Electricity System Operator Forward PlanConsultation Event







22 February 2018

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Welcome and Housekeeping

Charlotte Ramsay

Programme Director, Future of the System Operator

Housekeeping



Agenda

Time	Item	Speakers and Hosts	Room
9.15am	Welcome and Housekeeping	Charlotte Ramsay – Programme Director, Future of the System Operator	Imagine
9.25am	Continuing the Conversation	Fintan Slye – Director, UK System Operator	Imagine
9.40am	ESO Regulatory and Incentive framework 2018-21	Philippa Pickford – Associate Partner, Ofgem	Imagine
9.50am	Introducing the ESO Forward Plan	Charlotte Ramsay – Programme Director, Future of the System Operator	Imagine
10.00am	Panel Discussion How does the ESO best deliver against the Roles and Principles within the new regulatory structure?	Fintan Slye – National Grid Richard Hall – Citizens Advice Tim Rotheray – The Association for Decentralised Energy Laura Sandys – Challenging Ideas Nina Skorupska – Renewable Energy Association Nigel Turvey – Western Power Distribution Barbara Vest – Energy UK	Imagine
10.40am	Introduction to breakout sessions	David Bowman – Regulatory Analyst, National Grid	Imagine
10.45am	Coffee break		Imagine
11.00am	Breakout sessions	System Operator Leadership Team	Expand 1 Expand 2 Captivate 2 Imagine
1.00pm	Next steps and close	Charlotte Ramsay – Programme Director, Future of the System Operator	Imagine
1.15pm	Networking Lunch		Imagine

Join the debate

During the panel discussion there will be roving microphones

For other questions, please use Sli.do

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Continuing the Conversation

Fintan SlyeDirector, UK System Operator



ESO regulatory framework 2018-2021: Latest update and the role of stakeholders

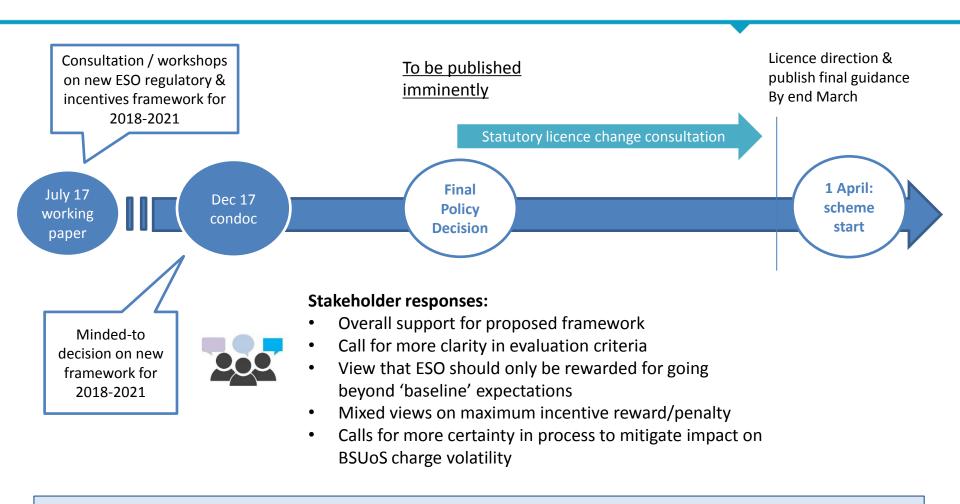
Philippa Pickford, Associate Partner, Ofgem

22/02/2018





Update on the new framework: where we are



Stakeholders play a key role in our proposed new framework. The ESO's draft Forward plan is a key part of this. We encourage stakeholders to be actively involved in shaping this plan.



Recap of new scheme





Ofgem / Panel reviews ESO Plan to ensure it is comprehensive, challenging and reflective of stakeholder views



Panel: Mid year review to provide feedback to ESO



1) Establish ESO
Forward Plan,
deliverables and
Performance Metrics



2) Monitor performance throughout the year



4) Decision on financial payment / penalty (by Ofgem)



3) Final performance evaluation

ofgem

GEMA makes decision on financial payment/ penalty. For 2018/19 we propose a max cap/floor of **±£30m**



Panel: evaluates ESO performance for each principle, based on clear ex-ante criteria



What we want from stakeholders

This process relies on **stakeholder input** in the ESO Forward Plan consultation (across all documents below) to assess whether the Forward Plan is ambitious:

Forward Plan

- What are your views on the ESO's long-term ambition?
- What are your views on the ESO's strategic aims for each role?
- Is there anything missing in the Forward Plan?

