

Ofgem's RIIO-2 draft determination for our business plan









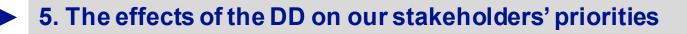
2. A reminder of our RIIO-2 business plan



3. Ofgem's draft determination (DD) for NGET



4. The effects of the DD on delivering net zero







1. Overview of the RIIO-2 process

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RIIO-2 is Ofgem's process for setting outputs and funding for energy network companies (slide 1)



RIIO stands for: setting **R**evenue using Incentives to deliver Innovation and **O**utputs.



Ofgem is setting the second set of RIIO price controls for electricity transmission, gas transmission and gas distribution companies (hence RIIO-2) covering 2021-26.



Ofgem started the RIIO-2 process with an "open letter" in July 2017. Ofgem published its first stakeholder engagement guidance in April 2018.



We started engaging with stakeholders on our business plans in summer 2017. Our independent user group has been meeting regularly since July 2018.

RIIO-2 timeline

RIIO is Ofgem's process for setting outputs and funding for energy network companies (Revenue=Incentives + Innovation + Outputs)

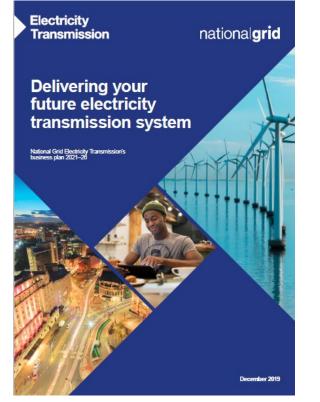
Activity	Date
Electricity Transmission draft business plan submitted	1 July and 1 Oct 2019
Electricity Transmission business plan submitted	9 December 2019
Independent User Group report published	19 December 2019
RIIO-2 Challenge Group report published	24 January 2020
Draft determination (where Ofgem sets out its proposals for our outputs, incentives and costs for the RIIO-2 period) published	9 July 2020
Draft determination consultation closes	4 September 2020
Open meetings	October 2020
Final Determination	December 2020
RIIO-2 starts	1 April 2021



2. A reminder of our RIIO-2 business plan

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What is our RIIO-2 business plan?



We submitted our **RIIO-2 business plan** to our regulator, Ofgem, and published it on 9 December 2019.

Our business plan covers the five years from 2021-22 to 2025-26, a crucial period for the energy system.

We engaged with our stakeholders more extensively than ever before on our business plan and built it around our stakeholders' priorities. **Thank you** for your help in developing our plan.

We developed our plan with you



We built our business plan around eight stakeholder priorities and three consumer priorities.

In building our plan we engaged with over 1,000 individuals covering all our main stakeholders, over 11,000 household consumers and over 750 business consumers.

The independent user group made sure we take account of your views.

Overview of our plan – some of our key deliverables

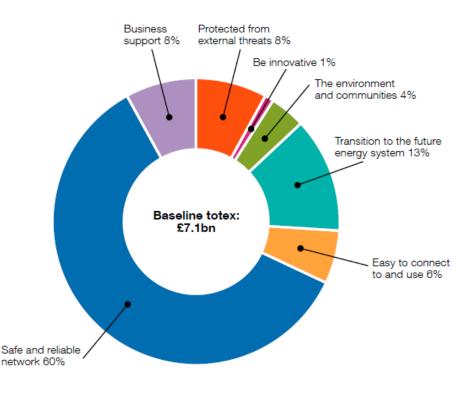
We will provide a network that enables the transition to net-zero 2050, facilitate competition and whole system solutions We will connect 15.3 GW of customer capacity, providing the UK with clean power, flexible storage and access to clean and cheaper power from Europe.

We will deliver world-class levels of safety and maintain our service reliability of 99.9999 per cent. We will improve the resilience of our business IT systems and operational technology to cyber attacks.

We are proposing a package of measures to improve the environment and to support vulnerable consumers and disadvantaged communities. We will deliver a programme of innovation focused on reducing greenhouse gas emissions and our asset management costs

National Grid | RIIO-2 draft determinations – Impact on Stakeholders

Overview of our plan - costs



We planned to spend **£7.1bn** to operate and invest in our network over five years to deliver your priorities.

