



# Next Generation Costing - Approaches to the Regulatory Costing of Next Generation Telecoms Access Networks

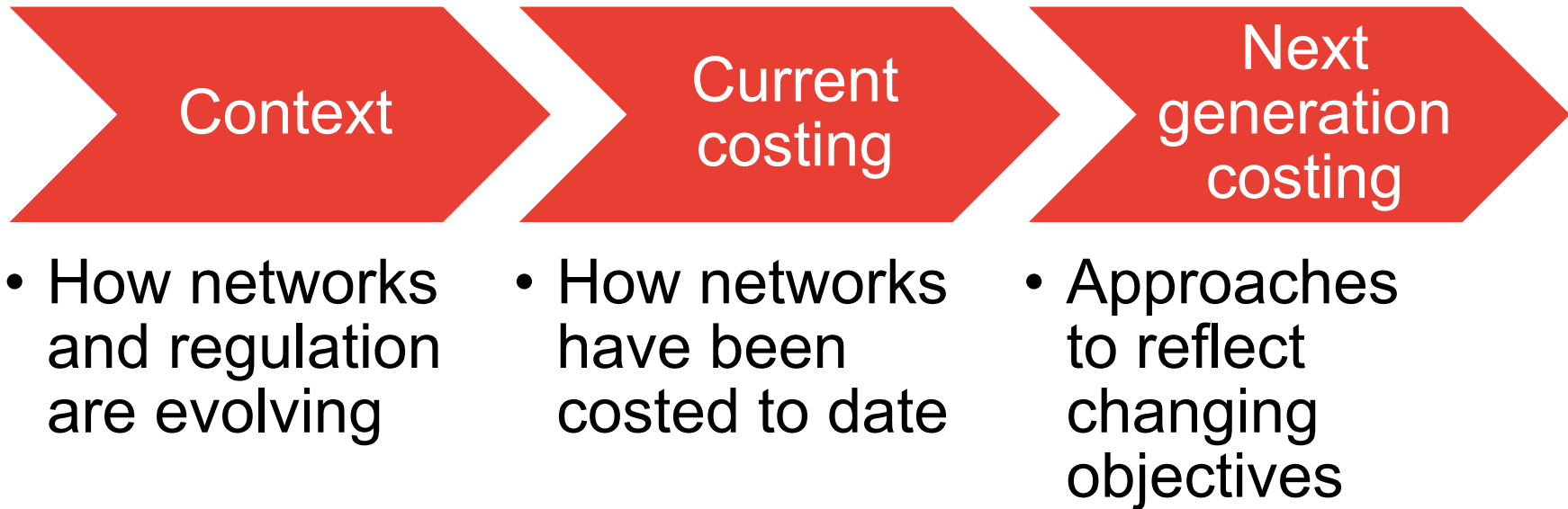
Martin Duckworth (with Jayanthi Batchelor)

