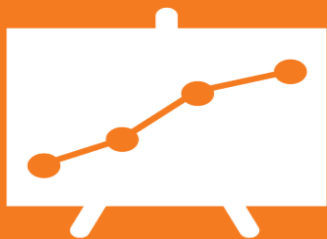


Electricity System Operator Mid-Year Review: Open session



Louise van Rensburg
20/11/18

Housekeeping

- Fire exits
- Alarms
- Toilets



Session	Agenda items	Timings
AM: Open Session	Introduction & Welcome (Louise van Rensburg, Ofgem)	9.30 – 9.35
	ESO's presentation on performance since 1 April	9.35 - 10.40
	<ul style="list-style-type: none"> ➤ Introduction and overview ➤ Principles presentations and Q&A (P1-2) 	
	---Coffee Break ---	10.40 - 11.00
	<ul style="list-style-type: none"> ➤ Principle Presentations and Q&A (P3-7) ➤ ESO closing remarks & AOB Q&A 	11.00 - 12.25
Closing remarks & next steps (Ofgem)	12:25 - 12:30	
	LUNCH	12.30 - 13.30
PM: Closed session	Performance Panel to meet with ESO for Q&A session	13.30 – 15:45

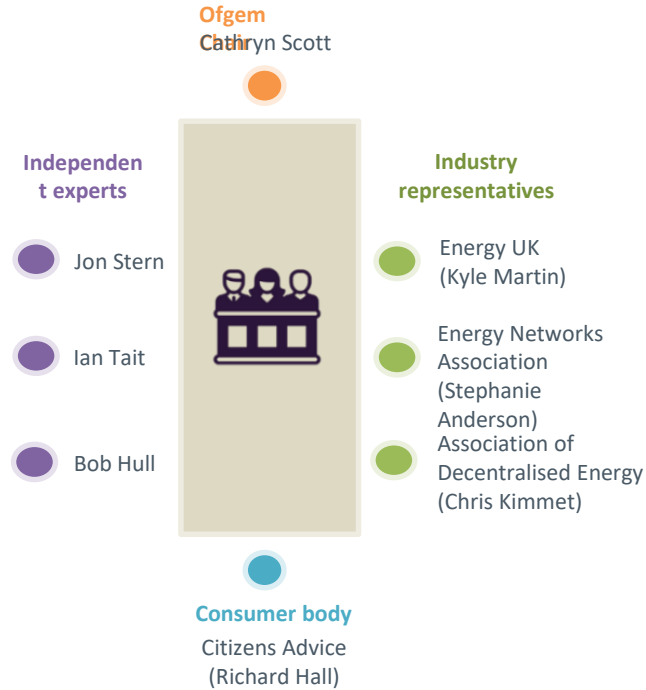
Purpose of today

- New 'evaluative' ESO incentives framework introduced from April 2018
- Emphasis on clear up front plans, reported evidence from the ESO and feedback from stakeholders
- The 'Mid-Year Review' is a key stage in the framework - opportunity for ESO to update stakeholders on its performance over the past 6 months
- This morning is a chance for stakeholders hear a summary of the ESO's mid year evidence, raise questions and provide direct feedback in the presence of our new performance panel



ESO Performance Panel

- Challenges the ESO's forward plans, evaluates its performance and provides recommendations to the Authority on incentives
- Meets for first time later today, then again on 29th November to evaluate ESO performance
- Conclusions from Mid-Year Review published on Ofgem website in early December



A learning process...

- First year of a very different approach, expect there are lessons we can learn
- Mid-Year Review a good trial for the End-of-Year Review in June 2019
- Welcome your feedback on how to improve the framework going forward - lesson learned also feeding into ESO RII02 price control design
- 'Call for Input' on the 2019-20 incentives scheme design, closes **30th November** – please send feedback to ESOperformance@ofgem.gov.uk



