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 or 020-7108-6317

- Meeting number (access code): 598 101 370

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

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ESO RIIO-2 Webinar

1ˢᵗ November

Angelita Bradney
Head of ESO RIIO-2
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Agenda

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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.

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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

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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

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Facilitating Whole Electricity System Outcomes

Andy Wainwright
Business Lead – Whole Electrcity System
Andy.wainwright@nationalgrid.com

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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

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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

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Whole electricity system

The Voice of the Networks

ena energynetworks association

Open Networks Future Worlds

Developing change options to facilitate energy decarbonisation, digitisation and decentralisation

31 July 2018

Power Potential

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

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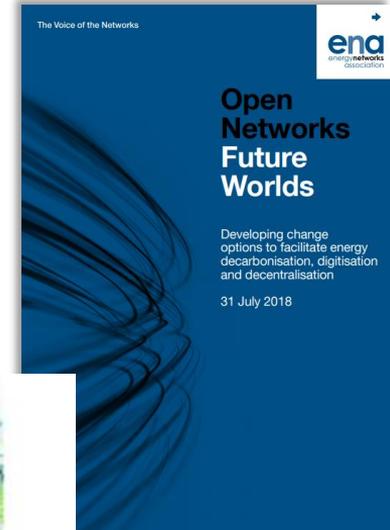
Facilitating whole electricity system outcomes

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.

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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'

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

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

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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

Answer	Poll Result
Yes	30%
Yes, but you are missing something	13%
No	0%
Not sure	13%

Which areas should we prioritise (please pick two from the list):
Market information
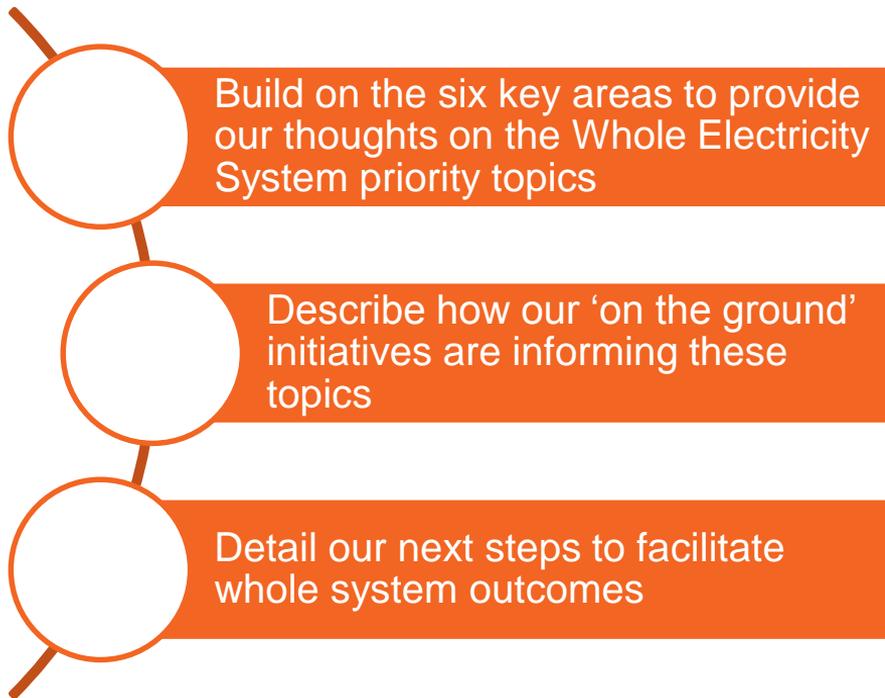Frameworks
Routes to market
T-D interfaces
System preparedness
Regional verses national
All of the above

Answer	Poll Result
Market Information	22%
Frameworks	4%
Routes to market	22%
T-D interfaces	30%
System Preparedness	4%
Regional verses national	9%
All of the above	4%

Whole Electricity System next steps

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

Build on the six key areas to provide our thoughts on the Whole Electricity System priority topics

Describe how our 'on the ground' initiatives are informing these topics

Detail our next steps to facilitate whole system outcomes

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Whole electricity system

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

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Driving greater value for consumers through network planning

