

# March 2012 Business plan

## Business plan summary

1 May 2012  
Transmission Workgroup



## RPI-X regulation

---

For publication only: will not  
be in presentation on the day

- The UK gas industry was privatised 25 years ago, and Transporters have been regulated ever since
- Real cost reductions have been driven by real revenue reductions (prices increased slower than inflation)
- Incentives were introduced for the cost of system operation 10-15 years ago
- This has been able to continue against a relatively stable energy environment, however, much change is anticipated.

## RPI-X@20

---

For publication only: will not  
be in presentation on the day

- Ofgem review of existing approach to energy network regulation
  - Still fit for purpose?
  - Encouragement & flexibility to facilitate low carbon energy sector?
  - Focused on customer considering, existing & future needs?
  - Need to decarbonise GB energy sector, place greater focus on the delivery of desired outputs
- December 2009, Ofgem advised a delay to implementation of next TPCR until April 2013
  - Enable next TPCR to reflect fully the conclusions of RPI-X@20
  - One year 'adapted' rollover of TPCR4

# RPI-X becomes RIIO

## Context (Gas & Electricity)

Future scenarios predict £32bn network spend forecast to deliver low carbon infrastructure

Ageing infrastructure driving continued high levels of asset replacement

Move towards low carbon infrastructure and the changing supply and demands patterns resulting in challenging real time system operation

RPI-X has delivered great value for consumers to date however it is perceived as:

- ◆ Driving short term network behaviours
- ◆ Insufficiently customer focussed
- ◆ Encouraging traditional capex solutions rather than innovative or non-network options

## RIIO

Eight year price controls

Focus on network outputs

Increased customer consultation

Proportionate assessment

Focus on and reward for innovation

Increased contestability on major projects

Superior rates of return for networks that deliver outputs

Revised depreciation profiles

Continued use of rating agency financeability assessments: Use of capital structure and WACC rather than accelerated depreciation to address financeability issues

# Ofgem's output categories

For publication only: will not be in presentation on the day

## INTERESTED IN WHAT THE SYSTEM DELIVERS...

SAFETY	RELIABILITY	ENVIRONMENT
CONNECTIONS	CUSTOMER SATISFACTION	MANDATORY SOCIAL OBLIGATIONS

## UNDERPINNED BY FUNDING FOR EFFICIENT DELIVERY

# Changing operational environment

## Drivers of change on our network

---

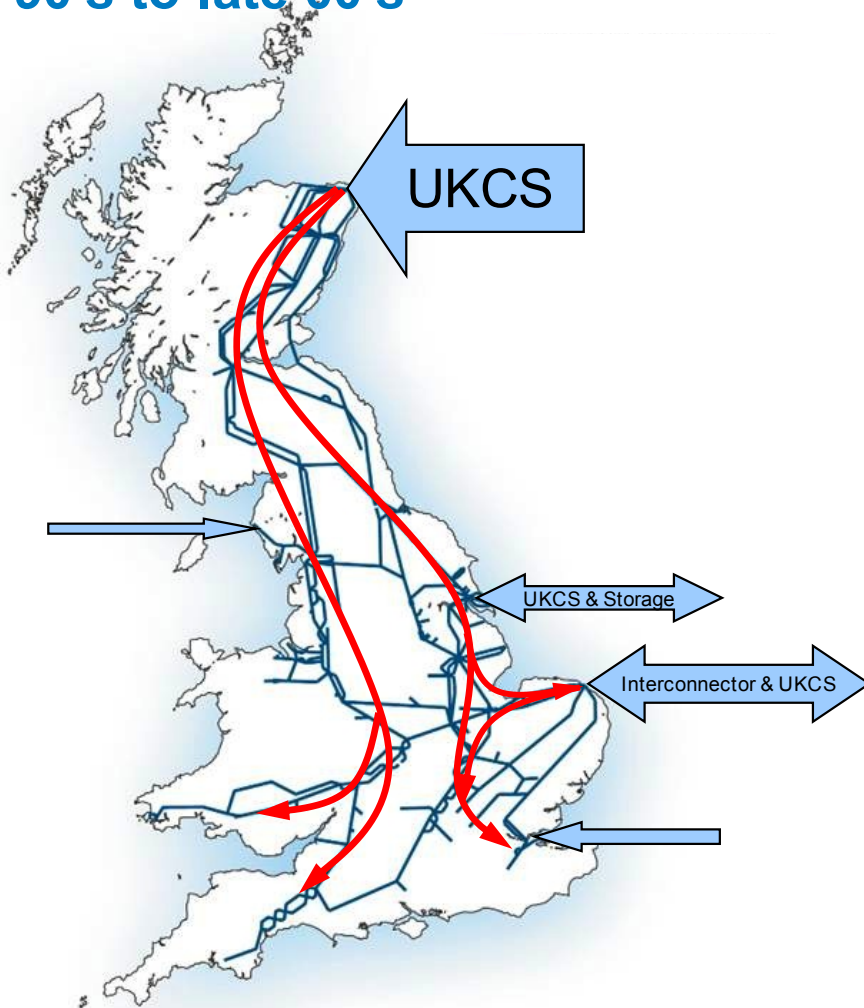
### Exciting and challenging time for UK gas transmission

