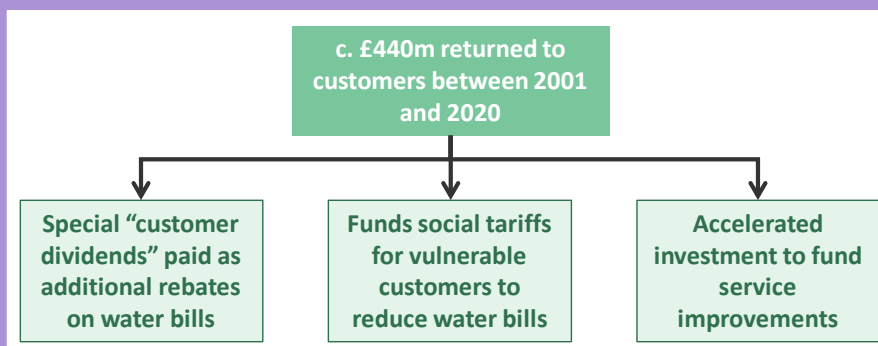
Ofwat also sets, and monitors, the company’s performance against a suite of “Performance Commitments”. Some of these are reputational only, but around 15 to 20 of them are financial. These automatically increase companies’ charges, if they outperform their targets, and reduce bills if they underperform. Examples include leakage levels; supply interruptions; and overall customer satisfaction.

Being not-for-profit, in the event of out / under performance, the financial incentives upon Welsh Water function in a manner similar to our proposed ‘high incentive power’ model for the NESO.

Out / under performance

Specifically, where Welsh outperforms its allowed revenues (costs) its parent company shares the benefit of that with customers. The companies’ share is then retained or reinvested, with a proportion its share also being used to benefit and incentivise its staff, through long-term and short-term performance-related pay schemes (which are directly linked to customer outcomes including performance against their Performance Commitments, discussed above).¹⁸

Figure 4: Benefits returned to customers between 2001 and 2020 by Welsh Water



Source: Said Business School¹⁹

¹⁸ ‘Annual Corporate Governance Report,’ *Glas Cymru* (March 2023); pages 173-194.

¹⁹ ‘Welsh Water: A Model for the Purposeful Ownership of a Utility?’ Said Business School (January 2021); page 10.

Licence breaches

Alongside the automatic incentives built into Ofwat's price controls, Welsh Water is also subject to Ofwat's enforcement regime, which allows the regulator to impose fines where a company is found to have breached its licence obligations.

In 2024, Ofwat found that Welsh Water had breached its licence obligations by reporting erroneous information related to leakage and water consumption.²⁰ As a result of this licence breach, Ofwat concluded it would be appropriate to impose a penalty worth around £15m on Welsh Water. However, the regulator chose to reduce this penalty to a nominal value of £1, on the grounds that Welsh Water had voluntarily committed to a package of customer redress worth £40m, made up of (i) direct rebates to customers and (ii) additional costs being "absorbed by Welsh Water", rather than passed on to customers.²¹ As a not-for-profit company, this package is funded by Welsh Water's shareholder capital, meaning that the benefit customers receive today is paid by the retained earnings of Welsh Water, such as the company share of historical outperformance and reward payments.

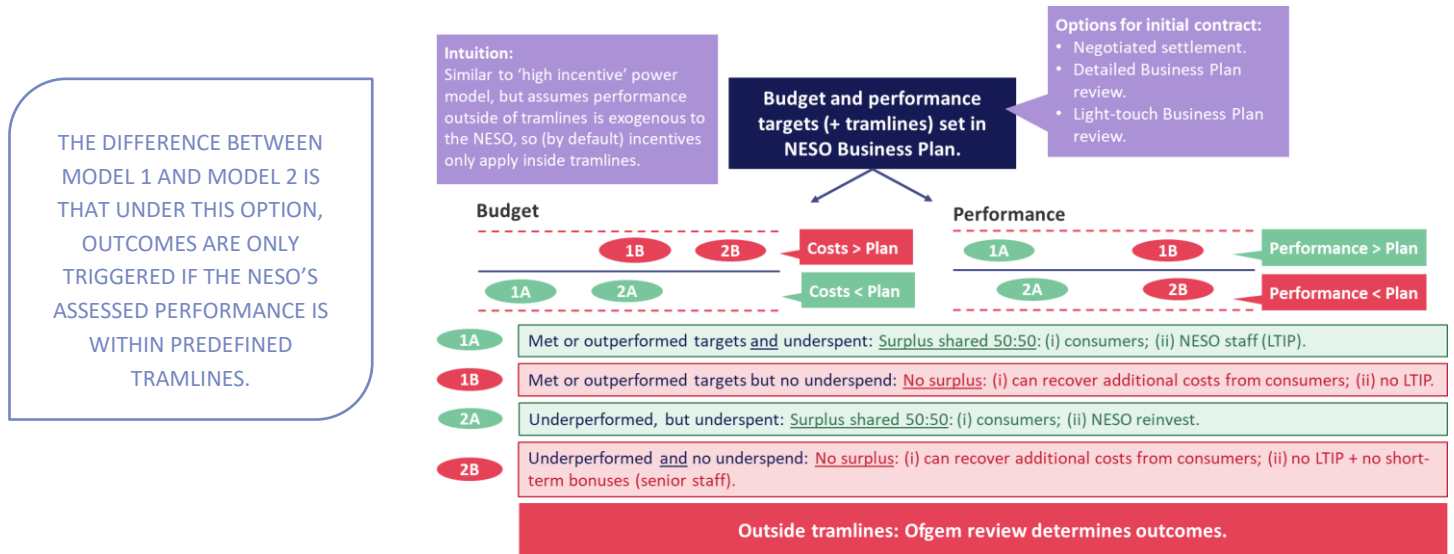
3C. Model 2: tramlines

As with all our models, Model 2 starts from the initial contract (i.e. the NESO BP) being agreed through one of the options set out previously, and then incentivises future performance relative to that. Model 2 effectively works in the same manner as Model 1, other than the incentives *only apply when the NESO's performance is within certain 'tramlines'*. Tramlines would be defined both in relation to: (i) service quality (i.e. points above / below the NESO's service quality targets); and (ii) costs (i.e. extent of spend above / below that budgeted for in the NESO's Plan). Figure 5 provides an illustration of the tramlines model, which we briefly expand on in the following.

²⁰ ['Welsh Water to pay £40 million following Ofwat investigation', Ofwat press release \(14 March 2024\).](#)

²¹ ['Enforcement case into Dŵr Cymru / Welsh Water \('Welsh Water'\) about the accuracy of its reported leakage and per capita consumption \('PCC'\) performance', Ofwat \(updated 14 March 2024\).](#)

Figure 5: Illustration of ‘tramlines’ model



Source: Economic Insight

As with Model 1, under Model 2, the NESO’s performance would be evaluated at the end of the ‘*relevant assessment period*’ (in relation to service quality and costs, relative to its Plan). Again, as per Model 1, depending on the outcome of that assessment, four outcomes are possible (which we do repeat here, but are denoted: 1A; 1B; 2A; and 2B in the above figure). Similarly, where the NESO has been found to breach any of its licence conditions, no benefit-sharing (under outcomes 1A or 2A) would occur. What differs from Model 1, however, is that under this option, those outcomes are only triggered *if the NESO’s assessed performance is within the predefined tramlines* (the dotted red lines in the figure). Also as per Model 1, and consistent with the NESO being consumer funded on a cost-pass-through basis, all cost overspends are recoverable from consumers.

Where performance lies *outside* of the tramlines (either positively or negatively), this implies that the NESO’s performance has varied significantly from its Plan (either in terms of service quality, cost, or both). Where this occurs, the **default position** would be:

- In the event of **material overspends** beyond the tramlines (where, by definition, no financial surplus arises), whilst the NESO can recover those costs, no short-term bonuses are payable to the NESO's staff,²² *irrespective of service quality performance*.
- In the event of **material underspends**,²³ the resultant financial surplus shall be shared between customers and the NESO at the % sharing rate. However, in the event of service quality targets being met, the NESO's surplus share allocated to staff via the LTIP is capped in line with the underspend tramline, with its remaining share being reinvested, *irrespective of service quality*.
- In the event of **material underperformance** on service quality (below the tramlines), no short-term bonuses are payable to the NESO's staff, *irrespective of expenditure, relative to budget*.
- In the event of **material outperformance** on service quality (beyond the tramlines), the outcome is as per Figure 5 (i.e. it depends on whether there is any financial surplus to be shared).

Whilst the above would be the *default positions*, performance outside of the tramlines would also trigger a review by Ofgem, to determine the primary reasons for the material variation. This is because said variation should be regarded as '*atypical*' and worthy of investigation. Ofgem's review should include considering whether the variation was due to:

- Unusually and exceptional good, or bad, performance by the NESO (i.e. factors within the NESO's control, impacting service quality or cost).
- The NESO's *Plan being mis-specified* in the first place.
- Exogenous events once the Plan was agreed that either aided, or impaired, the NESO's performance (i.e. factors outside of the NESO's control, impacting service quality or cost).

Depending on the outcome of that review, Ofgem could then depart from the default positions outlined above. For example, say the NESO had materially overspent, where (by default) staff would not receive short-term bonuses.²⁴ If Ofgem's review found that this occurred for reasons outside of the NESO's control, it might determine that short-term staff bonuses should, in fact, be paid. Such a review process should be transparent, with energy system stakeholders able to make representations to Ofgem on the evidence.

This proposed model has some similarities with the regulatory framework and funding arrangements that apply to Scottish Water, as highlighted in the case study overleaf.

²² Noting that no LTIP arises by definition without a financial surplus, as the LTIP is funded out of said surplus.

²³ We note that under the wider regulatory framework, Ofgem will likely apply reputational incentives around forecasting accuracy, whilst the NESO is also bound under the proposed licence conditions to provide accurate forecasts. Additionally, we note that any surplus arising from the underspend beyond the tramlines will be reinvested (even where the NESO outperformed).

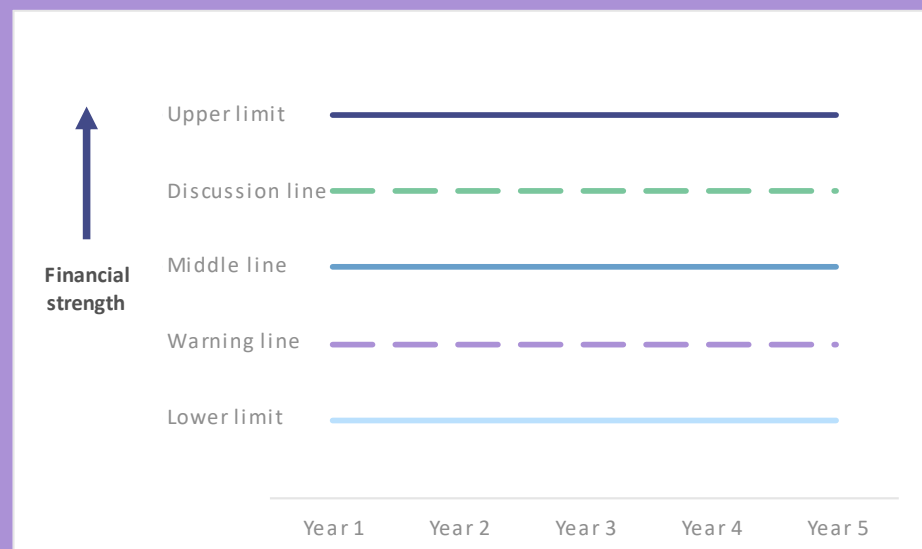
²⁴ Noting separately that, absent a surplus, by definition, no LTIP arises.

Box 2: Scottish Water case study – A State-Owned Corporation regulated via tramlines

Scottish Water is the state-owned water and wastewater company in Scotland. It operates as an arms-length “statutory corporation”, funded by water bills, with a regulatory framework overseen by the Water Industry Commission for Scotland (WICS).

Ahead of the 2015-2021 price control, WICS introduced the concept of “*financial tramlines*” as a framework for monitoring financial performance and returning benefits of financial outperformance to customers in a timely fashion. The model is summarised in the figure below. Performance above the “*upper limit*” is shared with customers, whilst performance below the “*lower limit*” triggers interventions by the regulator and Government, e.g. to change charges, and / or delay capital investments.²⁵ The intermediate warning / discussion initiates dialogue with the regulator and stakeholders on how to improve performance or return benefits to customers.

Figure 6: Illustration of ‘financial tramlines’ model



Source: WICS

WICS considered that this framework provided Scottish Water a stronger incentive to outperform its regulatory settlement, since the company (rather than the regulator) delivers extra benefits to customers, enhancing its reputation.²⁶

Ahead of the 2021-27 price control, WICS decided to retain, but reform, the tramlines approach for the next period – mainly simplifying them with respect to its assessment of financial strength²⁷ and reducing the impact of exogenous factors on Scottish Water’s performance against them.²⁸

²⁵ ‘Strategic Review of Charges 2015-21: Innovation and choice’, WICS (May 2013), pages 58-60.

²⁶ ‘Strategic Review of Charges 2015-21: Innovation and choice’, WICS (May 2013), page 57.

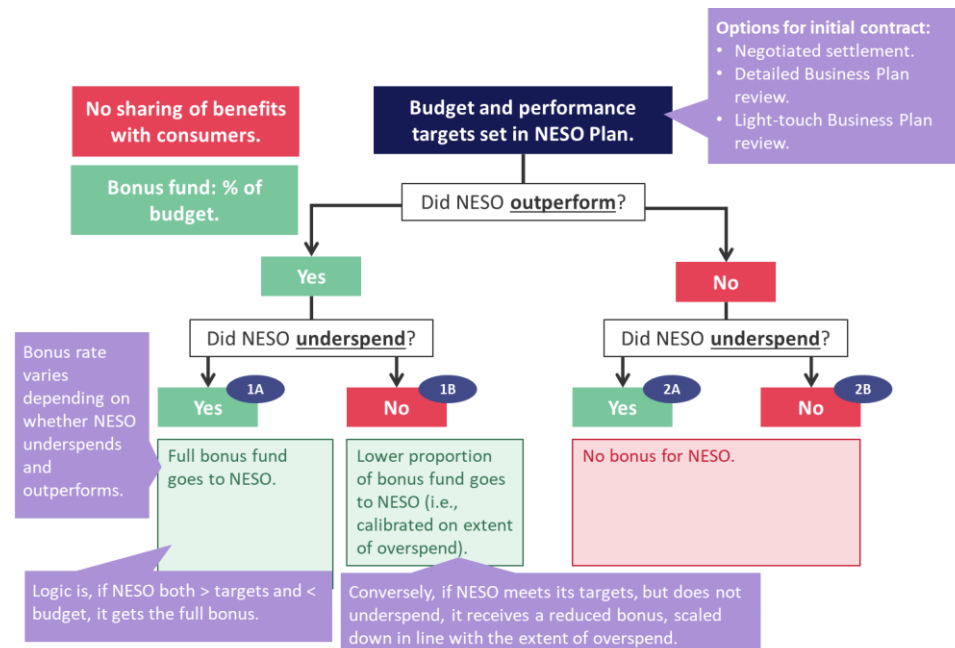
²⁷ ‘Decision paper 7: Financial Tramlines’, WICS (November 2018), pages 6-7.

²⁸ ‘Decision paper 7: Financial Tramlines.’ WICS (November 2018); pages 7-8.

3D. Model 3: enhanced performance

As per Models 1 and 2, Model 3 would start from an approved BP. Going forward, the approach under Model 3 is different from that for 1 and 2, in that its primary focus is on *driving service quality performance of the NESO*. The rationale for this model is that: (i) one might take the view that the distinction between cost efficiency and cost cuts is sufficiently unclear that it is not appropriate to incentivise cost savings; and / or (ii) service quality (and the investment needed to achieve it) is more important than cost efficiency. Figure 7 summarises the approach, which we subsequently expand on.

Figure 7: Illustration of ‘enhanced performance’ model



Source: *Economic Insight*

Following from the above, under this model there is a single staff performance-related bonus scheme (i.e. unlike Models 1 and 2, there are not separate LTIP and short-term staff bonuses). The budget for the bonus would be included within the NESO’s BP and could be set based on a percentage of the base salary bill of the NESO, for example. From that starting point, and at the end of the ‘*relevant assessment period*’, the NESO’s performance in relation to quality of service (against agreed targets) would be assessed. This would give rise to the following possible outcomes:

- **1A.** In the event that the NESO **met or outperformed** its service performance targets, and did so **without exceeding** its budget, it would retain (and staff would be paid) the budgeted bonus *in full*.
- **1B.** In the event that the NESO **met or outperformed** its service performance targets, but **exceeded** its budget, it would only retain (and staff would only be paid) a *proportion* of the budgeted bonus. Effectively, the total size of the bonus would reduce by some amount, in proportion to the overspend. The difference between the budgeted bonus (which will have been reflected in the NESO's charges) and the bonus that it is allowed to retain, would then be returned to consumers.
- **2A and 2B.** In the event that the NESO **does not meet its service performance targets**, it does not retain (and staff would not be paid) the budgeted bonus. The budgeted bonus would thus be returned to consumers *in full*.

The box overleaf highlights several case-studies on regulators applying performance monitoring frameworks. These regimes often benefit from a degree of comparative benchmarking. Since the NESO has no direct comparators within GB, one could consider the feasibility of drawing comparisons against: (a) equivalent bodies doing the same task in other countries; and (b) institutions and / or firms doing similar work in other parts of the energy value chain.