Alice Etheridge
Network Development Strategy Manager
alice.etheridge@nationalgrid.com
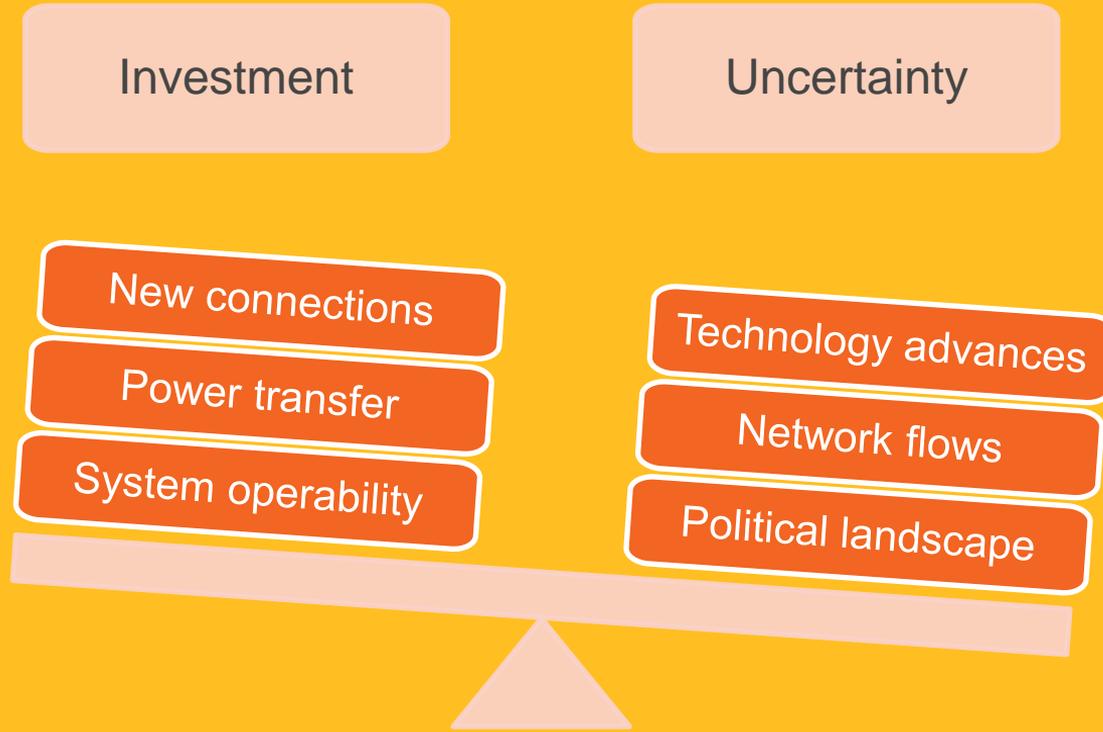
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Background

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

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Why do we do network planning?

Investment

- New connections
- Power transfer
- System operability

Uncertainty

- Technology advances
- Network flows
- Political landscape

- Ensures a safe, reliable, efficient, operable future network

- Manages uncertainty over future system needs

- Balances investment against asset stranding

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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

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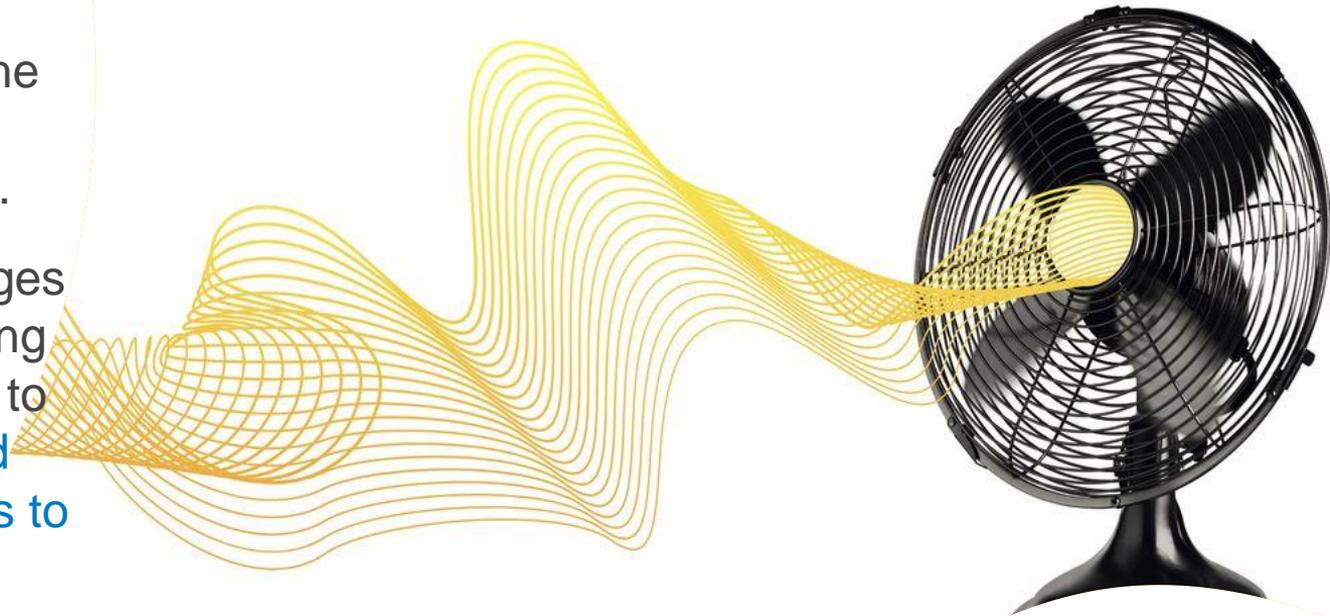
What will network planning look like at the start of RIIO-2?

