

# **RPI-X@20: Regulating energy networks for the future**

## ***Emerging Thinking***

Round table discussion  
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# Introduction and overview

## Purpose of today's workshop

- Provide overview of Emerging Thinking
- Set out next steps to Summer 2010 recommendations to GEMA
- Hear your views

## Reminder of the 'What and Why'

- 'RPI-X' has been used to regulate GB energy networks for nearly 20 years
- RPI-X@20 is our detailed two-year review of the regulatory framework for electricity and gas transmission and distribution network companies

### Review drivers

**Good  
housekeeping**

#### **New and emerging challenges**

Contribute to reducing industry carbon emissions while maintaining safe, secure affordable system

**Simplification?**

## RPI-X@20 Emerging Thinking

### Three parallel consultation documents

Core Emerging Thinking

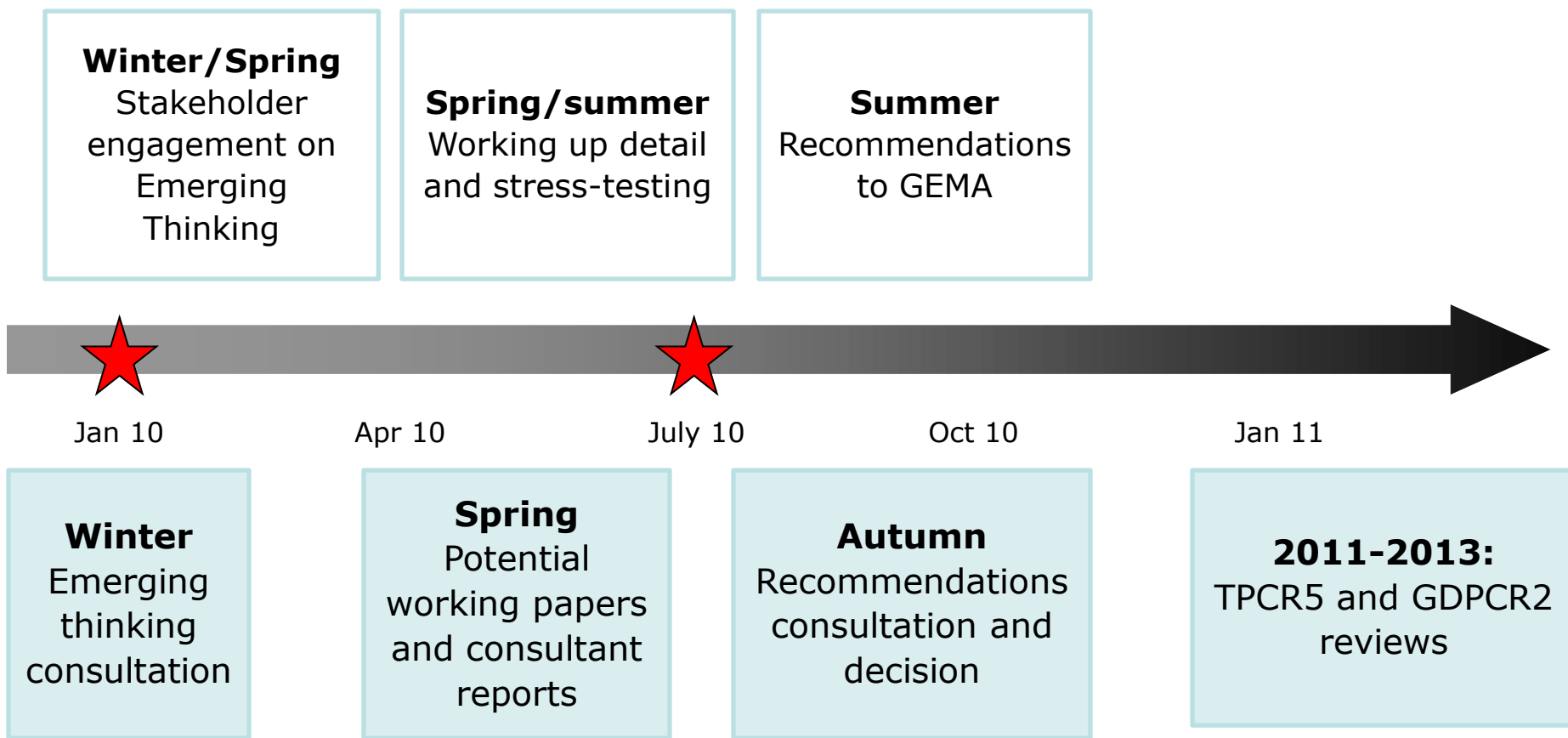
Financeability

Third party right to challenge

- Applies to all four network sectors
- Ideas subject to change as we consider responses to consultation and work up detail
- **Written responses by April 9<sup>th</sup> 2010**

**Potential new framework – Fundamental changes to network regulation**

# Emerging Thinking to Summer 2010 Recommendations



# **Is current energy network regulatory framework fit for purpose?**

# Energy network challenges

## Challenges facing all four network sectors

### Economy

- Availability of finance
  - Cost of finance
- International competitiveness
  - Price volatility

### EU policy

- Green house gas emission reduction targets
- Renewable energy targets
- Energy efficiency
  - Third Package
  - 2nd Strategic energy Review

### Government

- CCC advice to focus on decarbonised electricity
  - Low carbon transition plan
- Roadmap for 2050
  - Election 2010
    - Smart metering/smart grids

### Industry structure

- System Operator/ Transmission Owner split
  - Distribution system operator role?
- Energy service companies
  - Integration

**Great uncertainty about how best to respond to these challenges**



## Specific challenges for electricity networks

Reduced demand/  
energy efficiency

Back-up generation  
for renewables

Renewable  
energy targets