- Changing sources of gas supply
  - UKCS decline
  - LNG importation and Interconnections
- Decarbonisation of electricity generation, due to ambitious carbon reduction targets
- New environmental legislation
- Existing transmission assets reaching end of design lives
- Changing user behaviour, placing a requirement for additional operational capability
- Changing European regulatory environment

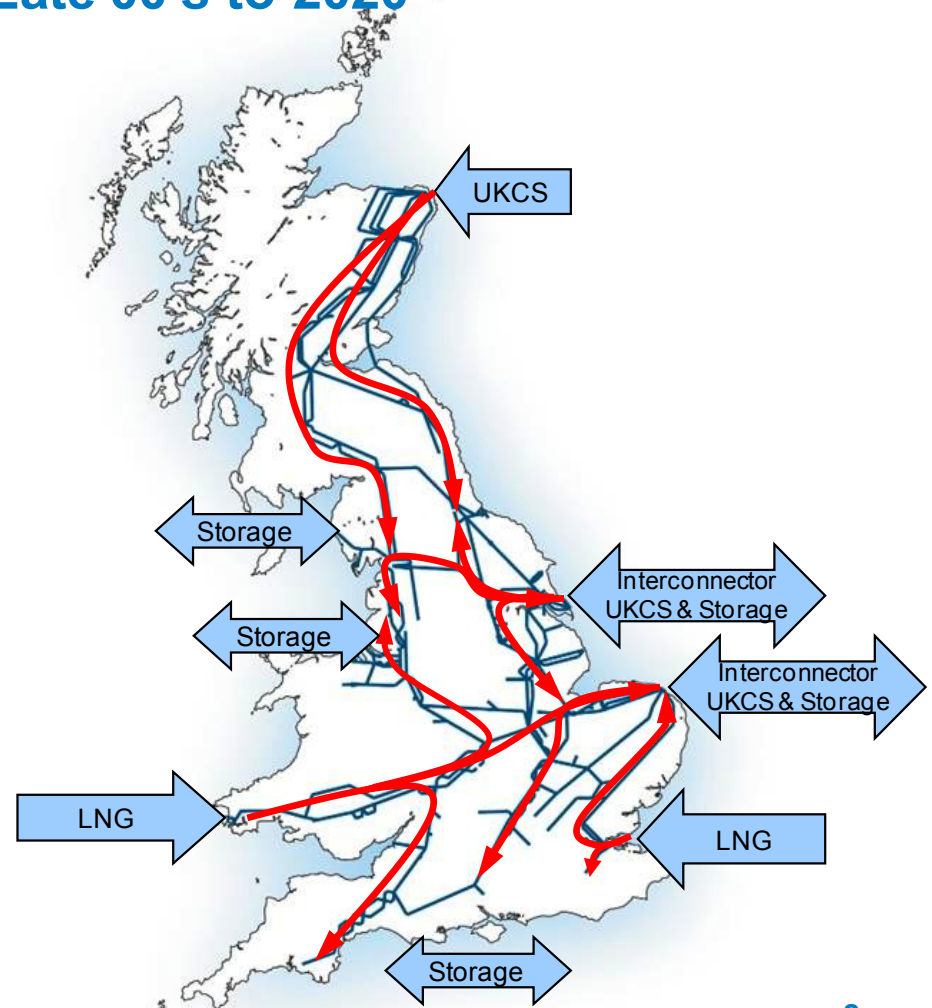
### Decade of essential development

# Changing sources of gas supply

Mid 90's to late 00's



