

Welcome to the ESO RIIO-2 webinar

- Thank you for joining us! You will be joined in listen only mode.
- Please do not unmute yourself or turn your camera on
- You can ask questions via the chat function
- The WebEx details are:
 - [0800-376-8336](tel:08003768336) or [020-7108-6317](tel:02071086317)
 - Meeting number (access code): [598 443 116](tel:598443116)

Please note we will be recording this webinar

For more information on the ESO's approach to RIIO-2 please visit <http://yourenergyfuture.nationalgrid.com>

ESO RIIO-2 Webinar

1st November



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Agenda

1 Introduction

2 Whole Electricity System

3 Network Planning

4 Code Administration

5 Next Steps

How you can get involved today



Throughout the presentation please feel free to provide feedback or ask questions via the chat function and we will pause at points to respond

We will be using a poll at certain stages during the presentation to collect your feedback



We hope to have a question and answer session at the end of the webinar. Please press the 'hand' icon next to your name and we will unmute your line.

Key updates

28th September

Long-term vision for the ESO Stakeholder workshop

<http://yourenergyfuture.nationalgrid.com/media/1560/eso-2030-ambition-workshop.pdf>

4th October

Bi-Monthly Bulletin

<https://mailchi.mp/1adea0a9a1a8/eso-riio-2-bulletin-register-for-upcoming-webinars?e=d636dd5b76>

15th October

Published 'Exploring how the ESO could be funded in RIIO-2' thought-piece

<http://yourenergyfuture.nationalgrid.com/media/1587/exploring-how-the-eso-could-be-funded-in-riio-2-v1.pdf>

18th and 25th October

Held round table discussion at the FES workshops on using scenarios and key trigger points for uncertainties

<http://fes.nationalgrid.com/>

Ongoing

Working with Ofgem and the ENA on the use of scenarios in RIIO-2

Our SO Mission focuses us on delivering value

We keep the lights on and the gas flowing round the clock for GB energy consumers; we play an essential role in enabling the transition to a more sustainable energy future.

Therefore we believe that:

- We deliver value for consumers first and foremost, while also ensuring that we build and maintain trusted partnerships with our customers and stakeholders
- We influence the energy debate positively with our independent perspective
- Through using markets, data and networks in new ways across gas and electricity, we help move GB towards a more reliable, affordable and sustainable energy world
- An incentivised for-profit model ensures we deliver the best long-term outcomes for consumers, society and the GB economy

Facilitating Whole Electricity System Outcomes



Andy Wainwright
Business Lead – Whole Electricity System
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The energy landscape is changing

The energy landscape is changing to meet the challenges of;

- Decarbonisation**
- Decentralisation**
- Digitisation**

- 30 GW of distributed generation, excluding small domestic, of which almost 50 % renewables
- 9GW of distributed connection applications processed in 2016
- Over 10 GW distributed solar regularly in the South for much of the summer 18



How we're responding to these challenges

We believe that facilitating whole electricity system outcomes will ensure that industry arrangements develop in a way that maximises consumer value

Providing thought leadership

- 'Facilitating Whole Electricity System Outcomes'

