

RIIO2

Steve McMahon, Ofgem

RIO2 Framework

Key decisions to date and next steps



Steve McMahon
Deputy Director, Electricity Distribution &
Cross Sector Policy

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- The electricity and gas networks are privately owned monopolies. Their customers have no choice but to use their services.
- Left unregulated, a private monopolist is likely to exploit its customers by restricting output and raising prices.
- We regulate networks by limiting how much they can charge customers – these are called “price controls”.
- In Ofgem we use the RIIO model where **Revenue = Incentives + Innovation + Outputs**
- This process sets the baseline outputs and financial parameters, sets the allowed revenues for TOs, DNOs and GDNs, and designs the incentive arrangements on network companies to make best use of networks and minimise future costs.
- Network companies earn their revenue allowance from users by charging them for use of the system.

The RIIO price controls



RIIO-GD1 – 2013-2021

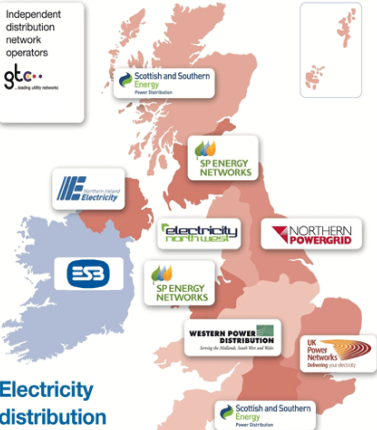
- Gas Distribution licensees**
- Cadent (x4)
 - SGN (x2)
 - Northern Gas Network (x1)
 - Wales and West Utilities (x1)

Electricity Transmission



RIIO-T1 – 2013-2021

- Gas Transmission licensees**
- National Grid Gas Transmission (x1)



RIIO-ED1 – 2015-2023

- Elec Transmission licensees**
- National Grid Electricity Transmission (x1)
 - Scottish Hydro Electricity Transmission (x1)
 - SP Transmission (x1)

- Elec Distribution licensees**
- Western Power Distribution (x4)
 - UK Power Networks (x3)
 - SP Energy Networks (x2)
 - SSE Power Distribution (x2)
 - Northern Powergrid (x2)
 - Electricity North West (x1)

These price controls cover 14 gas and electricity network companies and are worth ~£90bn in total funding. Network charges are c. £250 per annum, and constitute c. 23% of the average annual dual fuel bill