10<sup>th</sup> INFRADAY Conference, Berlin, 08 Oct 2011

# This presentation

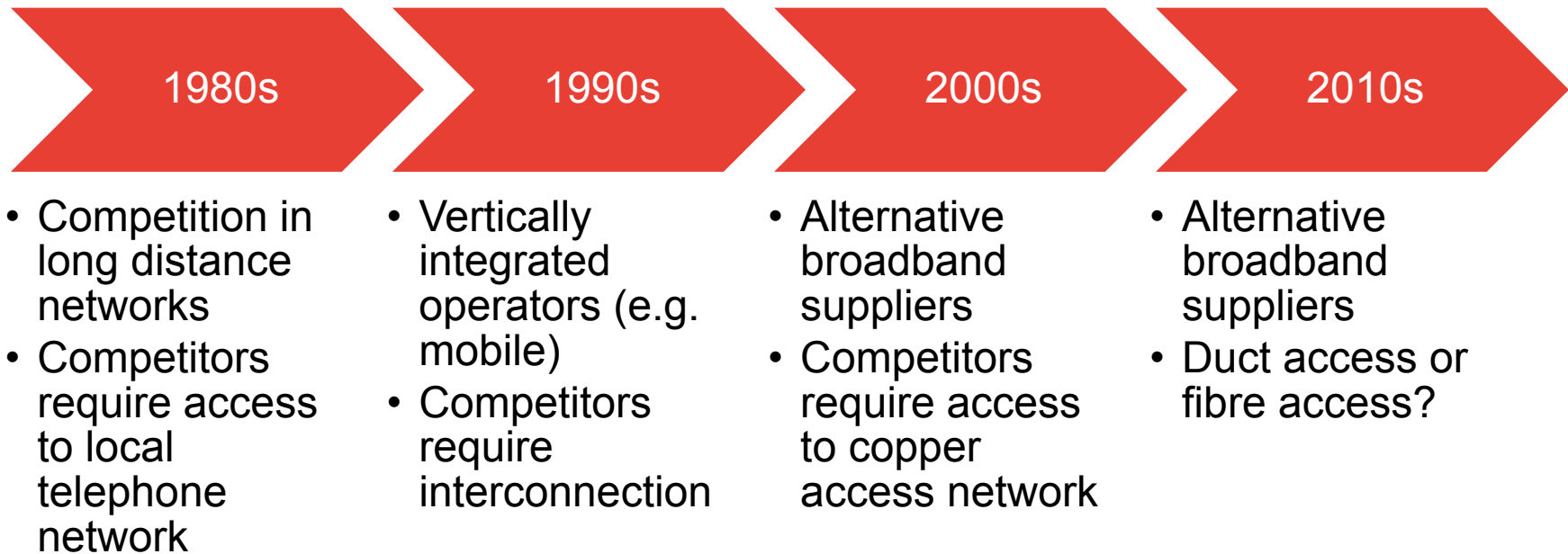
- How should regulators cost the assets underlying telecommunications access networks during the roll out of fibre networks?

