

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

Emerging Thinking

Industry workshop
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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

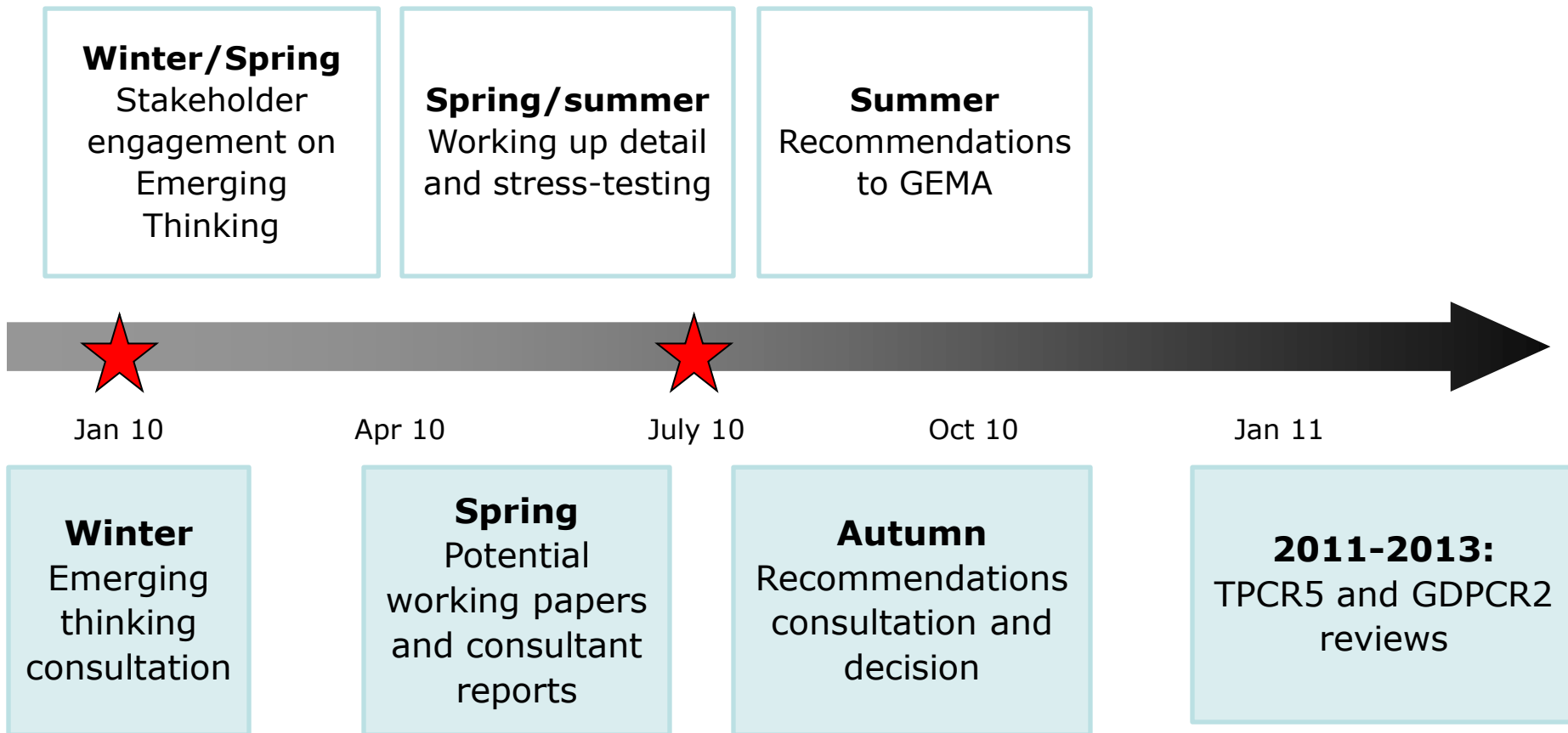
Financeability

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 9th 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