Working with others

- Playing an active role in the Open Networks project

Developing new ways of working

- Using our collaborative initiatives to learn how the ESO needs to change



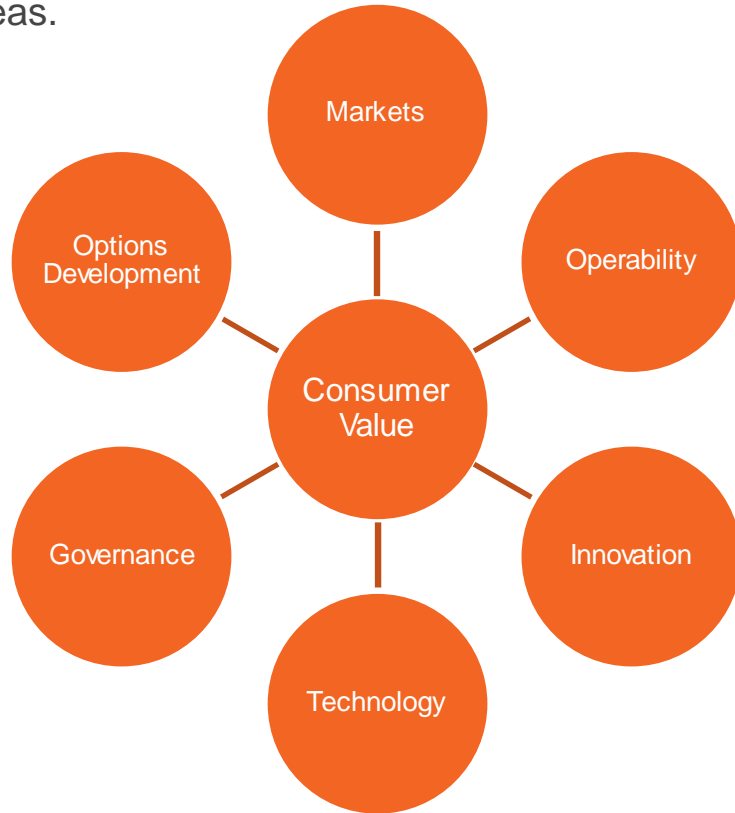
Power Potential

This initiative aims to create a new reactive power market for distributed energy resources (DER) and generate additional capacity on the network.



Facilitating whole electricity system outcomes

Facilitating whole electricity system outcomes will ensure that industry arrangements develop in a way that maximises consumer value. This can be achieved through a focus on six key areas.



Our ambition in 2030;

- Planning, development, investment and operation of the GB networks will be optimised on a whole electricity system basis irrespective of ownership boundaries.
- Solutions to system operator challenges will be open to a full range of participants, facilitating both market and asset solutions.
- Best overall value for consumers will be achieved, irrespective of the ESO or DSO performing the analysis.
- All investment decisions of value are assessed through a consistent cost benefit assessment across the network.

How we've used your feedback

Through your responses to the Future Worlds consultation and engagement with you at industry events we've identified six priority topics for the ESO in 'Facilitating Whole System Outcomes'



1. Market information

2. Framework accessibility and alignment

3. Facilitating routes to market

4. Clarifying responsibilities across the T-D interface

5. System event preparedness & restoration

6. Balancing regional requirements with national consistency

Question: Are these the right areas for the ESO to focus on? What should we prioritise?

Poll

Are these the right areas for the ESO to focus on? If not please use the chat function to let us know what we should focus on:

Yes

Yes, but you are missing something

No

Not sure

Which areas should we prioritise (please pick two from the list):

Market information

Frameworks

Routes to market

T-D interfaces

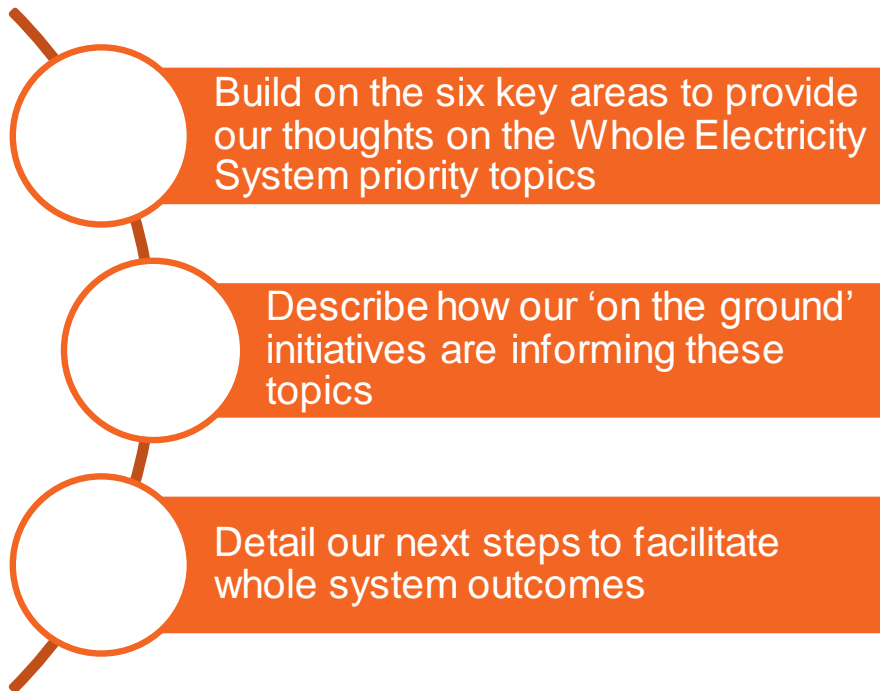
System preparedness

Regional verses national

All of the above

Whole Electricity System next steps

We are intending to follow up our July publication with a broader paper. This document will;



This paper will be the basis for discussion with you through a range of forums.