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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Network Development Roadmap https://www.nationalgrideso.com/insights/network-options-assessment-noa

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

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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

Answer	Poll Result
Yes – connection wider works	13%
Yes - end of life asset replacement	13%
Yes – lower voltage levels	9%
Yes – all of the above	13%
Yes - but nots what on your list	0%
No – None of the above	13%

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

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?

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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
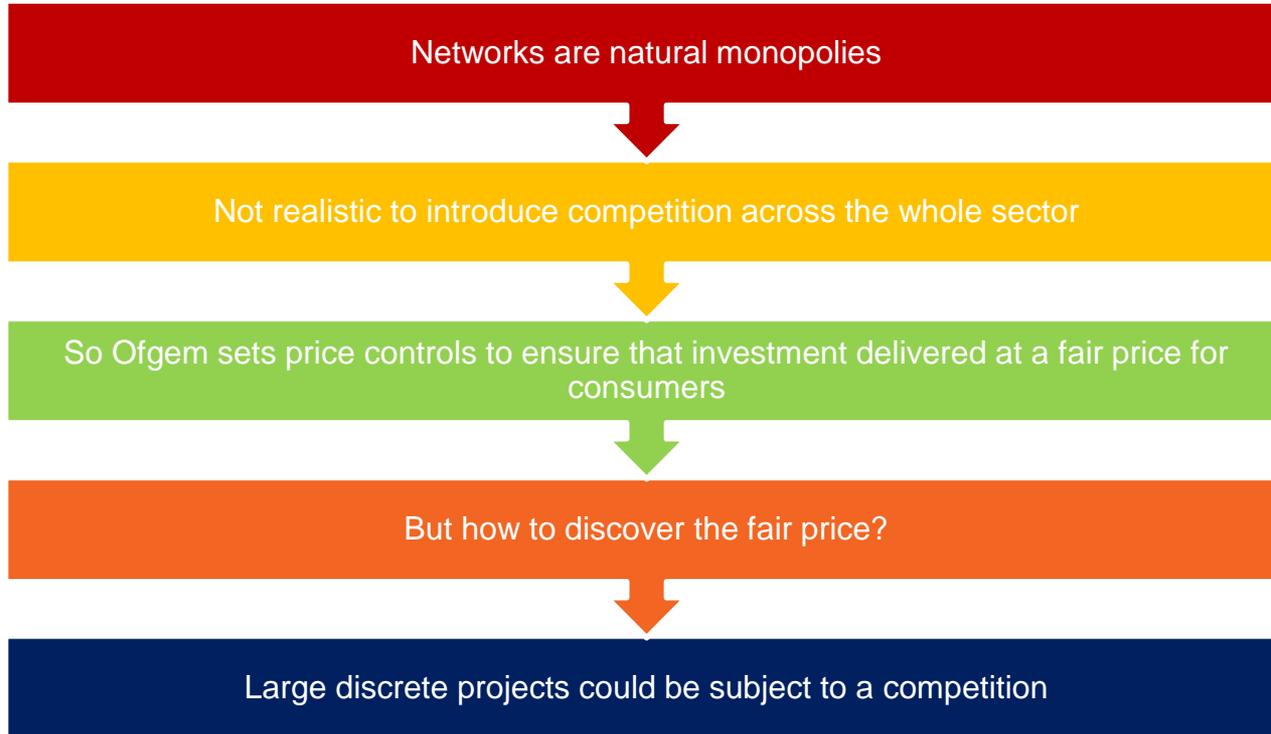Unsure