We committed to **£1.1bn of efficiencies** in our plan.

We said we would deliver our plan while **keeping the same, or reducing, our part of bills**, excluding inflation.

In independent research 87% of consumers found our plan and its bill impact to be acceptable.



3. Ofgem's draft determination for NGET

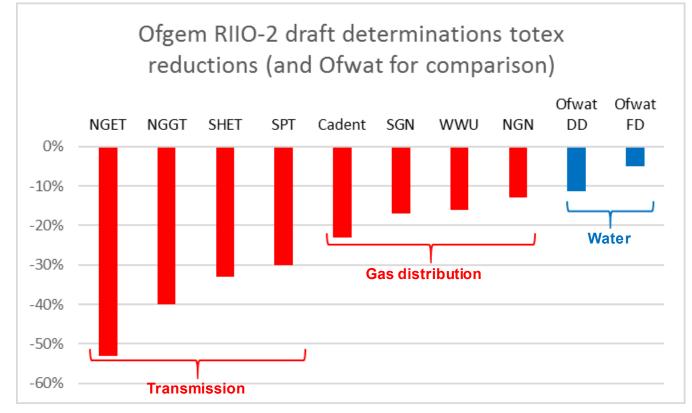


Some key features of the draft determinations

- £20 fall in network charges on average annual household bill from 2021.
- Large reductions in baseline expenditure for network companies.
- Lower returns for investors: cost of equity reduced to 3.95% (CPIH).
- A bigger emphasis on ex post (after-the-event) regulation.
- Relying on re-opener mechanisms to deliver net zero.
- Reduced incentives to improve services for stakeholders and consumers.

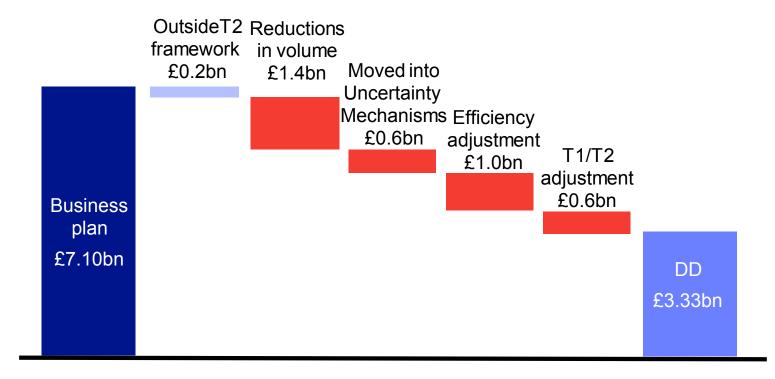
Ofgem's proposed baseline totex reductions

(from companies' business plan proposals)



National Grid | RIIO-2 draft determinations - Impact on Stakeholders

How Ofgem proposes to reduce our baseline totex





4. The effects of the DD on delivering net zero

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The UK Government has made a net-zero commitment by 2050

- Our futures depend on us all tackling climate change.
- The UK government has mandated that we should achieve **net zero by 2050**
- Electricity is vital for decarbonising **transport** and as an element in the decarbonising of **heating**.
- Our plan makes sure we retain options for supporting the delivery of net zero until the energy future is clearer.

Net zero: our business plan commitments

For National Grid group:

We, as the National Grid Group, will **achieve net zero for our scope 1 and 2 emissions by 2050**, with interim UK targets of a 50% reduction by 2030 and 34% by 2026, from 2018/19.

For our ET business:

- We will be ready to respond to an acceleration of **new low-carbon connections** during the price control period.
- We have developed a set of robust, cost-reflective, automatic mechanisms to deal with future uncertainty.
- We will make £600m of critical investments in the existing network to deliver net-zero system capability, and to drive down costs.
- We will provide brave leadership with targeted investments to replace leaking SF₆ equipment.