Late 00's to 2020



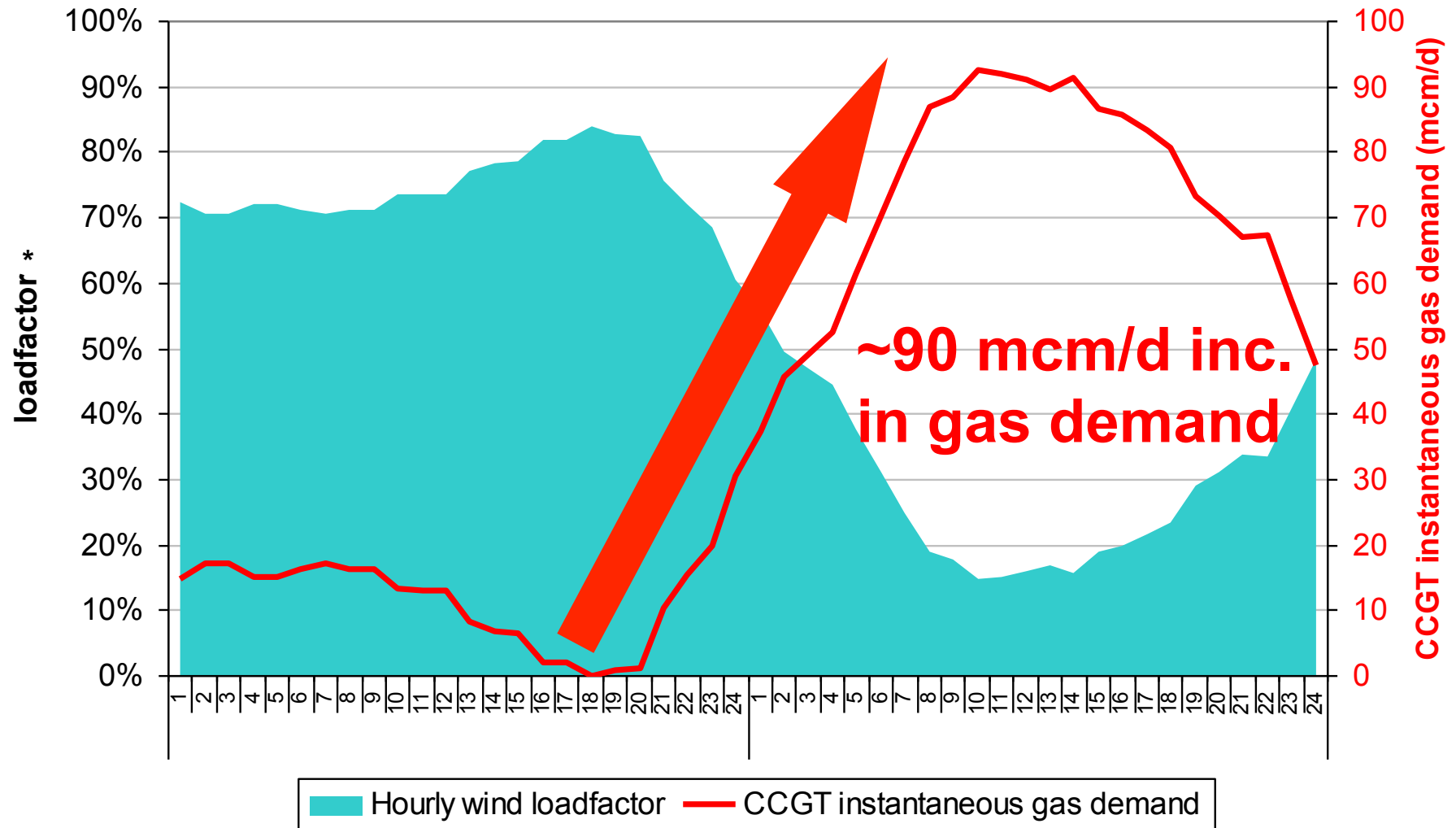


## Changing sources of gas supply

---

Makeup of similar supply level days demonstrating the move away from UKCS supplies	Winter 2002/03 (mcm)	Winter 2010/11 (mcm)	Indicative Winter 2020/21 (mcm)
UKCS	338	158	70
Norway	19	91	88
European Interconnectors	13	40	99
LNG Importation	0	106	122
<b>Total Non Storage Supply</b>	<b>370</b>	<b>395</b>	<b>379</b>
Storage	80	55	71
<b>Total Supply</b>	<b>450</b>	<b>450</b>	<b>450</b>

