

Introduction to Low Carbon RAB regime



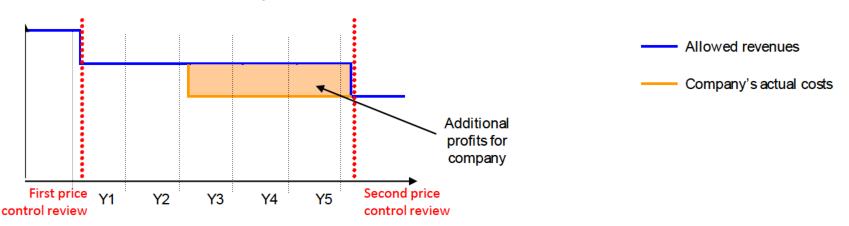


- Price Controls
- RIIO
- Potential Incentives for Low Carbon RAB

"Price Controls before 2010,,

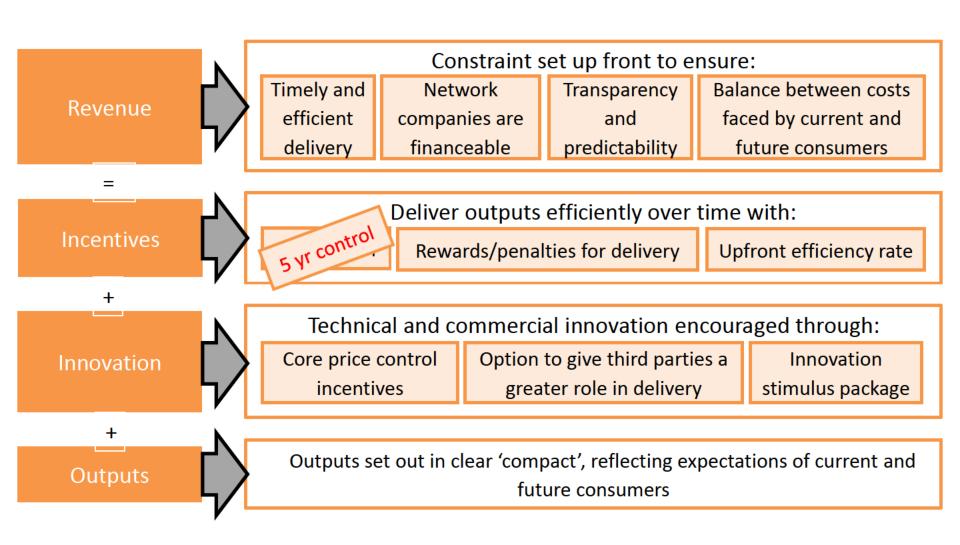


- GB networks were regulated in the past in a relatively blunt manner
- Price controls used to limit the amount of revenue that companies could recover
 - over the course of the price control period allowed revenues were adjusted by inflation (RPI) and a factor (X) that represents anticipated efficiency gains (or cost increases)
- Companies were incentivised to beat the regulators' assumptions
 - If they do, they keep the benefit until the next price control
- At next control, consumers benefit
- Quality measures
- Sustainable delivery

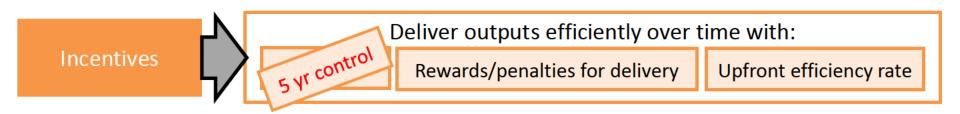


"RIIO Model "

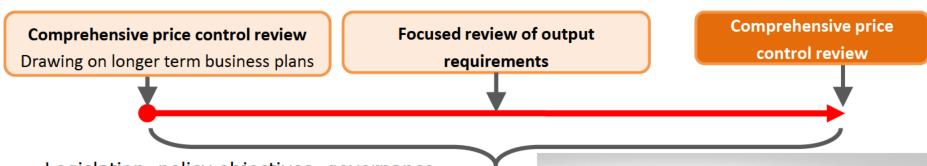








- Strong efficiency incentives sharing between company and consumers
- Long term perspective intended to encourage longer term business plans and the longer price control period – however we have since reverted to five years as it was felt eight years was too long



- Legislation, policy objectives, governance could change
- Opportunity to review package still appropriate
- Review not necessarily needed





Innovation

Technical and commercial innovation encouraged through:

