

Executive Summary

We are committed to working with our Customers and Stakeholders to help shape the future of the energy market and understand how best the Electricity System Operator (ESO) can deliver value for our customers and consumers. Enhanced stakeholder engagement will best enable us to create a business plan that reflects your needs.

On 22nd June, we held a workshop with stakeholders to discuss:

- how the energy landscape is likely to change over the next 10-15 years and to identify the big questions that we should work together as an industry to solve,
- the roles and behaviours that should be embodied in the ESO's regulatory framework and the regulatory models that could be considered for the ESO's first separate price control.

This was the first of our RIIO-2 'co-create workshops'. We intend to use these workshops and other engagement routes throughout the next 12-18 months to help us build our business plan with you. We will bring options we have worked through for these topic areas for discussion.

The feedback you provide will be used to develop and refine our options before being submitted within our well justified business plan.

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Objectives

In order to create a well justified business plan we first need a view of how the energy landscape will change over the RIIO-2 period and beyond to 2030.



In our first 'co-create' workshop, attendees were given a short presentation on the ESO's initial thinking on the changing energy landscape and some of the key challenges and uncertainties that the industry is likely to face out to 2030. We asked attendees to consider whether we were right to use the 2018 Future Energy Scenarios¹ (FES) as the starting point for this work and whether we had captured the main challenges and uncertainties.

In the second session, we presented our initial thinking on ESO funding models. Ofgem has confirmed the ESO will have its own separate price control in RIIO-2², and will make the ultimate decision on the funding model to be implemented. However, we wanted to explore potential options with stakeholders to help inform our inputs to Ofgem. We are considering potential regulatory models that will ensure that the ESO is funded and incentivised to deliver long term value for consumers across the energy system.



We presented a proposed set of principles for a successful regulatory framework for the ESO in RIIO-2 and our work so far looking at how a number of funding models could apply to the ESO. Attendees discussed each of the models in more depth and undertook an assessment of the strengths and weaknesses of each. We then asked attendees to choose the two models they thought would be most suited to the ESO.

8.1

The average score we received when asking attendees how likely they were to recommend an ESO event to a colleague.

(1 not very likely – 10 extremely likely)

¹ FES 2018

² Ofgem Decision Framework

Our Stakeholders

Engaging with a wide range of stakeholders helps ensure that we capture a cross-industry view of our options. We invited 203 individuals to our workshop and the event was well attended with 43 companies from across the industry represented.

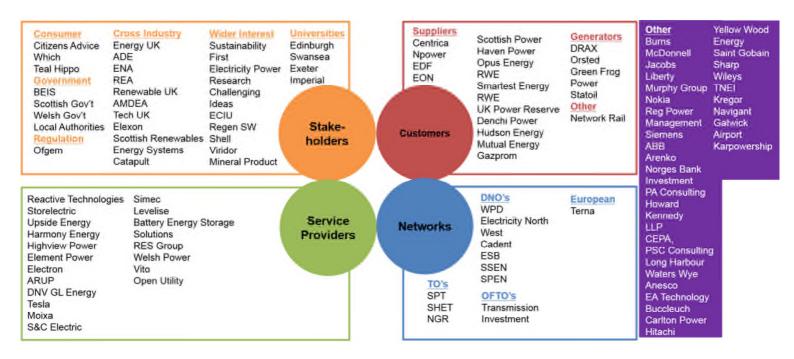
The companies in attendance included:

- Service Providers
- Generators
- Suppliers
- Public interest groups
- Academics

- Transmission Operators
- Government
- Industry Regulator
- DNOs

Our initial thoughts on the changing energy landscape and ESO funding models were also discussed at one of our regular webinars, where we presented the options and feedback we received from the workshop, giving the participants the opportunity to comment. The webinar included a further 50 stakeholders and what they told us broadly aligned with the workshop feedback. We captured lots of valuable responses on the day and from the webinar, all this has been critical to developing our thinking further. The table below shows the organisations that we have engaged with either through our workshop or one of our webinars.

Our updated proposals were submitted to the first ESO RIIO-2 Stakeholder Group³ (ERSG) in July, you can see the collated feedback from all three of these events within the feedback section.



³ Follow this link to the papers of the first **ERSG**

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What stakeholders told us on the use of scenarios

There was broad support for using the 2018 FES, attendees noted the rigorous engagement and analysis that is undertaken as part of the FES annual cycle, but there was a request for more detail on the new FES frameworks and how they would be reflected in our future work.

Stakeholders did not see the creation of a single 'best-view' of the future energy landscape as credible due to the level of change and uncertainty facing the industry. Most stakeholders agreed that we should seek to understand the commonalities across the four FES 2018 scenarios and asked that we provide more detail on these as we develop our thinking.