Ageing  
assets

Electric  
vehicles

Electric space  
heating

### Transmission

Connecting  
remote  
renewables

Closure of  
existing coal  
and nuclear  
plants

Connection of  
new nuclear,  
gas and CCS  
generation

### Distribution

Distributed  
generation

Active demand  
management

Adapting to  
impacts of  
climate  
change

## Specific challenges for gas networks

Secure  
sources of  
supply

Safety

Storage

Reduced demand/  
energy efficiency

Ageing  
assets

Alternative  
network use  
for CCS

Uncertain future  
demand average  
or peak

Renewable  
gas

### Transmission

Changing mix  
of supplies

Potential gas hub  
for Europe

Gas quality  
issues

### Distribution

Demand from Combined  
Heat and Power

Social obligations  
on extensions

New sources  
in new places

Liquid  
Natural gas

Increasing import  
dependency

Adapting to  
impacts of climate  
change

Mains  
replacement

District  
heating

## RPI-X is not broken – it has delivered

**Control on  
'revenue' set  
upfront,  
including return  
on asset base**

**Five-year price  
control  
periods, with  
some mid-  
period changes**

**Focus on  
(operating) cost  
efficiency  
incentives**

**Recently,  
incentives to  
meet specific new  
challenges**

### **RPI-X has delivered significant benefits for consumers:**

Reductions in  
network charges

Improvements in  
operating efficiency

More efficient  
financing

Improved quality  
of service

Increased  
investment

Consumers have benefited from effective regulation alongside competitive markets

## RPI-X was not designed for sustainable era

### Stakeholders have suggested existing frameworks have led to:

Networks focused on  
5 year price cycles

Networks focused on  
Ofgem not their customers

Limited consideration of innovation  
and 'how best to deliver'

Potentially limited appetite for risk

Limited focus on 'cross-sectoral' interactions

### Meeting future challenges and managing uncertainty requires:

Long-term focus on  
value for money

Innovation

Optionality and flexibility

Working with others to identify best  
delivery solutions

Understanding and responding to needs of  
existing and future consumers

➤ Mismatch between what we have and what we need?