Welcome

Kayte O'Neill

*Head of Strategy &
Regulation*



Plan for today

- Overview of ESO Performance
- Principles 1 & 2

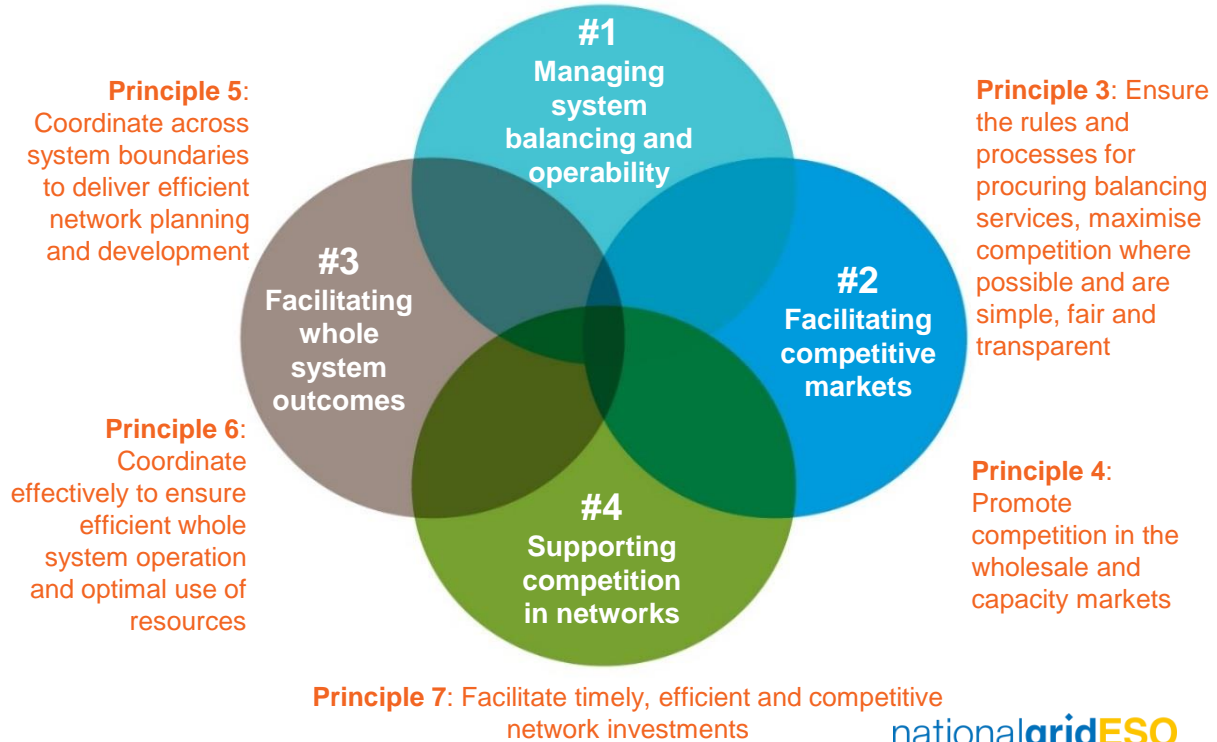
Coffee Break (10.40-11.00)

- Principles 3-7
- All principles Q&A

Lunch (12.30)

Principle 1: Support market participants to make informed decisions by providing user friendly, comprehensive and accurate information

Principle 2: Drive overall efficiency and transparency in balancing services, taking into account impacts of ESO actions across time horizons



ESO Overview

Fintan Slye

*Head of UK System
Operator*



The energy landscape has been changing

Decarbonisation

400%

Increase in all renewable capacity since
2010



Decentralisation

3 times

More distributed capacity connected than
in 2010



Digitalisation

12.3 mil

Smart and advanced meters in homes &
businesses in GB



System operations are changing as a result

March
25
2017

*transmission demand was **lower** in the day than overnight for the **FIRST TIME***