They also agreed that we should focus further analysis on the possible technical and policy changes that could significantly affect industry processes or consumer value. This was seen as the best way to inform the creation of a meaningful business plan against the backdrop of uncertainty across the industry.

In terms of the challenges and uncertainties, stakeholders felt the area of digitalisation and big data needed to be considered further and asked for more of a balance between the technical changes and the policy and market changes, with some saying our original list (see Table 2) was "too technocratic". There were no alternative set of scenarios suggested by stakeholders.

You can see how we plan to incorporate what stakeholders told us in *Table 1*.

Table 1:

Issue	You said	We will
Using FES as the	At our workshop and webinar	Continue to use FES 2018 as the
foundation of our business plan	you supported using FES	foundation of our plan; moving to more detailed analysis of the areas of change/ uncertainty
	At our workshop on 22 nd June you said more detailed information around the scenarios is required	FES 2018 has now been launched and more detailed information is available. We are also carrying our more detailed analysis on the areas of change and uncertainty and will share once complete.
Understanding the key drivers of change	At our workshop you said you would like to see more of a balance between the technical changes and the policy and market changes, with some saying the list was "too technocratic"	We reduced and consolidated some of the technology topics e.g. specific generation technologies into broad categories e.g. renewable technologies. We balanced the lists between the Technology and Policy and Market categories

At our workshop you felt the area of digitalisation / big data had been overlooked	We refined our areas of change/ uncertainty to specifically include digitalisation, and will incorporate this into our work on IS as part of our business plan development.
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Table 2:

Policy and Market changes	Technical changes
Capacity Market review	Increasing offshore wind capacity
Contracts for difference review	Increasing onshore wind capacity
Increased peer-to-peer trading	Decommissioning coal power plants
CCUS policy	New gas power plants
Heat decarbonisation policy	Increased levels of interconnection
Real time procurement of balancing services	Changing electricity demand profiles
Electricity Charging review	Minimum electricity demand
Competition in networks	Increasing solar PV
UK's relationship with the Internal Energy Market	Increased peak distributed generation
	Increased (Battery) storage
	Increased electrification of transport
	Increased electrification of heat

Top areas of change and uncertainty highlighted by stakeholders and we recommended to the ERSG we should focus on were:

- Digitalisation of the energy system
- Increase in decarbonised and decentralised generation
- Take-up of electric vehicles (EVs)
- Government's position on:
 - o Security of supply policy
 - o Decarbonisation policy
- Changing roles and governance of industry participants

The ERSG feedback we received indicated it would be good to include in the list or be clearer on our options for decarbonisation of heat, storage and Demand Side Response.

What stakeholders told us on Regulatory Mechanisms

Stakeholders strongly supported elements of several models we presented with many highlighting the importance of robust incentives. Strengths and weaknesses were found in all the models, with a strong focus on outcomes highlighted as critical.

We presented a proposed a set of principles for what we believe a successful regulatory framework for the ESO in RIIO-2 should include and our work so far looking at different funding models and how they could apply to the ESO. There was general agreement that the principles we had proposed had identified the right elements of a successful regulatory framework for the ESO.

We asked participants to vote for the three principles they saw as most important. Those highlighted as priorities (from 32 votes), focused on the ability of the ESO to deliver value for customers and consumers and provide services across the whole energy system. The principles we proposed for a successful regulatory framework for the ESO were:

Principles (priorities highlighted in blue):

Holistically supports and encourages the ESO to take the actions and investments needed to deliver long term value for customers and consumers, using appropriate incentives to drive exceptional performance and value for consumers

Provides an appropriate risk-reward framework tailored to the ability to bear risk and the potential value delivered to consumers

Encourages whole energy system thinking and use of market-based solutions to support the continuing low-carbon transition of GB's energy system

Sets clear, manageable and measurable outputs, while building in flexibility to manage uncertainty and respond to changes in customer and consumer needs

Promotes innovation within the ESO and across the system and market

Ensures the ESO is financeable and credit-worthy, and able to operate;

Prevents windfall gains and losses that are not justified by underlying performance

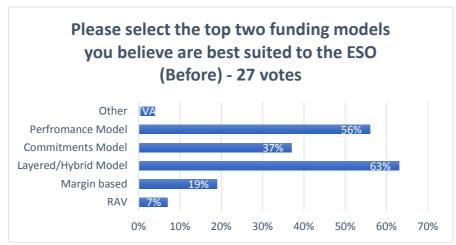
Is sufficiently simple and transparent for the ESO, Ofgem and industry stakeholders to understand.