# Decarbonisation of electricity generation (2020/21: 30GW wind capacity)



\* - Load factor is the generation output as a proportion of capacity

# Environmental legislation

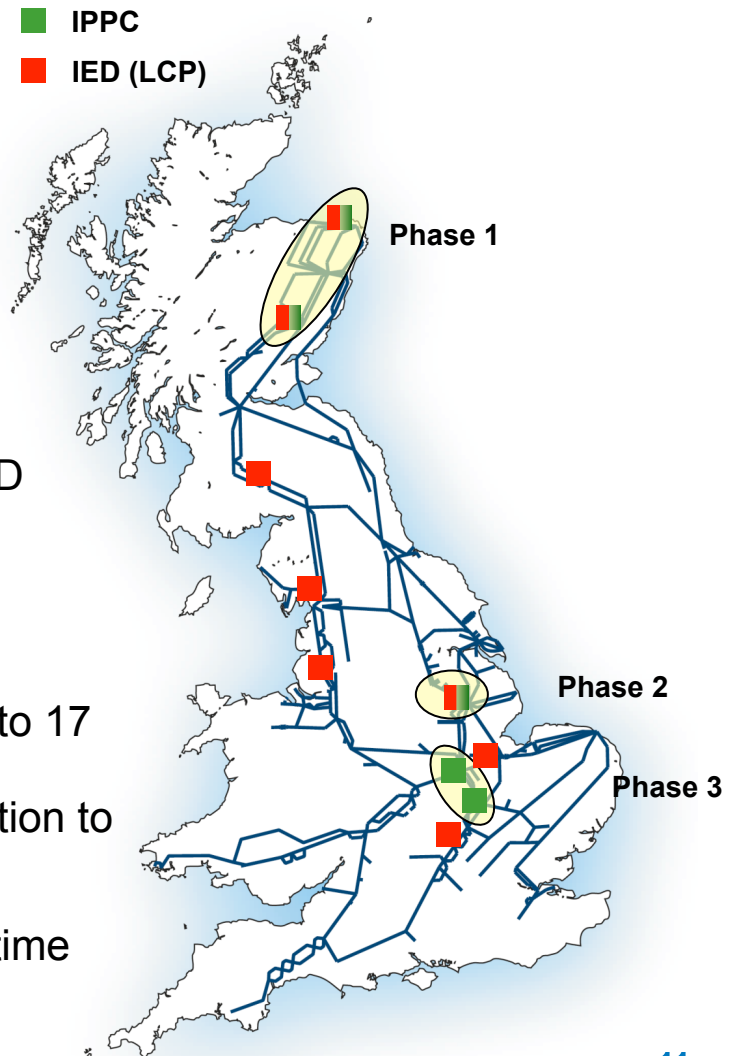
Necessary investment will impact capability

## IPPC emissions reduction

- Compressor fleet review with EA/SEPA
- Drives continuous emissions performance improvement

## IED introduced

- Our operated LCP previously exempt from LCPD ELVs for NO<sub>x</sub> by virtue of its age.
- IED is removing this age related exemption
- 21 non-compliant units (8 sites) – now reduced to 17
  - Written undertaking limiting hours of operation to 17,500 (1<sup>st</sup> Jan 2016 – 31<sup>st</sup> Dec 2023)
  - Maximise lifetime of affected units, longer time to make investment
  - Decommission or replace



## Changing user behaviour

---

- Network Flex - additional operational capability required for the NTS to accommodate changing flow patterns required by users
- Required capability may be provided through either (or combinations of):

### **Commercial (Rules)**

Shape commercial regime, products, tools and incentives to better align cost of customer actions, to encourage efficient behaviour and allow flexibility of usage desired