Box 3: Performance-focused regulatory and monitoring regimes

Many sectors in the UK public and private sector are subject to performance monitoring regimes, in which regulators or other bodies are tasked with maintaining and improving standards. Of particular relevance to the NESO are public sector organisations subject to monitoring and regulatory oversight even where economic regulation and / or direct financial incentives do not exist:

- **National Highways**, a Government-owned, arm's-length company looking after England's motorways and major roads, is overseen by the Office for Rail and Road (ORR). The ORR acts as its monitor, reporting on its operational and financial performance, and advising the Government on setting targets for it (including efficiency).²⁹ The ORR adjudicates on whether performance shortfalls are due to National Highways' faults or factors outside of its control.³⁰ It is also responsible for enforcement action in the event it finds National Highways is contravening its licence obligations.³¹ As a last resort, the ORR can impose fines.³² Finally, the regulator can initiate an investigation at its discretion, through which it seeks to resolve performance issues without the need for escalating to statutory enforcement action.³³
- **Universities** are subject to two frameworks monitoring teaching and research, the Teaching Excellence Framework (TEF) and the Research Excellence Framework (REF). TEF is overseen by the Office for Students, established in 2018, which publishes results annually based on evidence from surveys ("*student experience*") and data on university graduates ("*student outcomes*").³⁴ Universities are graded Gold, Silver or Bronze. The REF is overseen by Research England, with universities' scores based on the average rating of their research output across a four-grade system, with each grade assessing research against benchmark levels. For instance, the highest, 4* grade, is for work that is "*world-leading in terms of originality, significance and rigour*".³⁵ Since the TEF and REF are run periodically, they allow universities to be compared over time, as well as with one another.
- The Care Quality Commission (CQC) acts as the independent inspector of **hospitals, other healthcare providers and adult social care in England**. It inspects hospitals periodically and assesses them as a whole and department-by-department into four grades from "*inadequate*" to "*outstanding*".³⁶ Where a hospital or department is deemed inadequate, the CQC takes enforcement action.

Notably, many of these performance-focused regimes carry implicit financial incentives delivered through the reputational benefit of good performance. For instance, schools and universities with better performance rankings are likely to attract students, which in turn allows them to raise additional revenues or expand. Hospitals with services rated as outstanding are more likely to attract funding for expansion and / or increased specialisation.

²⁹ '*Holding National Highways to account*.' ORR (accessed April 2024).

³⁰ See, for example: '*Annual Assessment of National Highways' performance*.' ORR (July 2023).

³¹ '*ORR's monitoring framework and enforcement policy for Highways England*.' ORR (March 2020), page 28.

³² '*ORR's monitoring framework and enforcement policy for Highways England*.' ORR (March 2020), page 29.

³³ '*ORR's monitoring framework and enforcement policy for Highways England*.' ORR (March 2020), pages 21-23.

³⁴ '*About the Teaching Excellence Framework (TEF)*.' Office for Students (September 2023).

³⁵ '*About the REF*.' Cardiff University (2021).

³⁶ '*What we do and how we do it*.' Care Quality Commission (2022), pages 6-7.

3E. How the alternative models are compatible with current policy and licence condition proposals

'We consider our alternative options to be compatible with both: (i) Ofgem's consulted policy options; and (ii) DESNZ and Ofgem's consulted licence conditions.'

As noted previously in this Chapter, we consider our alternative options to be compatible with both: (i) Ofgem's consulted policy options;³⁷ and (ii) DESNZ and Ofgem's consulted licence conditions.³⁸ The key ways in which they are compatible are as follows:

- Ofgem's policy options set out that the NESO will operate on a '*not-for-profit*' basis, whereby the Government (the shareholder) will not earn an '*enduring financial return*', nor be exposed to downside losses.³⁹ Similarly, the DESNZ / Ofgem licence condition consultation sets out that (under Condition F1) the NESO should ensure it does not make a '*lasting profit or loss*.'⁴⁰ Under our alternative models, the NESO would remain a not-for-profit entity.⁴¹ Financial incentives at an organisational and staff-level under our alternatives are achieved through: (i) allowing for the *possibility* of short-term financial surpluses, relative to Plan costs (which are shared at the end of an assessment period, ensuring no enduring / lasting profit or loss arises); and / or (ii) short-term staff bonuses being included within the NESO's budgeted costs (thus, their payment, or otherwise, cannot give rise to an enduring / lasting profit or loss).
- Ofgem's policy options set out that the NESO will be funded by consumers '*through a 100% fast money approach*'.⁴² Similarly, the DESNZ / Ofgem licence condition consultation (Condition F3) confirms the intention that consumers will pay on a pass-through basis.⁴³ Our proposed alternatives are agnostic as to '*from where*' funding comes from, and so are compatible with the NESO being consumer funded. The models are also designed such that they would be funded on a fast money approach (i.e. no Regulatory Asset Value (RAV) is envisaged). Additionally, we expect that, even though the funding would be fast money without a RAV, the NESO would have a balance sheet under statutory accounts, including an effective book value of assets, subject to normal accounting standards.

³⁷ '[Consultation on the policy direction for the Future System Operator's regulatory framework](#),' Ofgem (December 2023).

³⁸ '[Statutory consultation on National Energy System Operator licences and other impacted licences](#),' DESNZ and Ofgem (March 2024).

³⁹ '[Consultation on the policy direction for the Future System Operator's regulatory framework](#),' Ofgem (December 2023); page 9.

⁴⁰ '[Statutory consultation on National Energy System Operator licences and other impacted licences](#),' DESNZ and Ofgem (March 2024); page 235.

⁴¹ Additionally, we note that the alternative regulatory models we explored in this Chapter are required to ensure that a not-for-profit entity faces sufficient incentives to be both deterred from underperforming and motivated to outperform. This is because, just being a not-for-profit entity does not ensure those incentives are in place, and our alternatives illustrate how it is possible to be both not-for-profit and face incentives.

⁴² '[Consultation on the policy direction for the Future System Operator's regulatory framework](#),' Ofgem (December 2023); page 9.

⁴³ '[Statutory consultation on National Energy System Operator licences and other impacted licences](#),' DESNZ and Ofgem (March 2024); page 247.

- Under Ofgem’s policy options, the NESO will not need (or have access to) private borrowing.⁴⁴ The DESNZ / Ofgem licence condition consultation (Condition B2) places restrictions on shares and investments the NESO can hold.⁴⁵ None of our models require the NESO to raise external borrowing, nor hold investments.
- Ofgem’s policy options set out that the detailed approach to staff incentives should be a matter for the NESO to decide. However, we note that a licence condition requiring that any remuneration policy reflects Ofgem’s performance assessments may be appropriate.⁴⁶ Consistent with that, the DESNZ / Ofgem licence condition consultation (Condition F7) affords Ofgem the right to approve the NESO’s remuneration policy or direct it to make changes.⁴⁷ Our proposed alternative models (which variously envisage the NESO having: staff LTIP; staff short-term bonus; or overall staff bonus) are compatible with this. Specifically, to implement our alternatives, Ofgem would (in line with Condition F7) merely need to direct (or advise) the NESO that its remuneration policies should have the necessary features so as to allow the financial incentives upon it to function as described under our models 1-3 (and that its approval of said policy would not be forthcoming, absent those features).⁴⁸
- Ofgem’s policy options set out that the regulator expects it will still undertake a scheduled (public) assessment of the NESO’s performance (to ensure robust reputational incentives). However, the regulator envisages this may be more ‘*light touch*’, relative to the approach previously applied to the ESO.⁴⁹ Accordingly, the DESNZ / Ofgem licence condition consultation (Condition G2) sets out that ‘*at the end of each assessment period*’ Ofgem will publish its views on the NESO’s performance over that period.⁵⁰ Our alternative models are consistent with this and, moreover, *require* that an independent assessment of the NESO’s performance is undertaken by Ofgem, in order to determine how the incentives described under our models apply.

In summary, our alternative models as currently proposed in outline form, are compatible with both Ofgem’s policy proposals and the licence condition consultation. Put another way, we do not see the policy or licence condition consultation themselves as being a *prima facie* impediment to adopting any alternative model. However, we do recognise, that the models may vary with respect to ‘*how practical*’ they are to implement within the current proposed policy / licence condition frameworks (particular from a ‘*Day 1*’ perspective).

⁴⁴ ‘[Consultation on the policy direction for the Future System Operator’s regulatory framework.](#)’ Ofgem (December 2023); page 9.

⁴⁵ ‘[Statutory consultation on National Energy System Operator licences and other impacted licences.](#)’ DESNZ and Ofgem (March 2024); page 80.

⁴⁶ ‘[Consultation on the policy direction for the Future System Operator’s regulatory framework.](#)’ Ofgem (December 2023); page 19.

⁴⁷ ‘[Statutory consultation on National Energy System Operator licences and other impacted licences.](#)’ DESNZ and Ofgem (March 2024); page 257.

⁴⁸ For example, Ofgem could direct the NESO to propose an LTIP linked to any financial service and performance against service quality targets, and (consistent with Condition F7) would not approve a remuneration policy without that feature.




































⁴⁹ ‘[Consultation on the policy direction for the Future System Operator’s regulatory framework.](#)’ Ofgem (December 2023); pages 16-17.

⁵⁰ ‘[Statutory consultation on National Energy System Operator licences and other impacted licences.](#)’ DESNZ and Ofgem (March 2024); pages 274-275.

3F. Evaluation of options

We have undertaken an evaluation of our alternative options, relative to those originally proposed by the Government and subsequently by Ofgem, using the objectives identified for the NESO by Ofgem. A summary of our evaluation is presented in Table 3, using a RAG rating approach.

Table 3: Summary evaluation of options

Objective	Government proposals (April 2022 decision)	Ofgem latest policy proposals (Dec 2023 condoc)	Alternative model 1: high incentive power	Alternative model 2: tramlines	Alternative model 3: enhanced performance
Accountability					
	Limited accountability for performance	Limited accountability for performance	Highly accountable for performance against Plan	Highly accountable for performance against Plan	Highly accountable for performance against Plan
Coordinated					
	Somewhat limited incentives to coordinate effectively	Limited incentives to coordinate effectively	NESO strongly incentivised to coordinate effectively	NESO strongly incentivised to coordinate effectively	Coordination incentives limited to Quality of Service
Flexibility					
	NESO readily able to vary scope / costs year-to-year	NESO readily able to vary scope / costs year-to-year	Flexibility reduced over assessment period	Flexibility reduced over assessment period	Flexibility reduced over assessment period
High performance					
	Latitude for incentives on costs and performance	Only reputational incentives envisaged	Org & staff-level financial incentives	Org & staff-level financial incentives	Staff-level financial incentives linked to Quality of Service
Independence					
	NESO fully independent body	NESO fully independent body	NESO fully independent body	NESO fully independent body	NESO fully independent body
Proportionality					
	Highly easy to implement	Highly easy to implement	Moderately easy to implement	Moderately easy to implement	Highly easy to implement
Transparency					
	Light touch BP & review envisaged	Light touch BP & review envisaged	Highly transparent process	Highly transparent process	Highly transparent process
Overall					

Source: Economic Insight

Implications of evaluation

Following from the above, and weighting the NESO's objectives equally, we find that:

- Our alternative models score more favourably than the Government's original proposals and Ofgem's more recent (consulted on) policy options.
- Our alternative Model 1 (high incentive power) scores most highly, due to it being most likely to drive high performance by the NESO.
- Our alternative models 2 and 3 are joint second, under our overall rating. This primarily reflects the fact that they have somewhat less incentive power than Model 1.

Further to the above, it might be reasonable to attach most weight to the 'high performance' objective of the NESO, given the critical role it is intended to play in the future energy system. Were that the case, our evaluation would point more strongly in favour of the alternative models appraised above.

In considering the relative merits of the various options that exist for the regulation of the NESO, it may further be helpful to distinguish between its *'Day 1'* operation, and regulatory options over the longer-term. Whilst we consider that ensuring the NESO delivers high performance should be given high priority, there are implementation costs and challenges associated with the alternative options that do not arise (or arise to a lesser degree) under Ofgem's latest policy proposals. As such, we can see a case for considering a transition period whereby:

- In the first instance, the focus for Day 1 is on successfully establishing the NESO and its roles.
- Further consideration can then be given to the detailed design and implementation of options that will better ensure the NESO is appropriately incentivised to effectively fulfil its critical role in the medium-to-long-term.

4 Recourse options

This Chapter identifies the recourse options that the Government and Ofgem should provide to energy market stakeholders, regardless of what regulatory framework they ultimately apply to the NESO. In turn we: (i) provide an overview of the key issues energy market stakeholders might consider seeking recourse on; (ii) set out what appropriate recourse options for those issues might be; and (iii) evaluate how these recourse options could hold the NESO more accountable to energy market stakeholders.

4A. Overview of issues most relevant to recourse

Under the Government and Ofgem's current proposals, the NESO will take on various roles and undertake multiple activities, which in combination means it has the potential to materially affect outcomes across the energy system.

In the previous Chapter, however, we explained that the lack of incentives placed on the NESO under those proposals means there are reasons for concern regarding the quality and cost of the outcomes it will deliver in practice. Within the energy system, energy market stakeholders might have particular concerns regarding the following topics:

- **The NESO's activities and delivered outcomes.** Energy market stakeholders may have reservations about: (i) the activities the NESO undertakes (i.e. its priorities); and relatedly (ii) the outcomes the NESO delivers (i.e. decisions the NESO takes regarding connections, dispatch, Codes, advice it gives to the Government, etc.).
- **The cost the NESO incurs in undertaking its activities and delivering its outcomes.** Energy market stakeholders may wish to scrutinise or challenge the NESO's budgets (and actual costs incurred) for undertaking certain activities / delivering certain outcomes (as, through the 100% fast money approach, this will impact how much consumers pay and impact incentives across the energy system). This concern may be particularly acute under the current regulatory framework proposals, which have limited incentive power regarding the NESO's cost efficiency (as explained in the previous Chapters).

THERE ARE A RANGE OF ISSUES CONCERNING THE NESO'S ACTIVITIES, PERFORMANCE, AND COST OF DELIVERY WHICH ARE RELEVANT TO RECOURSE.

- **The quality of the NESO's outcomes.** Energy market stakeholders may additionally consider that some of the NESO's activities are not being undertaken to the appropriate standard; and that the resulting outcomes are of low quality (i.e. the NESO's performance measures). Again, given the current proposals' lack of both financial incentives (for under- or outperformance), or minimum service standards proposed in licence conditions, energy market stakeholders may be especially concerned about the NESO's ambition (and ability) to achieve the desired level of quality.

Critically, and as we explain in our subsequent consideration of consumer detriment, the performance of the NESO in relation to each of the above will determine, or at least materially affect, its impact on the wider energy system. Put simply, a NESO that picks appropriate priorities, operates efficiently, and operates to a high quality is far more likely to deliver wider benefits across the energy system than one that does not.

In the previous Chapter, we highlighted how alternative regulatory models could address (or mitigate) concerns regarding the incentive power on the NESO. However, under any model (both the ones we propose in the previous Chapter, as well as the one proposed by the Government and Ofgem), it is important that energy market stakeholders can seek recourse, when they are concerned about the above. Indeed, the National Audit Office's (NAO) guidelines on best regulatory practice highlight the importance that regulatory decisions can be appropriately challenged by stakeholders.⁵¹

Currently, as we explain below (and further in Appendix D),⁵² energy market stakeholders can challenge decisions about the NESO at different stages, namely: (i) the business planning stage, where energy market stakeholders would be challenging Ofgem's Determinations about the NESO;⁵³ and (ii) the price control operational stage, where energy market stakeholders would be challenging Ofgem's decisions on the NESO's performance (i.e. quality of outcomes), and the NESO's decisions relating to the energy system (i.e. outcomes).⁵⁴

Should the Government and Ofgem move to a regulatory framework with weaker incentives for the NESO (as currently proposed), the need to have a strong recourse system becomes even more important, as concerns about cost and quality are not mitigated by the regulatory model itself. Additionally, we note the recourse options placed on NGESO are more stringent than the ones currently proposed for the NESO, even though it faces higher incentive power than the NESO will.

⁵¹ 'Good practice guidance: Principles of effective regulation.' National Audit Office (May 2021).

⁵² In Appendix D we compare the current approach to recourse applied to NGESO (which faces financial incentives), relative to the one proposed for the NESO (which does not face financial incentives).

⁵³ For example, currently, energy market stakeholders can appeal Ofgem's BP Determination for NGESO to the CMA.

⁵⁴ For example, currently, energy market stakeholders can appeal EMR decisions to Ofgem (and ultimately the Courts) where they are not satisfied with NGESO's first tier resolution proposal.

'The Government and Ofgem should provide energy market stakeholders with at least as many options for recourse of equivalent standing under the NESO's regulatory framework, as currently exist under the framework for NGESO.'

Therefore, logically, the Government and Ofgem should provide energy market stakeholders with *at least as many options for recourse of equivalent standing under the NESO's regulatory framework, as currently exist under the framework for NGESO*.⁵⁵

Key issues with proposed approach to recourse for the NESO

In our view the main issues around recourse options under the current policy proposals for the NESO are as follows:⁵⁶

Challenge decisions in the business planning stage

- **Activities.** Without further detail on the *ISOP BP Governance Document*, it is possible that an annual BP will lead to fewer opportunities for energy market stakeholders to feed into the development of the BP *ex-ante*, (relative to NGESO). Additionally, we discussed concerns around a shorter business planning cycle in the previous Chapter, and so do not repeat them here.⁵⁷
- **Costs.** Similarly to above, it is unclear whether energy market stakeholders will be as involved in the development of the NESO's BP *ex-ante* (as they are currently for NGESO), including providing challenge on costs. Thus, it appears that under the current proposals, energy market stakeholders must primarily rely on Ofgem appraising the NESO's BP and assessing whether its costs are "*demonstrably uneconomical, wasteful or inefficient*"⁵⁸ *ex-post*. It is further unclear how / where they would be able to challenge Ofgem's assessment of this *ex-post*.
- **Outcomes and quality of outcomes.** Again, it is unclear whether energy market stakeholders will be as involved in the development of the NESO's BP as they were in relation to those for NGESO (including challenging the outcomes *ex-ante*).

Challenge decisions in the price control operational stage

- **Costs.** Energy market stakeholders may wish to challenge whether the NESO's actually incurred costs are "*demonstrably uneconomical, wasteful or inefficient*"⁵⁹, without solely relying on Ofgem to issue the NESO with a *Cost Efficiency Notice*. Current proposals are unclear as to whether energy market stakeholders have a role in assessing the NESO's actual expenditure.

⁵⁵ The recourse options do not need to be equivalent, but their effect needs to be so. For example, where energy market stakeholders were previously able to appeal Ofgem BP Determinations to the CMA, a recourse option of equivalent standing must exist. This could take the form of stakeholders being able to appeal Ofgem BP Determinations to a separate independent body instead, if not the CMA.

⁵⁶ See Table 15 in Appendix D for a more detailed comparison.