Delivery Schedule

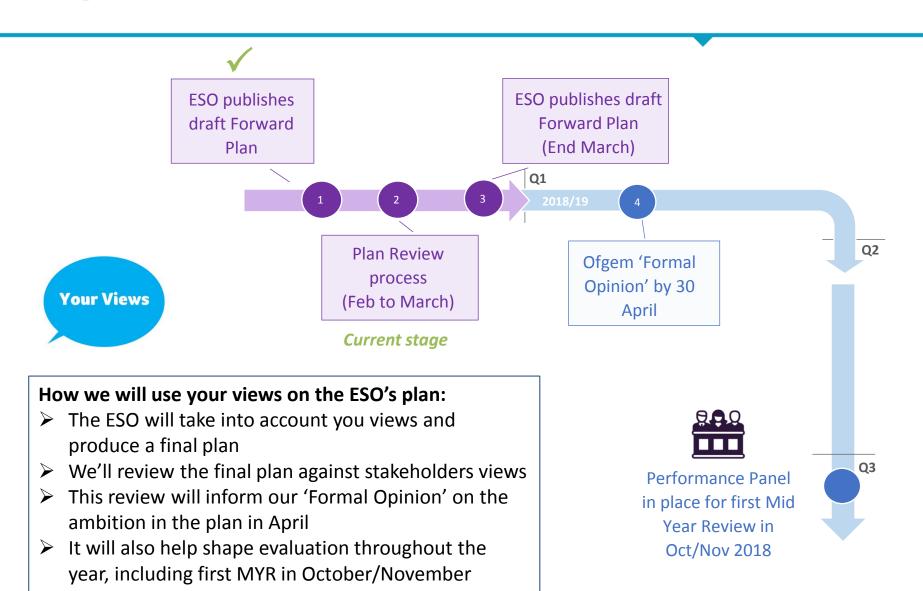
- What are your views on the ESO's activities and deliverables for 2018/19?
- Is there anything missing in the Delivery Schedule?

Technical Annex

- What are your views on the range of metrics proposed? Are there any metrics missing that you think should be included to measure performance across each principle?
- Do you think the metrics are ambitious? Do you think the performance benchmarks are ambitious and stretching?



What happens next?





Introducing our Forward Plan

Charlotte Ramsay

Programme Director, Future of the System Operator

Your personal guide to the ESO Forward Plan



A long-term vision



How we are going to deliver



How we (and you) will know when we have delivered



An open invitation...



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Panel Discussion

How does the ESO best deliver against the Roles and Principles within the new regulatory structure?

Introducing our Panellists

- Fintan Slye National Grid
- Richard Hall Citizens Advice
- Tim Rotheray The Association for Decentralised Energy
- Laura Sandys Challenging Ideas
- Nina Skorupska Renewable Energy Association
- Nigel Turvey Western Power Distribution
- Barbara Vest Energy UK



Breakout sessions

David BowmanRegulatory Analyst

Aim of the breakout sessions

The breakout sessions are your opportunity to give feedback on each chapter of the Forward Plan

Structure

- Hosts to spend 5 minutes on their vision for delivery against the Roles and Principles
- 20 minute discussion:
 - What is important to you and why?
 - Is there anything we have not covered?
 - Are we being ambitious enough?
 - How do you want us to behave in these areas?

Breakout sessions format

Role	Hosts	Room
Managing system balancing and operability	Mike Breslin Rob Rome	Expand 1
Facilitating competitive markets	Cathy McClay Richard Smith	Expand 2
Facilitating whole system outcomes	Julian Leslie Audrey Ramsay	Captivate 2
Supporting competition in networks	Alice Etheridge Nick Harvey	Imagine

Please be ready to head to your first breakout session at 11am

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1.15pm	Networking Lunch		Imagine

Please head to your first breakout session

Group	Breakout session	Room
Group 1	Managing system balancing and operability	Expand 1
Group 2	Supporting competition in networks	Imagine
Group 3	Facilitating whole system outcomes	Captivate 2
Group 4	Facilitating competitive markets	Expand 2

Please follow your marshals



Next Steps

Charlotte Ramsay

Programme Director, Future of the System Operator

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Thank you!