### **Operational (Tools)**

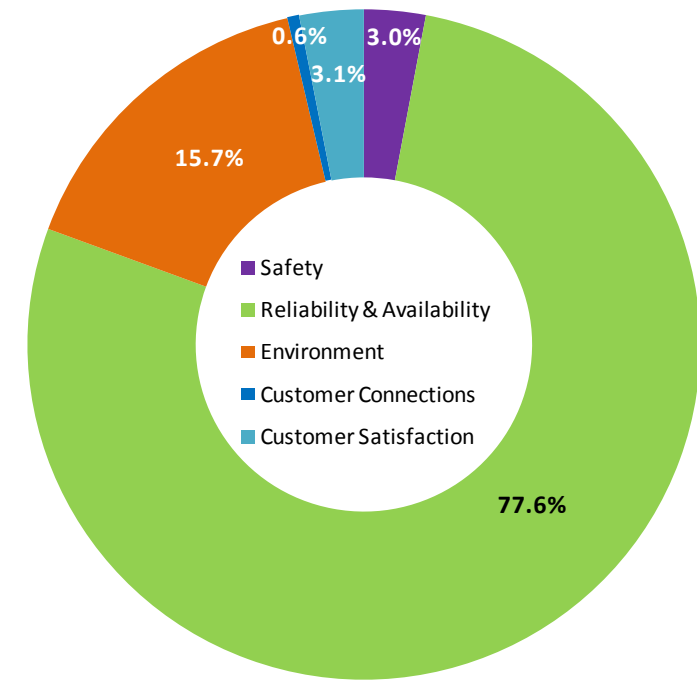
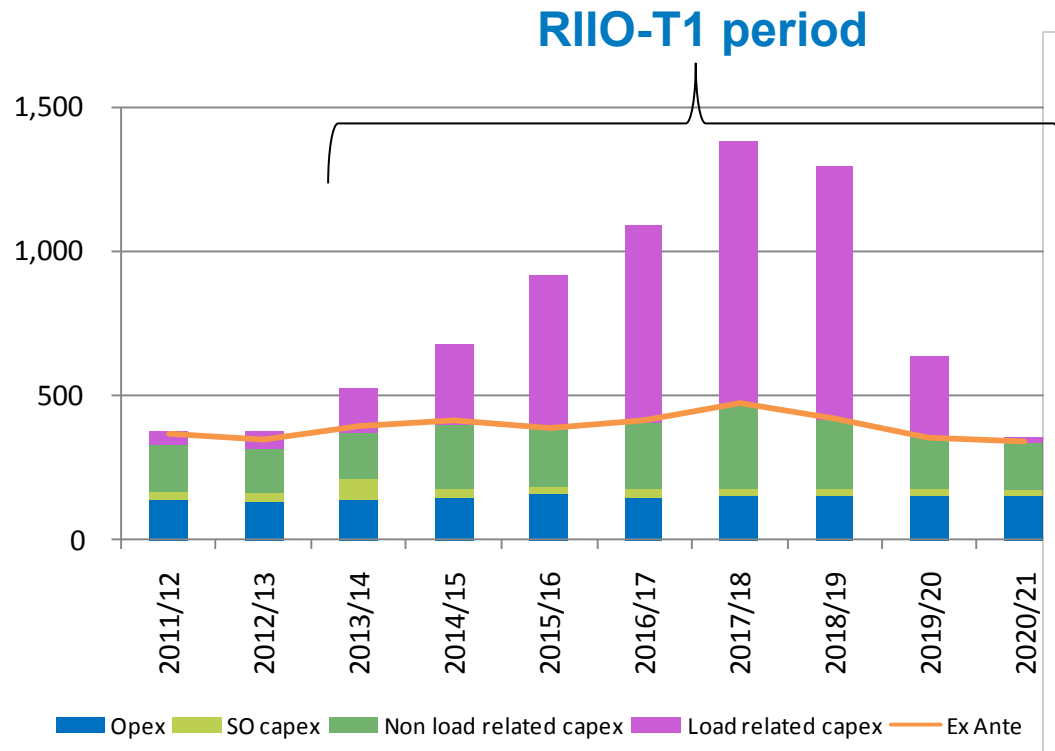
Enhance capabilities and tools to enable optimal use of the NTS under evolving rapid dynamic within day conditions (including consideration of ESO-GSO cooperation)

### **Investment (Assets)**

Targeted investment to NTS to support dynamic operation at strategic points on the network in order to meet customer requirements