⁵⁷ See our discussion around business planning cycle length in Chapter 3 for more detail.

⁵⁸ '*Annex E – Electricity System Operator Licence Conditions*,' DESNZ and Ofgem (March 2024); paragraph F1.4; '*Annex G – Gas system Planner Licence Conditions*,' DESNZ and Ofgem (March 2024); paragraph F1.4.

⁵⁹ '*Annex E – Electricity System Operator Licence Conditions*,' DESNZ and Ofgem (March 2024); paragraph F1.4; '*Annex G – Gas system Planner Licence Conditions*,' DESNZ and Ofgem (March 2024); paragraph F1.4.

- **Quality of outcomes.** Absent additional detail on the *ISOPRI Arrangements Governance Document*, it is unclear how different the NESO's performance assessment will be, compared to NGESO's. Ofgem indicated that there may be limited changes from Day 1 (suggesting concerns regarding challenging the NESO's performance from Day 1 are less likely to arise). However, Ofgem also indicated that more enduring changes to the NESO's performance assessment framework might follow, given the lack of financial incentives it faces. Notwithstanding any future changes to the NESO's performance assessment framework, we highlighted the importance of incentives in driving the NESO's performance in the previous Chapter. Thus, even where the same performance assessment framework is kept for the NESO's Day 1 operations (i.e. is retained in the short-term), the lack of incentives may lead to a different level of quality of the outcomes in the longer run. This is a key issue to consider.
- **Outcomes.** Finally, Ofgem has not provided much detail on how / through what means energy market stakeholders can challenge the NESO's decisions (outcomes) *ex-post*. Although we assume this remains broadly similar to the *status quo* for Code Decisions and Capacity Market pre-qualification decisions, it is unclear what recourse options will be available for all the other NESO decisions. Given the *range and importance of decisions* the NESO is likely to make in the future, a review mechanism specified by Ofgem is required.⁶⁰ Thus, it will be particularly important for a review / appeals mechanism to be in place for the NESO's decisions.

'Under the current Government and Ofgem proposals, without any financial incentives, energy market stakeholders are likely to be particularly concerned about both the cost and quality aspects of how the NESO will perform its functions.'

4B. Appropriate recourse options

Following from the above, under the current Government and Ofgem proposals, without any financial incentives, energy market stakeholders are likely to be particularly concerned about both the *cost* and *quality* aspects of how the NESO will perform its functions.

Therefore, we recommend that (as a minimum) stakeholders are *at least as able to seek recourse of equivalent standing under the NESO's regulatory framework, as they currently are under that for NGESO*.

Thus, in summary, we recommend the following recourse options, as **a minimum**:

Challenge decisions in business planning stage

- Detailed and timely engagement should be sought from energy market stakeholders in the NESO's BP development. This includes giving energy market stakeholders a means to feed into, and challenge, Ofgem's assessment of the NESO's costs.
- Energy market stakeholders should have the right to appeal Ofgem's determinations on the NESO's BP to the CMA or a separate independent body.

⁶⁰ For example, maintaining the *status quo* might lead to incongruous outcomes for the energy market, where separate bodies review separate decisions (e.g. Relevant Code Panels, Ofgem, etc.).

Challenge decisions in the price control operational stage

- Energy market stakeholders should have the right to challenge whether the NESO's actual expenditure is 'uneconomical, wasteful or inefficient', and should be able to assist Ofgem in triggering issuing the NESO with a *Cost Efficiency Notice*.⁶¹
- The NESO should continue reporting on its performance regularly, in sufficient detail and with sufficient transparency, that gives energy market stakeholders accurate and meaningful information in that regard. Relatedly, a separate body (e.g. NESO Performance Panel)⁶² and Ofgem should continuously review its performance. Performance below expectations in any aspect of the NESO's operations should trigger immediate action by Ofgem.
- Energy market stakeholders should have the right to challenge decisions made by the NESO to an independent body (i.e. the *NESO Review Panel*). This is set out in more detail in Towerhouse LLP's Annex to Centrica's submission.⁶³

The following subsections expand on how the above could function in practice.

Detailed and timely stakeholder engagement in the NESO's BP development

The NESO must be open to and account for energy market stakeholders' views in developing its BP *ex-ante*. This includes decisions around activities, costs, outcomes (e.g. outcomes the NESO delivers through its activities), and quality of outcomes (i.e. measured through the NESO's performance).

To ensure that energy market stakeholders can provide detailed and timely feedback – as well as evidence – on the NESO's BP, Ofgem must explicitly provide for these opportunities in the *ISOP BP Governance Document*. For example, in that guidance document, Ofgem could:

- direct the NESO to establish / reinstate a stakeholder group (such as the ERSG under RIIO-2) to provide a challenge to the NESO's BP; and / or
- establish a separate NESO BP challenge group, independently chaired (such as the RIIO-2 Challenge Group).

⁶¹ For example, where more than one stakeholder challenges Ofgem's assessment of the NESO's actual expenditure, Ofgem issues the NESO with a *Cost Efficiency Notice* (in line with paragraph F1.5 of Condition F1), requiring more information in relation to the NESO's compliance of paragraph F1.4 of Condition F1, to which the NESO must respond with a written explanation.

⁶² Or the NESO Review Panel, as we understand it, Towerhouse LLP suggests that the NESO Review Panel also takes on the ESO's Performance Panel roles. See: '[Annex to Centrica Submission: A Model for Establishing an Expert Review Panel to Enhance NESO's Accountability and Decision Making Process](#),' Towerhouse LLP (May 2024); paragraph 37.

⁶³ '[Annex to Centrica Submission: A Model for Establishing an Expert Review Panel to Enhance NESO's Accountability and Decision Making Process](#),' Towerhouse LLP (May 2024).

During the RII0-2 process, these stakeholder groups have held the NGESO to account. Further, we note that the NGESO has maintained the ERSG, without being mandated by Ofgem to do so.⁶⁴ This suggests that, of these two groups to challenge the NESO's BP development and enable wider engagement, mandating a group akin to the RII0-2 Challenge Group might provide stakeholders with more opportunities to *scrutinise* the NESO's BP. This is because, where the NESO also (voluntarily) maintains the ERSG, this would provide engagement in *developing* the Plan and identifying priorities, whereas a group akin to the RII0-2 Challenge Group would then scrutinises the Plan that the ERSG helped shape, and as submitted by the NESO to Ofgem. This scrutiny would include reviewing the NESO's proposed costs.

Ofgem could also consider reinstating Open Hearings just for the NESO's BP.

Additionally, where Ofgem moves to a '*lighter touch*' BP reviewing approach, energy market stakeholders should be able to challenge Ofgem's assessment of the NESO's costs *ex-post* (i.e. the assessment of whether costs are '*uneconomical, wasteful or inefficient*'). We therefore suggest that Ofgem should consider providing stakeholders an opportunity to input into Ofgem's review of whether the NESO's actual expenditures are '*uneconomical, wasteful or inefficient*' (including by providing evidence).

Right to appeal Ofgem's determinations on the NESO's BP to the CMA or a separate independent body

Where Ofgem makes a determination regarding the NESO's BP (including the costs), it is important that stakeholders can appeal this determination (to the CMA or a separate independent body). We note that the currently published proposals are unclear as to whether energy market stakeholders would be able to appeal to the CMA.⁶⁵

Therefore, to ensure the current proposals are of the same standing as the approach applicable to NGSEO, energy market stakeholders should be able to appeal Ofgem's determinations regarding the NESO's BP.

⁶⁴ See: <https://www.nationalgrideso.com/what-we-do/our-strategy/our-riio-2-business-plan/eso-riio-2-stakeholder-group-ersg>

⁶⁵ This would depend on whether licence modifications are required to give effect to Ofgem's determinations..

Right to challenge whether the NESO's actual expenditure is 'uneconomical, wasteful or inefficient'

When Ofgem reviews and assesses whether the NESO's actual expenditure is 'uneconomical, wasteful or inefficient', it should additionally consider how energy market stakeholders can help assist it in that process; including by being able to trigger a *Cost Efficiency Notice*. For example, where multiple stakeholders submit representations to Ofgem that the NESO's actual expenditure may be inefficient, this could automatically trigger Ofgem issuing a *Cost Efficiency Notice* to the NESO (whereby the notice would be intended to seek information and evidence from the NESO specifically intended to address the concerns raised by stakeholders).⁶⁶

This would provide energy market stakeholders with an additional opportunity to challenge decisions, which may ultimately affect their customers, too.

Regular performance reporting, with performance below expectations leading to immediate action

As noted previously, currently NGESO is incentivised to provide high quality outcomes, as there is a financial incentive linked to outperformance. Putting the specific financial benefits arising from that incentive to one side, the presence of such an incentive also provides some reputational incentives through: (i) NGESO's monthly and quarterly reporting;⁶⁷ (ii) ESO Performance Panel publications;⁶⁸ as well as (iii) stakeholder satisfaction surveys, feeding into the performance publications.⁶⁹

Thus, given the importance and further breadth of roles that the NESO will be taking on, without (i) financial incentives on the NESO for under- or outperformance; and (ii) Ofgem's ability to impose financial penalties for licence breaches,⁷⁰ we consider that safeguards and opportunities for stakeholders to challenge the quality of NESO's outputs / outcomes are required.⁷¹ These could take the following form:

⁶⁶ For example, where more than one stakeholder challenges Ofgem's assessment of the NESO's actual expenditure, Ofgem issues the NESO with a *Cost Efficiency Notice* (in line with paragraph F1.5 of Condition F1), requiring more information in relation to the NESO's compliance of paragraph F1.4 of Condition F1, to which the NESO must respond with a written explanation.

⁶⁷ See: <https://www.nationalgrideso.com/what-we-do/our-strategy/our-riio-2-business-plan/how-were-performing-under-riio-2>

⁶⁸ For example: 'ESO Performance Panel Mid-Scheme Review 2021-23,' ESO Performance Panel (July 2022); and 'Electricity System Operator Performance Panel End-Scheme Review 2021-2023,' ESO Performance Panel (July 2023).

⁶⁹ 'Electricity System Operator Performance Panel End-Scheme Review 2021-2023,' ESO Performance Panel (July 2023); page 10.

⁷⁰ 'Consultation on the policy direction for the Future System Operator's regulatory framework,' Ofgem (December 2023); paragraph 3.28.

⁷¹ We note that these are also required under our alternative regulatory models, set out in Chapter 3.

- Ofgem maintains the current regular performance assessment it applies to NGESO. In particular, it maintains the setting of up-front activity-level performance expectations and evaluation criteria; the NESO reporting on various performance metrics; the ESO Performance Panel (or NESO Performance Panel) reporting on NESO's performance, which includes input from various energy market stakeholders; Ofgem reviewing the NESO's performance (including the NESO Performance Panel's views) and deciding on whether the NESO is meeting its expectations.
- Then, additionally to the current system applied to NGESO, where its performance is *below expectations* for some activities, this could automatically trigger intervention by Ofgem, by way of a licence investigation. In line with the current Enforcement Guidelines,⁷² Ofgem could:
 - **Open an investigation.** This would be akin to the situation where a licence holder is suspected of being in breach of its licence obligations. Following the investigation, Ofgem could make a final order in due course (see below).
 - **Provisional order.** Given Ofgem will have already reviewed significant amounts of information, a full investigation may not be required. Thus, where the NESO's performance has the potential to seriously compromise the energy system, Ofgem could make a provisional order.
 - **Final order.** Either following an investigation, or where Ofgem considers it has sufficient information from its performance assessment exercise, it can make a final order. This could require the NESO to do (or not do) certain things. For example, where the NESO does not meet Ofgem's expectations regarding '*managing connections*', Ofgem could intervene in the process for connections, as well as planning ahead.

Right to challenge decisions made by the NESO that affect the energy system to an independent body

With regards to energy markets stakeholders' ability to challenge the NESO's decisions impacting their operations and customers' bills, we consider that (given the interlinkages and 'whole-system' remit that will arise), it could be beneficial for there to be one independent organisation, which would be able to adjudicate on any disputes between stakeholders and the NESO. For example, such an organisation could be the *NESO Review Panel*, as outlined in in Towerhouse LLP's Annex to Centrica's submission.⁷³

⁷² '*Enforcement Guidelines*,' Ofgem (March 2023).

⁷³ '*Annex to Centrica Submission: A Model for Establishing an Expert Review Panel to Enhance NESO's Accountability and Decision Making Process*,' Towerhouse LLP (May 2024).

4C. Additional considerations: minimum service standards

Finally, we suggest that the Government and Ofgem consider the introduction of minimum service standards into the NESO's licence conditions. We set this out below.

Minimum service standards

Where Ofgem implements the current proposals, without (i) financial incentives for outperformance and (ii) imposing financial penalties for licence breaches, we consider that Ofgem should embed **minimum service standards** in the licence conditions (alongside the recourse options set out above). For example, we note that Ofgem guarantees standards of service by way of the “*Quality of Service Guaranteed Standards*” for distribution companies, where the guaranteed standards cover 12 key service areas, including supply restoration; connections; and voltage quality.⁷⁴

Thus, to ensure the NESO provides its services at an appropriate minimum service standard, we suggest Ofgem consider undertaking the following.

- Consult with stakeholders on the key areas of the NESO's services, which require a minimum level of service, and subsequently consult on what the appropriate minimum service standard is. For example, we envisage that this could, *at a minimum*, cover the following roles currently undertaken by NGESO:⁷⁵
 - **Role 1: Control centre operations.** Here, for example, Ofgem could strengthen Condition C1, Part B (General obligations on ISOP activities: General obligations related to transparency and forecasting) of the ESO Licence, by providing some parameters around what would constitute an accurate and unbiased forecast (i.e. within 10% of benchmark for balancing costs).
 - **Role 2: Market development and transactions.** Similarly to above, Ofgem could ensure the Charging Methodology statements (accompanying the Licence Conditions) are strengthened by ensuring the absolute percentage error does not exceed 10% for ‘*month ahead BSUoS forecasts*’.
 - **Role 3: System insight, planning, and network development.** Finally, Ofgem could also ensure that, in relation to its planning and network development, minimum timelines are met across all relevant licence conditions, as currently set out Condition E12 Part C (Requirement to offer terms: Timeframes).

⁷⁴ See: <https://www.ofgem.gov.uk/energy-policy-and-regulation/industry-codes-and-standards/standards/quality-service-guaranteed-standards>

⁷⁵ We consider it unlikely that any of the NESO's additional roles, such as advice to the Government, would require minimum service standards.

This would allow energy market stakeholders to, at least, refer breaches to Ofgem (and for Ofgem to investigate and impose remedies on the NESO). This is because Ofgem can enforce licence conditions, where a licensee is found to be in breach of the condition. However, as mentioned previously, Ofgem's enforcement tools will be reduced, as it:

- is not minded to impose financial penalties on the NESO;⁷⁶ and
- considers full licence revocation unlikely to be effective, or feasible, for the NESO.⁷⁷

Additionally, Ofgem could also take one of the following approaches, allowing energy market stakeholders themselves to enforce the minimum service standards:

- It could apply an operational performance regime in the licence, enforceable by Ofgem. This would be akin to Section 104 of the Communications Act 2003, which allows affected parties to take direct court action if they suffer loss as a result of breach of licence conditions, subject to getting Ofcom's consent.
- Alternatively, Ofgem could apply operational performance obligations in the code to which the NESO is subject and to which energy market stakeholders are signatories. There would need to be a robust process in the code to provide a meaningful right to enforce the obligations, as well as a bilateral contract with a meaningful process to settle disputes. For example, senior representatives could first try to satisfactorily resolve the dispute in accordance with an escalation procedure. Beyond that the parties could agree to enter into mediation, only following which a party may commence court proceedings.

4D. Evaluation of alternative recourse options











Given the importance of the NESO's roles, and the impact it has on all energy market stakeholders, we consider that the Government and Ofgem should ensure strong recourse options are in place for energy market stakeholders.

Table 4, overleaf, summarises our assessment of the recourse options, which we understand would apply under the current proposed licence conditions and regulatory approach, against our proposed alternative recourse options, detailed in this Chapter.

⁷⁶ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.28.

⁷⁷ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.29.

Table 4: Summary evaluation of alternative recourse options

Area recourse is being sought on	Currently proposed recourse options (Government and Ofgem proposals)	Alternative recourse options
Decisions in the business planning stage		
	Energy market stakeholders consulted on the NESO's BP.	Detailed and timely challenge from energy market stakeholders in the NESO's BP development.
		
	Unclear whether energy market stakeholders are able to challenge Ofgem's Final Determination at the CMA.	Energy market stakeholders able to challenge the Final Determination at the CMA or an independent body
Decisions in the price control operational stage		
	Unclear whether / how energy market stakeholders can challenge whether the NESO's actual expenditure is ' <i>uneconomical, wasteful or inefficient</i> '.	Provide energy market stakeholders with an opportunity to assist Ofgem in triggering a <i>Cost Efficiency Notice</i> .
		
	Unclear whether / how performance assessment framework will diverge from the one currently applicable to NGENO. Assumed current model applies from Day 1, without financial incentives.	The NESO must continue reporting on its performance regularly, and a separate body (e.g. NESO Performance Panel) and Ofgem must continually review its performance. Performance below expectations in any aspect of the NESO's operations triggers immediate action by Ofgem.
		
	Unclear whether / how energy market stakeholders will be able to challenge the NESO's decisions.	Energy market stakeholders must have the right to appeal the NESO's decisions to a separate independent body (e.g. NESO Review Panel), to ensure consistent decision making.

Source: Economic Insight

5 Consumer detriment

In this Chapter, we assess the potential harm to consumers that could occur if the NESO fails to achieve the cost savings expected under a more robust incentive-based regulatory framework. Our analysis extends the Government's IA for the NESO by incorporating insights from existing research, allowing us to develop a more comprehensive estimate of the likely consumer detriment resulting from foregone cost savings.

5A. Overview

The NESO is envisaged to play a significant role in the energy system, contributing materially towards the transition to net zero; maintaining energy security; and helping to minimise costs for consumers. Consistent with this, the Government's published IA for the NESO (formerly the FSO) indicates that, under the preferred option at the time (Option 2, illustrated in Table 5), the NESO could generate significant net benefits of up to £2.9bn (NPV terms), comprising of implementation costs of £90m and cost savings of £3.1bn.^{78,79} This implies that the NESO has the potential to materially (positively) impact consumer welfare across the energy system. However, by the same virtue, the NESO may also give rise to significant consumer detriment, if it falls short of its potential.