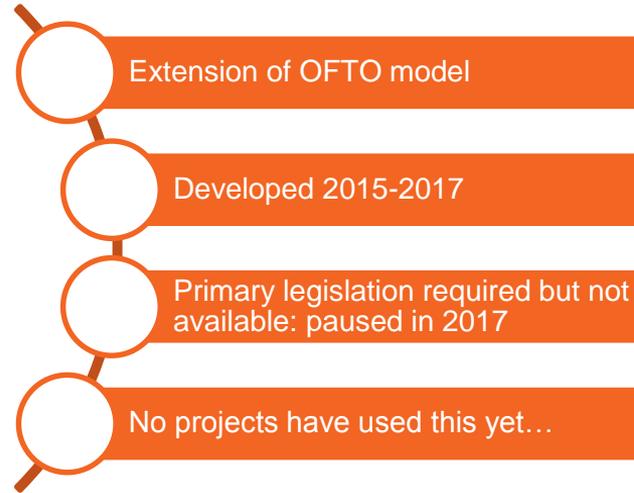| Answer	Poll Result
Yes	30%
No	0%
Unsure	9%

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Extending competition in onshore transmission Competition vs Regulation

Networks are natural monopolies

Not realistic to introduce competition across the whole sector

So Ofgem sets price controls to ensure that investment delivered at a fair price for consumers

But how to discover the fair price?

Large discrete projects could be subject to a competition

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The Competitively Appointed Transmission Owner (CATO) model

CATO
- Licence awarded by Ofgem
- Builds, owns and operates assets
- Signs up to industry codes
- Regulated by Ofgem
- 25 year revenue stream

- Extension of OFTO model
- Developed 2015-2017
- Primary legislation required but not available: paused in 2017
- No projects have used this yet…
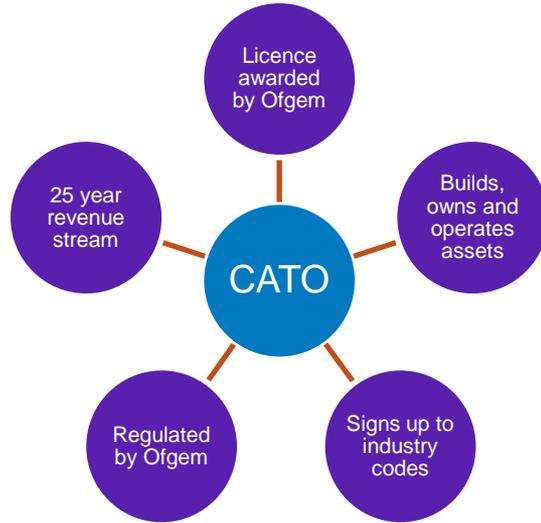
Project development framework

Identify need → Identify options (desktop) → Identify preferred solution → Initial solution design → Undertake surveys/ studies → Obtain consents → Detailed desing of assets

Three variants…

- Very Early Model
- Early Model
- Late Model

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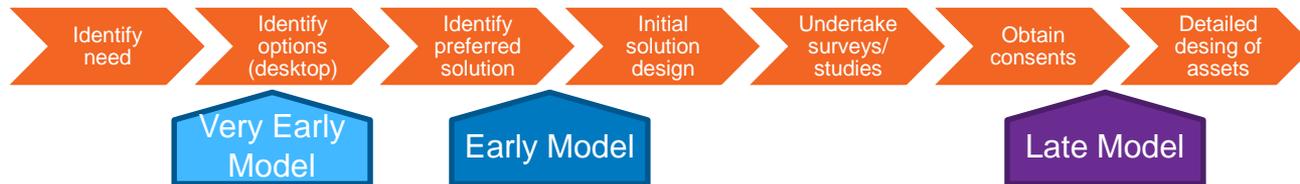
Questions to explore

- 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?