## Our business plan – March 2012 submission

# Baseline plan expenditure



Capex  
£5.7 bn

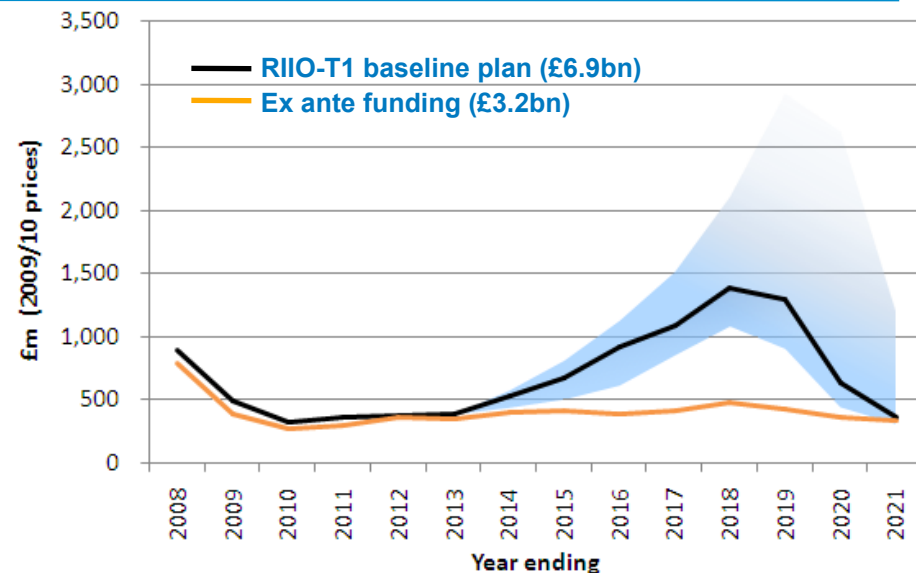
Opex  
£1.2 bn

‘Totex’ over RIIO-T1 period  
£6.9 bn

+ =

## Uncertainty Mechanisms

**Our baseline RIIO-T1 plan is only one view of the future...**



Mechanisms we proposed:

- allow the regulatory control to adapt in a transparent way to an uncertain future
- ensure the RIIO-T1 package remains appropriate across a wide range of potential outcomes
- allow us to deliver desired outputs in future scenarios outside what is currently considered credible through the use of specific and targeted ‘re-openers’

## Managing risk & uncertainty

Uncertainty	Proposed mechanism
Buybacks / Constraint Management	Caps and collars on buyback exposure – to be explained further in our May 2012 SO external incentives submission
Incremental Entry and Exit	Specific re-opener to set forward-looking cost targets based on incremental capacity signals
Network Flexibility	Specific re-opener to adjust allowances as requirements become clearer
Asset Health	Specific re-opener with materiality threshold for unforeseeable high-impact events
Industrial Emissions Directive	Volume-driver based on variance of scope of environmental legislation impact compared to our baseline plan
Critical National Infrastructure	Specific re-opener windows with materiality threshold
GB and EU market facilitation	Specific re-opener windows with materiality threshold
Real price effects (steel price)	Steel price tracker with dead-band and time-lag



## Network Flexibility – proposed UM

---

- At the January Transmission Workgroup, we outlined a process for the Network Flexibility uncertainty mechanism
- We submitted this same process in our March 2012 RIIO-T1 submission



# Load Related Activities

---

For publication only: will not be in presentation on the day

## Reliability & Availability

Provide **network flexibility** to deliver required reliability whilst facilitating emerging customer behaviours

An **uncertainty mechanism** is proposed for network flexibility investment in response to stakeholders challenges around need case. Reflected by new industry consultation process to share outputs of analysis.

## Environment

Stakeholders believe we should facilitate the **timely connection** of gas fired generation plant to support decarbonisation of the electricity sector

## Customer Connections

Development of a **joint connection & capacity process** to encourage timely connection of customers, and align our processes with those of our customers to manage the implications of the **Planning Act**

## Customer Satisfaction

Improvement of day-to-day **customer service**

Introduction of a formal **complaints procedure** and escalation route

Introduction of **customer forums** on specific topics

# Non-load Related Activities

---

For publication only: will not be in presentation on the day

## Safety

We will ensure **compliance with safety legislation** through our asset health investment programme

## Reliability & Availability

We will maintain **reliability performance and control network risk** through our asset health investment programme

This level of **programme spend is considered “about right”** by stakeholders and supported by Ofgem’s consultant in the TPCR4 rollover review

## Environment

We will ensure **compliance with environmental legislation** through our investment programme

In line with stakeholder feedback the plan includes the minimum investment required to **achieve statutory carbon reduction levels**

Mechanism to manage requirements of the **European Industrial Emissions Directive**

# System Operation

---

For publication only: will not be in presentation on the day

## Reliability & Availability

We will manage **reliability performance** in response to changing customer requirements for NTS utilisation by developing our operational processes, IT systems and people