**A new regulatory framework is needed?**

# **A potential new framework for GB energy networks (subject to consultation)**

## Changes from the existing framework

### What would remain the same?

Constraint on revenue set upfront

Building blocks approach, including return on regulatory asset value

Rewards for efficient delivery

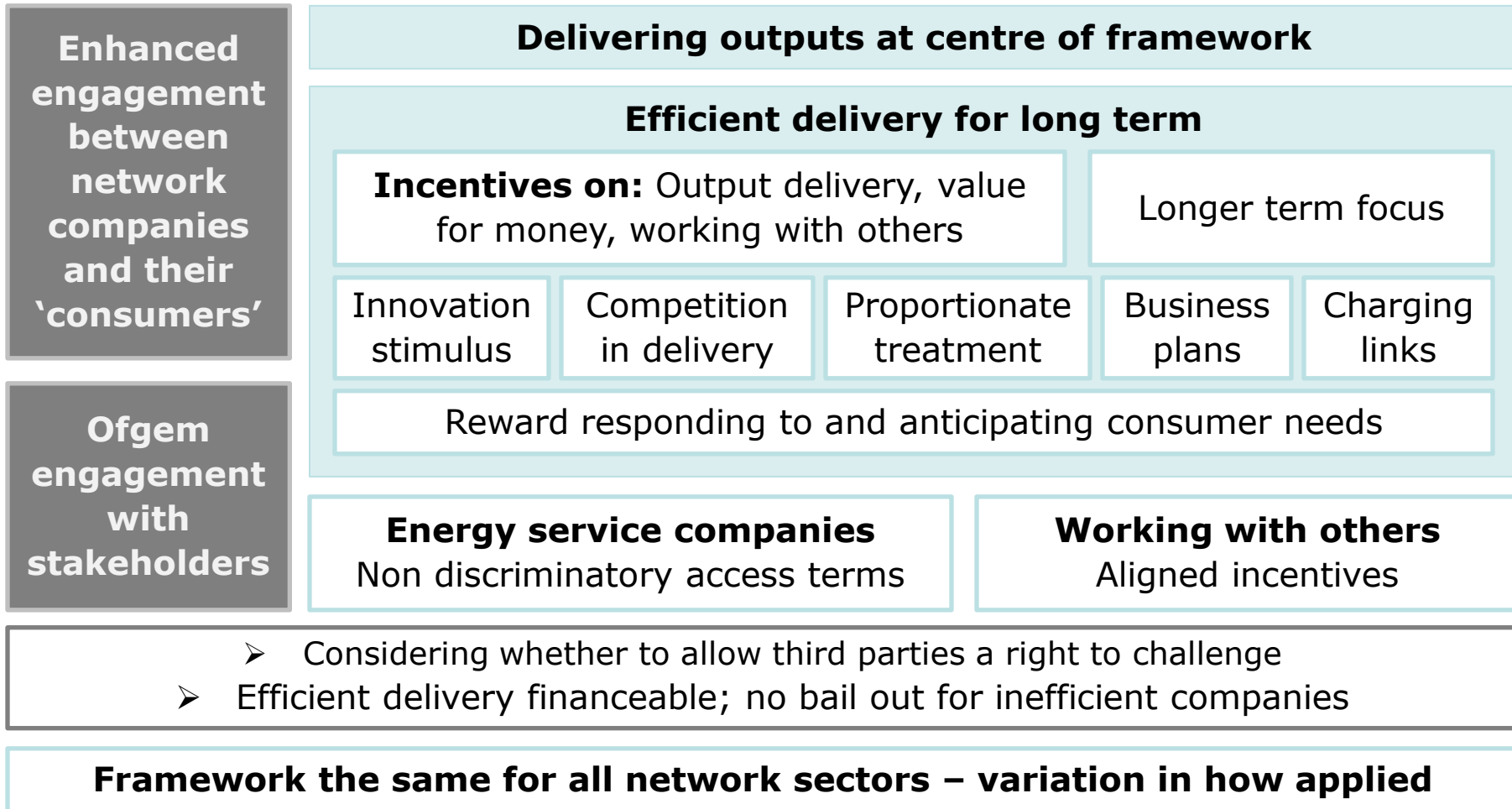
**Network companies who deliver efficiently will remain financeable**

### What could change? How price control is set

#### **Encourage monopoly networks to be more proactive:**

- Play fuller role in facilitating delivery of sustainable energy sector
- Provide value for money for existing and future consumers