We are interested in your views before and after its publication. Please contact;
Andy.Wainwright@nationalgrid.com

To find out more about Whole Electricity System go to;

<https://www.nationalgrideso.com/insights/whole-electricity-system>

Driving greater value for consumers through network planning



Alice Etheridge
Network Development Strategy
Manager
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Background

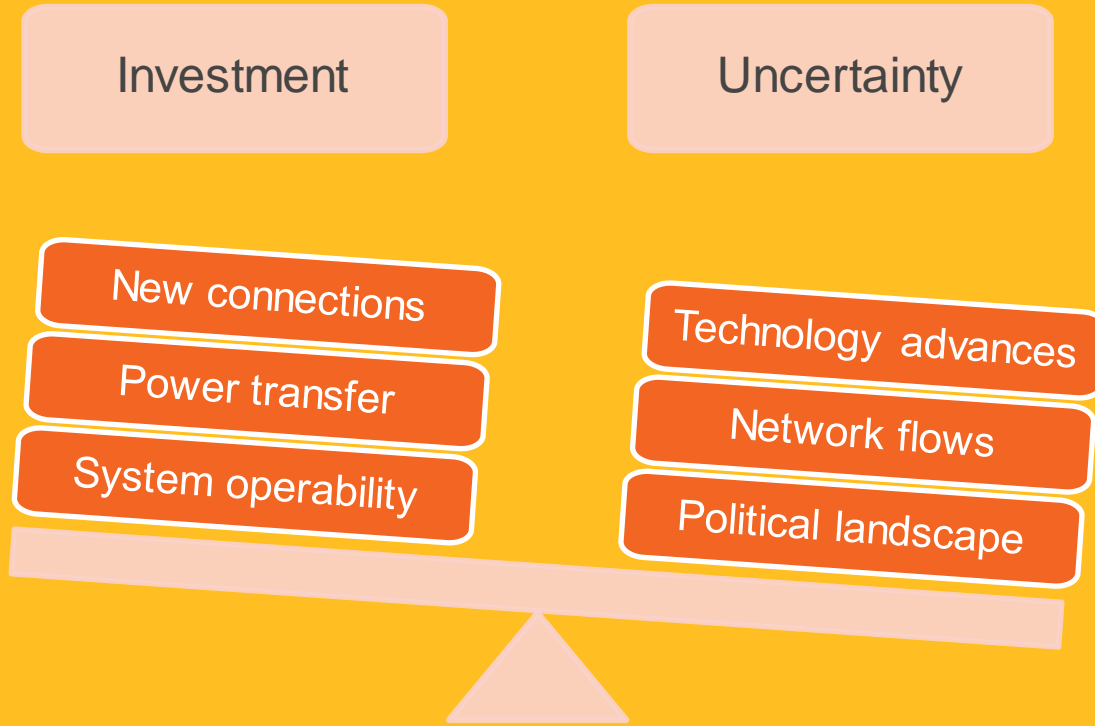
Network Planning is an important element of two of the key topics for RIIO-2:

- facilitating whole electricity system outcomes
- facilitating timely, efficient and competitive network investment

We welcome your views on how we develop our role in this area in RIIO-2



Why do we do network planning?



- Ensures a safe, reliable, efficient, operable future network
- Manages uncertainty over future system needs
- Balances investment against asset stranding

How do we currently plan the network?



