

Agenda

Introduction of the Whole System Grid Code

Journey to Date

Stakeholder Feedback

Identified Benefits

Discussion

Next Steps

Purpose for this discussion

- To provide background on the digitalised whole system grid code ambition
- To gather feedback on the approach and ambition



Introduction

RIIO-2 ambition to work with all stakeholders to create a fully-digitalised, Whole System Grid Code by 2025

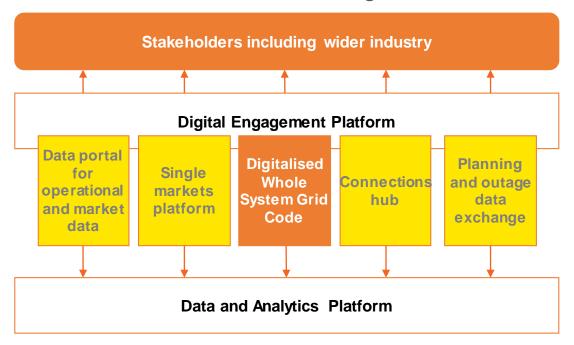
- Focus on providing minimum standards to allow safe and secure operation of the electricity systems.
- Step 1: To determine the scope, objectives and approach together with all stakeholders at the start of this activity in 2021/22. This will ensure that there is a consensus on the direction of this work from the beginning.



Delivering a "digitalised whole system grid code"

The concept can be progressed through two distinct – but closely interlinked – work streams.

Work Stream 1: Grid Code Digitalisation



A digitalised code supported by artificial intelligence to signpost and improve the user experience (e.g. a 'smart search' that retrieves code information relevant to the use case of a specific market participant).

Work Stream 2: Whole System Grid Code

Applying a whole system approach to the technical codes at Distribution and Transmission to improve customer experience, deliver consumer benefit, and ensure these codes are fit for the future.

This is focus of today's presentation.



The Journey to Date

Consumer and stakeholder priorities

The ambition for a digitalised Whole System Grid Code has been developed with the support of stakeholders and Ofgem through the development of the ESO RIIO2 Business Plan

April 2018 Independent research 2000 people 88 people July 2017 System Needs and Product strategy (SNAPS) consultation 128 responses 2017/18 Code Management Journey 2017/18 Manage My Profitability Customer Journey 2017/18 Feb 2018 Ancillary Forward Plan Services consultation Provider Journey

May 2018 Network Development Roadmap consultation 13 responses

2018/19 ESO Customer Satisfaction surveys (CSAT)

2018/19 ESO Stakeholder Satisfaction surveys (SSAT)

2017/18 Network Connections Customer Journey

Feb 2019 Forward Plan consultation 18 response:

June 2018 ESO RIIO-2 webinar. Scenarios and whole system 49 people

ESO RIIO-2 workshop. Scenarios and regulatory mechanism 43 people

Aug 2018 ESO RIIO-2 webinar, Scenarios. charging and 65 people

Copt 2018 ESO roles and ambition workshop, all topics 40 people

Oct 2018 Grid Code Panel 15 people

28 people

ESO BIIO-2 webinar, Sector specific CUSC panel consultation, consumer value (18 people) 24 people Regulatory Mechanisms webinar

Transmission Charging Methodology Forum 24 people

Nov 2018

Nov 2018 ESO RIIO-2 webinar. Network development, whole electricity

system

17 people

workshop

22 people

Jan 2019

79 people

Data and

planning

webinar

31 people

March 2019

Connections

Seminar

ESO Customer

and

Dec 2018 March 2019 Transmission Cyatom operation, Charging system access Methodology planning, whole Forum electricity 16 people system and network development

> March 2019 Operational Forum, Data transparency. balancing markets. system operation

> > 60 people

March 2019 April 2019 Power Responsive Round Table, Data transparency. connections and transparency, balancing system access markets,system operation 19 people

Our RIIO-2

Ambition and initial

proposals

April 2019 RIIO-2 Ambition workshop. all topics 37 people

April 2019 ADE Demand Side Response working group round table 8 people

April 2019 ESO RIIO-2 CBA workshop 10 people

April 2019 ESO RIIO-2 CBA workshop System operation, system access planning. whole electricity system and network development 22 people

April 2019 Our RIIO-2 Ambition consultation 8 responses

May 2019 OC2 Forum. System access planning. connections and codes 42 people

May 2019 Generation Group, System operation, balancing markets, data 8 people

May 2019 Responsive Steering Group. codes 20 people

May 2019 BSC Panel. System operation and balancing

markets

15 people May 2019 ESÓ RIIO-2 Webinar. Innovation, IT strategy, data and system operation 5 people