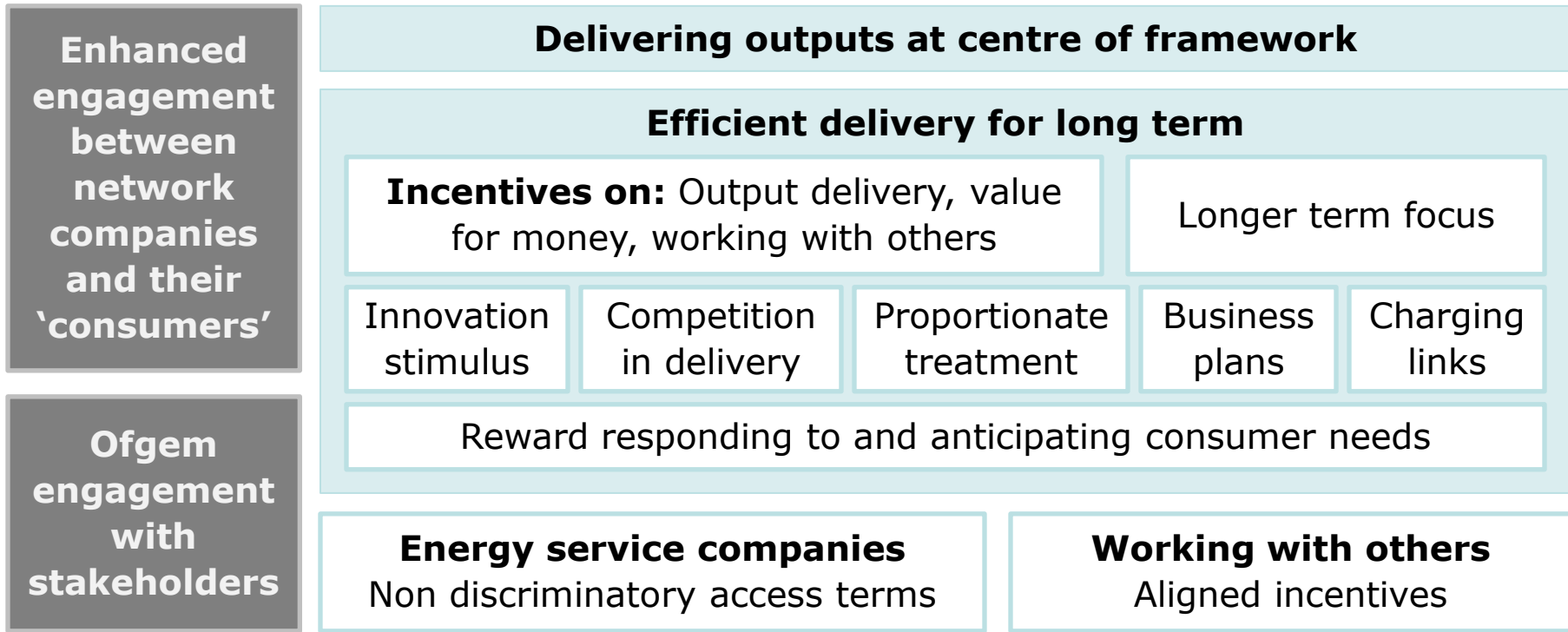
Network companies who deliver efficiently will remain financeable

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



- Considering whether to allow third parties a right to challenge
- Efficient delivery financeable; no bail out for inefficient companies

Framework the same for all network sectors – variation in how applied

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

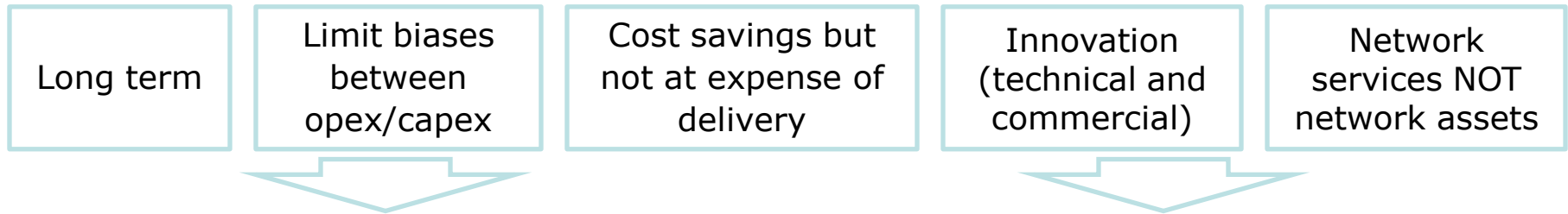
Delivery
performance
impacts on
future reviews

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 20th to April 9th 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

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ofgem

Promoting choice and value
for all gas and electricity customers