We consider Ofgem's DD reduces our ability to deliver net zero

- To manage uncertainty, Ofgem is proposing TOs invest at risk coupled with detailed re-opener assessments for net-zero critical investments when we need to deliver at pace to enable the transition
- Ofgem is proposing to re-assess allowances and outputs at the end of T2, undermining the certainty needed to invest and innovate
- Ofgem is proposing low returns relative to the level we consider necessary to attract and retain capital for these investments, despite the investment in energy networks needed and the uncertain pathway to get to net zero emissions
- Ofgem's proposals reduce certainty and flexibility in investment at the time it is needed most
- Investment needed for key customers will simply be un-funded in the T2 deal

Ofgem's draft determination jeopardises the delivery of the energy transition and the green recovery

National Grid | Energy UK Meeting | 11 August 2020



5. The effects of the DD on our stakeholders' priorities



Top 3 key Impacts of Ofgem's Draft Determination

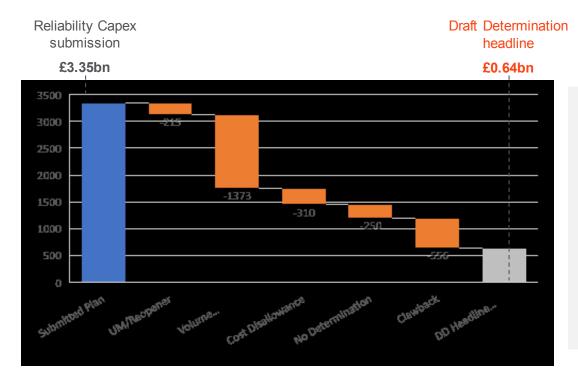
- Ofgem's proposals mean that the risk to network reliability and resilience will increase significantly, with less money allowed for network maintenance and replacement. This will be worst outside of London.
- Ofgem's proposals put at risk the green economic recovery. They could have provided an opportunity for energy networks to lead this recovery, but the route they have set out will delay much-needed investment and miss the chance to create jobs right across the country. Some of our proposed projects may never be economically viable under Ofgem's proposed framework.
- Ofgem's proposals mean it is less likely the UK will hit its 2050 net zero emissions target. Rather than accelerating the transition to net zero, the delays to projects will slow our progress in a period when every year counts.

Reliability was our stakeholders' top priority

- Maintaining current levels of reliability was our stakeholders' top priority.
- Ofgem proposed an allowance of £1,272m for Reliability, against a submission of £3,347m (Capex)
- Ofgem proposed a reduction of £556m, to 'claw-back' allowances unused in T1
- We have identified errors in Ofgem's assessment which increase our allowance
- LPT2 was funded in full, with no reduction in spend, with other large projects removed from the baseline with the option of funding through other mechanisms

Ofgem's draft determination leaves us concerned about our ability to deliver a reliable network

I want a safe and reliable network Recap of disallowances – and why it jeopardises reliability



Cost & volume reduction results:

- P&C DDs equates to £12m per year
- Conductor replacement is 80% down on historic run rates
- Ofgem proposal of efficient asset unit cost lower than procurement cost in some instances

New

Our stakeholders want a resilient network

- Our stakeholders have told us that they want us to protect the network from external threats and to respond and recover from incidents when they happen
- Our business plan proposed investment to protect the network from physical attack and extreme weather and to improve the resilience of our business IT systems and operational technology to cyber attacks
- Many of these investments are required to meet mandatory requirements.
- Ofgem does not fully accept needs case for OpTel and is only willing to part fund this investment at this stage commencing from the final two years of T2. We are concerned that this approach will not replace critical telecoms equipment that is essential to the safe and reliable operation of the transmission system before it becomes obsolete. We are providing supplementary evidence to ensure that OpTel is appropriately funded.
- Overall, Ofgem has reduced our resilience expenditure from £445m to £142m baseline capex.