Core price control incentives

Option to give third parties a greater role in delivery

Innovation stimulus package

- Regulation has been good at protecting against monopoly prices
- More difficult to challenge monopoly 'quiet life'
- Why take risks, have new thinking, try new approaches?
- Of course different ways are not always right
- but companies in relatively competitive markets have to keep on their toes for possible innovation
- RIIO supports innovation across business plan but also extra stimulus
- Competition but with governance ensuring sharing of benefits and company commitment

£60m/a available in electricity NIC

£20m/a available in electricity NIC



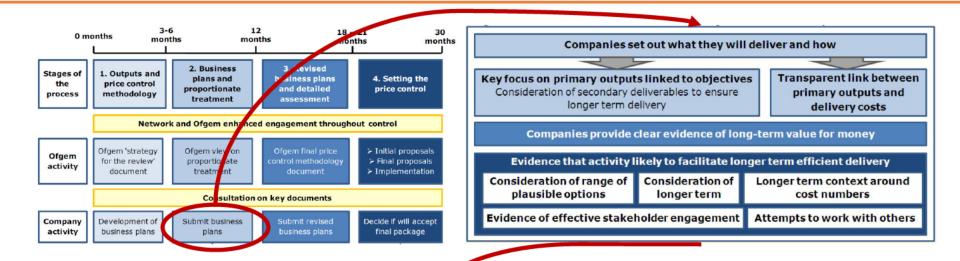
Outputs

Outputs set out in clear 'compact', reflecting expectations of current and future consumers

	Electricity transmission	Gas Transmission	Gas Distribution	Electricity distribution
Safety	Meet HSE requirements/ asset health measures	Meet HSE requirements/ asset health measures	40-60% reduction in safety risk, Meet HSE requirements/ Asset health measures	Meet HSE requirements/ asset health measures
Customer Service	Customer/stakeholder satisfaction survey, stakeholder engagement	Customer/stakeholder satisfaction survey, stakeholder engagement	Broad measure of customer satisfaction, complaints, stakeholder engagement	Broad measure of customer satisfaction, complaints, stakeholder engagement
Connections	Current licence requirements on timing of offers	Process established	Meet guaranteed standards	Meet guaranteed standards, new incentives on engagement (large connections)
Environment	Business Carbon Footprint and Sulphur hexaflouride targets	Business carbon footprint	Shrinkage, business carbon footprint, Biomethane capacity connected	Losses obligations and discretionary reward Business carbon footprint. undergrounding allowance -broad environmental impact (reputation).
Reliability and availability	Target for energy not supplied and boundary capacity levels	Sufficient to deliver 1 in 20 winter peak	Number and duration of interruptions	Interruptions incentive scheme Network resilience
Social	Not Applicable	Not applicable	Connection of up to 80,000 fuel poor, increased carbon monoxide awareness	Pro active in relation to vulnerable consumers



Increasing intensity of regulatory scrutiny



Examination and reassessment of particular project plans

Review of company evidence in plan/testing of company assumptions

Totex benchmarking

International benchmarking

Use of high level comparisons

Unit cost/opex benchmarking

Random inspections focused on one aspect of the plan

Full engineering reassessment of asset replacement strategy

Asset life based analysis

Option value analysis

Use of market testing evidence

Option to require companies to undertake further market testing



- There are parts of the control where we do not have sufficient information to set revenues at the time of the review.
- Reopeners/ Uncertainty Mechanisms allow for the possibility to submit a case for further revenue when there is greater certainty.
- Examples of reopeners in RIIO-1 include:
 - Innovation Rollout Mechanism allows companies to apply for additional revenues to roll out a proven innovation
 - Sub-sea cables scope for SSE to apply for additional funding once there was certainty on the level of protection required for sub-sea cables to be determined by Marine Scotland
 - Load related reopener if demand is significantly different from that envisaged in setting the control

Process for reopeners

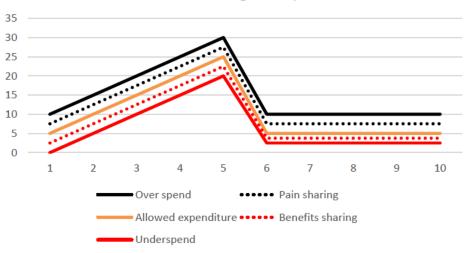
- Generally a time window is defined for submitting reopeners/ UMs to be triggered
- Submissions must be evidence based
- Discretion is retained by the regulator whether to grant additional revenues
- Company has recourse to legal challenge



Table 1: Pre-tax Totex in 2015-16

	NGE	T		
£m 2015-16 Prices	ТО	SO	SHE Transmission	SPT
Allowed Totex	1,805	137	781	354
Actual Totex	1,161	137	524	358
Overspend / underspend	-644	-1	-257	4
Sharing Factor ⁹	53.11%	53.11%	50.00%	50.00%
Allowed Totex after sharing 10	1,463	137	652	356

Risk Sharing Example



Risk Sharing - Totex Incentive Mechanism

Any over, or under spend is shared between consumers and companies. This is based on a sharing factor we set as part of assessing plans. Where a companies plans more closely reflects what we expect it receives a more generous benefits sharing factor.