May 2019 CATO stakeholder webinar 11 people

Jul/Aug 2019 Control centre engagement workshop (3). draft business 13 people

Jul/Aug 2019 Capacity Market launch event, EMR proposals 12 people

Jul/Aug 2019 FES launch event, draft business plan 188 people

ESO RIIO-2

Business Plan

- First Draft

Jul/Aug 2019 ENA ERG, draft business plan 7 people

Jul/Aug 2019 Roundtable. draft business plan and regulatory framework 6 people

Jul/Aug 2019 All TO and ESO meeting, Connections. system access and whole system 10 people

Sept 2019 Energy UK Ancillary Services Group, Balancing services, EMR, code management, metrics 10 people

Sept 2019 Power Responsive Roundtable, draft business plan 5 people

> Sept 2019 Flexible Generators Group, System operation and markets 9 people

Sept 2019 Flexibility First Forum, Gyatem operation and markets 29 people

> Sept 2019 All TO and ESO meeting, Network Options Assessment 8 people

> > Sept 2019 OCZ Outage Forum Scotland 49 people Sept 2019 OC2 Outage forum

England and Wales

17 people

Oct/Nov 2019 ESO Customer Connections Seminar London. Connections portal 45 people

Oct/Nov 2019 ESO RIIO-2 October Workshop. Deliverables. benefits, metrics 00 people

Oct/Nov 2019 ESO Customer Connections Seminar Glasgow, Connections portal 107 people

ESO RIIO-2

Business Plan

Second Draft

Oct/Nov 2019 ESO RIIO-2 Webiner. Deliverables, benefits, metrics 13 people

Oct/Nov 2019 Renewable UK metrics webinar 4 people

Oct/Nov 2019 ESO Operational Forum, draft business plan 69 people

Oct/Nov 2019 IS Change Forum. draft business plan 25 people

Stakeholder Feedback

Stakeholder comments from our RIIO2 engagement in April 2019

Stakeholders were generally supportive of the proposal but, a small number of stakeholders noted the ambitious nature of the proposals and questioned our ability to deliver.

A plain English "lite" version of the code was proposed as a possible alternative to a fully digitalised version

A number of stakeholders, whilst supportive overall, highlighted that we need to ensure that market participants still understand the obligations on them even if the Grid Code is simplified. The obligation will still be on individual parties to ensure that they are compliant with the code.

How this shaped our Business Plan...

Budget and resource has been secured to deliver value while keeping the scope of the project open, to be shaped with industry and the regulator.

The high level ambition aims to facilitate a level playing field for all parties, improve accessibility and understanding of the technical codes across the whole system.



Stakeholder Feedback

Stakeholder comments from other RIIO2 engagement

April 2019: More clarity was requested on what the 'principles based' Grid Code actually means? And what are the principles to be applied?

April 2019: There was a suggestion to start simple with principles and then bolt on/add to those for the exceptions or what you need over and above the minimum.

DNO bilateral meetings in September and October 2019:

Combining the transmission and distribution Grid Codes is inevitable at some point.

Consultation, April 2019: There was general support for creating one integrated Grid Code. One stakeholder expressed the need to ensure that in addition to enhancing the accessibility of the code we should also reappraise the content.

How this shaped our Business Plan...

We stated in the Business
Plan that the first activity to deliver the digitalised whole system grid code will be to define objectives, scope and outcome together with stakeholders.



Identified Benefits

Stakeholder feedback suggests that a whole system Grid Code can help realise key benefits:

- Clear, transparent & accessible technical codes for a wider group of stakeholders
- 2 Increased pace of decision making throughout the connection journey
- 3 Streamlined implementation of code changes & housekeeping existing content
- Increased market participation, a level playing field, and more efficient outcomes for consumers

For Discussion

- 1. Do these benefits address your key concerns with the technical codes from a whole system perspective?
- 2. How do you think the WSGC might aide the DSO transition?



Discussion

The concept of a Whole System Code came from cross-industry engagement, and the project must be industry-led throughout.

For Discussion

- 1. How do we develop the content of WSGC?
- 2. How do we keep industry informed?
- 3. How do we make decisions?
- 4. Would you like to be involved in the development of the Whole System Grid Code?
- 5. Which category of stakeholders best describes you?
 - Existing Code Party
 - Wider Industry Player
 - Consumer Group
 - Academic
 - Existing Code Administrator
 - Trade Associations
 - If Other, please explain
- 6. What are the risks and/or opportunities you envisage from this project?



Next steps

We will present at July/Aug meeting with summary of feedback and proposed next steps

The ESO RIIO2 Business Plan includes a "go / no-go" decision on a project scope by Q4 FY22 (Jan-March 2022)

Thank You