Accordingly, in this Chapter, we address:

- The Government's IA and how this shows the NESO can materially affect consumer welfare.
- The existing evidence on the link between incentive power and outcomes.
- Our estimates of potential consumer detriment that may arise, should the NESO underperform (which, we suggest, is more likely to arise under the current policy and licence condition proposals, than under proposals that more overtly incentivise the NESO to perform to a high standard).
- A qualitative assessment of the nature of detriment that could arise under DESNZ and Ofgem's proposals across some areas of particular interest to Centrica.

⁷⁸ 'Future of the System Operator: Impact Assessment (IA),' BEIS and Ofgem (December 2021).

⁷⁹ The cost of asset purchase has not been published in the IA.

5B. Government's IA of the NESO

The Government's IA quantifies the net benefits of the NESO, against the counterfactual of the status quo (including RII0-2 changes) for the period 2020 – 2050.⁸⁰ Specifically, it compares three shortlisted options to a '*do nothing*' baseline option. The three options are consistent in their approach to organisation design; funding; and implementation. Specifically, all options propose the NESO to be: (i) a public corporation, with operational independence from Government; (ii) fully funded by consumers (i.e. Balancing System Use of System, BSUS)⁸¹; and (iii) to be implemented through a phased transition. They differ, however, in their electricity roles and gas functions. The differences between the three options with respect to these roles and functions are set out in the table below.

Table 5: The NESO shortlisted options set out in the IA

		Option 1: Lower intervention	Option 2: Preferred way forward	Option 3: Greater intervention
Electricity roles	Day-to-day operation + advising + planning and competition	✓	✓	✓
	Coordination + data and standards		✓	✓
Gas functions	Long-term forecasting & network planning + strategic market functions		✓	✓
	Day-to-day operation			✓

Source: Economic Insight analysis

THE GOVERNMENT EXPECTS THE NESO TO DELIVER A RANGE OF 'WHOLE SYSTEM' COST SAVINGS UNDER ITS PREFERRED OPTION.

The IA provides an extremely wide range of *potential net* benefits, ranging from £10m up to the £2.9bn (NPV, preferred option).⁸² On an annual basis, this equates to approximately £0.4m to £100m. Within this, a key driver of the quantified benefits is the assumed '*whole-system*' cost savings (i.e. efficiencies) that the NESO would help deliver through its approach to network development and assessment of energy system needs. For example, the IA states "[t]hese benefits are directly related to the reduction in the perceived or actual conflicts of interest faced by the system operator under current arrangements".⁸³

⁸⁰ This reflects the existing structure of the System Operators, but includes the changes Ofgem were planning to make to NGESO in the RII0-2 period (2021-2026). For example, stronger restrictions on the ESO's use of shared services provided through National Grid Plc and stronger restrictions on day-to-day governance interactions with National Grid Plc and its affiliated companies.

⁸¹ Though we note that it will now be funded by both electricity and gas users, where National Gas will pay NESO for gas-related services, and where it will recover those costs via network charges.

⁸² We only consider Option 2 in further discussion and analysis as the Government has indicated that they will likely implement this preferred option.

⁸³ '*Future of the System Operator: Impact Assessment (IA)*,' BEIS and Ofgem (December 2021), paragraph 52.

The Government's IA sets out the expectations for the NESO's improved whole system insight which is expected to result in significant system-wide cost savings. These are the following:⁸⁴

'The improved perception of impartiality of the NESO is expected to increase energy actors' willingness to participate in joint-innovation projects.'

- Improved network planning through removal of the current informational and financial potential conflicts of interest the system operator has towards transmission network solutions.
- Better identification and promotion of cost-effective and innovative solutions.
- Better identification of challenges to system operability and necessary steps to address them.
- Better coordination of investment decisions to ensure alignment with whole system needs and policy goals.
- Better coordination and promotion of innovation projects involving actors from across the energy system.
- Improved facilitation of competition as the NESO is likely to be best placed to identify, develop and facilitate competitive tenders across the energy system, such as competition in onshore electricity networks.

These benefits are likely to result in reduced costs across the entire energy system including generation, system-balancing and policy costs passed through to consumers via energy bills. However, it is important to note that the Government's IA only considers the potential cost savings in future transmission network development and therefore the scale of benefits could be even larger. Specifically, these benefits of whole-system cost savings set out in the IA range from £290m to £3.1bn.⁸⁵

The NESO's potential benefits

The Government recognises that these (system-wide) cost savings could arise from a variety of sources. However, for the purposes of the IA, it quantifies savings that occur due to **transmission network costs savings only**.⁸⁶ It assesses these savings by assuming a proportion of transmission companies' total expenditure (totex) could be saved, due to whole systems decision making by the NESO (savings of 1%-5% of network totex costs were assumed). Thus, these savings are the benefits of the NESO identified in the IA. To recognise the inherent uncertainties around these benefits, the IA estimates them across two scenarios in its central analysis. Specifically, the:

⁸⁴ *'Future of the System Operator: Impact Assessment (IA).'* BEIS and Ofgem (December 2021); paragraph 53.

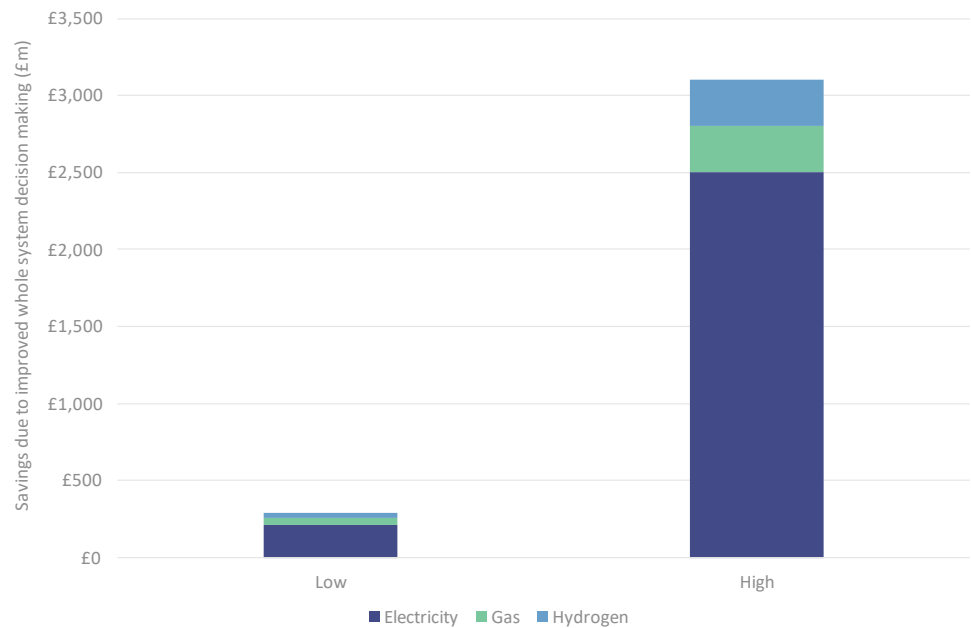
⁸⁵ *The total cost savings (benefits) under the low scenario are comprised of £210m (electricity), £50m (gas) and £30m (hydrogen). Under the high scenario, it is comprised of £2.5b (electricity), £300m (gas) and £300m (hydrogen). See: Future of the System Operator: Impact Assessment (IA).'* BEIS and Ofgem (December 2021); Table 2.

⁸⁶ *'Future of the System Operator: Impact Assessment (IA).'* BEIS and Ofgem (December 2021); paragraph 54.

- low scenario is based on the lowest available demand projection and 1% reduced costs due to the improved ‘whole-system’ decision making; and the
- high scenario is based on the highest available demand projection and a 5% reduced costs assumption.⁸⁷

This is illustrated in the figure below.

Figure 8: Cost savings attributed to improved whole-system decision making



Source: Economic Insight analysis

As can be seen from Figure 8, the range of benefits (cost savings due to system-wide decision making)⁸⁸ is extremely wide, ranging from £290m to £3.1bn.

Potential consumer detriment from an inadequate regulatory framework

‘A key determinant of the benefits the NESO delivers across the energy system will be how well it performs its functions.’

The extent to which the NESO will deliver whole-system wide cost efficiencies will depend on a number of factors, some of which may be outside of its control. However, a key determinant of the benefits the NESO delivers across the energy system will be how well it performs its functions. Therefore, we consider it reasonable to interpret the upper end of cost savings of the IA (i.e. the 5%) as also being consistent with the NESO fulfilling its functions to a high standard.

As set out in Chapter 2, under the current policy proposals, the extent of incentives on the NESO to fulfil its functions to a high standard are limited. The Government itself recognises that the NESO’s own performance is a key driver of the assumed 5% cost savings, noting the following key risks: (i) reduced efficiency under the NESO; (ii) increased uncertainty to energy system participants; and (iii) the creation of a “single

⁸⁷ *‘Future of the System Operator: Impact Assessment (IA).’ BEIS and Ofgem (December 2021); Table 2.*

⁸⁸ *Cost savings refers to efficient investment when required as opposed to avoiding necessary investment to achieve a short-run cost decrease.*

view” of the energy system, which could lead to poorer decisions being made by the NESO.⁸⁹

Relatedly, a range of theories and evidence establishes a clear link between incentive power and the quality of outcomes delivered by organisations, as we set out in the following section. As such, and in light of the large potential impact of the NESO on the energy system indicated by the Government (benefits of £290m to £3.1bn), there is clearly (by the Government’s own logic) a very real potential for the NESO to result in material consumer detriment, by way of foregone cost savings across the system. Specifically, the difference between the high and low scenarios set out in the IA amounts to £2.8bn across electricity, gas, and hydrogen.

We note, however, that the difference between the high and low scenario set out in the IA is driven by a range of factors, including differences in demand, and not just the performance of the NESO. It would therefore not be appropriate to interpret the quoted difference above as a robust measure of the potential consumer detriment arising from poor performance by the NESO.

5C. Evidence on the link between incentives and outcomes

In industries with no or limited competitive pressure (such as natural or, in the case of the NESO, statutory monopolies), incentive regulation is intended to promote cost savings, investment and service quality.⁹⁰ Thus, to help us understand *how well* organisations facing incentive regulation perform (relative to a counterfactual of no, or less, incentive regulation), we have reviewed the existing literature, covering the efficiency impacts resulting from incentive regulation.

We have undertaken this review with the objective of obtaining an indicative guide as to the ‘average’ outcome resulting from the use of high-powered incentives in regulated (or usually regulated) natural / statutory monopolies. In section 5D below, we set out how we subsequently use this figure to estimate the potential consumer detriment arising from the NESO failing to perform as well as it should.

As illustrated in Table 6, the literature reflects the outcomes from high-powered incentives as either productivity / efficiency gains (increased output holding inputs constant) or cost savings (a decrease in costs for the same level of output). Overleaf, we set out the main findings from six different sources of evidence.

⁸⁹ *Future of the System Operator: Impact Assessment (IA)*, BEIS and Ofgem (December 2021); paragraphs 91-101.

⁹⁰ *Designing incentive regulation in the electricity sector*, Brown, D. and Sappington, D. (November 2023).

Table 6: Literature review findings

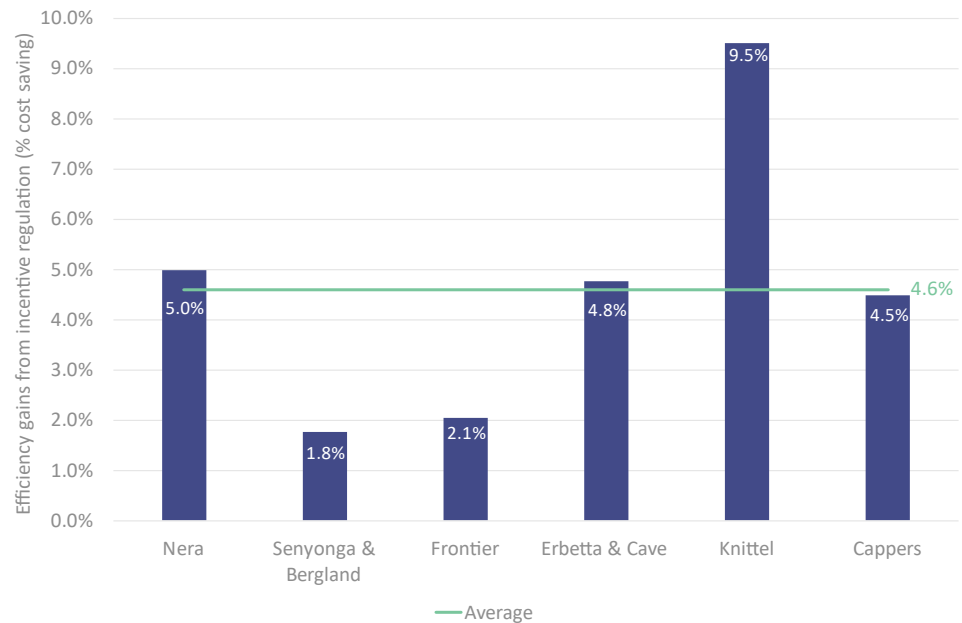
Title	Author	Date	Industry	Country	Main findings
A comparison of the performance and efficiency of public- and privately-owned energy networks	Nera Economic Consulting	June 2019	Electricity distribution	UK	Since privatisation, Distribution Network Operators (DNOs) in the UK have improved operating cost efficiency by 5% per year.
Impact of High-Powered Incentive Regulations on Efficiency and Productivity Growth of Norwegian Electricity Utilities	Livingstone Senyonga and Olvar Bergland	September 2018	Electricity distribution	Norway	Average productivity increased by 1.8% when Norway switched to high-powered incentive regulations in the electricity distribution industry.
Productivity improvement in the water and sewerage industry in England since privatisation	Frontier Economics	September 2017	Water and wastewater	England	Annual productivity growth for the water and sewerage sector has averaged 2.1% since privatisation (between 1994 and 2017) when adjusting, on a conservative basis, for output quality.
Regulation and Efficiency Incentives: Evidence from the England and Wales Water and Sewerage Industry	Fabrizio Erbetta and Martin Cave	December 2007	Water and wastewater	England and Wales	England and Wales experienced a tightening of regulation in the water and wastewater industry in 1999. The average efficiency value before 1999 price review is 0.891, whilst its average value during the 1999 price setting period is 0.940. Thus, it seems that the 1999 price review stimulated a technical efficiency progress of around 5%, whereas the 1994 price review had no effect.
Alternative Regulatory Methods and Firm Efficiency: Stochastic Frontier Evidence from the U.S. Electricity Industry	Christopher R. Knittel	August 2002	Electricity generation	USA	Regulatory frameworks tied directly to generator performance and those that modify traditional fuel cost pass-through programmes, to provide a greater incentive to reduce fuel costs, are associated with greater efficiency levels. Specifically, the change in expected output when moving from no regulation to EAF ⁹¹ regulation is 10.51%.
Financial Analysis of Incentive Mechanisms to Promote Energy Efficiency: Case Study of a Prototypical Southwest Utility	Peter Cappers	March 2009	Electricity generation	USA	Average utility bills would decrease by 3-6% if the utility successfully implements the energy efficiency portfolios in conjunction with decoupling or the shareholder incentive mechanisms compared to the “business-as-usual” case.

Source: Economic Insight analysis

⁹¹ Equivalent Availability Factor (EAF) programmes focus on increasing the percentage of the time that a plant is available to produce electricity, whether or not it is actually called upon to do so. These programmes provide a disincentive for firms to keep plants offline, thereby reducing total generation costs if low-cost generators would have been held offline, as well as potentially increasing the reliability of the network. For example, availability programmes have been designed such that, if the set of plants' availability over the course of a year is above a certain threshold, the firm is rewarded for the costs savings, whereas, if it falls below a certain threshold, the firm's profits are reduced.

As illustrated in Table 6, companies subject to incentive regulation have been able to achieve average efficiency / productivity savings of between 1.8% to 10.5% per year. Where outcomes have been reported as productivity improvements, or increases in output, we have converted this into a percentage cost saving.⁹² Figure 9 summarises this and shows that the average cost savings across the six sources is approximately 4.6%.

Figure 9: Efficiency gains from incentive regulation



Source: Economic Insight analysis

'We interpret 4.6% as the expected cost savings that could result from the implementation of effective high-powered incentives in the NESO's regulatory framework.'

Following from the above results, we interpret 4.6% as the expected cost savings that could result from the implementation of effective high-powered incentives in the NESO's regulatory framework.

It is worth noting that there is limited evidence specifically on the relationship between incentive regulation and system-wide outcomes (or efficiencies achieved by system operators). However, we think it reasonable to interpret the above evidence as being analogous to this, for two reasons:

- Firstly, the above estimates are estimated across groups of organisations that, in practice, do form part of a system (e.g. water and wastewater companies collectively make complex interrelated decisions about how to allocate resources across their networks, in order to deliver their services).
- Secondly, a high performing organisation is both more likely to perform better as measured by (i) its own cost / outcomes performance; but also (ii) in terms of its wider decision making.

Following from the above, there is therefore no *a priori* reason to believe that the system-wide impacts will be significantly different to the organisation-level ones.

⁹² % cost saving = productivity increase % / (productivity increase % + 1)

5D. Top-down quantitative assessment of consumer detriment

In this section, we build on the Government's IA of the NESO and the main findings from our literature review, to estimate the potential consumer detriment arising from the current proposals for the NESO.

As stated previously, the Government's estimate of the net benefits under the high and low scenario is driven by the performance of the NESO (5% and 1%, respectively) as well as fluctuations in demand. In our assessment, we further refine this estimate of net benefit to the whole system under the high and low scenarios *by holding demand constant* across both the high and low scenario (and therefore attributing the difference in benefits under the two scenarios – the potential consumer detriment – solely to the performance of the NESO). We do this by:

- forecasting electricity, gas and hydrogen totex in line with demand expectations;
- estimating the net present value (NPV) of a 1% cost savings and defining this as the expected (factual) output of the NESO (and the wider energy system) under the current regulatory framework;
- estimating the NPV of a 4.6% cost savings and defining this as the counterfactual output of the NESO (and the wider energy system) under a high-powered incentive regulatory framework; and finally
- estimating the consumer detriment (foregone cost savings) as the difference between the NPV resulting from cost savings of 1% and the NPV resulting from cost savings of 5%.