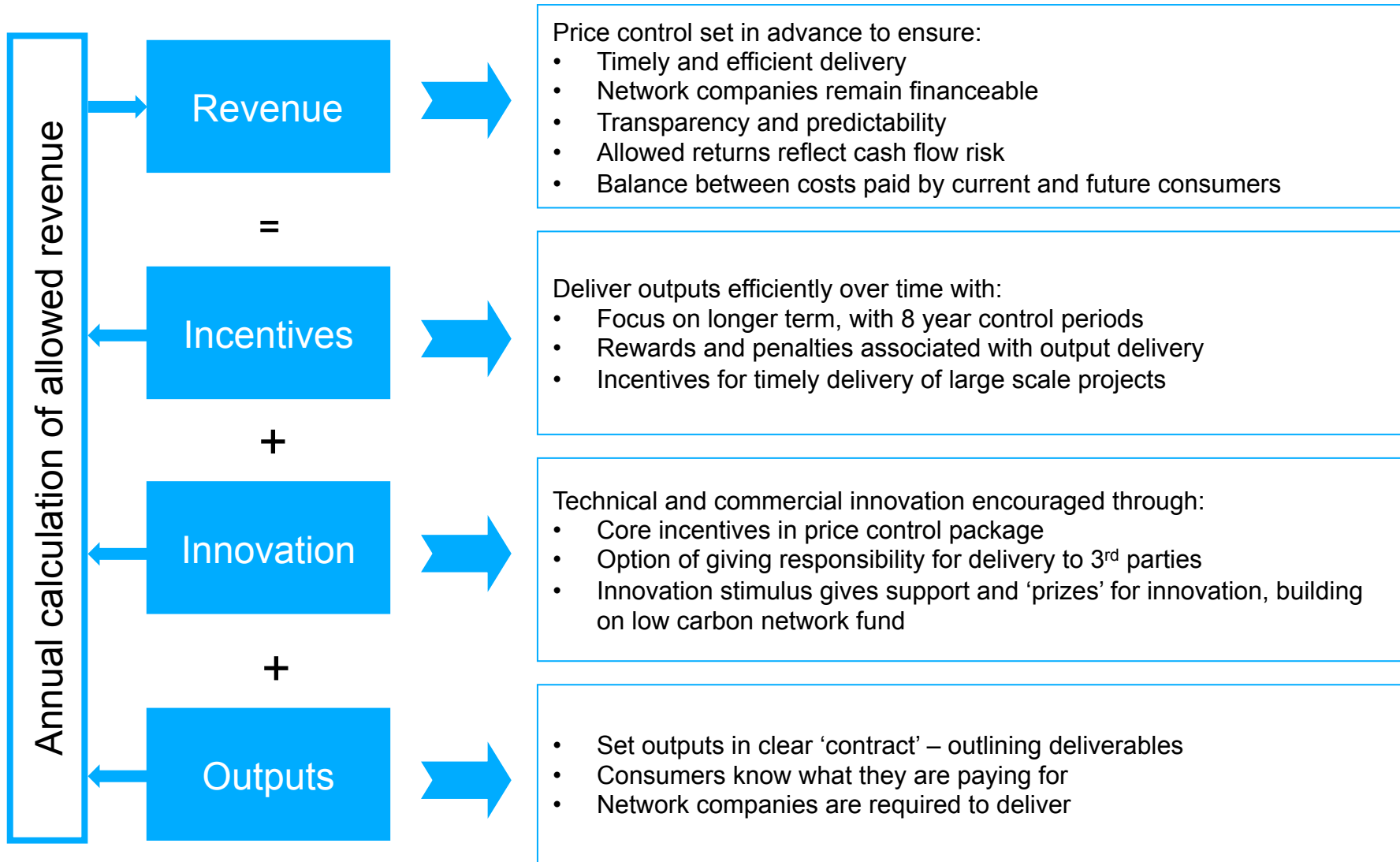
Where this is insufficient to maintain current standards we will use the proposed network flexibility **uncertainty mechanism** to agree with stakeholders the required capability enhancements

## Customer Satisfaction

Marginal allowances for the evolution of our **market facilitation role** are included in our plan.

A re-opener is proposed to accommodate material impacts from changes in the GB & European markets