System need:

- Boundary transfer capability

Options sought:

- Transmission network

Option providers:

- Existing TOs, SO



Cost
benefit
analysis
against
constraint
costs

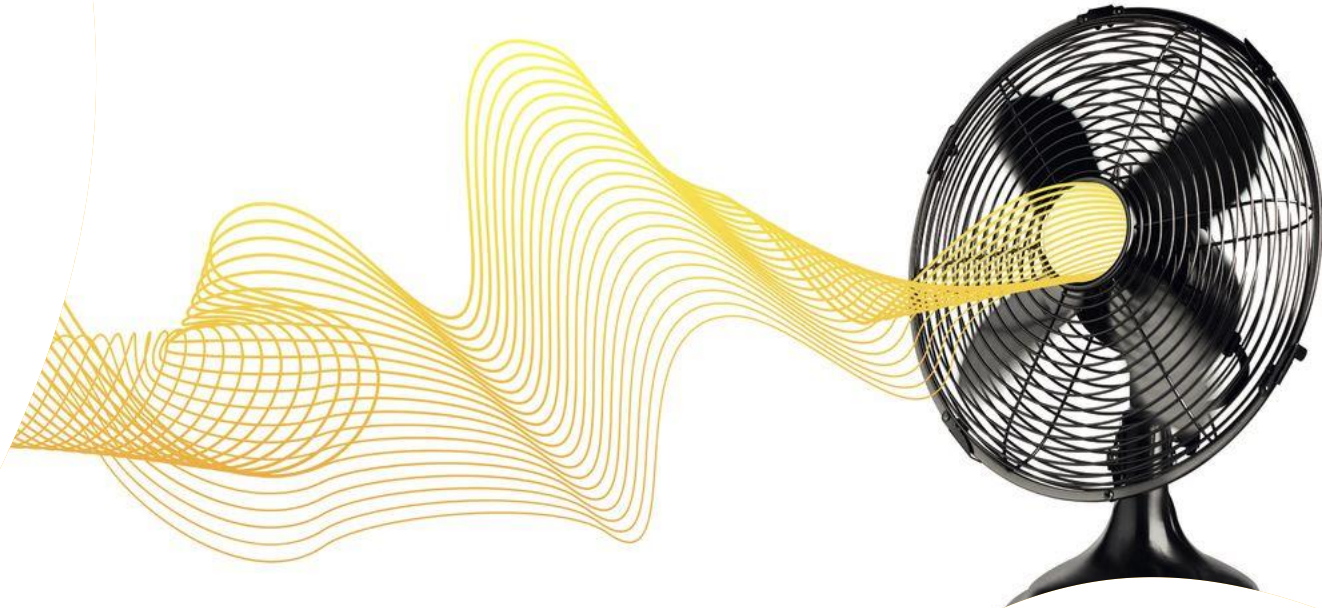


Recommend:
Tx option –
if and when

Planning the network up to 10 years ahead

Why change this?

- We think we can drive greater value to consumers through the way we plan the transmission network.
- We are making changes to our network planning tools, one of which is to compare network and non-network solutions to transmission network needs, across transmission and distribution



What will network planning look like at the start of RIIO-2?



System need:

- Boundary transfer capability
- Voltage management beyond boundaries
- Across the year to a greater extent

Options sought:

- TOs, DN – network & other
- Market and commercial solutions

Option providers:

- TOs, SO, DNOs, market participants



Cost
benefit
analysis
against
each option
& constraint
costs



Recommend:
which option(s) and
when

**Broader range of system needs, of
solutions and solution providers**

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NOA and RIIO-2

Expand NOA to a wider set of system needs in RIIO-2?

For example:

- Connection wider works
- End of life asset replacement
- Lower voltage levels



Poll Question

Should the NOA be expanded to a wider set of network needs in RIIO-2?

Yes – connection wider works

Yes – end of life asset replacement

Yes – lower voltage levels

Yes – all of the above

Yes – but it's not on your list

No – none of the above

If you think there is anything else please feel free to provide this in the chat panel.

A photograph of several wind turbines silhouetted against a bright, golden sunset sky. The sun is a large, glowing orb in the center, casting a warm light over the scene. The foreground shows a field of tall grasses, and a white fence or structure is visible in the middle ground.

Security and Quality of Supply Standard (SQSS)

- Requirements for the TOs and SO on planning and operating the GB transmission system
- System changed extensively since introduced – significantly more renewable and embedded generation
- Time for a fundamental review?

Poll

Would there be merit in us carrying out a fundamental review of the SQSS in RIIO-2 in conjunction with the TOs?