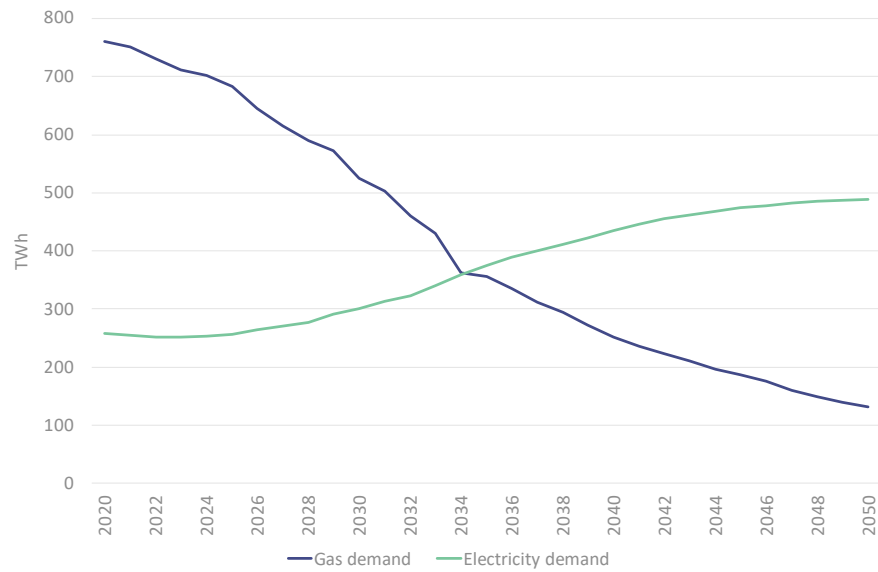
The details of our calculations are set out in the following steps:

- **Step 1: Forecasting total electricity and gas transmission network costs to 2050.** In line with the IA's approach, we estimate the annual electricity, gas and hydrogen transmission operators (TO) totex for the period 2022 to 2050. For the 2022 to 2026 period, electricity and hydrogen totex is based on the existing TO costs set out in the RIIO-2 business plans.⁹³ We forecast electricity and gas totex by scaling it in line with the electricity demand and gas demand predicted for England in the 'balanced net zero pathway' scenario in the Sixth Carbon Budget Dataset.⁹⁴ The demand forecast for both electricity and gas and the forecasted totex are illustrated in Figure 10 and Figure 11 below. In line with the demand forecasts, electricity totex is expected to increase, whilst gas totex is expected to decline.

⁹³ 'RIIO-T2 Business Plan Submission'. National Grid (December 2019).

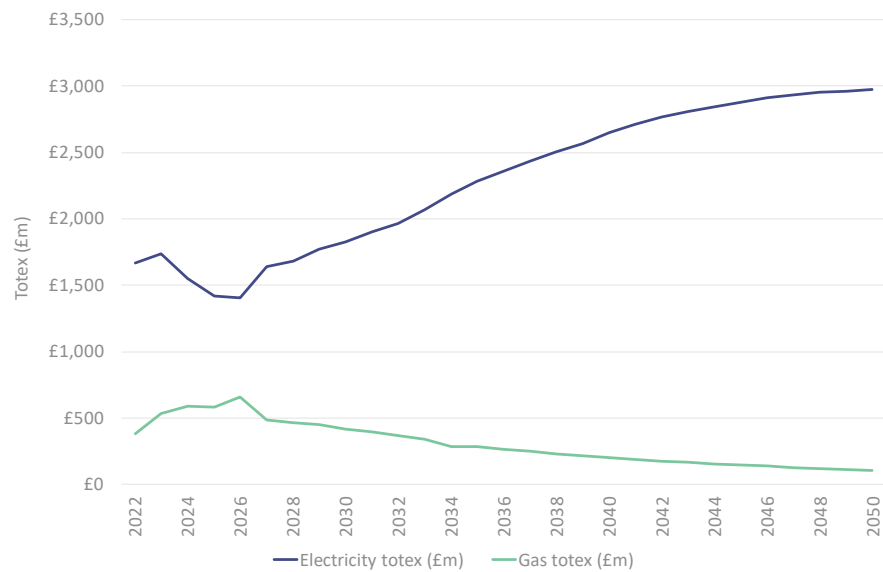
⁹⁴ See: <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

Figure 10: Electricity and gas demand forecast according to the 'balanced net zero' pathway



Source: Economic Insight analysis using data from Sixth Carbon Budget

Figure 11: Forecasted electricity and gas totex

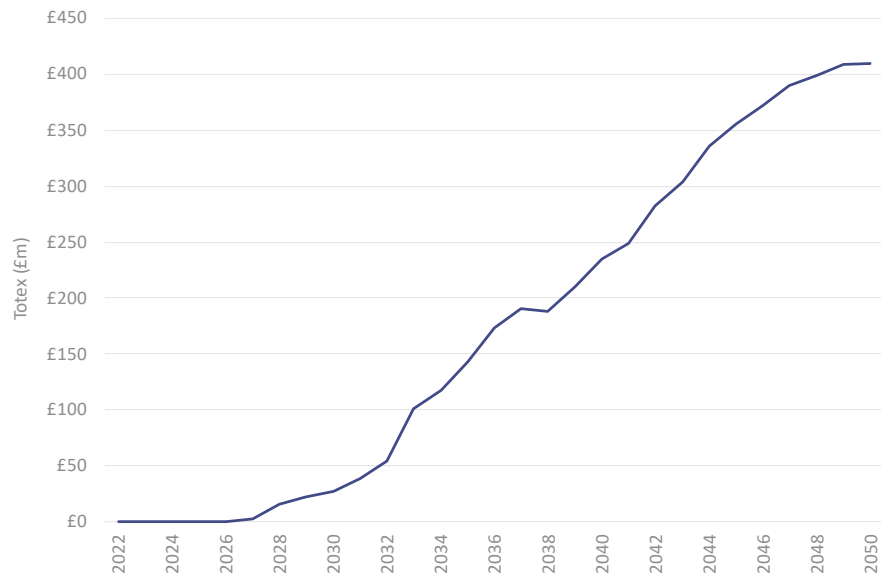


Source: Economic Insight analysis

- Step 2: Forecasting total hydrogen transmission network costs to 2050.** For hydrogen, we follow the approach set out in the Government's IA. That is, as there are no existing transmission network costs to base the estimate on, we use an estimated network cost of £2.2m/TWh and apply this to the energy estimates for hydrogen under the 'balanced net zero pathway' scenario in the Sixth Carbon Budget Dataset.⁹⁵ The estimated hydrogen totex to 2050 is illustrated in the figure below.

⁹⁵ <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

Figure 12: Forecasted hydrogen totex



Source: Economic Insight analysis

- **Step 3.** We define the factual scenario as the case where the NESO achieves cost savings of 1% under the proposed regulatory framework, as does not contain high-powered incentives. Under this factual scenario, we estimate system-wide cost savings of £441m.
- **Step 4.** We define the counterfactual as the scenario where the regulatory framework of the NESO contains high-powered incentives (as per our alternative regulatory models) which therefore achieves cost savings of 4.6%. Under this counterfactual scenario, we estimate system-wide cost savings of £2,031m.
- **Step 5.** We compare the cost savings achieved in the two scenarios and attribute the difference of £1,589m as the potential consumer detriment (foregone cost savings) that arises from the NESO underperforming, due to a lack of incentive power.

In the Table 7, overleaf, we provide a breakdown of the potential consumer detriment between electricity, gas and hydrogen. Due to the significantly larger totex, most of the consumer detriment is likely to arise with regard to electricity. It should be noted that in the context of the Government's IA, this detriment arises from the foregone totex savings due to the NESO's whole system activities, rather than from any activities undertaken by the TO companies themselves.

Table 7: Potential consumer detriment of the NESO

	1% cost savings (£m)	4.6% cost savings (£m)	Potential consumer detriment (£m)
Electricity	£361	£1,659	£1,299
Gas	£58	£269	£210
Hydrogen	£22	£103	£80
Total TO costs	£441	£2,031	£1,589

Source: Economic Insight analysis

5E. Bottom-up qualitative assessment of consumer detriment

Below, we provide a qualitative description of the nature of detriment that could arise under DESNZ and Ofgem's proposals across some of the areas of interest to Centrica: (i) connections; (ii) accuracy of forecasts for charging; (iii) balancing system, including skip rates; and (iv) system planning activities. Note, we do not consider this detriment to be 'additional' to that captured under our top-down estimates reported above. Rather, they should be interpreted as specific examples of detriment, implicitly captured under our top-down method (i.e. because that method is based on the concept of the NESO underperforming 'in general', thus making sub-optimal decisions).

Connections

Beyond the consultations on the regulatory framework for the NESO, Government and Ofgem have also extensively consulted on reforms to the current connections framework. In November 2023, DESNZ and Ofgem published the *Connections Action Plan*, outlining six key areas of action for the Government, Ofgem, the NESO, and network companies to drive further action and significantly reduce connection timescales.⁹⁶

The DESNZ and Ofgem March 2024 Consultation on the NESO's licence conditions does not provide any additional requirements for the NESO, over and above the current NGESO's responsibilities with regards to connections.

Thus, the consumer detriment arising from the current proposals likely remains similar to the existing sources of detriment (identified in the *Connections Action Plan*), such as consumers paying higher bills, and not being able to benefit from better located / designed energy sources, etc.

⁹⁶ *'Connections Action Plan.'* DESNZ and Ofgem (November 2023).

Accuracy of forecasts for charging

The Government and Ofgem's proposals for the NESO have not made any additional / different provisions in relation to the NESO's approach to forecasting used for setting Use of System charges.

Notwithstanding this, the consumer detriment arising from inaccurate forecasts is two-fold:

- Inaccurate forecasts can damage the confidence of energy market stakeholders, as they rely on these forecasts to set Transmission Network Use of System (TNUoS) charges. For example, energy suppliers rely on the NESO's forecasts of TO revenues for setting TNUoS charges, which have a direct bearing on their tariff offerings.
- This, in turn, leads to inaccurate forecasts increasing consumers' bills.

We note that through the proposed regulatory regime for the NESO, Ofgem will lose an important mechanism (i.e. imposing fines for breaches of licence conditions) to incentivise it to provide accurate forecasts. For example, in 2021 the NGESO was fined £1.5m, due to its failure to provide accurate and unbiased seven-day ahead electricity demand forecasts in 2017.⁹⁷

Additional transparency requirements, whereby the NESO publishes its forecasting models, where practicable, may aid the industry and create further trust and transparency (potentially mitigating this source of detriment).

Balancing system

The NESO will maintain NGESO's role of balancing the electricity system. Currently, the March 2024 Consultation on the NESO's licence conditions does not suggest the current activities undertaken by NGESO will change. Therefore, we consider that the current sources of consumer detriment, arising from the NESO's balancing system activities, remain similar to those that would have arisen for NGESO, and which are as follows:

- "Skip rates" for providers of any technology type in the balancing mechanism, where they are not dispatched despite being available, can lead to consumer detriment. This reduces the amount of flexible capacity utilised by the NESO, potentially requiring more expensive balancing actions, which increase consumer costs.
- Inefficient balancing of the grid by the NESO, due to issues with the design of the balancing mechanism and ancillary services, can result in higher system balancing costs that are ultimately passed on to consumers through higher electricity prices.

BY REMOVING THE POSSIBILITY TO IMPOSE FINANCIAL PENALTIES ON THE NESO, OFGEM LOSES AN IMPORTANT ENFORCEMENT TOOL, TO DRIVE BOTH COMPLIANCE WITH THE LICENCE CONDITIONS AND PERFORMANCE.

⁹⁷ ['National Grid Electricity System Operator to pay £1.5 million over electricity demand forecasts,' Ofgem \(April 2021\).](#)

- Reforms to the balancing mechanism and ancillary services are being considered by NGESO and the Government, such as improving dispatch arrangements, baselining methodologies, and participation thresholds. The aim is to increase competition and unlock more flexible capacity to aid system balancing and reduce consumer costs.⁹⁸

The March 2024 Consultation does not provide for any specific reform of the system. Although it is unlikely that these issues will resolve through the creation of the NESO, there is also no reason to believe that these issues will worsen under the NESO.

System planning activities

Under the current proposals, the NESO will be undertaking considerably more system planning activities, compared to NGESO. For example, it will be producing a FEP, a SSEP, and a CSNP, in addition to all its prior system planning roles.

This could lead to consumer detriment in the following ways:

- The quality of the analysis undertaken by the NESO could reduce, say where the NESO does not consider all stakeholders' views equally. It could potentially rely on the views of one organisation (the NESO) at the expense of other stakeholders.
- This, in turn, could lead to the quality of the NESO's decision-making deteriorating. For example, it could prioritise certain technologies over others, or make more myopic decisions than it would otherwise.

Therefore, this highlights the importance of ensuring that there remain effective means of recourse for energy market stakeholders, ensuring they can feed into the NESO's decision making and planning process. In particular, energy market stakeholders must have recourse options as effective as they have now.

⁹⁸ ['Markets Roadmap,' ESO \(March 2023\)](#).

6 Appendix A: Background to consultations

This Appendix provides the relevant background to all the Government and Ofgem consultations and decisions with regards to the development of the NESO. It sets out the evolution of the UK Government's and Ofgem's proposals for the NESO's regulatory framework in more depth.

6A. Overview

In its April 2022 Decision⁹⁹, the Government provided Ofgem with an overarching framework for the NESO's regulatory framework, which Ofgem then provided further details and specificity on in its December 2023 Consultation.¹⁰⁰

Table 8 illustrates the currently proposed regulatory framework for the NESO, as most recently captured within DESNZ and Ofgem's statutory consultation on the NESO's licence conditions, as well as any previous consultations setting the direction of the Government's policy in these areas. In summary:

- **Ownership structure and organisational design.** The NESO will be a not-for-profit public corporation owned by the Government (sole shareholder), where the Government will not receive an enduring financial return or be exposed to downside losses.¹⁰¹
- **High-level design of legal arrangements.** The NESO will be licensed and regulated by Ofgem, where Ofgem will monitor the NESO's compliance with its licence obligations and statutory duties and take appropriate action where necessary. Additionally, the existing Strategy and Policy Statement (SPS) framework will be extended to the NESO.

⁹⁹ *'Future System Operator - Government and Ofgem's response to consultation.'* BEIS and Ofgem (April 2022).

¹⁰⁰ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023).

¹⁰¹ *'Statutory consultation on National Energy System Operator licences and other impacted licences.'* DESNZ and Ofgem (March 2024); page 20.

- **High-level design of broader regulatory framework.** Ofgem will carry on evaluating the NESO's performance (by way of a regular schedule of public assessment of the NESO's performance). However, it might move from the status quo (*detailed outputs*) to more high-level and strategic outcomes. Moreover, changes to the NESO's performance assessment are proposed to be implemented in phases, with the model applicable at Day 1 not necessarily being the enduring model.
- **Funding model and cost regulation.** The NESO will be funded on a cost-pass-through basis, with a 100% fast money approach from consumers.
- **BPs and Plan assessment.** The NESO will have to submit streamlined BPs on an annual basis, for Ofgem's approval.
- **High-level design of incentives.** The NESO will only be subject to reputational incentives, applied through annual public assessments of its performance by Ofgem. There will be no organisational-level financial incentives, and with regards to staff-level incentives, there will only be a high-level obligation to account for Ofgem performance assessment outcomes (and any instance of licence non-compliance) within its senior staff remuneration decisions.
- **Stakeholder and external scrutiny.** The proposed licence conditions envisage appropriate platforms for stakeholders and external parties to provide feedback on the NESO's performance and shape its BPs. Ofgem considers there are opportunities to streamline existing arrangements, where stakeholder scrutiny is sought through multiple channels.

Table 8: Summary of development of the overarching regulatory framework set by the Government and Ofgem for the NESO

	BEIS and Ofgem (April 2022)	Ofgem (December 2023)	DESNZ and Ofgem (March 2024)
Ownership structure and organisational design	The NESO is established as a public corporation, with operational independence from the Government.	Not-for-profit public corporation owned by the Government (sole shareholder), where the Government would not receive an enduring financial return or be exposed to downside losses.	No change from Ofgem's December 2023 proposals.
High-level design of legal arrangements	Licensed and regulated by Ofgem, where Ofgem will monitor the NESO's compliance with its licence obligations and statutory duties and take appropriate action where necessary. Extend the existing SPS framework to the NESO.	No change from April 2022 Decision.	No change from April 2022 Decision.
High-level design of broader regulatory framework	Ofgem will provide regulatory oversight of the NESO's performance. Where appropriate, Ofgem will also implement an incentive regime on the NESO to promote high levels of operational performance, innovation, and ambition. Details of the incentive framework will be openly developed and set out in, or under, the relevant licence(s).	Ofgem evaluates the NESO's performance (regular schedule of public assessment of the NESO's performance). It might move from the status quo (<i>detailed outputs</i>) to more high-level and strategic outcomes.	Proposal to implement changes to the NESO's performance and incentives framework in phases, including essential changes introduced for Day 1, with a more enduring framework established at appropriate later points, including the end of NGESO's current RIIO-2 BP in April 2025.
Funding model and cost regulation	Funded via network charges determined through a price control mechanism.	100% fast money approach and the NESO not required to hold a credit rating. It will also be funded on a 'cost-pass-through' basis.	No change from Ofgem's December 2023 proposals. Wind down RAV over 7-year period. Requirement to produce and follow a cost allocation methodology across gas and electricity functions, which is approved by Ofgem.