However, the incentive is asymmetrical, if a company takes more of the gain on an underspend it also takes more of the pain on an over spend.

This is demonstrated below:

NGET's allowed Totex in 2015/16= £1,805m Actual Totex= £1,161m Underspend=£644 Sharing Factor=53.11% Amount recoverable from consumers= £1,161+(0.4689*644)=£1463m



Incentives can take a range of forms:

- Some are reputational only we published 'league tables'
- Some are reward only upside for exceptional performance
- Some are penalty only downside for failing a KPI
- Some are strict licence requirements

Output Category	Incentive	Incentive Type	
Environmental impact	Business Carbon Footprint	Reputational	
Customer satisfaction	Stakeholder Engagement Incentive	Reward only	
Connections	Incentive on Connections Engagement	Penalty only	
Safety	Compliance with HSE	Licence requirement	
Reliability and availability	Interruptions Incentive Scheme	Symmetric	
Social obligations	Priority Services Register	Licence requirement	



Table 7: ENS Three year performance - volume of unsupplied energy below annual target

	NGET	SHE Transmission	SPT
Target	316 MWh	120 MWh	225 MWh
2013-14	181 MWh	84 MWh	183 MWh
2014-15	307 MWh	14 MWh	222 MWh
2015-16	312 MWh	120 MWh	211 MWh

Transmission Revenue system effect availability 100% +5% Annual availability higher than the target results in a revenue uplift of up to 5 per cent 98% 0% Annual availability between the target and a collar 4 percentage points below the target results in revenue penalties of up to 10 per cent. 94% -10% Additional unavailability accrues penalties at the same rate up to a maximum of 50 per cent of one year's revenue. These penalties are paid over a period of up to five years. 78% -50% No further financial penalties below this point - but OFTOs required to minimise the effect and duration of any transmission outage in line with industry best practice. The failure of an OFTO to manage the effect and duration of a transmission outage could lead to enforcement action. 0%

TOs are incentivised to maximise the amount of electricity that is transported through their assets from entry to exit.

These targets are static and set for the whole price control period.

They receive a reward for being under target and a penalty for being over target.

OFTOs are not protected per se.

They could be fined up to ten percent of their annual turn over if they fall below the 98% mark.

They could also have their licence revoked.



Our financeability duty

Ofgem's Principal objective: to protect the interests of existing and future consumers

Must also "have regard to the need to secure that licence holders are able to finance the activities which are the subject of obligations on them"

- In the interest of consumers that efficient network companies can secure finance in a timely way and at reasonable cost to facilitate their regulatory obligations
- No bail-out if financial distress is due to own behaviour
- No reward of inefficiency or unwarranted returns
- Capital structure remains the responsibility of network companies' management

Regulatory commitment provided through transparency and predictability

Transitional arrangements to avoid sudden impact on earnings and cash flows

Low Carbon RABEconomic Regulatory Regime



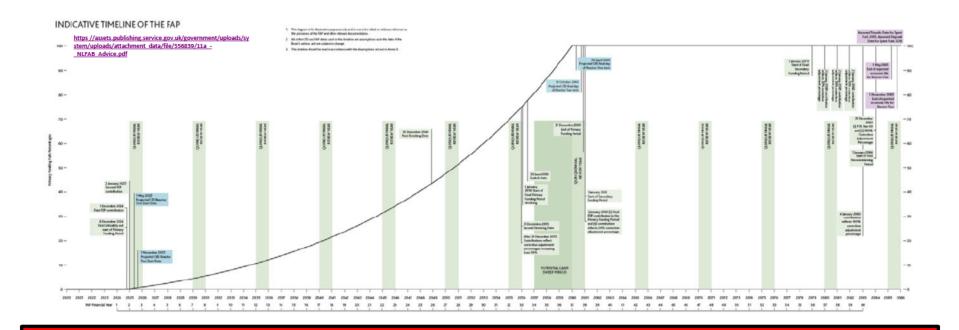
Parallels and divergences for Low Carbon RAB



Funded Decommisioning Programme







"Incentives,,

















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.