RIIO : Driving smarter energy networks for a low carbon future

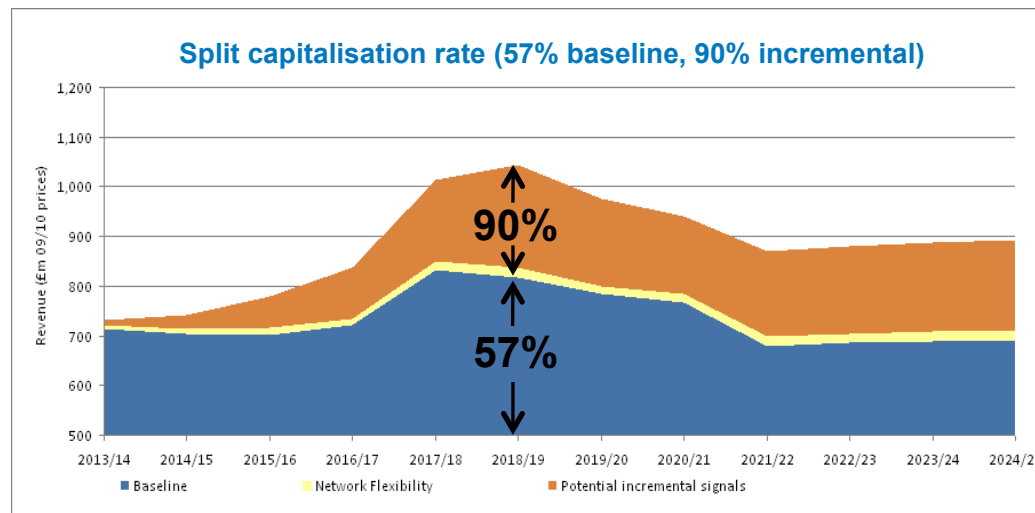
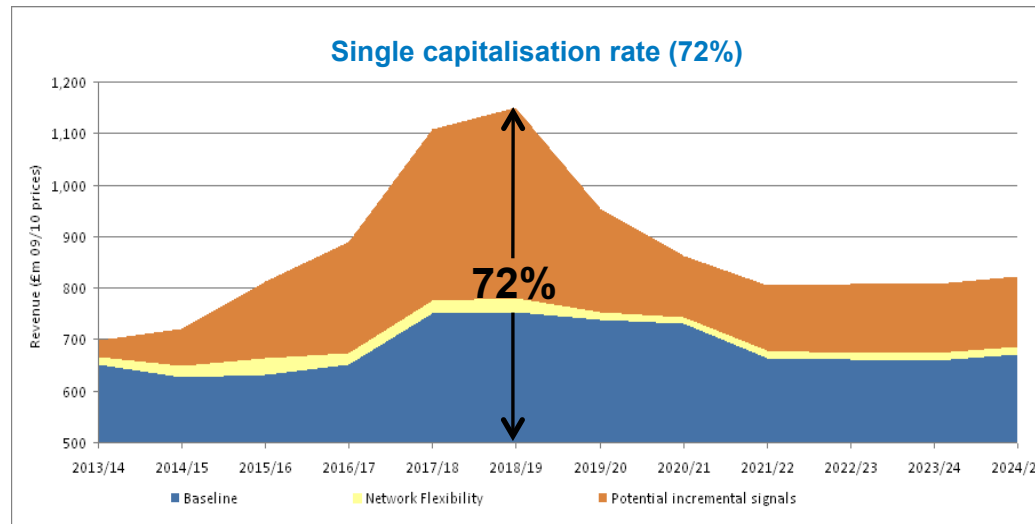


## Calculating our revenue

---

- RIIO framework includes:
  - **Performance against our Output incentives** which need to be included in our revenues
  - **Uncertainty mechanisms** which need to feed into our revenue in the year of spend to ensure financeability
  - Annual true up for items such as:
    - **Estimates of RPI** which need to be trued up to actuals
    - **Cost of debt** trailing average calculation to be trued up
    - **Tax** charges to be trued up
- Ofgem's proposal is to run a Price Control Finance Model each November to calculate following year's revenue.

# TO Revenue forecast



## Capitalisation rate

- RIIO introduced a longer period of uncertainty
- Stakeholder concerned re: volatility in our prices
- Listened and taken action to smooth profile
  - Less fast money
  - More slow money
- Ensure business financeable and we can attract investors

# **Suggested developments: to be considered as an industry**





## Potential development

---

- There are a number of areas we need to discuss and agree to support the necessary changes to the UK gas industry.
- The PCR provides an opportunity to change the regulatory regime to better align with the challenges of the future.
- In parallel, we need to also appropriately develop the commercial regime to maintain fitness for purpose into the future.
- This is not commercial change driven by the PCR; it is an opportunity to deliver aligned regulatory and commercial regimes that are fit for the future.

## Development topics for consideration

---

- **Delivering connections and capacity** – the main subject of today's discussions
- **Flexibility** – following on from our January 2012 session, we will provide an update later today
- **Review Neutrality** – to facilitate a single Entry/Exit constraint management regime
- **Entry maintenance days** – consideration of the case for introducing maintenance days on Entry
- **Potentially need to re-consider charging methodologies** as a result of changes the RIIO regime will introduce. If considered necessary, this will be for consideration at NTS CMF