	BEIS and Ofgem (April 2022)	Ofgem (December 2023)	DESNZ and Ofgem (March 2024)
BPs and Plan assessment	Ofgem will provide a known framework for sector engagement with the NESO's aims and business planning.	<p>Where Ofgem moves to a higher-level performance assessment framework, this could enable the NESO to produce lighter touch plans than those under RIIO-2, which are focused on key priorities and major deliverables produced annually.</p> <p>Ofgem has a role in approving and challenging the NESO on its spending and its delivery of value for money.</p>	Proposal for the NESO to submit BPs and reports justifying its expenditure to Ofgem annually.
High-level design of incentives	<p>Ofgem's regulatory framework will be fit for purpose and deliver high quality outcomes for consumers.</p> <p>Where appropriate, Ofgem will also implement an incentive regime on the NESO to promote high levels of operational performance, innovation, and ambition. Details of the incentive framework will be openly developed and set out in, or under, the relevant licence(s).</p>	<p>Organisational-level incentives</p> <p>Reputational incentives applied through annual public assessments of the NESO's performance by Ofgem (higher-level assessment approach which is less focussed on detailed outputs).</p> <p>There will be no organisational-level financial incentives.</p> <p>Staff-level incentives</p> <p>High-level obligations to account for Ofgem performance assessment outcomes (and any instance of licence non-compliance) within its senior staff remuneration decisions.</p>	No change from Ofgem's December 2023 proposals.

	BEIS and Ofgem (April 2022)	Ofgem (December 2023)	DESNZ and Ofgem (March 2024)
Stakeholder and external scrutiny	Ofgem will provide a known framework for sector engagement with the NESO's aims and business planning.	<p>Appropriate platforms for stakeholders and external parties to feedback on the NESO's performance and shape the NESO's BPs.</p> <p>Opportunities to streamline existing arrangements, where stakeholder scrutiny is sought through multiple channels.</p>	No change from Ofgem's December 2023 proposals.

Source: Economic Insight analysis

In the following, we provide a more detailed overview of the proposals and decisions that have led to the current proposals. We set out, in turn: (i) BEIS and Ofgem’s April 2022 Decision; (ii) DESNZ and Ofgem’s August 2023 Consultation; (iii) Ofgem’s December 2023 Consultation; (iv) DESNZ and Ofgem’s March 2024 Consultation; and (v) other related consultations.

6B. April 2022 Decision

In April 2022, the Government and Ofgem published their response¹⁰² to their July 2021 consultation on proposals for an expert, impartial FSO with responsibilities across both the electricity and gas systems, to drive progress towards net zero whilst maintaining energy security and minimising costs for consumers. That decision included the commitment to proceed with the creation of the FSO, as well as key decisions on the regulatory framework for it.

The Government and Ofgem concluded that the most effective organisational model to drive progress towards net zero whilst maintaining energy security and minimising costs for consumers was to establish the FSO as a public corporation (whereby the Government will be the sole shareholder), with operational independence from the Government.¹⁰³ Specifically, the Government states “[t]his means that it would sit within the public sector, but outside of central Government, and with the operational freedom it needs to manage and organise itself to delivery its roles and objectives”.¹⁰⁴ Below, we summarise the key characteristics of the proposed organisational model.

- The FSO will be **regulated** and accountable to Ofgem through its **licence obligations**. Ofgem will additionally provide a framework for sector engagement regarding the FSO’s aims and business planning.
- The high-level functions, powers and duties of the FSO will be set out in legislation. Specifically, the FSO will have a primary **statutory duty** to undertake its functions in a way which promotes the objectives of: (i) managing the trade-offs and synergies required to achieve net zero; (ii) maintaining security of supply of electricity and gas; and (iii) ensuring an efficient, coordinated, and economical system. Its statutory duty will further require the FSO to have regard to several other matters including: (i) the need to facilitate competition and innovation; (ii) understanding the impact on consumers and consumer behaviour; as well as (iii) operating in a whole-system manner. The FSO will hold both the electricity and gas licences and have the potential to hold additional licences, if required and provided for in future legislation. Specifically, the FSO will hold two categories of licence: (i) the ESO licence; and (ii) the Gas System Planner licence.

¹⁰² *‘Future System Operator - Government and Ofgem’s response to consultation.’ BEIS and Ofgem (April 2022).*

¹⁰³ *The Government emphasised that the nature and limits of its role in the NESO will be clearly and transparently described in the NESO’s framework document, articles of association and other foundational governance documents.*

¹⁰⁴ *‘Future System Operator - Government and Ofgem’s response to consultation.’ BEIS and Ofgem (April 2022); page 36.*

- Ofgem will **monitor the FSO's compliance** with its licence obligations and statutory duties and take appropriate action where necessary.
- The **regulatory framework** in which the FSO will operate will be set by Ofgem in a way that is fit for purpose and delivers high quality outcomes for consumers. Where appropriate, Ofgem will implement an incentive regime on the FSO to promote high levels of operational performance, innovation and ambition.
- The FSO will be **funded via industry**, and ultimately consumers, through network charges at a level determined through a price control mechanism.
- The Government will put in place a **performance framework** to ensure the FSO is not disincentivised from driving outcomes for the long-term benefit of the energy system and consumers.
- The Government will amend and extend the **SPS framework** in the Energy Act 2013 to apply to the FSO, in order to impose legally binding:
 - duties on the FSO to have regard to the SPS strategic priorities when exercising specified functions and to carry out those functions to further the delivery of the policy outcomes; and
 - reporting requirements on the FSO in relation to the SPS which mirror the reporting requirements on Ofgem in relation to the SPS: its forward work programme, published annually, contains its strategy for furthering the policy outcomes, and its annual report reports on how it has complied with its duties in relation to the SPS.

6C. August 2023 consultation

In August 2023,¹⁰⁵ DESNZ and Ofgem further consulted on two new elements of their FSO policy.

- New Day 1 security and resilience roles for the FSO.
- New power for the Secretary of State to direct the FSO in certain limited circumstances related to national security.

6D. December 2023 Consultation

In December 2023, Ofgem consulted on additional features of the FSO's regulatory framework.¹⁰⁶ Specifically, Ofgem further developed the Government's regulatory framework set out in section 6A above. Ofgem proposed that the FSO will be not-for-profit and funded by consumers using a 100% 'fast money' approach. Overleaf, we set out the key developments to the FSO's regulatory framework proposed by Ofgem.

¹⁰⁵ *'Future System Operator - Second Policy Consultation and Update,' DESNZ and Ofgem (August 2023).*

¹⁰⁶ *'Consultation on the policy direction for the Future System Operator's regulatory framework,' Ofgem (December 2023).*

- **Government involvement.** The strategic priorities in the Government's SPS will be considered as part of the NESO's statutory duty.
- **Organisational performance incentives.** There would be no organisational-level financial incentives. Instead, regulation would focus on reputational incentives, with an appropriate link to the FSO's staff incentives. Ofgem stated that this could involve *"[t]he application of robust reputational incentives through an annual public assessment of the FSO's performance by Ofgem; but moving towards a higher-level assessment approach which is less focussed on detailed outputs."*¹⁰⁷ Additionally, Ofgem suggested *"[a]n approach to licence enforcement, which creates strong incentives on FSO senior managers through robust reputational consequences and formal recommendations to the shareholder."*¹⁰⁸
- **Staff-level incentives.** Ofgem proposed that *"[h]igh-level licence requirements on the FSO to account for Ofgem performance assessment outcomes (and any instances of licence non-compliance) within its senior staff remuneration decisions"*¹⁰⁹ could be involved in the regulatory model.
- **BPs and Plan assessment.** Ofgem's policy direction stated that there would be *"[s]tremlined FSO business plans which are focussed on key priorities and major deliverables, and which are produced annually."*¹¹⁰
- **Funding model and cost regulation.** Ofgem proposed the FSO would be funded by consumers through a 100% fast money approach. This means the FSO could seek to recover its full forecast spend within the financial year, with true ups to account for differences between industry charges and actual spend. Ofgem will play an important role regarding approving and challenging the FSO on its spending and delivery of value for money. The Government would not receive an enduring financial return or be exposed to downside losses. Additionally, the FSO would not need or have access to borrowing from the private sector and therefore it would not be required to hold a credit rating.
- **Stakeholder and external scrutiny.** Ofgem suggested the use of *"[a]ppropriate platforms for stakeholders and external parties to feedback on FSO performance and shape FSO business plans."*¹¹¹

¹⁰⁷ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.9.

¹⁰⁸ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.9.

¹⁰⁹ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.9.

¹¹⁰ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.9.

¹¹¹ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.9.

6E. March 2024 Consultation

Subsequently, in March 2024, DESNZ and Ofgem published a statutory consultation on the NESO's licence conditions,¹¹² responding to various open consultations, including Ofgem's December 2023 consultation, and DESNZ and Ofgem's August 2023 consultation.

The proposed licence conditions establish the activities, operations and working arrangements that the NESO should undertake. Specifically, the NESO will have two licences through which it will be regulated by Ofgem: (i) an ESO licence covering its obligations regarding its electricity functions; and (ii) a Gas System Planner (GSP) licence covering its obligations regarding its gas functions. The licences will include conditions for:

- (i) its strategic and operational functions;
- (ii) its roles including the provision of advice, analysis, and information to the Government; and
- (iii) its obligations concerning energy industry codes and charging.

Further, the NESO's statutory duties, as provided in the Energy Act 2023, including promoting net zero, energy security, and cost efficiency, will also be regulated by Ofgem as relevant requirements.¹¹³

The following new developments are proposed in the March 2024 Consultation:

- **Licence obligations / enforcement.** The consultation states that the *"two licences will be granted by the Secretary of State using powers in the Energy Act 2023 to the body being designated as the ISOP"*.¹¹⁴ The licence conditions include an obligation for the NESO to comply with the scope and detail of the SSEP set out in a commission from the Secretary of State. In addition to the SSEP, the NESO will also be responsible for creating a new CSNP that will provide an independent, coordinated, and longer-term approach to wider network planning in Great Britain to help meet the Government's net zero ambitions.
- **Government involvement.** The NESO should work with the Government and other parties to develop the SSEP. The SSEP should define the optimal mix and location of generation and energy infrastructure to meet Great Britain forecast demand and net zero targets.
- **BPs and Plan assessment.** The NESO will be required to submit plans and reports justifying its expenditure which Ofgem plans to assess both *ex-ante* and *ex-post* as part of its regulatory processes.

¹¹² *'Statutory consultation on National Energy System Operator licences and other impacted licences.'* DESNZ and Ofgem (March 2024).

¹¹³ *'Statutory consultation on National Energy System Operator licences and other impacted licences.'* DESNZ and Ofgem (March 2024).

¹¹⁴ *'Statutory consultation on National Energy System Operator licences and other impacted licences.'* DESNZ and Ofgem (March 2024); page 13.

- **Funding model and cost regulation.** The consultation states that the “*NESO’s regulatory framework will be supported by financial arrangements provided by government, including a working capital facility, to manage cash flows and a process for managing the transition between ESO and NESO regulatory models*”,¹¹⁵ as well as “[w]hile NESO will not earn an enduring regulatory profit, it will initially be structured to wind down its RAV and compensate the taxpayer for the cost of providing that capital over a time limited period.”¹¹⁶ Further detail is also provided on the allocation between electricity and gas charges, for which the NESO will be required to produce and follow a cost allocation methodology which is approved by Ofgem.

6F. Related consultations

Additionally to the decisions and consultations set out above, we have also considered the Government and Ofgem’s position with regards to the following consultations:

- In September 2023, Ofgem consulted on two proposed draft licences, which would be held by the FSO: an Electricity Operator (ESO) licence and a GSP licence.¹¹⁷
- In December 2023, Ofgem published a decision on the framework for the FSO’s CSNP.¹¹⁸ It set out how, and when, it expects the FSO to produce the CSNP and its related publications, including the Future Energy Scenarios (FES) and the interaction between the CSNP and the SSEP.
- In March 2024, DESNZ and Ofgem published a consultation on code governance reform proposals covering code manager licensing and secondary legislation.¹¹⁹ Specifically, it set out the proposed high-level contents of the code manager licence as well as proposals for the secondary legislation that will underpin Ofgem’s code manager selection process.
- In April 2024, DESNZ and Ofgem proposed the introduction of a temporary facilitative licence condition to support the implementation of the Independent System Operator and Planner (ISOP).¹²⁰

¹¹⁵ [‘Statutory consultation on National Energy System Operator licences and other impacted licences.’ DESNZ and Ofgem \(March 2024\); page 20.](#)

¹¹⁶ [‘Statutory consultation on National Energy System Operator licences and other impacted licences.’ DESNZ and Ofgem \(March 2024\); page 20.](#)

¹¹⁷ [‘Future System Operator Draft Licences Consultation.’ Ofgem \(September 2023\).](#)

¹¹⁸ [‘Decision on the framework for the Future System Operator’s Centralised Strategic Network Plan.’ Ofgem \(December 2023\).](#)

¹¹⁹ [‘Energy code reform: code manager licensing and secondary legislation.’ DESNZ and Ofgem \(March 2024\).](#)

¹²⁰ [‘Statutory consultation on the temporary facilitative licence condition to support the implementation of the Independent System Operator and Planner – Reasons and effect.’ Ofgem \(April 2024\).](#)

7 Appendix B: In-depth review of regulatory governance and funding arrangements

This Appendix sets out our more in-depth review of other organisations': (i) ownership; (ii) funding; (iii) profit objective; (iv) organisational-level financial incentives; (v) reporting of financial key performance indicators (KPIs); and (vi) staff-level financial incentives.

7A. Ownership

Considering different organisations' ownership is important, as this may (in some circumstances) affect incentives. We classified organisations into one of the following: (i) *state-owned* (public); (ii) *privately owned* (e.g. private company limited); or (iii) *mixed* (e.g. Government golden share; public benefit corporation; public private partnership; etc).

We reviewed the ownership structure of all 30 organisations by looking at their corporate structure or annual reports, which is usually available on the organisation's website. As Table 9 illustrates, half of the organisations are state-owned; nine are privately owned; and six have a mixed ownership structure.

Table 9: Review of ownership structure

Ownership	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
State-owned	8	1	6	15
Privately owned	0	6	3	9
Mixed	2	0	4	6

Source: Economic Insight analysis

An example of a ‘mixed’ ownership organisation is NATS (the UK’s air traffic control provider), as it is a public-private partnership between the Airline Group (42%), NATS staff (5%), the UK airport operator – LHR Airports Limited (4%), and the Government, which holds 49% (the golden share).¹²¹

THE WAY IN WHICH
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FUNDED CAN HAVE
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ON THEIR INCENTIVES TO
FULFIL POLICY GOALS.

7B. Funding

The way in which organisations are funded can have important implications on their incentives. For example, organisations that are entirely Government funded are more likely to have incentives (implicit or explicit) to fulfil certain policy goals (all else equal). In contrast, firms that are funded through commercial revenues will tend to be more incentivised to earn income / returns (all else equal). Under our review, we classified the funding sources of organisations as follows:

- *Government*, which is where an organisation is fully funded by the taxpayer, i.e. through Government grants;
- *commercial – unregulated*, which is where the organisation is funded through *commercial* revenues, and is free to generate those revenues (set prices) as it chooses, not being subject to formal regulation;
- *commercial – regulated*, which is where the organisation is funded through commercial revenues, but where the amount of revenue (and / or prices) it earns (sets) are determined, at least in part, through some form of regulation; and
- *mix of Government and commercial*, which is where the organisation is funded *partially* through commercial revenues – regulated or unregulated – and *partially* through Government funds, such as grants.

We assessed the organisations’ funding models by examining their financial accounts, as well as various legislative or regulatory frameworks. The largest number of organisations (14, mostly comprising of other system operators) are funded by regulated commercial revenues, as illustrated in Table 10.

¹²¹ See: <https://www.nats.aero/about-us/company/>.

Table 10: Review of funding models

Funding	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
Government	0	1	0	1
Commercial – regulated	2	1	11	14
Commercial – unregulated	2	5	1	8
Mix of Government and commercial	6	0	1	7

Source: *Economic Insight analysis*

By way of example, the UK Infrastructure Bank's funding model is as a '*mix of Government and commercial*', since it is funded both from investment earnings and the UK Government (grants).¹²² Likewise, we find that the Nuclear Decommissioning Agency (NDA) is funded from the commercial activities it undertakes, as well as the UK Government through grants.¹²³

7C. Profit objective

SOME COMPANIES WITH A NOT-FOR-PROFIT AIM CAN STILL EARN A PROFIT. THEY MAY EITHER (I) KEEP THE PROFIT (I.E. REINVEST OR RETURN IT); OR (II) RETURN IT TO RELEVANT STAKEHOLDERS.

Companies can have a profit-earning *aim* (for-profit companies) or alternative aims, such as increasing participation in sports (not-for-profit companies). However, just because an organisation has a not-for-profit *aim*, does not mean it is not *able* to earn a profit (e.g. a surplus of revenue over costs). Where this occurs, and where the organisation's *aim* is not-for-profit, there are two broad alternatives – either (i) the organisation is allowed to 'keep' the profit (despite its aim; where, depending on its ownership structure, it might reinvest any surplus, return it to customers, or offer a return to shareholders) or, (ii) where the company is (by statute) not 'allowed' to retain any profit, it would likely have to return any surplus earned to relevant stakeholders (most likely customers), such that a profit never technically arises (in an accounting sense).

Under our review, we classified organisations into one of the following as regards their profit objective:¹²⁴

- *not-for-profit*, that is, the organisation's main objective is something other than generating profit, and any potential financial surplus (revenues over and above costs) that *could* arise must be immediately returned to relevant stakeholders, such as customers / members (i.e. no profit arises);

¹²² 'UK Infrastructure Bank Limited Annual Report and Accounts 2022-2023,' UKIB (2023).

¹²³ See: <https://www.gov.uk/government/organisations/nuclear-decommissioning-authority/about>.

¹²⁴ Our definition of profit is in line with that of the UK Companies Act 2006.

- *not-for-profit aim*, where the *objective* of the organisation is not to make a profit, but it does have the *ability* to do so, meaning any revenues over and above costs can be recorded (and redistributed in various ways); and
- *for-profit*, where the organisation operates with the goal of making a profit.

Table 11 shows that, overall, there is a relatively even split across the reviewed organisations in terms of their profit objectives. Specifically, out of the 13 other system operators, seven are not-for-profit, whilst six are for-profit.

