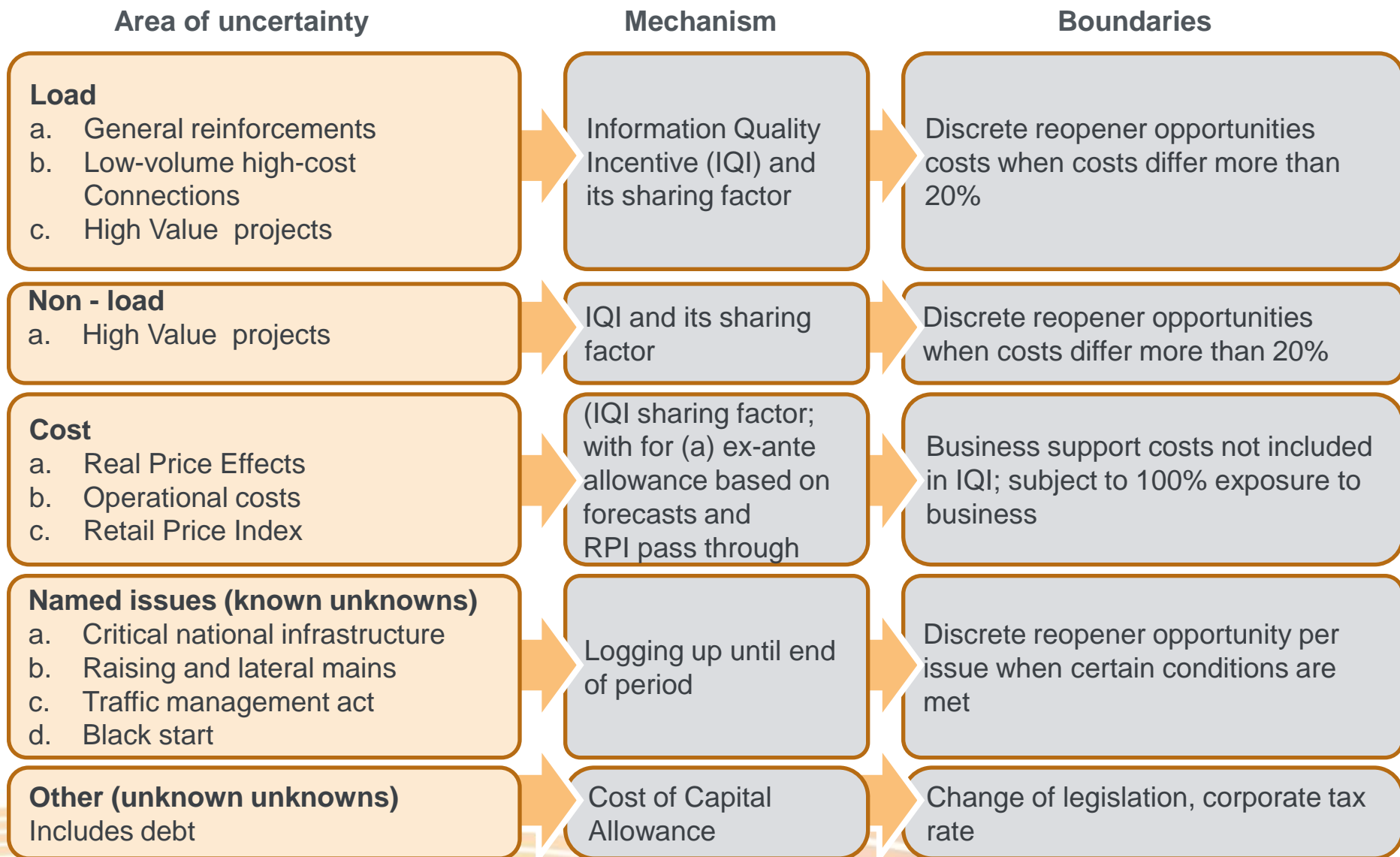


# RIIO-ED1 Uncertainty mechanisms

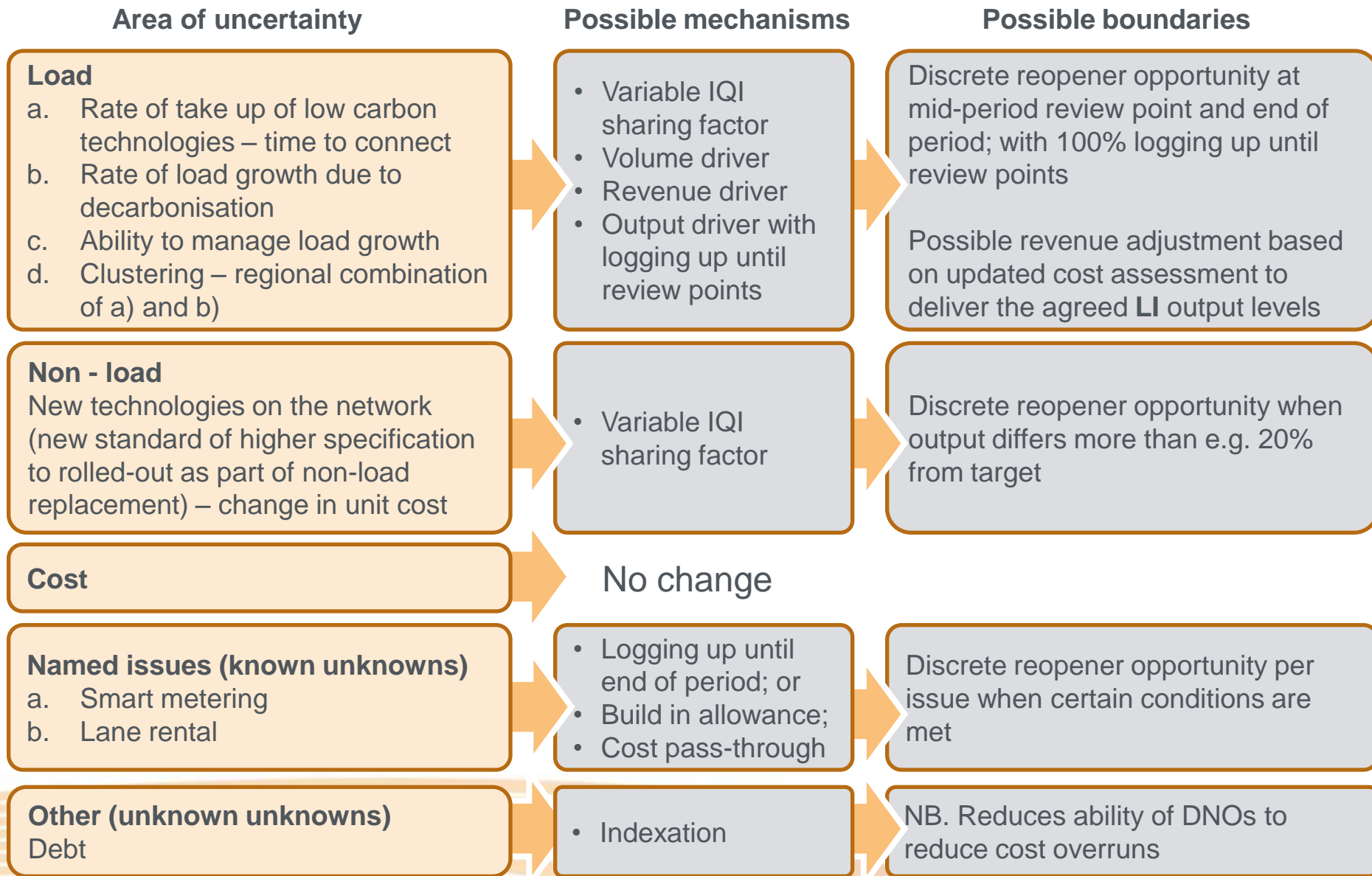
## Discussion document

V1.0  
30 May 2012

# Uncertainty Mechanisms in place during DR5



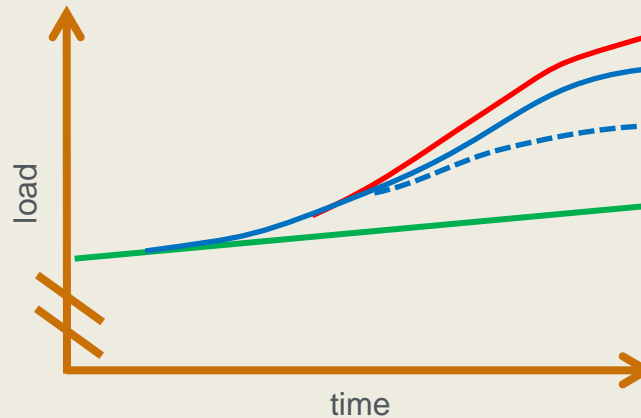
# Changes under ED1



# UKPN Proposal: Revenue adjustment based on Output driver with logging up until review