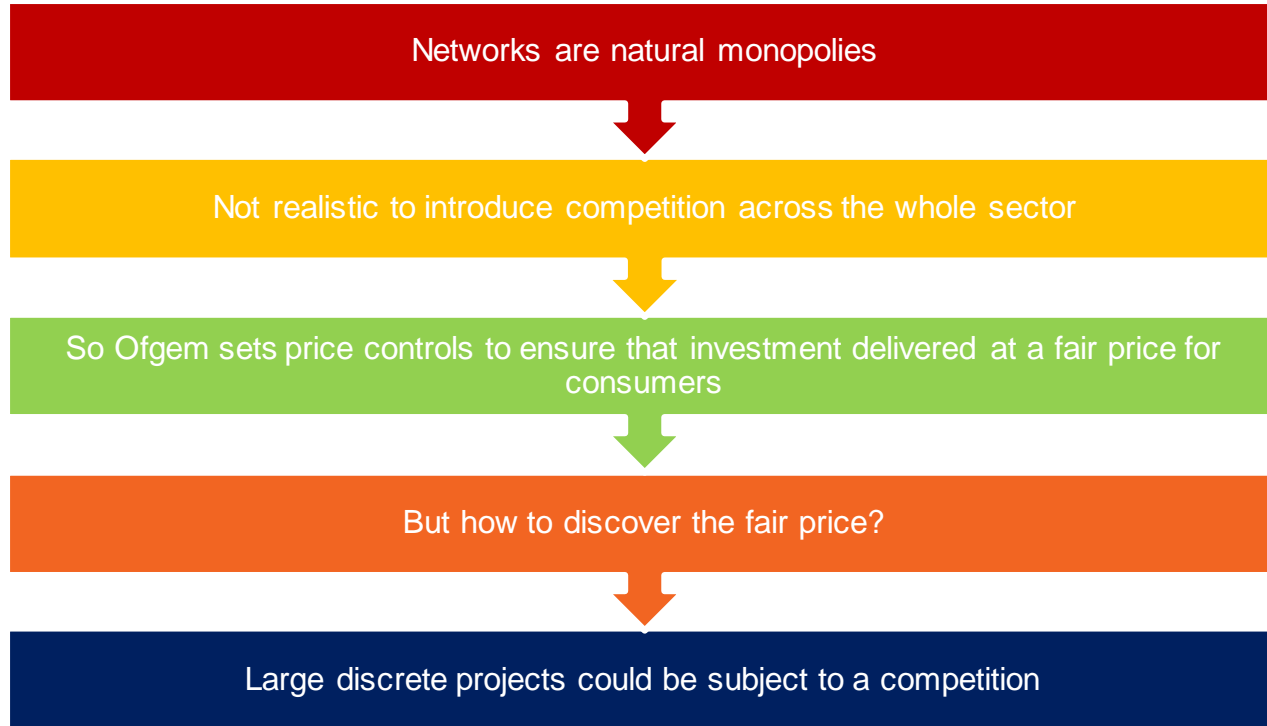
Yes

No

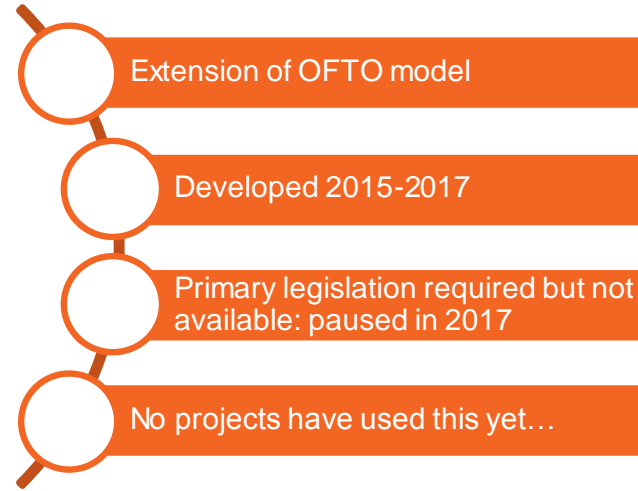
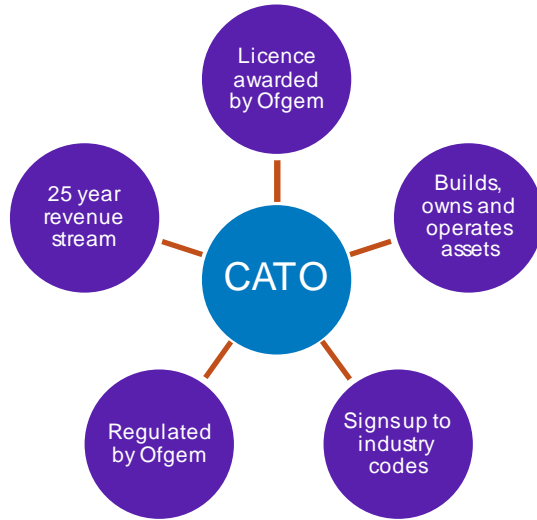
Unsure