Ofgem's draft determination leaves us concerned about our ability to deliver resilient networks

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Environment and communities

- We have been asked to submit information for an SF₆ baseline investment plan
- We have been granted the funding to deliver net zero construction and 60% fleet transition to EVs - although we have had 15% of our diesel fleet request cut. Reducing our Diesel fleet allowance, for vehicles which currently have no EV equivalent, could impact our ability to operate a reliable network and serve our customers.
- Ofgem have rejected our stakeholder proposed urban improvement provision
- Ofgem have proposed a £465m funding cap for transmission VIP works

Ofgem's proposals mean we risk not being able to maintain our operational fleet or fulfil our stakeholders' needs in urban communities

Weaker incentives to deliver for stakeholders

Incentives are a vital part of Ofgem's framework. It's called RIIO-2 and one of the "I"s stands for incentives. Incentives can encourage companies to deliver more and better services for consumers and stakeholders. Over the last 8 years incentives have encouraged us to improve customer satisfaction, reduce leakage of insulation gases and reduce the amount of energy not supplied.

Ofgem has nearly quartered the size of our incentives for the next 5-year period. We consider this large reduction acts against the interests of consumers and our stakeholders by weakening our incentive to innovate and improve our services. In particular, in the following 3 areas:

- Saving consumers money through SO:TO optimisation
- Accelerating low-carbon connections
- Customer satisfaction with the quality of connections
 National Grid | RIIO-2 draft determinations Impact on Stakeholders

Incentives – Possible Impacts

SO:TO optimisation Incentive

Ofgem has rejected our proposal for an incentive to encourage us to offer flexible services to the electricity system operator (ESO) that we estimated in our business plan could save consumers up to £188m per year. We can address Ofgem's concerns and will be asking for Ofgem to approve the incentive in its final determination in December.

Accelerating low-carbon connections

Ofgem has rejected our proposed incentive to encourage us to reduce the connection time for low-carbon generators to reduce greenhouse gas emissions. We consider the incentive helps support the delivery of the UK's target of achieving netzero greenhouse gas emissions by 2050. We can address Ofgem's concerns and will be asking for Ofgem to approve the incentive in its final determination in December.

Customer satisfaction with the quality of connections

Ofgem is proposing to halve the size of this incentive and switch it off in the first year of the five-year price control period. This incentive has helped fund investments to improve our customer service in recent years and we think it is vital to support our continuing journey of service improvement. We will be asking Ofgem to turn on this incentive in year one of the price control period (as it is for the other energy sectors) and to increase its strength back to its current level.



Weaker incentives could lead to lower levels of service and higher cost for our customers and consumers

Other impacts on Stakeholders

- NGET has a license obligation to connect customers where it is economic and efficient to do so. However, the Uncertainty Mechanisms (UM's) proposed for Generation is likely to mean that NGET will be delivering many connections at a loss as in lots of cases, the allowance does not even cover the asset costs to connect. This will inhibit our risk appetite and our ability to provide flexibility at the very time of significant and structural change in the energy market.
- The DDs will jeopardise investment by low carbon users of electricity. We are already under financial pressure when considering connecting new sources of demand. The impact of RIIO-2 will force us to delay further the pipeline of 1.5 GW of new data centres and potential future gigafactories that are desperate to access new connections.
- For larger projects (for example boundary re-enforcements), NGET will be required to undertake pre-construction activities at risk, with the opportunity to recoup monies towards the end of the 2026. Additionally, in order to facilitate competition for Onshore Transmission connections (which NGET support the concept), there will be delays added into the programme of around 2 years which, will not only increase constraint costs to the end consumer, may also delay certain connections (eg for Interconnectors).

Competition

We continue to support the introduction of genuine competition where it is in the interest of consumers.

We are concerned with the limited developments of CATO or SPV to date which leads to CPM becoming the default competition model for the foreseeable future. We do not see the application of CPM to be in the best interest of consumers.



6. Next steps and questions



Next steps

The consultation period for draft determinations ends on 4 Sept

In our response we'll be strongly arguing the case for a better final determination that:

- delivers for our stakeholders' priorities;
- supports the path to net zero emissions; and
- supports the economic recovery from Covid-19.

We would very much encourage you to respond to the consultation if you believe Ofgem's proposals would not favourably deliver the above



- Ofgem's open meetings for stakeholders in October
- Final determinations in December 2020

RIIO-2 period starts on 1 April 2021

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