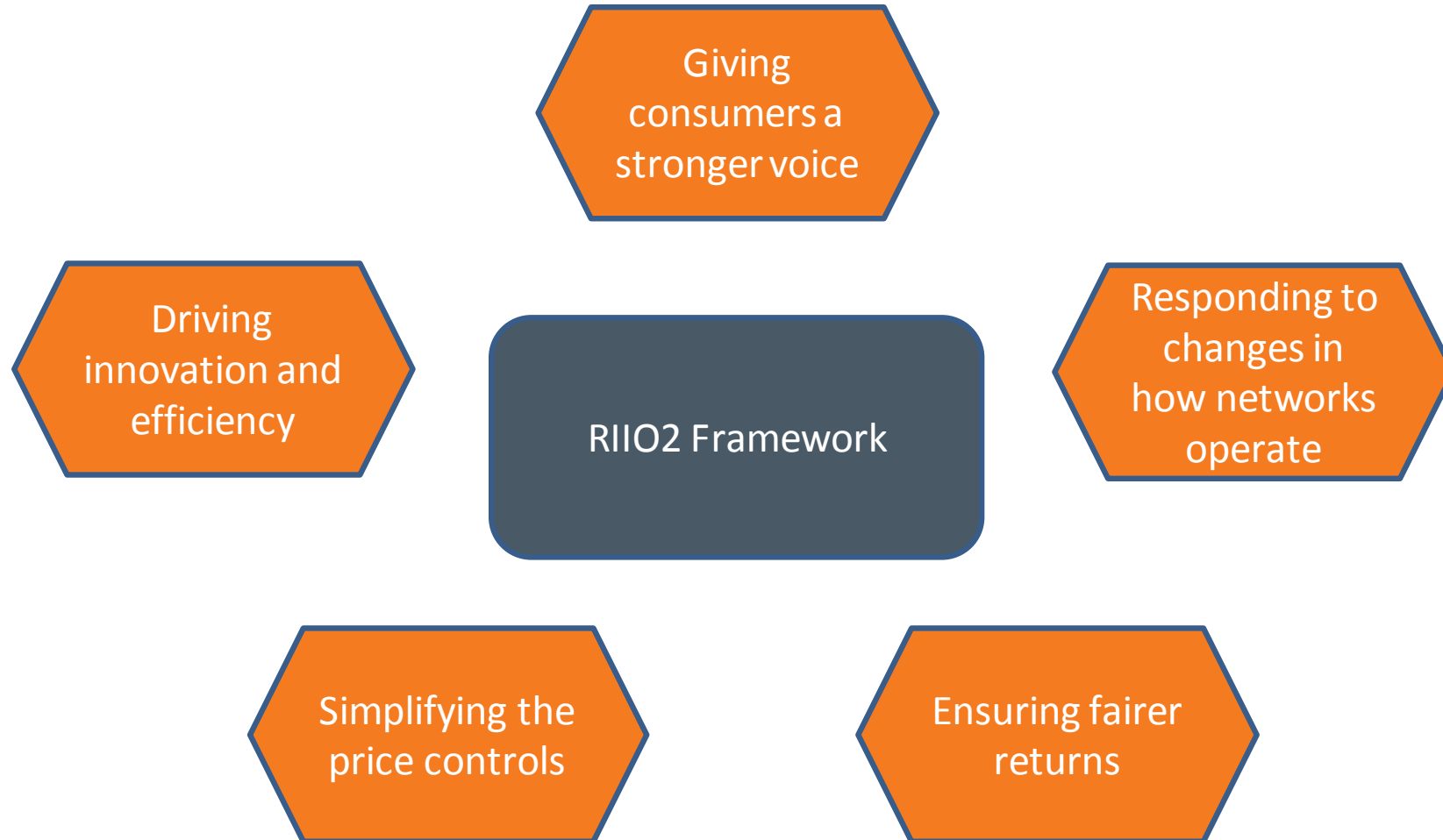
Demand-side

- The **demand for electricity** has been falling as the economy continues to de-industrialise...
- But new source of demand are now emerging, such as **electric vehicles**, which could also act as **storage devices** and sell energy back to the grid.
- **Smart meters** are being installed in each household. These could enable much smarter demand responses to price signals.
- The **demand for gas** has fallen as the power sector decarbonises. Its future as a fuel now depends on the way we decarbonise the heat supply (via electricity or renewable gas).

Supply-side

- The **generation mix** is transforming rapidly away from coal and gas, towards **renewable energy** (offshore wind and solar) whose costs have fallen rapidly.
- The future of **nuclear energy** and **carbon capture and storage** is uncertain.
- More and more generation is now **connected to the distribution** rather than transmission network, with more households producing their own power.
- **Storage** technology (e.g. batteries) is getting better, faster and cheaper each year.
- The supply of gas is also shifting from its traditional source in the North Sea towards **a greater reliance on imports** via liquefied natural gas (LNG) terminals.
- The future of **shale gas** is uncertain.

- We are reforming our price control arrangements to deliver better value for money for consumers.
- Our objective for the RII02 price controls is to ensure that regulated network companies deliver the value for money services that both existing and future consumers want.
- In March we consulted on a number of ways we could enhance the RII0 framework to meet this objective.
- At the end of July we made firm decisions on certain elements of the framework across the sectors that are necessary to establish the structure of the price control.
- In other areas we narrowed down the options we are considering for reforms to the framework and signalled a direction of travel.



- **Confirmation of approach to enhanced engagement**
 - Transmission companies to each establish a User Group to report their views on company business plans
 - Distribution companies to each establish a Customer Engagement Group to report their views on company business plans
 - Ofgem to establish a RII02 Challenge Group covering all sectors to further scrutinise business plans
 - Open hearings to be held before final determinations
 - Focus on areas of disagreement and contention
 - Invite further evidence in support of, or against, company proposals
- **Ofgem retains ultimate responsibility to make initial and final determinations, but evidence from enhanced engagement will be one of the key inputs**

- **Default length of the price control set at five years**
- **No alignment of the start and end dates for the electricity transmission and electricity distribution price controls**
 - Further work to be carried out to investigate if reforms of the price control framework are needed to support delivery of whole system outcomes
- **Separate price control for the Electricity System Operator**
- **Network utilisation, stranding and investment risk**
 - Company business plans to subject new investment to high hurdles