June
7
2017

*renewables provided **over 50%** of generation for the first time*

April
24
2018

*The electricity system ran for **76 hours without coal***

The future is uncertain

Uncertain Demand 3 to 11 million

Electric Vehicles driving on our roads by 2030



Uncertain Supply 37 to 50 GW

Of wind capacity generating on the system by 2030



Uncertain Markets 10s to 1000s

Of active energy suppliers across the country by 2030



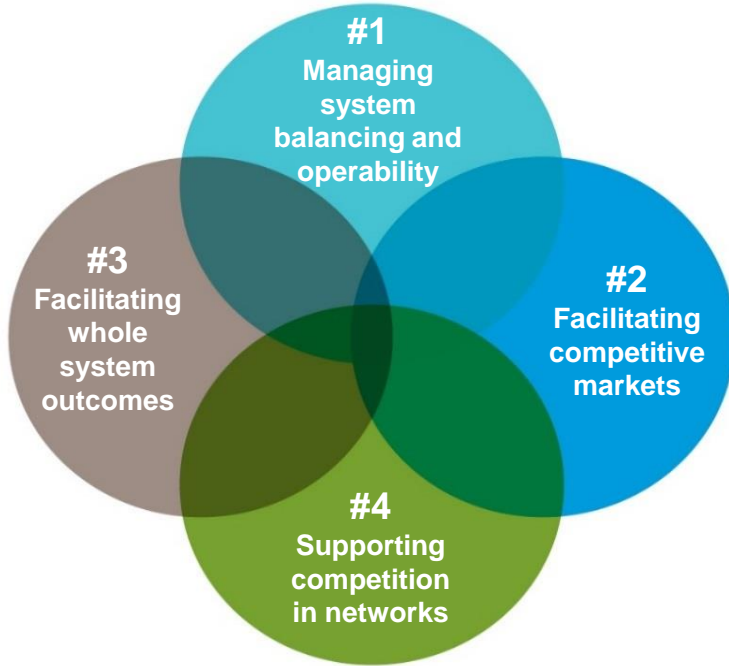
Our SO Mission focuses us on delivering value

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

The activities we deliver under our roles are evolving



- **2018-21 incentives framework**
- **2021-2026 separate regulatory framework**
- **2030 strategy**

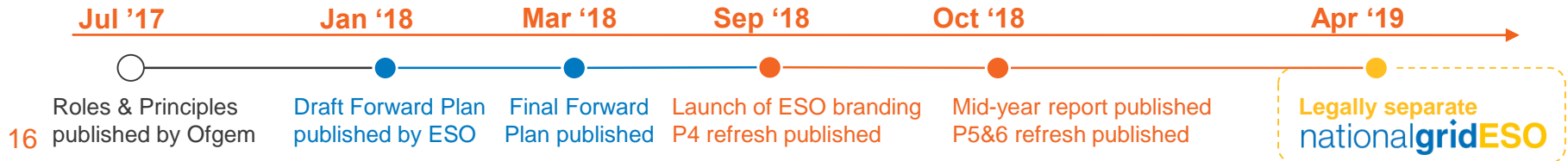
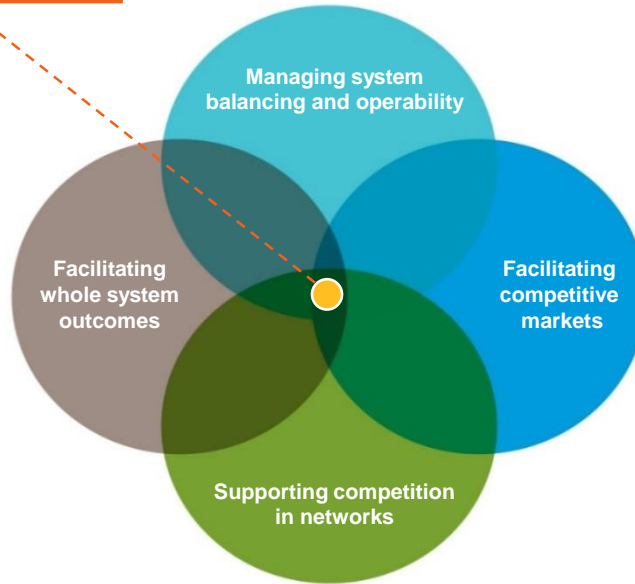
ESO Incentives

Duncan Burt

Director of SO Operations

Incentives for the ESO have evolved

The current scheme has consumer interest at its core



We made significant progress in the first six months

Considerable progress against our plan: a **strong baseline** performance and **many areas exceeding baseline** to deliver improved processes, greater transparency, and new products and services to create real consumer value.

Applying an innovative approach to create value for customers and consumers



Innovative approach to progress balancing



Platform for Ancillary Services



Wider access to the Balancing Mechanism



Auction trial



Inertia monitoring



Voltage management



Network Options Assessment

Four performance highlights



Deep engagement



Process improvement



Thought leadership



Consumer focus

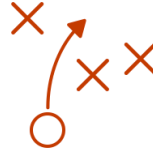
We will apply our lessons learned to the next six months

The first six months were a steep learning curve and we continue to embed the scheme within the ESO