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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

Answer	Poll Result
Yes they're the right ones	36%
In part – they're good but you should be thinking about…	5%
No	5%

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Code Administration

John Twomey
EU and UK Commercial Strategy Manager
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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
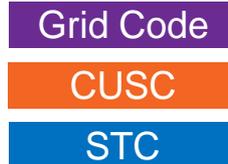
Grid Code
CUSC
STC

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%	

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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

Areas for further work

Key requirements

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

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

Requires **modelling, analysis and legal** resource

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

There needs to be some **checks and balances** if a Code Manager has more flexibility to raise Modifications initiated internally from the NGESO
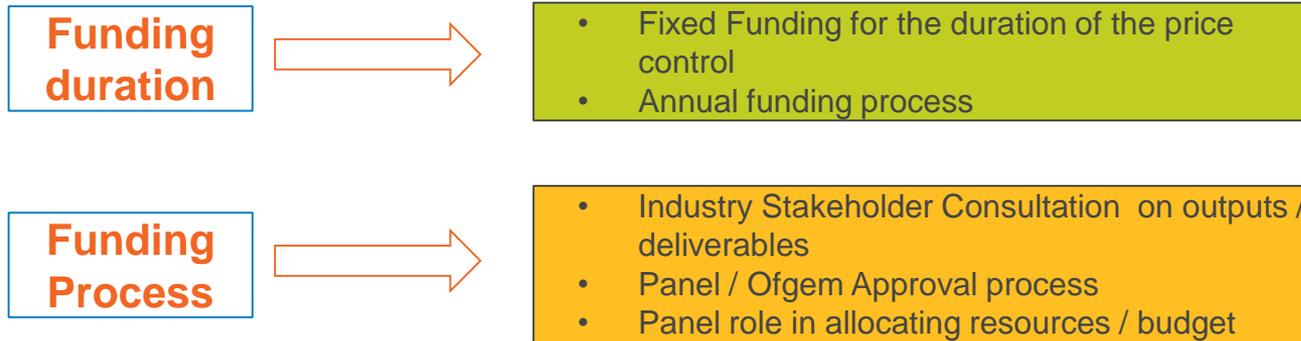
Requires **the right funding process** to work well
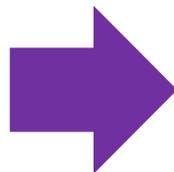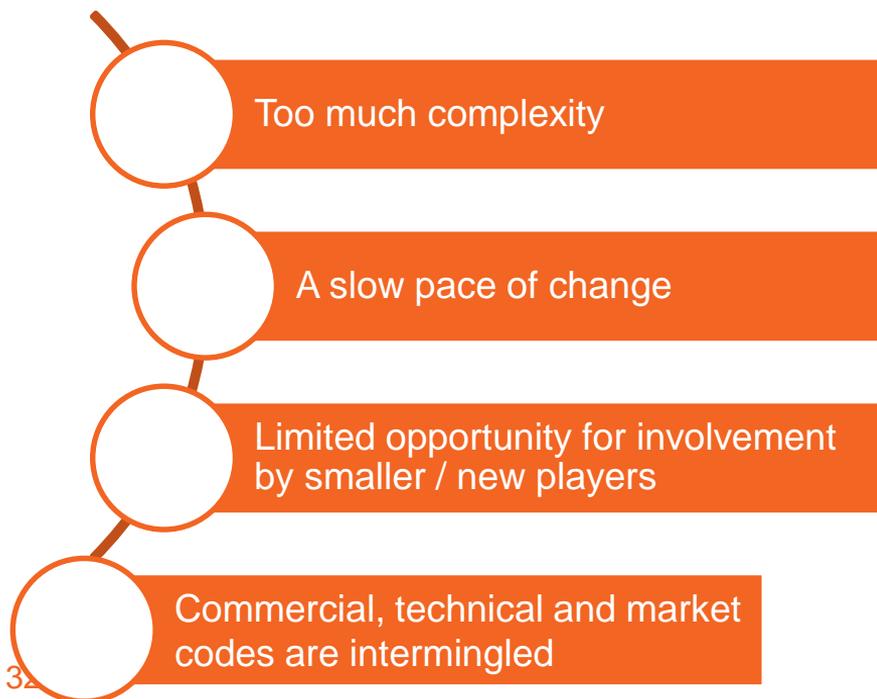
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Funding our code administration activity

- 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

Funding duration	→	• Fixed Funding for the duration of the price control • Annual funding process
Funding Process	→	• Industry Stakeholder Consultation on outputs / deliverables • Panel / Ofgem Approval process • Panel role in allocating resources / budget

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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:

- Too much complexity
- A slow pace of change
- Limited opportunity for involvement by smaller / new players
- Commercial, technical and market codes are intermingled

- 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?

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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

Answer	Poll Result
No	0%
Yes, I would support targeted incremental change	14%
Yes, I wold support a fundamental review	24%
Not sure	0%

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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

18th December
Ofgem publish
Sector Strategy
document

ofgem

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How to get involved

http://yourenergyfuture.nationalgrid.com

Box.ESO.RIIO2@nationalgrid.com