# Agenda



- Context
- Current costing
- Next generation costing

# Market developments drive regulation



... now at a crucial point in regulation

# Current access regulation allows a range of access methods

Resale of incumbent broadband service



Bitstream service



Local loop unbundling



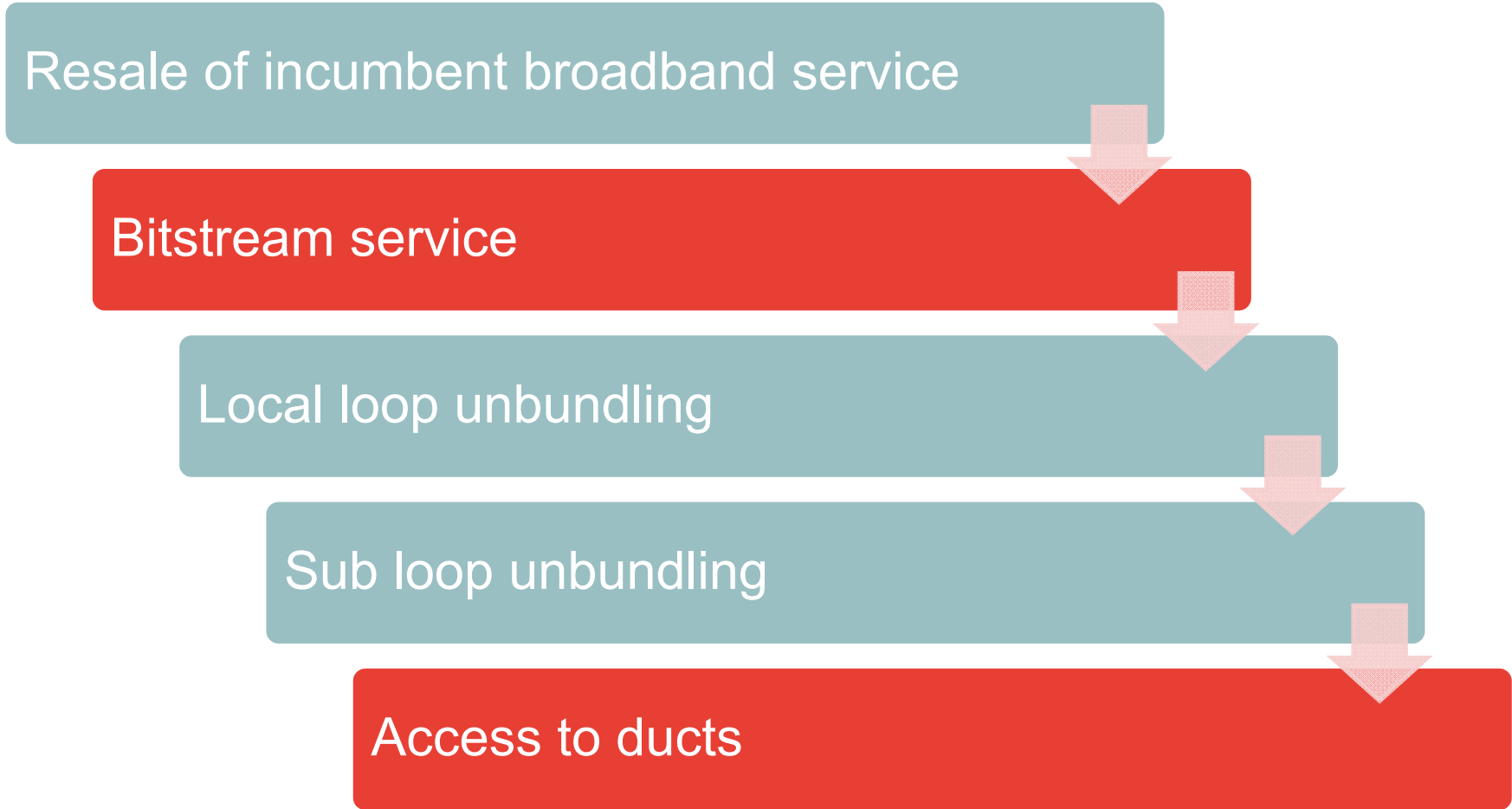
Sub loop unbundling



Access to ducts

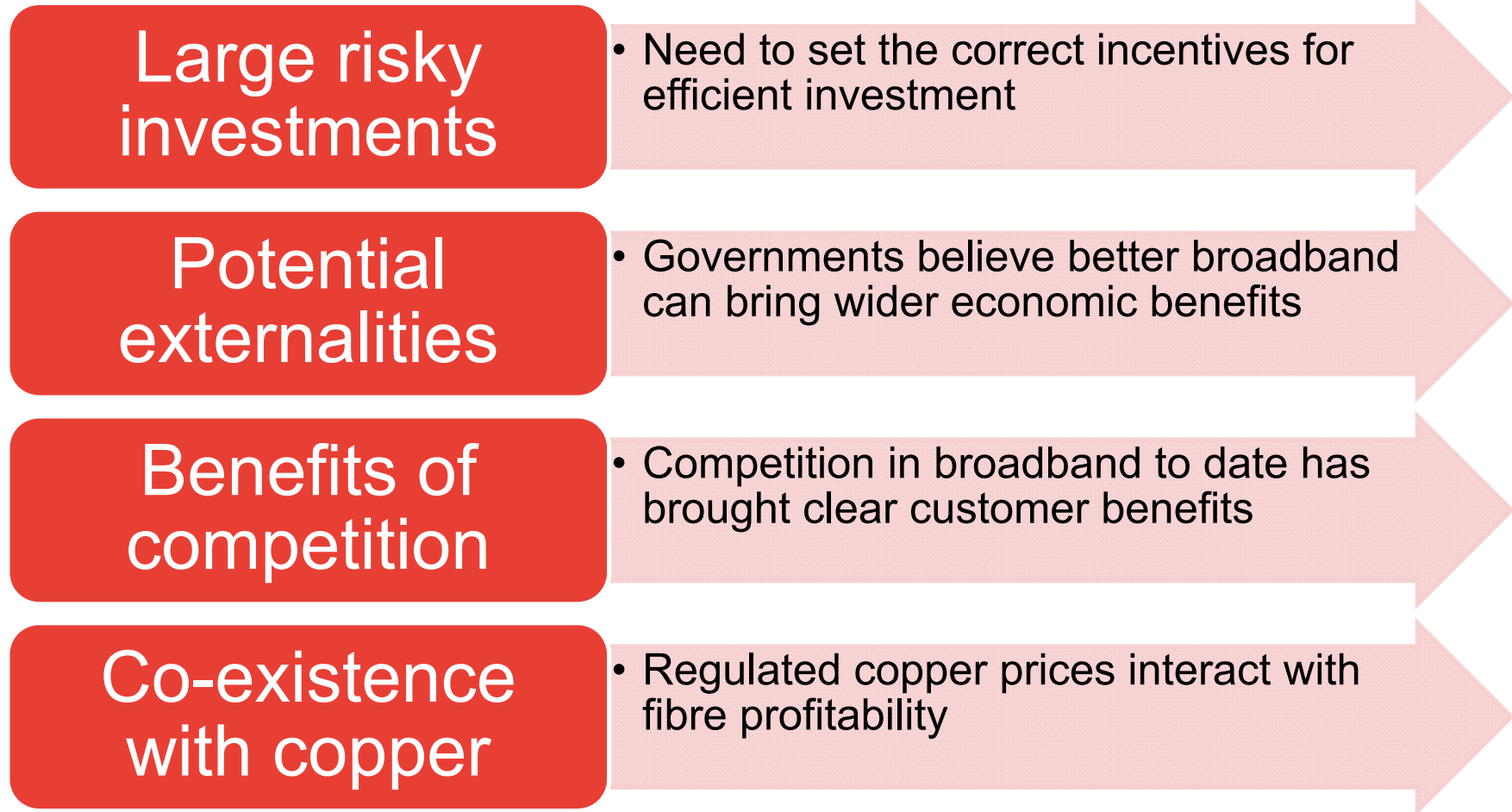
... “ladder of investment” has delivered benefits

# Move to fibre changes the available options



... raise challenges for competitors' business models

# Fibre roll out also challenging for regulators



... need to review approach



# Globally a range of options have been adopted

## Forbearance

- Not regulating access to fibre networks
- Applied in the US to new fibre deployments

## Regulated access with public subsidy

- Government shares financial burden of roll out but requires access
- Applied in Singapore