Extending competition in onshore transmission

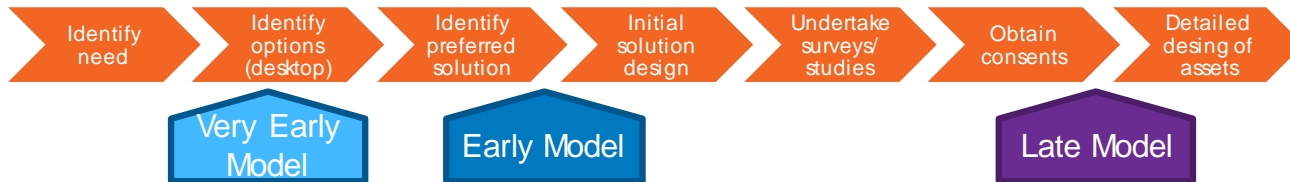
Competition vs Regulation



The Competitively Appointed Transmission Owner (CATO) model



Project development framework



Three variants...

Questions to explore

- What role should the ESO play in facilitating competition in advance of legislation to enable CATOs?
- What role should the ESO play in competition once legislation is introduced?
- What are your views on the different competition models?



Poll

Do you agree with the questions we are considering?

Yes – they're the right ones

In part – they're good but you should also be thinking about
(Provide further comments in the chat function)

No – you shouldn't be doing any work on competition until you have the legislative and regulatory mandate to

Code Administration

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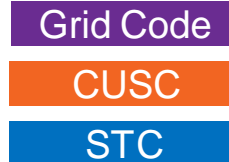
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Recap and the Code Manager role

In the August webinar we talked about:

- the role that we undertake in code administration for our three industry codes
- our customer journey work and where we need to improve
- opportunity to increase consumer value by transitioning to a Code Manager role
- some potential characteristics of a Code Manager



Our CACoP 2018 survey results show improvement but we know we have more to do

Overall Satisfaction	BSC	CUSC	DCODE	DCUSA	GRID CODE	IGT UNC	MRA	SEC	SPAA	STC	UNC
2016/17	82%	47%	77%	83%	59%	62%	70%	71%	73%	45%	77%
2017/18	86%	65%	74%	58%	66%	62%	76%	61%	78%	58%	69%
		18%			7%					13%	

Code Manager - feedback

- We have heard that the existing governance model is not fit for purpose
- Wider direction of travel towards Code Managers and our customer journey work takes us on the same path

The role

There is a need and a want to form ideas together, and have a '**critical friend**' through the process

A Code Manager might have more flexibility to **raise modifications that are not of a technical nature** - e.g. simplification, presentational etc

Areas for further work

Is there **conflict** between the ability to raise mods versus ability to be a good critical friend?

There needs to be some **checks and balances** if a Code Manager has more flexibility to raise Modifications initiated internally from the NGENSO