point(s)

## Load

- Rate of take up of low carbon technologies
- Rate of load growth due to decarbonisation
- Ability to manage load
- Clustering



- Increased actual new load
- RIIO –ED1 Load Forecast
- Reduced actual load due to externalities
- Historic load growth

(2) If uptake is higher than forecasted, LI will raise; **cost to deliver agreed output** will also increase

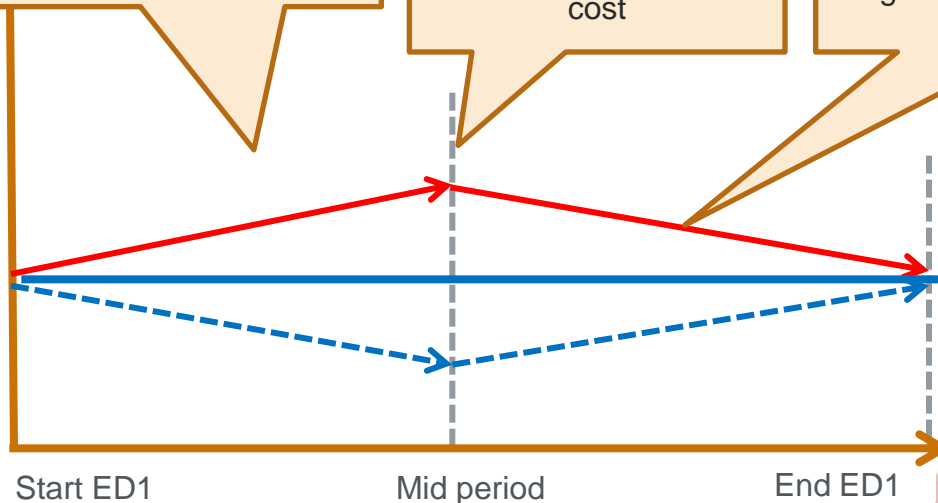
(3) **Mid-period review** of forecast vs. actuals; with 100% logging of cost

(4) **Mechanistic revenue adjusted** based on new forecast – in order to deliver agreed LI output and time to connect

## Output Driver

*LV network would be on modelled load until smart metering reaches critical mass 2017/19*