Table 11: Review of profit objectives

Profit objective	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
Not-for-profit	2	3	7	12
Not-for-profit aim	7	1	0	8
For-profit	1	3	6	10

Source: Economic Insight analysis

By way of example, Transpower in New Zealand is state-owned, *not-for-profit* organisation. This is because any surplus equity is returned to taxpayers, by way of dividends paid to the New Zealand Government.¹²⁵

7D. Organisational-level financial incentives

Given the nature of the organisations we have reviewed, the organisational-level financial incentives we are most interested in is their ability to make a profit. As can be seen in Table 12, most organisations are able to earn a profit, irrespective of their aim.

Table 12: Review of profit ability

Organisational-level financial incentives	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
Ability to make a profit	8	4	6	18

Source: Economic Insight analysis

¹²⁵ See: <https://www.transpower.co.nz/about-us/who-we-are>.

7E. Reporting of financial KPIs

Further to organisational-level financial incentives, we also assessed how many organisations reported / published financial KPIs on a regular basis. This provides transparency around the financial health of organisations.

Table 13: Review of reported KPIs

Organisations that report financial KPIs	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
Report financial KPIs	9	5	12	26

Source: Economic Insight analysis

We find that most other system operators (12 out of 13 organisations reviewed) published some form of financial KPIs on a regular basis. This suggests that they have financial reporting requirements in place, which they adhere to.

7F. Staff-level financial incentives

Finally, we examined what staff-level financial incentives applied within the organisations we reviewed. To do this, we examined the remuneration policies published by said organisations. We classified these as follows:

- *short-term* financial incentives, where staff are rewarded for good performance on an annual basis;
- *long-term* financial incentives, where staff are rewarded for good performance across a period of more than one year and performance is usually evaluated at both a personal and company (organisation) level; or
- *unclear*, where based on public domain information, we were unable to determine the staff incentives that applied (if any).

Out of the 30 organisations, 73% offered short-term staff financial incentives and 40% offered some form of long-term staff financial incentives. This is illustrated in Table 14. Most organisations applied at least some form of staff-level incentives.

MOST ORGANISATIONS FOR WHICH WE COULD FIND INFORMATION ON THEIR REMUNERATION POLICIES OFFER – AT LEAST – SHORT-TERM FINANCIAL INCENTIVES TO THEIR STAFF.

Table 14: Review of staff-level financial incentives

Staff-level financial incentives	UKGI	Other market operators	Other system operators	Total
<i>N</i>	<i>10</i>	<i>7</i>	<i>13</i>	<i>30</i>
Short-term	90%	57%	69%	73%
Long-term	70%	43%	15%	40%
Unclear	0%	29%	31%	20%


Source: Economic Insight analysis

Box 4: Case study - NDA short- and long-term staff-level incentives¹²⁶

The NDA's Short-Term Incentive Plan (STIP) encourages improved operational and organisational performance, by delivering part of their reward package as variable pay, linked to achievement of the business operating plan and staff's personal objectives. The NDA's CEO has a STIP up to a maximum of 50% of salary and the Group CFO has a STIP up to 40%.

The Long-Term Incentive (LTIP) encourages strong and sustained performance in line with the strategy and mission, by aligning executive pay on longer-term strategic goals. LTIP awards are made at the start of each 3-year performance period. The maximum LTIP outturn is 50% for the CEO and 40% for the CFO.

¹²⁶ 'Nuclear Decommissioning Authority Annual Report and Accounts 2022/23,' NDA (2023).



8 Appendix C: Outline of negotiated settlement approach to setting the NESO's BPs

This Appendix outlines how negotiated settlements could be used to set the NESO's BPs.

8A. Overview

As set out in Chapter 2, it is important that the 'initial contract' with the NESO (i.e. its BP) is specified such that it is incentivised to focus on the right priorities; deliver to an appropriate quality; and at an efficient cost.

One way this could be achieved (without having a formal *ex-ante* price control) would be to use a negotiated settlement approach. In broad terms, this would function as follows:

- The NESO would outline a shortlist of 'packages' that it could deliver under its Plan. This would include different combinations of: (i) outputs delivered; (ii) quality achieved; and (iii) costs incurred.
- These options would then be put to consumer and network / system user representatives as a starting point, who would '*negotiate*' with the NESO until a final package was arrived at that was deemed acceptable to the NESO and the representatives.

In this Appendix, we expand on the above, addressing in turn: (i) more detailed design considerations (including outlining practical options); (ii) examples of where negotiated settlement has been implemented; and (iii) views on why a negotiated settlement approach may be beneficial, in relation to the NESO.

8B. Detailed design considerations and practical options

To implement a negotiated settlement approach in practice, a number of design issues must be considered. In the following we expand on these, setting out our thoughts on practical approaches that could be used. The issues we address are:

- How to determine the initial packages of options.
- Choice of consumer and network / system user representatives (who negotiates with who?).
- Design of the negotiation process.
- Reaching resolution when settlement cannot be agreed.

Determining the initial packages

Under a negotiated settlement approach, it is necessary that a party (typically the organisation responsible for delivering the required services; in this case, the NESO) tables an initial set of proposals as a starting point. Therefore, one must consider *'how'* those initial proposals should be arrived at. Key considerations in this case are that: (i) there will likely be trade-offs relating to *'what'* the NESO delivers in terms of quality and cost; and (ii) there will be differing views across energy system stakeholders as to what the appropriate priorities and trade-offs are.

To address the above, we suggest that the key requirements of any initial package design process should be as follows:

- The NESO could be required to identify a shortlist of packages (say up to 3), which each reflect a somewhat different prioritisation of objectives and trade-offs (e.g. between cost and quality).
- The NESO could also be required to develop and provide evidence for each of its proposed packages. That is to say, we would expect it have evidence of the potential benefits; costs; and risks associated with each combination, which would be published alongside its packages for transparency.
- The packages would need to be described in sufficient detail, such that the consumer and network / system user representatives (addressed below) could adequately understand *'what'* would be delivered under each, and the outcomes they would give rise to. This is important, so that once the negotiation process starts, the parties can understand the implications of *'trading off'* individual elements within each package.

Choice of consumer and network / system user representatives

A challenge under negotiated settlement approaches is that it is often impractical for the provider (in this case the NESO) to directly negotiate with end consumers. This is both because end consumers: (i) typically do not understand the technicalities of the service being provided; and (ii) are not a single entity (but are numerous). Thus, it is typically the case that a negotiating party (or parties) must be identified to act as the *'consumer representative.'* In this instance, the complexity of the energy system further means it is inherently difficult, if not impossible, to objectively determine what choices will be in the best interests of consumers overall.

Following from the above, we consider that companies operating within the energy system (e.g. network / system users) would be well placed to negotiate with the NESO. The intuition for this is that, whilst each would (of course) have different views as to what the *'right'* package should be, reflecting their disparate roles in the energy system, those different views should broadly reflect the complex trade-offs that exist, when seeking to optimise the system to maximise consumer benefits overall. Put simply, if we assume said companies are incentivised to deliver for their customers, they are inherently well placed to negotiate with the NESO.

More detailed consideration would need to be given as to precisely which companies should be included in the negotiation process. However, we would expect the following categories to be included:

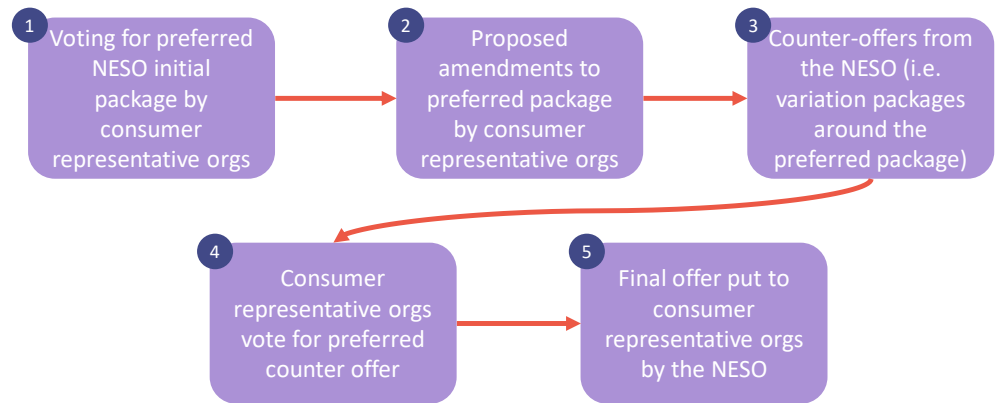
- Electricity distribution and transmission companies.
- Electricity generation companies.
- Electricity interconnector operators.
- Gas distribution and transmission companies.
- Gas interconnector operators.
- Retail (supply) companies for electricity and gas.

Design of the negotiation process

The design of the negotiation process refers to the *'steps'* or *'stages'* that take place between the initial packages of proposals put forward (in this case by the NESO) and the final settlement being agreed between the negotiating parties. Such processes can vary significantly and there is considerable latitude as to their implementation. In this case, an important consideration is how best to ensure any process would appropriately balance: (a) fairly reflecting the views of participating stakeholders (the consumer representative organisations), given we envisage numerous companies would need to participate; versus (b) remaining streamlined and efficient.

Again, the detailed design of any process would need careful consideration. However, for these initial purposes, we envisage a five-step process, as summarised overleaf and expanded on in the following passages.

Figure 13: Overview of the negotiation process



Source: *Economic Insight*

Once the NESO puts forward its initial set of (say, three) shortlisted packages, the consumer representative organisations (energy system companies) would vote on their preferred package (**Stage 1**). One would have to consider how to balance the votes provided at this stage. They could either be *unweighted* (e.g. one-company; one-vote); or *weighted* (e.g. by size of revenue or asset base, as a proxy for likely impact on consumer welfare).

With a preferred initial package (i.e. the one with the most votes) identified, in **Stage 2** the consumer representative organisations would then each be able to put forward more detailed proposed amendments to that selected package. In doing so, we would expect those organisations to provide evidence as to why their proposed amendments were in the interests of end customers.

Under **Stage 3**, the NESO would consider the proposed amendments received and would then put counter offers to the consumer representative organisations. By this we mean, starting from the preferred initial package (identified at Stage 1), and amendments suggested (under Stage 2), the NESO would essentially deliver a further shortlist of packages, each being a variation on the preferred package (i.e. a set of ‘*narrowed down*’ packages, that now better align to the preferences of the representative organisations). Again, we would recommend no more than three options.

Next, at **Stage 4**, the representative organisations could vote on the NESO’s counter offers, in order to identify the majority preferred package (under the same process described at Stage 1). In addition to voting for their preferred counteroffer, the representatives could also indicate their view on the maximum appropriate budget (costs) for the NESO, under each option.

Finally, at **Stage 5**, reflecting the votes at Stage 4 and views on budget, the NESO would revert with a ‘*final offer*’ package. At this point, the consumer representative organisations could either elect to accept the offer (in which case, a settlement will have been successfully reached), or reject it (discussed overleaf).

Reaching resolution when settlement cannot be reached

Should a negotiated settlement not be reached (e.g. under the above process, consumer representative organisations reject the NESO's final offer) a mechanism is required to reach a resolution.

In this case, it would seem appropriate that, under that eventuality, Ofgem would make a determination, whereby it would weigh up the views and evidence submitted by both the NESO and the consumer representative organisations, in order to set the package to be provided by the NESO (i.e. an approved BP).

8C. Examples of negotiated settlement in practice

National Energy Board – Canada

In Canada, the National Energy Board (NEB) is responsible for regulating: (i) pipeline construction and operation; (ii) power lines; (iii) pipeline traffics, tolls and tariffs; and (iv) the export and import of natural gas (and the export of oil and electricity). Its Parliamentary mandate is to promote: (i) safety; (ii) environmental protection; and (iii) economic efficiency.

Traditionally, the Board would make regulatory decisions by way of responding to applications by relevant parties (e.g. permission to build pipelines, or to vary prices / tariffs etc). In common with the model in North America more broadly, this process was largely a litigated one. However, where there was sufficient public interest, the NEB would hold public consultations and hearings, in order to obtain a wider evidence base. Specifically in relation to tolls and tariffs, historically there was a '*periodic toll hearing*', whereby the NEB would hear on various contentious issues at the same time.

From the late 1980s onwards, however, the above has been increasingly superseded by the use of negotiated settlement (which can preclude the need for hearings, or at least reduce their scope). Following a consultation in 1987, in 1988 the NEB reported back on regulatory areas targeted for improvement by interested parties. Under this, negotiated settlements were the first topic discussed, where the NEB noted "*strong support appears to exist among submitters for the Board to adopt procedures which would allow for settlement (or partial settlement) of issues by agreement between parties in toll proceedings.*"¹²⁷

Following from the above, the NEB set out principles it wanted any negotiated settlement process to meet, which were:

- Affected parties have a fair opportunity to have their interests recognised and appropriately weighted.
- The process should not fetter the NEB's ability to take the full public interest into account.

¹²⁷ As quoted in '*Negotiated Settlements and the National Energy Board in Canada.*' Doucet and Littlechild (2006); page 20.

- The settlement process must produce adequate information on the public record for the NEB to ensure the settlement results in tariffs that are just and reasonable.
- The NEB's independence is not impinged.
- The NEB cannot accept a package if (in total) it does not result in tariffs that are just and fair.¹²⁸

Of relevance to the establishment of the NESO, it is further worth noting that the NEB considered that the existing wording of the Act did not preclude settlements, and so it did not recommend any legislative changes to accommodate them. From 1994 onwards, negotiated settlements became more commonplace and took the form of multi-year settlements.

Doucet and Littlechild (2006)¹²⁹ identify the following benefits driving the growth of negotiated settlements in Canada:

- More rapid regulatory decisions / outcomes (under litigation, it took 7.1 months on average, to reach a decision; under settlement, this reduced to 2.4 months).
- Reduced number of regulatory decisions (the total number of AEB hearings reduced due to settlements).
- Longer settlements leading to more stability and further reduced regulatory burden (average toll duration of 3.6 years under settlements, compared to 1.7 years under litigated outcomes).
- Increased efficiency (i.e. incentives that reduce cost of service).
- Improvements in service quality.

Settlements in the regulation of electricity in Florida

In Florida, there are four privately owned and vertically integrated companies providing the majority of electricity. The 'base rate' charged to end customers is determined under a negotiated settlement approach (referred to as stipulations) and has been the standard model since 1996.

The first stipulation was signed only by the relevant utility companies and the Office of Public Counsel (OPC). However, there are now typically multiple parties (and therefore signatories) engaged in the settlement process. Since 2002, the median number of parties signing a settlement has been eight.

¹²⁸ As quoted in '[Negotiated Settlements and the National Energy Board in Canada](#).' Doucet and Littlechild (2006); page 21.

¹²⁹ As quoted in '[Negotiated Settlements and the National Energy Board in Canada](#).' Doucet and Littlechild (2006); pages 40-44.

The process is relatively simple, working as follows:

- The Utility (or other interested parties) can apply to the Florida Public Service Commission (PSC) for a rate review.
- The PSC then opens a ‘*docket*’ for that rate review, and any parties (intervenor) can file testimony on it, offering views and evidence.
- Settlement negotiations then typically occur following that testimony, with stipulations signed where agreement is reached.
- Hearings occur if no settlement is reached, with the PSC then making the rate review decision.

Identified benefits from the above include: *“consumers have gained rate reductions, refunds and innovative service quality incentives. The utilities have gained commitments on conduct (moratoria on requests for rate reviews for agreed periods), greater flexibility on accounting policy, and the evolution from rate of return regulation to incentive regulation.”*¹³⁰

8D. Reasons a negotiated settlement approach may be beneficial in the case of the NESO

We recognise that, were one to implement a negotiated settlement approach in relation to the NESO, the design issues discussed above would require further consideration. In addition, there would be implementation issues that would need to be addressed. We also recognise that negotiated settlement models have not typically been used in regulation in the UK, notwithstanding their use elsewhere. Nevertheless, at face value, there are several features regarding the role of the NESO and its objectives that would seem to lend itself to such a model. Most obviously:

- Given the ‘*whole energy system*’ remit of the NESO, there is inherently a need to manage trade-offs in seeking to implement approaches that best promote consumer interests in totality. Therefore, a regulatory model that places weight on ensuring the disparate interests of consumers and network / system users are represented (both via the evidence collected by the NESO in developing its initial proposals; or representative organisations during negotiations) is inherently attractive.
- Related to the above, under alternative approaches, one would seem to be primarily reliant on a single body (either the NESO itself under a ‘light touch’ review process, or Ofgem under a ‘detailed review’ approach) having responsibility for determining ‘*what is best*’ for the system.

¹³⁰ [‘A summary of evidence and thinking on negotiated settlements.’ Carbon and Energy Markets \(2013\).](#)

- A negotiated settlement addresses the considerable concerns regarding a lack of incentives for the NESO to develop the '*right*' plan (under the 'light touch' review approach), whilst also being less resource intensive for Ofgem and other stakeholders than the 'detailed review' approach (or more formal *ex-ante* price controls).
- It provides greater scope for flexibility and innovation, which would seem to be especially important in the context of the needs of the future energy system being uncertain.

Finally, we would note that negotiated settlement approaches can be viewed along a continuum, whereby at one end of the spectrum lies any modest form of customer / consumer engagement (whether direct, or via representatives); and at the other lies a 'full' negotiated settlement. Seen through this lens, it is important to reflect on the critical role the NESO will play and the potential scale of its impact on the energy system. This would point to it being preferable to ensure that, under *any* model, there are strong incentives to ensure its BP properly reflects consumer preferences as to: priorities; quality; and costs.



9 Appendix D: Comparison of NGESO recourse options to the NESO proposals

This Appendix provides an overview of the existing regulatory framework and recourse options for NGESO and the currently proposed one for the NESO regarding energy market stakeholders' ability to challenge the organisation's: (i) activities; (ii) costs; (iii) outcomes; and (iv) quality of outcomes.

9A. Overview

Overleaf, Table 15 provides an overview of the *existing regulatory framework* for NGESO and the currently proposed one for the NESO, regarding energy market stakeholders' ability to seek recourse.