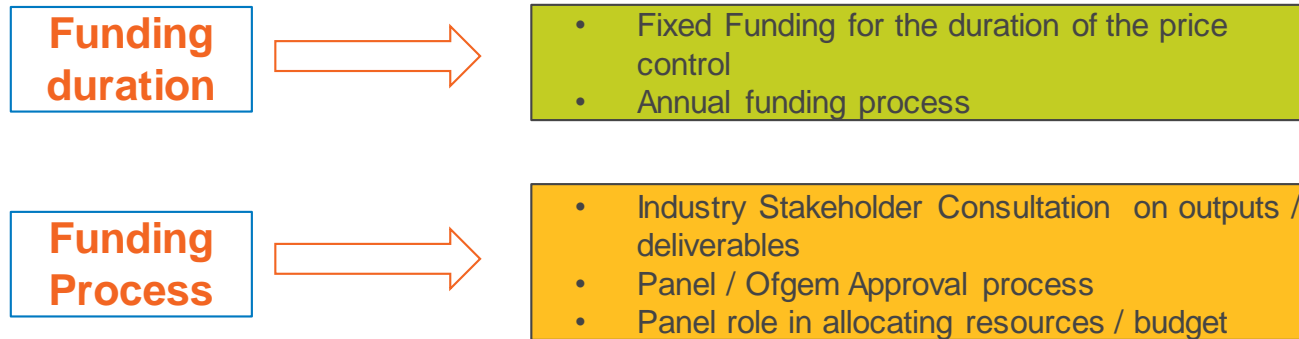
Key requirements

Requires **modelling, analysis and legal** resource

Requires **the right funding process** to work well

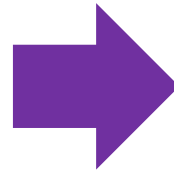
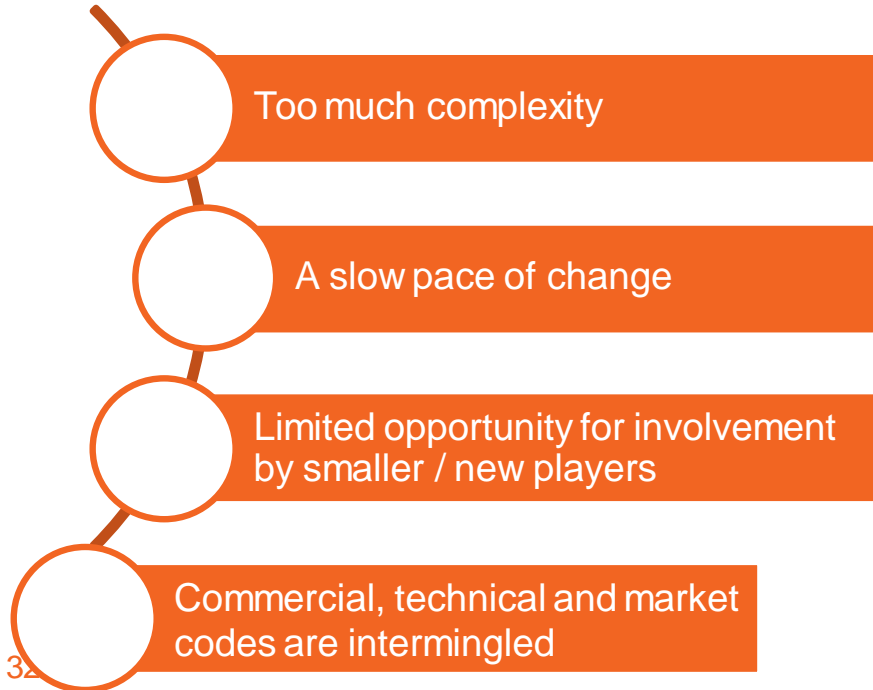
Funding our code administration activity

- Looking at an appropriate funding model for ESO and a possible layered model
- Code Administration could be its own layer – stakeholders have generally supported this
 - Allows for a more bespoke and flexible funding arrangement that would complement the role of a Code Manager
 - Allows for better benchmarking between different code administrators and introduces competitive pressures



Possible code reform

Through our engagement we are also hearing that the current codes structure may not be fit for purpose. For example, stakeholders have said that there is:



- Benefit to be had from simplification and streamlining of the code frameworks
- There needs to be better signposting and provision of information
- How could whole system thinking be facilitated?
- Who is best placed to undertake any reform?

Poll Question

Do you think that code reform is required and to what extent?

No, the current code structure is fine

Yes, I would support some targeted incremental change

Yes, I would support a fundamental review of the current code structure

Not sure

Next Steps



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Upcoming Activity

November

December



1 November
ESO RIIO-2 webinar

14th Nov
ERSG Meeting



Dec
ESO RIIO-2
Bulletin



Mid-Dec
ESO RIIO-2
Workshop

ofgem

18th December
Ofgem publish
Sector Strategy
document

How to get involved



<http://youreenergyfuture.nationalgrid.com>



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