# Proposed new regulatory framework



# Delivering a sustainable energy sector – focus on what needs to be delivered

**Play a fuller role in facilitating delivery of a sustainable energy sector**

Environmental  
targets

Network service  
connections

Customer  
satisfaction

Safety

Reliability

Social  
obligations

**Respond to current demands and anticipate future needs**

- **Output measures in each category determined at price control reviews**
- **Rewards for delivery; penalties for non-delivery**

'Allowed  
revenue' linked  
to outputs

Enhanced  
engagement at  
heart of 'what'  
to deliver

Need well-  
justified case on  
how best to  
deliver

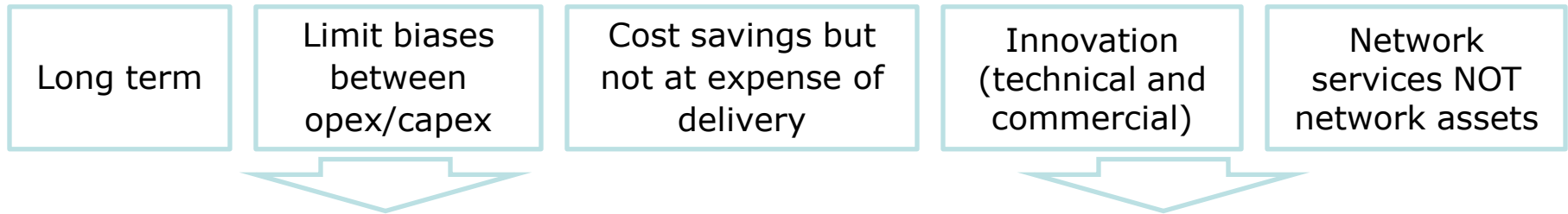
Delivery  
performance  
impacts on  
future reviews

Mix of financial  
and  
reputational  
incentives

**'Traffic light indicators' potentially monitored and published**

# Delivering at value for money – efficient delivery over long term

Retain focus on efficiency incentives  
**But shift in perception of what we mean by 'efficiency'**



## Assessment of required efficient costs for delivery

- Range of delivery options and future scenarios considered in business plans
- Engagement and 'Buy-in' from stakeholders
- Benchmarking
- Efficient procurement evidence

## Incentives to seek out efficient and innovative delivery solutions

- Upfront (strong) incentive rate
- Equalised opex/capex incentives
- Interactions with charging
- Cross-sectoral innovation stimulus, open to third parties
- Tendering of aspects of delivery
- Differential treatment
- Facilitating competition in energy services



# Potential move away from focus on five-year control

## Focus on longer term across framework

- Longer term business plans
- Longer term outputs

## Partial lengthening of price control period:

- Some elements of the control committed to for longer
- Potential indexation of other elements

## Regular monitoring of outputs

- Allow us to have a better understanding of potential risks to delivery

## Adaptation

- Provisions will be included to reopen aspects of the control
- It is also important that the framework can adapt to changing circumstances

## Embedding financeability in the framework

**We are seeking to design clear, transparent principles for ensuring companies earn appropriate returns on their RAV but not bail out inefficient companies**

- Straw-man proposal set out for embedding our financing duty in the regulatory framework

### Key aspects

Allowed return should reflect the riskiness of revenue/cost streams

A measure to monitor performance and returns

Depreciation modelled on economic basis

Clear principles to determine appropriate capitalisation policy

Continue to assess the expected financial health of efficient company

# Next steps

## Next steps

### **Emerging Thinking consultation and stakeholder engagement period**

January 20<sup>th</sup> to April 9<sup>th</sup> 2010



### **Final recommendations to GEMA – Summer 2010**

Consultation period – Autumn 2010

Decision – Autumn 2010



### **Implementation**

**Transmission Price Control Review 5 (TPCR5) – April 2013**

**Gas Distribution Price Control 2 (GDPCR2) – April 2013**

The logo for ofgem, consisting of the word "ofgem" in a white, lowercase, sans-serif font, centered within an orange rounded rectangle. The background of the slide features a collage of images: solar panels on the left, a large white arrow pointing right, and a close-up of a gas meter on the right.

*ofgem*

Promoting choice and value  
for all gas and electricity customers