Table 15: Summary of current and proposed regulatory framework on recourse

	<i>NGESO RIIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
Activities	<p>At RIIIO-2, there was enhanced stakeholder engagement, comprising of “structured challenge to the company BPs by groups consisting of expert consumer advocates and network users.”¹³¹ Specifically:</p> <ul style="list-style-type: none"> • <u>NGESO</u> had established (and continues to have) an independently chaired <i>ESO RIIIO-2 Stakeholder Group (ERSG)</i>,¹³² which provided scrutiny and challenge throughout the development of its RIIIO-2 BP; and • <u>Ofgem</u> established an independently chaired <i>RIIO-2 Challenge Group</i>, which reviewed two drafts of company BPs, before the companies submitted their Plans as final to Ofgem.¹³³ <p>This process provided energy market stakeholders with opportunities to feed into NGESO’s BP development and challenge various aspects thereof, including NGESO’s activities and priorities for the regulatory period.</p>	<p>The current BP process proposals appear likely to depart from the approach previously taken to NGESO at RIIIO-2.</p> <p>First, Ofgem will publish the <i>ISOP BP Guidance Document</i>, which will contain further details on “the process for engagement with stakeholders, including any consultations”.¹³⁵ It is possible that this process will be somewhat similar to NGESO’s RIIIO-2 process (outlined on the left). However, we note Ofgem’s proposals “to perform a less detailed up-front assessment on whether individual activities are correct.”¹³⁶ A high-level review by Ofgem would seem more consistent with the NESO’s BP itself also being less detailed, with less supporting evidence, than was the case for NGESO. For example, Ofgem proposes that a higher-level performance assessment framework “could enable the FSO to produce lighter touch plans than those under RIIIO-2”.¹³⁷ Therefore, irrespective of process, this might reduce the ability of stakeholders to effectively scrutinise the NESO’s Plans.</p> <p>Notwithstanding the above, where stakeholders feel their views are not sufficiently heard, they can submit representations on the content of the <i>ISOP BP Governance Document</i>.¹³⁸</p>	<p><i>Business planning stage</i></p> <p>Although the NESO might be able to more frequently revise its activities, as it submits BPs annually, there is potentially less scope for energy market stakeholders to contest these, where they disagree with them.</p> <p>Where stakeholders’ ability to appeal determinations to the CMA is not included within the regulatory framework for the NESO, this significantly reduces stakeholders’ opportunities to challenge the NESO’s activities.</p>

¹³¹ ‘*RIIO-2 Sector Specific Methodology*.’ Ofgem (December 2018); paragraph 3.2.

¹³² See: <https://www.nationalgrideso.com/what-we-do/our-strategy/our-riio-2-business-plan/eso-riio-2-stakeholder-group-ersg>

¹³³ See: ‘*RIIO-2 Challenge Group: Independent Report for Ofgem on RIIIO-2 Business Plans*.’ RIIIO-2 Challenge Group (January 2020).

¹³⁵ ‘*Annex E – Electricity System Operator Licence Conditions*.’ DESNZ and Ofgem (March 2024); paragraph G1.13(e); ‘*Annex G – Gas system Planner Licence Conditions*.’ DESNZ and Ofgem (March 2024); paragraph G1.13(e).

¹³⁶ ‘*Consultation on the policy direction for the Future System Operator’s regulatory framework*.’ Ofgem (December 2023); paragraph 3.21.

¹³⁷ ‘*Consultation on the policy direction for the Future System Operator’s regulatory framework*.’ Ofgem (December 2023); paragraph 3.20.

¹³⁸ ‘*Annex E – Electricity System Operator Licence Conditions*.’ DESNZ and Ofgem (March 2024); paragraph G1.14(c); ‘*Annex G – Gas system Planner Licence Conditions*.’ DESNZ and Ofgem (March 2024); paragraph G1.14(c).

	<i>NGESO RIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
	<p>Additionally, Ofgem held Open Hearings prior to its initial determination of the price control, to focus on areas of disagreement raised by the various groups, and to invite any other evidence in support of, or against, company BPs.¹³⁴</p> <p>Finally, where energy market stakeholders were not satisfied that their concerns had been considered within Ofgem's Final Determination for NGESO, they were able to appeal the Final Determination to the Competition and Markets Authority (CMA).</p>	<p>Second, the NESO “<i>must engage with relevant stakeholders, in line with guidance provided in the ISOP BP Governance Document.</i>”¹³⁹</p> <p>Finally, Ofgem will “<i>assess the Business Plan, and any other supporting information required by the Authority, in line with the process and timelines set out in the ISOP Business Plan Governance Document</i>”¹⁴⁰ and publish an “<i>annual Plan Determination</i>”¹⁴¹ on its website. Again, depending on Ofgem's <i>ISOP BP Governance Document</i>, there <i>may</i> be a provision for Open Hearings and for stakeholders to provide their views of the NESO's BP. However, for the same reasons as set out above, we consider that it will likely provide for <i>less opportunities</i> to stakeholders to feed into the BP, especially as the NESO's BPs will be produced on an <i>annual basis</i>.¹⁴²</p> <p>Whilst the current proposals are drafted such that Ofgem makes a ‘<i>Plan Determination</i>’¹⁴³ it is not (at this stage) entirely clear as to whether those determinations would be appealable by energy market stakeholders to the CMA.</p>	

¹³⁴ ‘*RIIO-2 Sector Specific Methodology.*’ Ofgem (December 2018); paragraph 3.2.

¹³⁹ ‘*Annex E – Electricity System Operator Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.5; ‘*Annex G – Gas system Planner Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.5.

¹⁴⁰ ‘*Annex E – Electricity System Operator Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.7; ‘*Annex G – Gas system Planner Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.7.

¹⁴¹ ‘*Annex E – Electricity System Operator Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.8; ‘*Annex G – Gas system Planner Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.8.

¹⁴² ‘*Annex E – Electricity System Operator Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.3; ‘*Annex G – Gas system Planner Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.3.

¹⁴³ ‘*Annex E – Electricity System Operator Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.8; ‘*Annex G – Gas system Planner Licence Conditions.*’ DESNZ and Ofgem (March 2024); paragraph G1.8.

	<i>NGESO RIIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
Costs	<p>Similarly to NGESO's activities above, energy market stakeholders were able to feed into NGESO's detailed BP development, including challenging its budget and proposed costs.</p> <p>For example, the RIIIO-2 Challenge Group raised various concerns around NGESO's proposed costs; such as highlighting <i>"the challenge of running this size of IT programme, and this number of projects, alongside its system operation role, and with the high level of dependency on National Grid Group. Significant weakness and lack of clarity remain about the precise governance of projects and their dependencies. [...] we are still concerned that allowance for contingencies is too low. We don't think the two-year planning cycle will be sufficient on its own to avoid significant cost overrun / scope creep – an issue given the extensive use of agile methods rather than fixed cost procurement."</i>¹⁴⁴</p>	<p>The current BP process proposals, set out above, would equally apply with respect to costs, and so we do not repeat them here.</p> <p>Additionally, regarding the NESO's costs, we note that Ofgem will consider whether the NESO has taken <i>"all reasonable steps to ensure that it incurs no expenditure which is demonstrably uneconomical, wasteful or inefficient"</i>¹⁴⁵ as part of its BP assessment (and, ultimately, can impose its own view on costs, where this test is not met).¹⁴⁶</p> <p>Moreover, at any point in time Ofgem can <i>"issue a Cost Efficiency Notice to the licensee where the Authority considers it requires further information in relation to the licensee's compliance with paragraph F1.4 for a specified activity or for specified expenditure."</i>¹⁴⁷ The NESO may have to submit a <i>"Cost Efficiency Plan"</i> (if asked), in response.¹⁴⁸</p>	<p><i>Business planning stage</i></p> <p>Under the current proposals, the extent to which other energy market stakeholders can challenge the NESO's proposed costs is unclear (beyond offering views during any consultation on the BP).</p> <p>Currently, they must primarily rely on Ofgem appraising the NESO's BP and assessing whether its costs are / are not: <i>"demonstrably uneconomical, wasteful or inefficient."</i>¹⁴⁹</p> <p>Additionally, the same considerations as above around whether / where energy market stakeholders might be able to appeal Ofgem BP Determinations.</p> <p><i>Price control operational stage</i></p> <p>Energy market stakeholders must rely on Ofgem to assess and determine whether the NESO's incurred costs are <i>"demonstrably uneconomical, wasteful or inefficient."</i>¹⁵⁰</p>

¹⁴⁴ See: *'RIIO-2 Challenge Group: Independent Report for Ofgem on RIIIO-2 Business Plans.'* RIIIO-2 Challenge Group (January 2020); page 93.

¹⁴⁵ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4.

¹⁴⁶ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.3(a); *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.3(a).

¹⁴⁷ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.5; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.5.

¹⁴⁸ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.8; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.8.

¹⁴⁹ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4.

¹⁵⁰ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph F1.4.

	<i>NGESO RIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
	As above, where energy market stakeholders considered that these concerns had not been sufficiently addressed in Ofgem's Final Determination, they could appeal to the CMA.	It is less clear whether / how other energy market stakeholders can feed into the above cost assessment process, beyond their BP involvement (i.e. being consulted on).	
Outcomes	<p>Similarly to NGESO's activities and costs above, energy market stakeholders were able to feed into NGESO's detailed BP development, including challenging its proposed outcomes.</p> <p>Beyond BP development, energy market stakeholders are affected by various outcomes of NGESO's activities, such as various decisions it makes. There is variation in terms of <i>how</i> energy market stakeholders can challenge these outcomes / decisions. For example, below we provide some examples in relation to code and EMR decisions.</p> <p><u>Code decisions</u></p> <p>Code modification decisions, such as those that are BSC- or CUSC-related, can be appealed to Ofgem, depending on the route taken. For example, where a code modification is made under the self-governance route, energy market stakeholders are usually able to challenge decisions following a two-tier complaints approach.¹⁵¹</p> <ul style="list-style-type: none"> First, they can request the Relevant Code Panel to review its decision. Where they remain dissatisfied, they are able to appeal the decision to Ofgem. 	<p>Similarly to above, the current BP process proposals also apply here, so we do not repeat them.</p> <p>Additionally, we note that Ofgem has not proposed any other changes to the Codes, nor has it changed the approaches currently available to energy market stakeholders to challenge the NESO's outcomes / decisions.</p> <p>It is unclear under the current proposals, what recourse options will be available to energy market stakeholders across the NESO's range of decisions and further clarity is needed.</p>	<p><i>Business planning stage</i></p> <p>Similarly to above, it is unclear whether / how energy market stakeholders will be able to shape the <i>proposed</i> outcomes that the NESO should achieve, say by way of feeding into the BP development process. Thus, similar concerns to the ones set out previously remain.</p> <p><i>Price control operational stage</i></p> <p>Regarding the <i>actual</i> outcomes the NESO achieves, such as any decisions it makes (e.g. regarding connections, dispatch, etc.) or Plans it publishes (e.g. Future Energy Pathways (FEP), SSEP, CSNP), where Ofgem maintains currently existing recourse options applicable to NGESO, there <i>may</i> be limited concerns. For example, where Ofgem maintains the two-tiered approach to dispute resolution for EMR decisions, or consultation requirements for its Plans, this may provide energy market stakeholders with sufficient means of recourse.</p> <p>However, given the range of decisions the NESO will likely make, and the interlinkages between them, having separate bodies (e.g. Relevant Code Panels, Ofgem, etc.) reviewing the decisions may lead to incongruous outcomes, and should be considered with care.</p>

¹⁵¹ See for example: '[Annex E – Electricity System Operator Licence Conditions](#),' DESNZ and Ofgem (March 2024); Condition E1; Condition E2; Condition E3; and Condition E4.

	<i>NGESO RIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
	<ul style="list-style-type: none"> Finally, as a last resort, a judicial review is also available to energy market stakeholders, who have exhausted this two-tier process. <p><u>EMR decisions</u></p> <p>Similarly, NGESO must follow a process where energy market stakeholders dispute EMR decisions.¹⁵² Again, this follows a two-tiered complaints approach, where:</p> <ul style="list-style-type: none"> First, energy market stakeholders request NGESO to review its decision. Then, they can appeal the decision to Ofgem, if they still remain dissatisfied. <p>Ultimately, they can appeal to the Court.¹⁵³</p>		
Quality of outcomes	<p>Energy market stakeholders are affected by the quality at which NGESO delivers its outcomes. In line with the above, energy market stakeholders can feed into NGESO's BP, to help determine what an acceptable level of performance is.</p> <p>As part of NGESO's RIIO-2 incentive framework, the ESO Performance Panel and Ofgem assess NGESO's performance every six months.¹⁵⁴</p> <ul style="list-style-type: none"> The ESO Performance Panel, led by an independent (non-Ofgem) Panel chair, makes recommendations to Ofgem on an appropriate reward or penalty for NGESO. It assesses evidence provided by 	<p>The current BP process proposals, set out above, also apply here, and so we do not repeat them again.</p> <p>The currently proposed performance reports and assessments, appear to depart from NGESO's RIIO-2 approach.</p> <p>First, Ofgem will publish the <i>ISOPRI (Independent System Operator and Planner Reporting and Incentives) Arrangements Governance Document</i>, which will contain further details on: (i) reports the NESO will have to publish to demonstrate its performance; (ii) the process and procedures for the performance assessment; (iii) the requirements the NESO must fulfil, as part of any assessment process; (iv) how any performance</p>	<p><i>Business planning stage</i></p> <p>Similarly to above, it is unclear whether / how energy market stakeholders will be able to shape the <i>proposed</i> quality of the outcomes that the NESO should achieve, save by way of feeding into the BP development process. Thus, similar concerns to the ones set out previously remain.</p> <p><i>Price control operational stage</i></p> <p>It appears that from Day 1, it is unlikely that the current performance assessment of the NESO will drastically change from NGESO's. That is, stakeholders will likely still feed into the assessment of the <i>actual</i> quality of the NESO's outcomes.</p>

¹⁵² *'Electricity Market Reform dispute resolution guidance.'* Ofgem (October 2021).

¹⁵³ *'Electricity Market Reform dispute resolution guidance.'* Ofgem (October 2021); page 19 and 24.

¹⁵⁴ *'The Electricity System Operator Reporting and Incentives Arrangements: Guidance Document.'* Ofgem (July 2021).

	NGESO RIIIO-2 approach	NESO proposed approach	Issues
	<p>stakeholders, NGESO and collected by Ofgem to provide scores for each of NGESO's roles, based on evaluation criteria.¹⁵⁵</p> <ul style="list-style-type: none"> Ofgem will make a decision, forming its own views on NGESO's performance, including the ESO Performance Panel's recommendation. <p>The above provides energy market stakeholders with a way of challenging NGESO's performance. For example, by feeding into the ESO Performance Panel's assessment (e.g. by responding to calls for evidence, the stakeholder satisfaction survey, etc.).</p>	<p>assessment will be published; (v) requirements regarding the NESO gathering feedback from its stakeholders; and (vi) any other matters relating to the regulation, governance, or administration of the NESO's regulatory performance incentives.¹⁵⁶ This process <i>could</i> be similar to NGESO's RIIIO-2 process (outlined left), especially as Ofgem's initial view was <i>"that regularly scheduled public assessment of the FSO's performance by Ofgem should continue to exist in the enduring FSO regulatory model."</i>¹⁵⁷ However, given Ofgem's proposals to <i>"move away from a granular assessment approach, towards a higher-level assessment approach focussed on key outcomes"</i>¹⁵⁸, it appears that the regulator is seeking to move to a <i>"less detailed, and less regular"</i>¹⁵⁹ performance assessment of the NESO. This could lead to energy market stakeholders being less able to contest the NESO's performance. Notwithstanding this, where stakeholders feel their views are not sufficiently heard, they can submit representations on the content of the <i>ISOPRI Arrangements Governance Document</i>.¹⁶⁰</p>	<p>However, as there won't be financial incentives on the NESO, it may not have as strong an impact on the quality of the NESO's outcomes, as it did for NGESO's. In particular, we note that <i>even with financial incentives</i>, NGESO did not significantly outperform on quality, performing below expectations in some areas. For example, in NGESO's first BP period (BP1), covering 2021-2023, it earned a financial reward of £1.8m (out of a maximum reward achievable of £30m).¹⁶⁴</p> <p>Additionally, concerns remain for the NESO's enduring performance assessment, were this to change significantly from the Day 1 arrangements. However, as there are currently limited proposals put forward by Ofgem, we do not concern ourselves with these further.</p>

¹⁵⁵ *'Electricity System Operator Performance Panel End-Scheme Review 2021-2023.'* Ofgem (July 2023).

¹⁵⁶ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph G2.9; *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph G2.9.

¹⁵⁷ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.15.

¹⁵⁸ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.17.

¹⁵⁹ *'Consultation on the policy direction for the Future System Operator's regulatory framework.'* Ofgem (December 2023); paragraph 3.18.

¹⁶⁰ *'Annex E – Electricity System Operator Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph G2.10(c); *'Annex G – Gas system Planner Licence Conditions.'* DESNZ and Ofgem (March 2024); paragraph G2.10(c).

¹⁶⁴ *'End of BP1 decision on ESO Performance.'* Ofgem (August 2023); pages 5 and 9.

	<i>NGESO RIIO-2 approach</i>	<i>NESO proposed approach</i>	<i>Issues</i>
		<p>Second, the NESO must publish reports demonstrating its performance carrying out the ISOP Business, including with respect to the achievement of its delivery of its BP, in line with the requirements in the <i>ISOPRI Arrangements Governance Document</i>.¹⁶¹</p> <p>Third, the NESO “must use reasonable endeavours to put in place arrangements that enable a diverse range of stakeholders to provide regular and coordinated feedback on the licensee’s performance carrying out the ISOP Business, in line with the specific requirements in <i>ISOPRI Arrangements Governance Document</i>.”¹⁶² This, along with the absence of financial incentives,¹⁶³ suggests there may be less focus on achieving outperformance, in the currently proposed framework.</p>	

Source: Economic Insight analysis

¹⁶¹ *‘Annex E – Electricity System Operator Licence Conditions.’ DESNZ and Ofgem (March 2024); paragraph G2.3; ‘Annex G – Gas system Planner Licence Conditions.’ DESNZ and Ofgem (March 2024); paragraph G2.3.*

¹⁶² *‘Annex E – Electricity System Operator Licence Conditions.’ DESNZ and Ofgem (March 2024); paragraph G2.4; ‘Annex G – Gas system Planner Licence Conditions.’ DESNZ and Ofgem (March 2024); paragraph G2.4.*

¹⁶³ *‘Consultation on the policy direction for the Future System Operator’s regulatory framework.’ Ofgem (December 2023); paragraph 2.12.*

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