Clearer articulation of what we want to achieve



How are we going to do it



And how it ultimately creates value for consumers



Highlights for the next 6 months



Balancing and operability

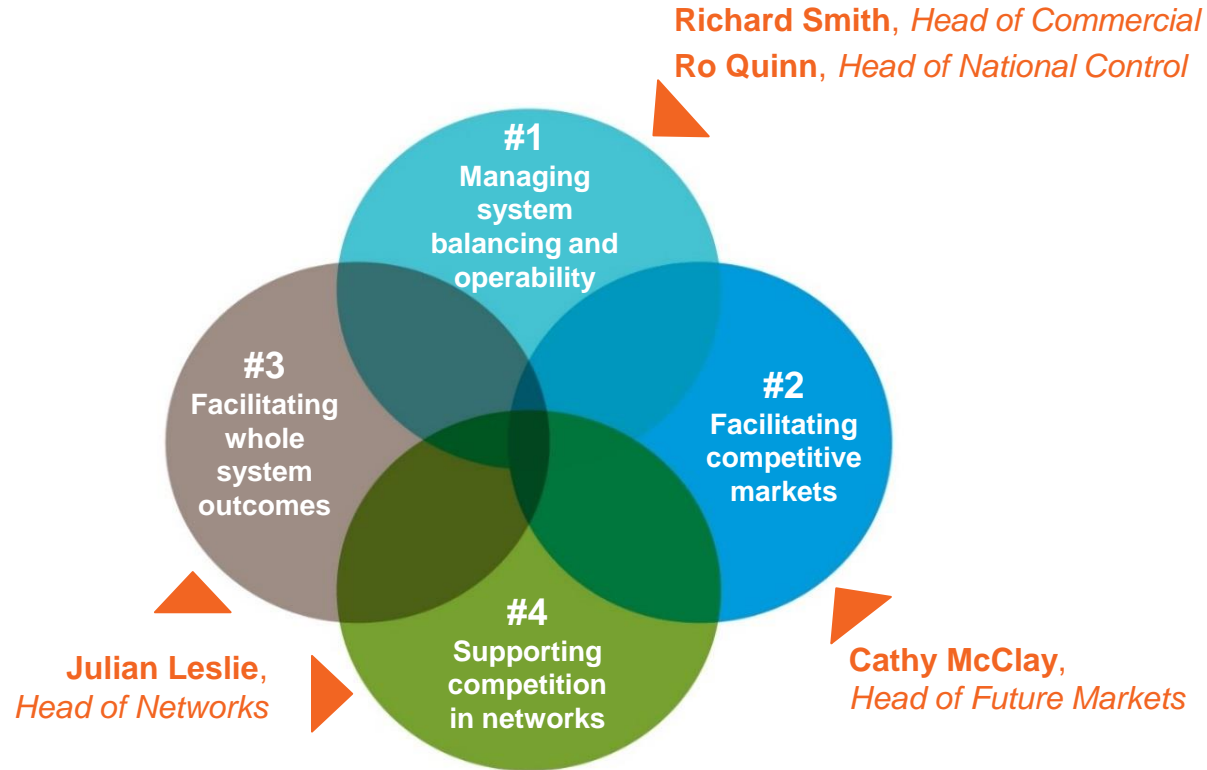


Transparency



Thought leadership

Principle owners will reflect on progress in more detail



Performance per principle



Principle 1

Richard Smith



Support market participants to make informed decisions by providing user friendly, comprehensive and accurate information

Creating efficient markets through transparency

We create efficient markets through transparency, confidence in markets and liquidity

 Commitment to **11** deliverables in Forward Plan **8** deliverables added **10** completed in first six months **9** on track for end of year

Your feedback led to our principle refresh and clearer articulation of our activities in a **new framework**



3 barriers to transparency

Inappropriate range of information



Inappropriate frequency & accuracy



Multiple channels



Across 3 decision-making horizons

Long term: Investment



Medium term: Operations planning



Short term: Price & availability





Principle 2

Roisin Quinn



Drive overall efficiency and transparency in balancing, taking into account impacts of ESO actions across time horizons

Maintaining our focus on efficiency and security



We committed to **10** deliverables*

2 completed in first six months**

7 on track

1.

Optimised balancing costs

Apr May Jun Jul Aug Sep



Savings of **£30m+** from resolving Vector shift risk alone



Asset disruption



New generation mix



Long term planning

2.

Increased transparency in IT delivery



Electricity Balancing System (EBS)

Scheduling



Dispatch



Ancillary Services Dispatch Platform



Wider engagement through the IS Change Forum

180+

3.