LI Performance

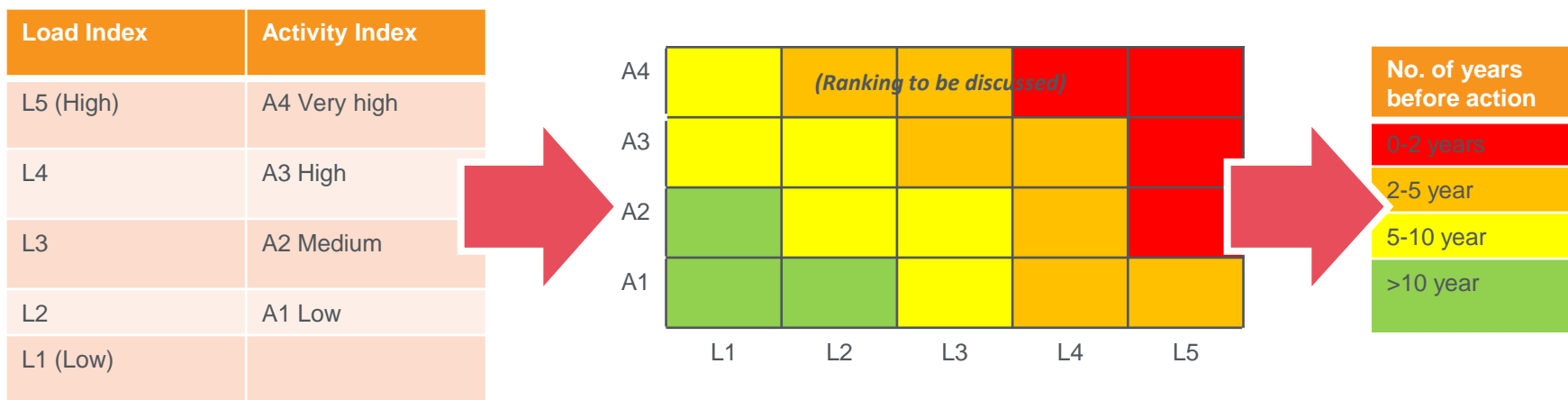


(1) **Agreed LPI output level** with ex-ante forecast of new load

# The Load Priority Index has a strong anticipatory and geographical element

The Load Priority Index is a weighting of the established Load Indices with an Activity Index. The Activity Index seeks to provide a measure of where headroom will be used up more quickly on the network based on the anticipated (regional) activity on the network.

**Load Priority Index (anticipated need) = asset loading x anticipated activity**



- The Activity Index is a reflection of both speed of change as well as predictability of change
- The Measure will reflect ability to deliver new capacity (adds to uncertainty)
- This measure complements the new Load Related Model, developed with Asset Management and Imperial College, which has the ability to forecast network activity down to Local Authority level.

## Next Steps & issues to be addressed

- How do we incorporate DNO outperformance through innovation?
- What is an appropriate level of uncertainty, threshold of re-openers?
- Is an LV network model sufficiently robust for forecasting LPI outputs?
- Who pays for any anticipatory headroom?
  - Socialised vs. connected parties
  - Need to understand the delta between use of system and contributions
  - Willingness to Pay
- To which level can we sensibly disaggregate – Local Authority, Primary, asset?
- Acceptable complexity of measure – what is manageable and realistic?
- Further need to understand impact on security of supply

- Appendix 1
  - Potential RIIO-ED1 uncertainty mechanisms



# Uncertainty Mechanism options

Mechanism	Mechanisms in RIIO handbook	Example uses
<b>Indexation</b>	Provision that adjusts the revenue the company is allowed to collect from customers according to changes in a specified price index	Cost of debt
<b>Volume driver</b>	Provision allowing revenue to vary as a function of a volume measure	number of new connections
<b>Revenue trigger</b>	Provision allowing revenue to increase/decrease by a specified amount (or in a specified way) if and when certain trigger events occur during the price control period.	
<b>Use it or lose it</b>	If revenue set aside for a specified activity or purpose is not used as intended, revenue can be adjusted to remove this allowance.	IFI
<b>Revenue adjustment</b> based on updated cost assessment if trigger event occurs (e.g. specific re-opener)	Provision allowing for a specific part of the company's revenue allowance to be reviewed and potentially adjusted by Ofgem during the price control period, on a forward-looking basis, if and when specified conditions are met	global trigger to change business plan; switch between pre-ante determined scenarios and revenue streams
<b>Pass-through</b> items	Provides that the company will be fully or partially compensated for costs incurred in specified areas or on specified items	Ofgem licence fees
<b>Logging up</b> of actual expenditure subject to ex-post efficiency review	Provides that a company will be fully compensated for actual expenditure on a certain activity, through the revenue allowance set at the next price control review, at least insofar as Ofgem determines the relevant expenditure was efficiently incurred.	
<b>Backward-looking revenue adjustment</b> based on benchmarking analysis of outturn costs	A company will receive an amount of revenue, in respect of a particular activity or output, which Ofgem will determine based on benchmarking analysis of other companies' actual expenditure on that activity or output.	For new activities of which no historical expenditure data is available ex-ante
<b>Cost of Capital</b>	Covers residual risk	