## Regulated access

- Apply existing access regime, adapted to take account of risk
- EU approach

... reflecting competing objectives

- Context
- Current costing
- Next generation costing

## Costing aims to set efficient access prices

**Allocative  
efficiency**

- Ensure maximum take up of services

**Dynamic  
efficiency**

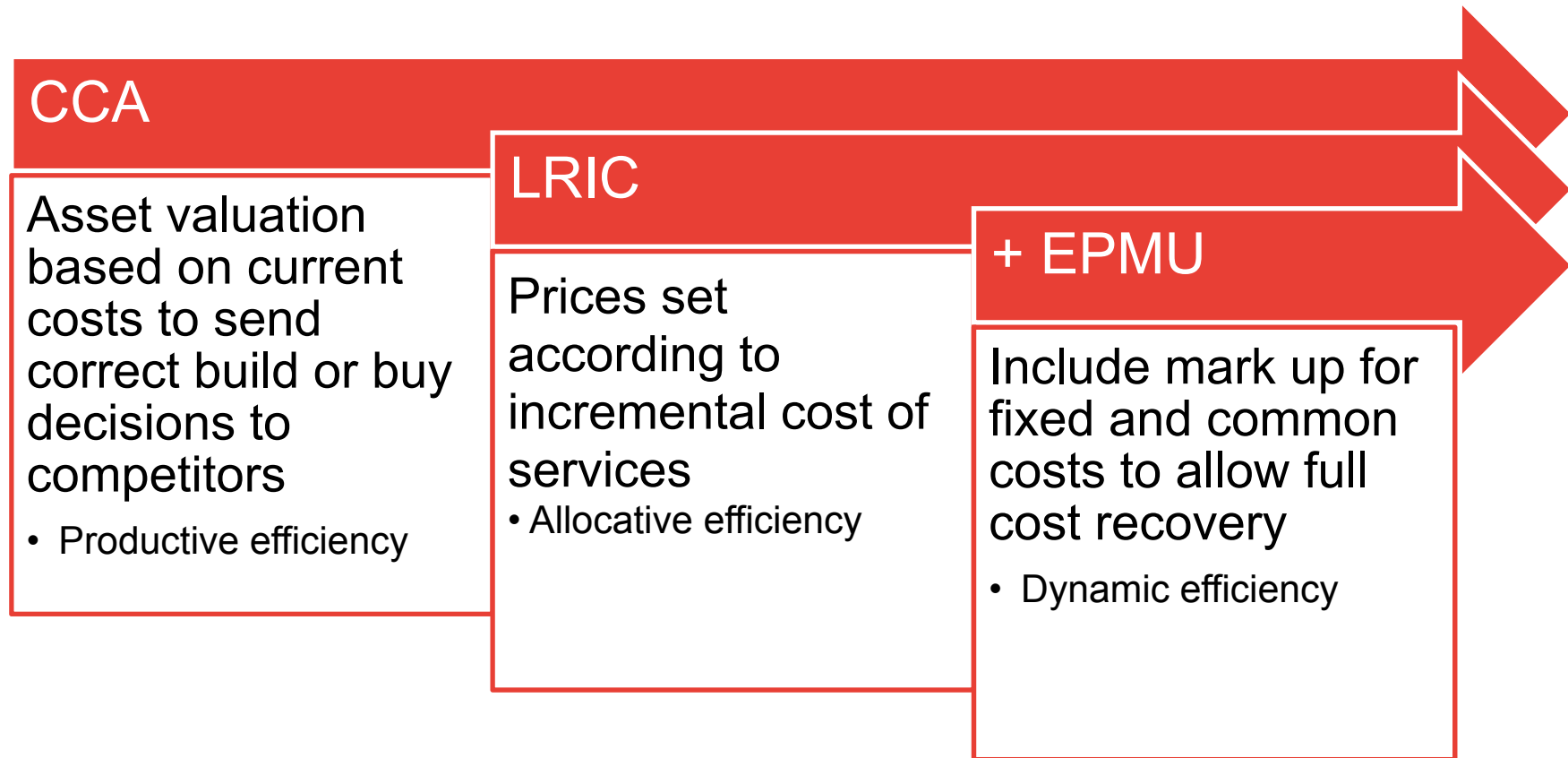
- Ensure ongoing investment and innovation

**Productive  
efficiency**

- Minimise costs of delivering services across the industry

... critical in contestable markets

# Standard telecommunications costing approach developed in 1990s



... assumes market is largely contestable

# However CCA valuation of assets introduces uncertainty

## Benefits

Incumbent prices reflect entrant costs

Enhances productive efficiency for replicable assets

## Disadvantages

Introduction of CCA can lead to holding gains or losses

CCA valuations can introduce subjectivity

... need to consider whether still appropriate

- Context
- Current costing
- Next generation costing

# Objectives when reassessing asset valuation

Encourage network roll out	<ul style="list-style-type: none"><li>• Stable regulatory environment</li><li>• Reward investors for risk</li></ul>
Encourage service take up	<ul style="list-style-type: none"><li>• Ensure affordability</li><li>• Promote downstream competition</li></ul>
Promote competition	<ul style="list-style-type: none"><li>• Correct build or buy decisions for replicable assets</li><li>• Ensure no margin squeeze</li></ul>
Promote productive efficiency	<ul style="list-style-type: none"><li>• Provide incentives for incumbents to minimise costs</li></ul>
Practicality	<ul style="list-style-type: none"><li>• Predictable, objective and harmonised approach</li></ul>