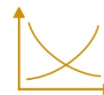
Drove long term operat. transparency

2018



2030+

Future of the ENCC



Balancing strategy



Licence condition C16 update



Operability report

Coffee break



Please be seated by 10:50



Principle 3

Cathy McClay



Ensure the rules and processes for procuring balancing services maximises competition where possible and are simple, fair and transparent

Creating competitive markets for future system needs

We create consumer benefit by developing transparent liquid markets for balancing and ancillary services



Commitment to **14** deliverables in Forward Plan, **4** moved to other principles

20 deliverables added

17 completed in first six months

13 on track



Reducing barriers to entry in balancing and ancillary markets

500

£30m

<7days

1+1



Power Responsive



Firm Frequency Response



Platform for Ancillary Services



Wider access to the BM



Our learnings from increasing transparency

Auction trial



Roadmaps



Early DNO engagement



Speed of delivery





Principle 4

Cathy McClay



**Promote competition in
the wholesale and
capacity markets**

Providing clear price signals for efficient decision making


We create consumer benefit by reducing barriers to entry in wholesale and capacity markets

 Commitment to **12** deliverables in Forward Plan

13 deliverables added during principle refresh

All in progress, on track

 Facilitating the evolution of markets through collaboration and thought leadership

 Your feedback is helping us improve

£4b **100/month** **18%** **29/3/19**

Accuracy of forecast Code prioritisation New ways of engaging Charging Futures



Transparent charges

Customer journey

Code governance

Brexit



Principle 5

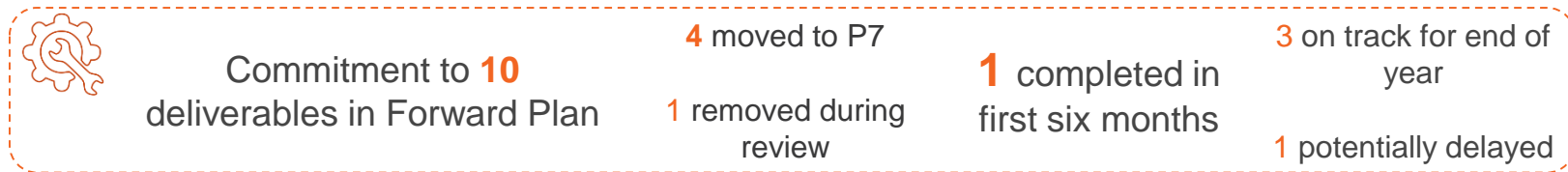
Julian Leslie



Coordinate across system boundaries to deliver efficient network planning and development

Enabling long term investment and development

We deliver consumer benefit by finding additional capacity without new asset build solutions



365/24/7 tools and processes for network assessment



Finding new ways to release capacity through Regional Development Programmes (RDPs)



Standard templates



Collaboration with DNOs



Effective use of data



Managing off-peak



RDPs underway



New ways of working



Collaboration in modelling



Principle 6

Julian Leslie



Coordinate effectively to ensure efficient whole system operation and optimal use of resources

Delivering optimal use of resources across the system

We deliver consumer benefit by operating a safe and secure network and optimising our day-to-day activities



Commitment to **7** deliverables in Forward Plan

4 deliverables added during refresh

All **11** ongoing



Appendix G trial

£15k

1 week



Thinking differently about connections

£250k



Whole system outcomes



Visibility of future challenges



Process changes



Connection applications



New technology



Solutions to new issues



Liquidity



Whole system strategy



ENA Open Networks

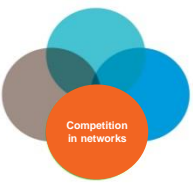


TOGA



Principle 7

Julian Leslie



**Facilitate timely, efficient
and competitive network
investments**

Driving innovation and identifying long term system needs

We deliver consumer benefit by facilitating competition in networks



We committed to **10** deliverables in 2018/2019

4 added from P5 **5** completed

8 on track

1 potentially delayed



Network Options Assessment (NOA)



New forms of competition



Future investment



Interconnector methodology incorporated



Interconnector modelling improvements



Connections competition assessment



Network Development Roadmap



Trialling DNO solutions



RFI to incorporate commercial solutions



Managing regional high voltage



Year round assessment of needs



£3.2bn network investment

Questions and Answers

Fintan Slye,
Head of UK System Operator

Duncan Burt,
Head of Operations

Kayte O'Neill,
Head of Strategy and Regulation

Richard Smith, *Head of Commercial*
Ro Quinn, *Head of National Control*