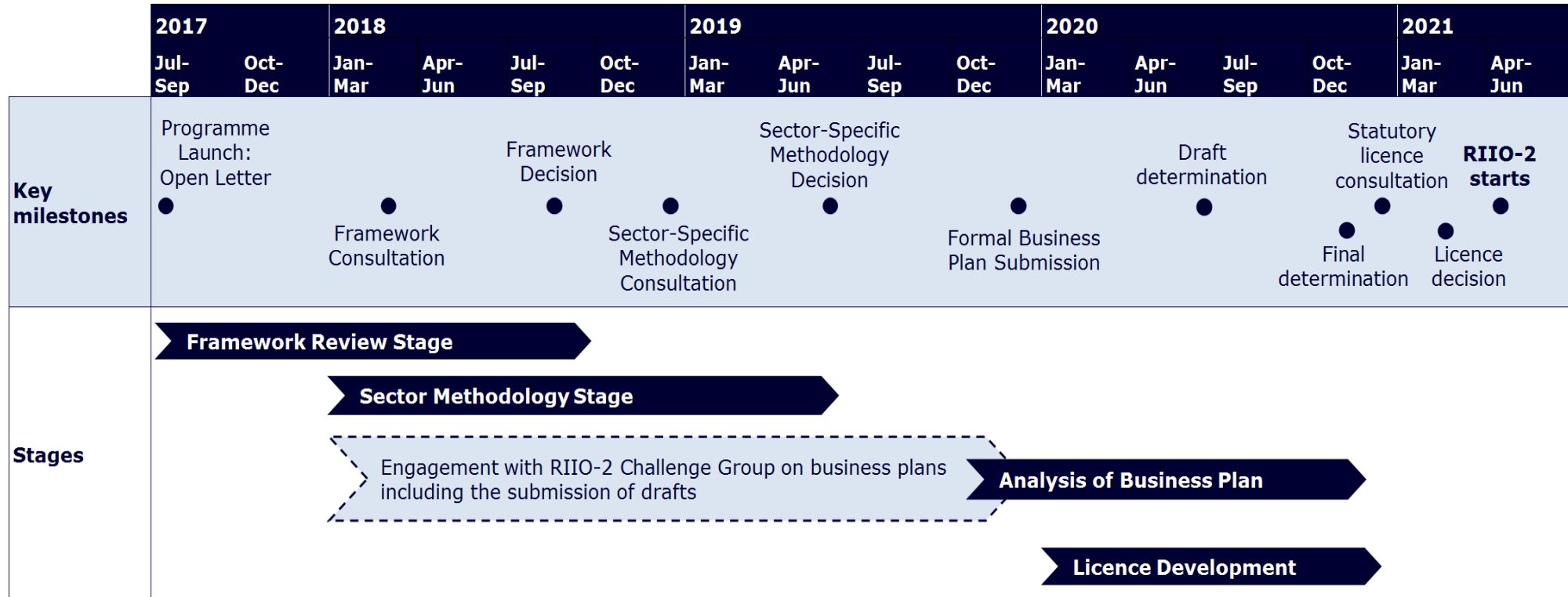
- **Retain an innovation stimulus package linked to projects which might not otherwise be delivered under the core RIIO2 framework**
 - Further work to be carried out on increased alignment to energy transition challenges, greater coordination with public funding, and increased third party engagement (including potential direct access)
- **Extend the role of competition in monopoly activities**
 - Use of the electricity transmission criteria of new, separable, high value (>£100m capex) in other sectors
 - Developing the range of models for late competition, and consideration of early models
 - Further work to be carried out on the net benefits of competition in each of the sectors

- **Continued use of outputs and incentives to drive improvements that consumers value**
 - Where we are confident we can accurately forecast costs, we will reward outperformance
 - Arrangements to enable automatic consumer refunds if outputs/deliverables for which funding has been provided are no longer required for reasons beyond the licensees' control
 - Further exploration of the indexing of Real Price Effects
 - Establish outputs that are up to date at the beginning of the price control, and remain current throughout
- **Information revealing devices**
 - Ruled out early settlement (a component of fast-tracking) for electricity transmission, gas transmission, and gas distribution
 - Business plan incentives, including the role of IQI, to be developed as part of the work on the individual sector methodologies

- **Cost of Equity**
 - CAPM used to estimate the cost of equity, and setting its key parameters
 - No update to the indicative range communicated in March, at this stage – we will update in December
- **Cost of debt**
 - Full debt pass-through option ruled out, high bar of evidence for a material change in approach
- **Corporation tax, Inflation, Depreciation**
 - Review of taxation included in our review of company financial arrangements
 - Intention to move away from RPI to CPIH in calculating RAV and allowed returns
 - Policy of using economic asset lives maintained as the basis for depreciating the RAV
- **Ensuring fair returns**
 - Hard cap and floor ruled out as a return adjustment mechanism option, further assessment of four remaining options

- **Sector-specific methodology consultation in December 2018 for following sectors**
 - Gas distribution
 - Gas transmission
 - Electricity transmission
 - Electricity System Operator
- **Business plan submission to Ofgem in Q4 2019**
- **Determinations**
 - Draft determination in Q2 2020
 - Final determination in November 2020
- **RIO2 price control commences April 2021**

Indicative High-Level RIIO2 Plan for ET, GT, GD and ESO Sectors



- We are facing a significant period of change in network usage.
- RIIO1 has worked well, but we have learnt lessons.
- We will continue to use the incentive based RIIO framework to set price controls.
- Higher returns are justified where these result from genuine innovation and efficiency.
- This will be a tougher price control for network companies but those who deliver great customer service at lower cost will be rewarded.
- We will retain an attractive environment for investors but returns should reflect the low level of risk of a stable, predictable regulatory framework.

Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where practical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.

We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.