If you have any comments or questions on the ESO Forward Plan please send them to:

box.soincentives.electricity@nationalgrid.com



Appendix

Breakout session slides



Managing System Balance and Operability

Mike Breslin – Operate the System, Electricity Rob Rome – Commercial Operations Manager



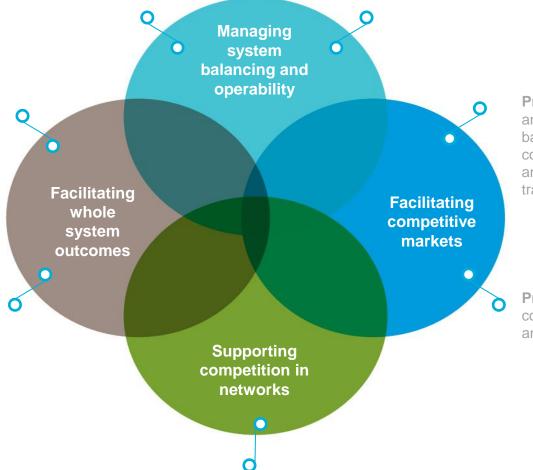
Managing system balancing and operability *Principles 1 and 2*

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

Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources



Principle 3: Ensure the rules and processes for procuring balancing services, maximise competition where possible and are simple, fair and transparent

Principle 4: Promote competition in the wholesale and capacity markets

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

Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
Customers want enhanced demand and wind generation forecasts to allow better self balancing of positions	fewer balancing actions by the ESO and less consumer money spent	Improved forecasting processes and models, source new data, adopt new systems and technologies	Day Ahead Transmission demand and wind generation forecast accuracy
Granular day ahead half hourly BSUoS forecasts help participants to make better informed decisions	reducing participants need to include risk premia in their BM prices that are ultimately paid for by consumers	Develop a new model & methodology for day ahead BSUoS forecasts and design new BSUoS scenarios	Percentage of BSUoS half- hourly forecast published at day-ahead
Helping them to better understand our balancing services procurement decisions will lead to greater confidence in the market	reducing the cost of balancing through increased market participation and liquidity	Publication of Ancillary Services/ Balancing Services tender assessment decisions to a published schedule	Percentage of FFR, Fast Reserve and STOR tender results published on time and right first time
Timely publication of information about ESO trades will reduce delay and risk in their decision making	resulting in lower risk premia in the market and lower costs to consumers	Newly developed process using new software to greatly increase the publication of trades data	Percentage of all trades data published within one hour of capture
Providing forecast of GB electricity carbon intensity allows consumers adopt more environmentally friendly power consumption	supporting development of variable pricing strategies that will enable decarbonisation of GB power supply at lowest cost	Build on current process to publish regional carbon intensity data	All actions on regional carbon intensity delivered in 18/19 and Stakeholder feedback satisfaction measure

Principle 2: Drive overall efficiency and transparency in balancing, taking into account impacts of its action across time horizons

Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
To go beyond economic and efficient in our management of balancing spend. Bring new levels of transparency and consider our impact across a variety of timescales	efficient balancing spend passed onto consumers via lower BSUoS chargebetter helping our customers manage their positions reducing overall need for ESO balancing actions and costs	Innovation in activities to provide cost efficiency including delivery of new systems and review of Electricity Network Control Centre processes and systems	Balancing cost management – outturn spend within published benchmark range



Facilitating competitive markets

Cathy McClay - Head of Commercial, Electricity

Richard Smith - Head of Market Change, Electricity



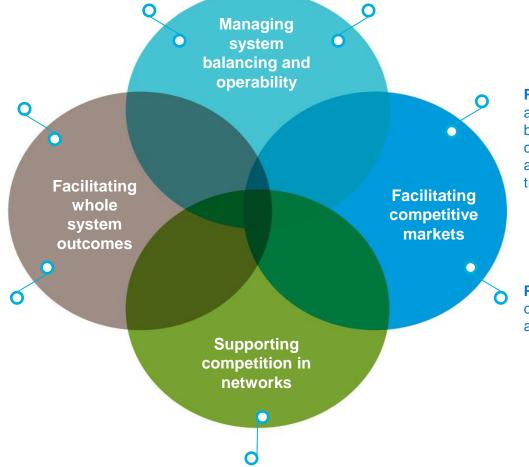
Facilitating competitive markets *Principles 3 and 4*

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

Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources



Principle 3: Ensure the rules and processes for procuring balancing services, maximise competition where possible and are simple, fair and transparent

Principle 4: Promote competition in the wholesale and capacity markets

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Principle 7: Facilitate timely, efficient and competitive network investments

Principle 3: Ensure the rules and processes for national **grid** procuring balancing services maximise competition where possible and are simple, fair and transparent.

Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
Balancing and ancillary services markets need to be simpler and more accessible to a broader range of stakeholders	more accessible markets open to all providers will increase liquidity and drive down costs	Deliver reform of the balancing services markets through rationalisation and simplification and by working with parties to develop new markets	Progress against commitments made in Future Balancing Services Roadmap and Stakeholder satisfaction measure
Help new providers to understand our business and navigate the processes which will qualify them to offer us services	increasing numbers of parties able to participate in markets will increase liquidity and deliver more competition which reduces cost to consumers	Provide enhanced facilitation to new providers (generally those who do not participate in the balancing mechanism) to progress through the onboarding process	Stakeholder satisfaction measure and progress through "on-boarding" process from October 2018
To open fair competitive market based procurement methods wherever possible to all participants	reduced barriers to entry will see greater participation resulting in Increasing liquidity of the markets which will lower costs of balancing.	The ESO will move away from bilateral procurement activities to competitive market based procurement methods wherever possible	Increase in the number of tenders/bids from individual units received for Frequency Response and Reserve

Principle 4: Promote competition in the wholesale and capacity markets

markets			
Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
Customers have told us that BSUoS bills are at the core of managing their profitability. Accurate and on time BSUoS bills increase customers clarity on their financial position which allows participation in wholesale and capacity markets	reducing their need to include risk premia (to cover uncertainty) in their BM prices that are ultimately paid for by consumers	Dedicated resources to implement and support improvements and billing query resolution.	BSUoS Bill query response and resolution time
As code administrator for CUSC, Grid Code and STC, customers want to see our customer service improve-transparent, accessible and more efficient	increasing engagement with the codes change process, especially for smaller customers removes barriers to effective code change improving quality and timeliness of industry change in the interests of consumers	Delivery of actions to improve efficiency, transparency, accessibility and customer service	Customer Satisfaction Survey on Code Administrator Performance
Better coordination of access and charging reforms is required so that all parties regardless of size or type can contribute to change	reduced barriers to entry for new parties allows markets to expand. This drives more competition, enhanced service provisions and ultimately reduced consumer charges	Delivery of the Charging Futures program (including hosting forums and developing and maintaining the charging futures web portal) will help network users plan and prioritise their involvement and contribution towards network charging and access reform.	Charging Futures Stakeholder Satisfaction measure including diversity, gross participation and Net Promoter Score



Facilitating whole system outcomes

Julian Leslie – Head of Network Capability, Electricity

Audrey Ramsay – Commercial Operations Strategy Manager



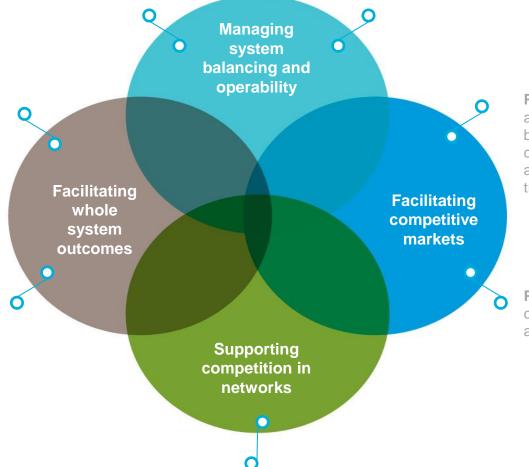
Facilitating whole system outcomes *Principles 5 and 6*

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

Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources



Principle 3: Ensure the rules and processes for procuring balancing services, maximise competition where possible and are simple, fair and transparent