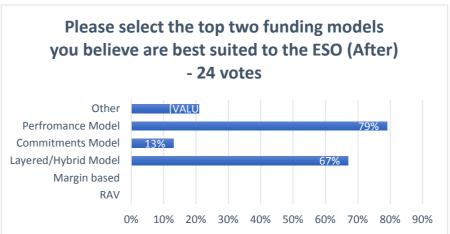
In the workshop, there was consensus that there are overarching questions that need to be considered before a position on the best funding model for the ESO can be made:

- What outcomes do stakeholders want from the ESO in RIIO-2?
- What activities should the ESO undertake in RIIO-2? What roles should the ESO play?
- What risks does the ESO hold, and why should the ESO earn a profit?
- What problems are there with the current funding model and how would these be addressed with any new proposed model?

Stakeholders supported elements of several models we presented with many highlighting the importance of strong incentives. We asked participants at the beginning of the session to vote for funding models they believed to best suited to the ESO and then again at the end after we had highlighted the outcomes of our work. The Performance and Layered models were voted as the two models most suited to the ESO.

We will continue to engage with Ofgem as we build our proposals.





You can see how we plan to incorporate stakeholders feedback in *Table 3* on the following page.

Table 3:

Issue	You Said	We Did	
Principles for the ESO's regulatory framework	An industry trade body pointed out the importance of avoiding windfall profits	We added the principle that the framework 'prevents windfall gains and losses that are not justified by underlying performance'	
	A consumer body suggested that transparency would be important to include in the principles	We added the principle that the framework 'is sufficiently simple and transparent for the ESO, Ofgem and industry stakeholders to understand.'	
	In our stakeholder workshop, an additional principle was suggested around delivering carbon and cost reductions	We have not included an additional principle. We consider that carbon reduction is included in the fourth principle; and that the first principle of encouraging the ESO to deliver value covers cost reduction as well as recognising the potential for necessary short term cost increases to drive longer term savings, and the importance of meeting customer and consumer needs.	
	We tested our principles in multiple bilateral meetings with organisations including Ofgem, suppliers, generators, TOs, DNOs, service providers, consumer bodies, academics and wider public interest, as well as at working groups with a trade association. We have received broad consensus that these principles reflect a successful regulatory framework for the ESO.		
Funding models	In our workshop, 48% of participants responded to a poll on which two were best suited to the ESO. The poll results and qualitative feedback clearly showed strong support for both the Performance and Layered models.	We are pulling out the key features of the models that stakeholders have supported and that meet our proposed framework principles, and will build on the models we have described to develop a bespoke funding model that incorporates these. One key message we have heard is that stakeholders want transparency but not excess complexity, so we will look to make our approach as simple and accessible as possible; while recognising that a model that reflects all that the ESO does, and the different activities we undertake, brings some complexity.	
	There was very little qualitative support for the RAV and Margin models or the ESO/customer contract approach in the Commitments model	In the workshop, we had originally proposed the Commitments model as one of the models we would continue to develop. We will continue to focus on understanding the outcomes stakeholder want and will develop a strong focus on outcomes in the funding model, but we do not plan to pursue the ESO/ customer contract approach any further due to concerns around this.	
	Some stakeholders also suggested looking elsewhere for examples of models: National Air Traffic Services for an example of a Performance model ISOs, such as those in the USA	We are looking at the funding models for these suggested organisations to identify where we can pull out features that meet what we have heard from stakeholders far and our regulatory principles	
	In our workshop, stakeholders pointed that the activities the ESO undertakes and the risks we hold must inform the ESO's final funding model	We agree with stakeholders that the activities the ESO undertakes and the risks we hold must inform the ESO's final funding model. We will be engaging over the next few months to understand what outcomes stakeholders want from us in order to identify how to deliver these, and we will build this into our development of a funding model. As part of this we will aim to provide a clearer explanation of the risks the ESO holds, given feedback that many stakeholders do not understand this.	

Next Steps

We will continue to 'co-create' our business plans with you. We have planned further activities on these topics to give you chance to get involved.

Our current timeline of activity:

- September ERSG Regulatory Mechanisms deep dive
- Early October FES Workshops
- Late October Regulatory Mechanisms Thought Piece
- Ongoing bilateral meetings

If you would like to talk about anything in the report in more detail or have any questions or queries relating to the ESO RIIO-2 work please don't hesitate to get in touch with us through the following channels:

Email: box.ESO.RIIO2@nationalgrid.com

- Online: https://yournergyfuture.com



"The pre-read sent out before the event was extremely useful".

ESO Stakeholder Comment



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