Principle 4: Promote competition in the wholesale and capacity markets

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Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
We need to encourage non-transmission parties to suggest solutions to transmission system needs	successful solutions should drive lower network costs, balancing costs or both	Run three Regional Development Plans (RDPs) with DNOs to identify non- transmission solutions Develop Network Options Assessment (NOA) process to identify and evaluate distribution led investments and non-network solutions to transmission needs	Number of non-transmission solutions achieved
We need to collaborate with Distribution network partners to manage transmission and distribution constraints and release capacity for new connections on the distribution networks	DER (Distributed Energy Resources) developers will gain access to the South-East coast distribution network enhancing liquidity of marketsdevelopment of innovative balancing services contracts with Distribution connected parties supports system security and potentially drives down balancing costs	Develop new processes and types of contracts to enable connections	New capacity at distribution level as a result of UKPN/ESO RDP collaboration on South-East coast network

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources

Stakeholders have told us:	Delivering consumer value through:	Action we will take to deliver:	How our performance will be measured:
Customers have told us that balancing costs are at the core of managing their profitability	enhanced risk management and more efficient delivery of system operability through longer term planning and enhanced operability modelling capability can lead to reduction in balancing costs	Use existing and new modelling coupled with power system analysis to identify capability now and in the period to 2030, gap analysis and solutions optioneering including new market based and whole system solutions	Delivery of a new output: Six monthly Operability Reports and stakeholder satisfaction feedback on this output
We need to improve our network access planning processes to minimise within-day cancellation of the established network access plans	saving money on cancelled asset maintenance and connection plans reducing the overall cost of network management	Investigate reasons for cancellations and put in place mitigations to prevent any repeat Scoping and ITT for new Transmission Owner Availability System (TOGA)	Number of planned outages that are cancelled within day due to process failure
We need to minimise late notice actions in the balancing mechanism to facilitate networks access	reduction in balancing spend due to reduction in use of Bid Offer Acceptance (BOA) process resulting from lack of updated connections agreements	Enhance collaboration between the ESO and the relevant TO to improve timeliness of connections contract	Percentage of connections agreements updated within 9 months of notification



Supporting competition in networks

Alice Etheridge - Network Development Strategy Manager Nick Harvey - Network Development Manager

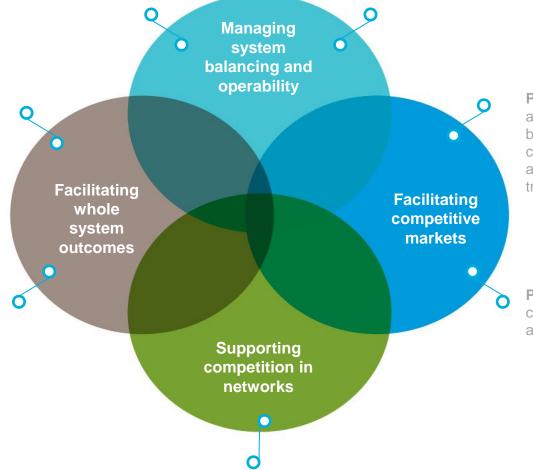
Supporting competition in networks *Principle 7*

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

Principle 5: Coordinate across system boundaries to deliver efficient network planning and development

Principle 6: Coordinate effectively to ensure efficient whole system operation and optimal use of resources



Principle 3: Ensure the rules and processes for procuring balancing services, maximise competition where possible and are simple, fair and transparent

Principle 4: Promote competition in the wholesale and capacity markets

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Principle 7: Facilitate timely, efficient and competitive network investments

Principle 7: Facilitate timely, efficient and competitive network investments

Stake	holder	rs have	blot	IIS:

We need to consider a wide range of potential solutions and approaches to delivery to meet transmission system needs...

Delivering consumer value through:

...reduced costs of delivering increased network capability through consideration of a variety of options available, not just transmission build

Action we will take to deliver:

Increase scope of Network Options Assessment methodology (NOA) to include non-network solutions to transmission needs

Design developments to the NOA to accommodate the introduction of competition in delivery of onshore transmission network

How our performance will be measured:

Consumer value for alternative options against traditional build options

They want to engage in the process for offering solutions to meet transmission needs and that we need to make the process as accessible as possible...

.. increased stakeholder participation in the NOA will increase competition for delivery of solutions to meet transmission needs at lower cost Publication of NOA roadmap to show direction of travel to allow more stakeholders to engage in NOA process Measurement of effectiveness of ESO's engagement on the development of the NOA