... emphasis may vary

# Costing approach should reflect nature of assets

Increasing asset lives



**Active equipment**

Mix of technologies

**Fibre**

New build

**Copper cable**

Sunk legacy

**Duct**

Fixed and common cost



Increasingly replicable

... based on a range of factors including 'replicability'



Helpful to look at approaches used in other regulated industries

HCA

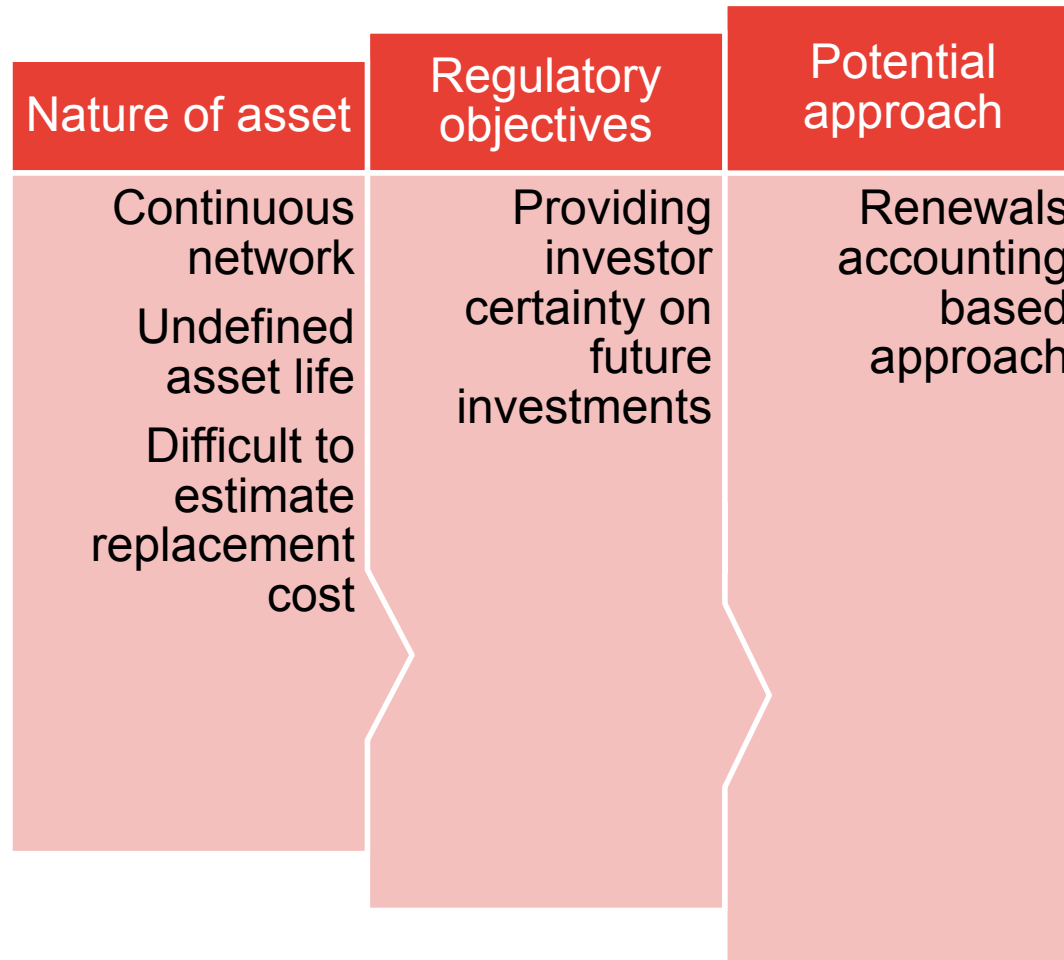
CCA

Economic  
depreciation

Infrastructure  
renewals  
accounting

Regulatory  
asset value

# Duct valuation



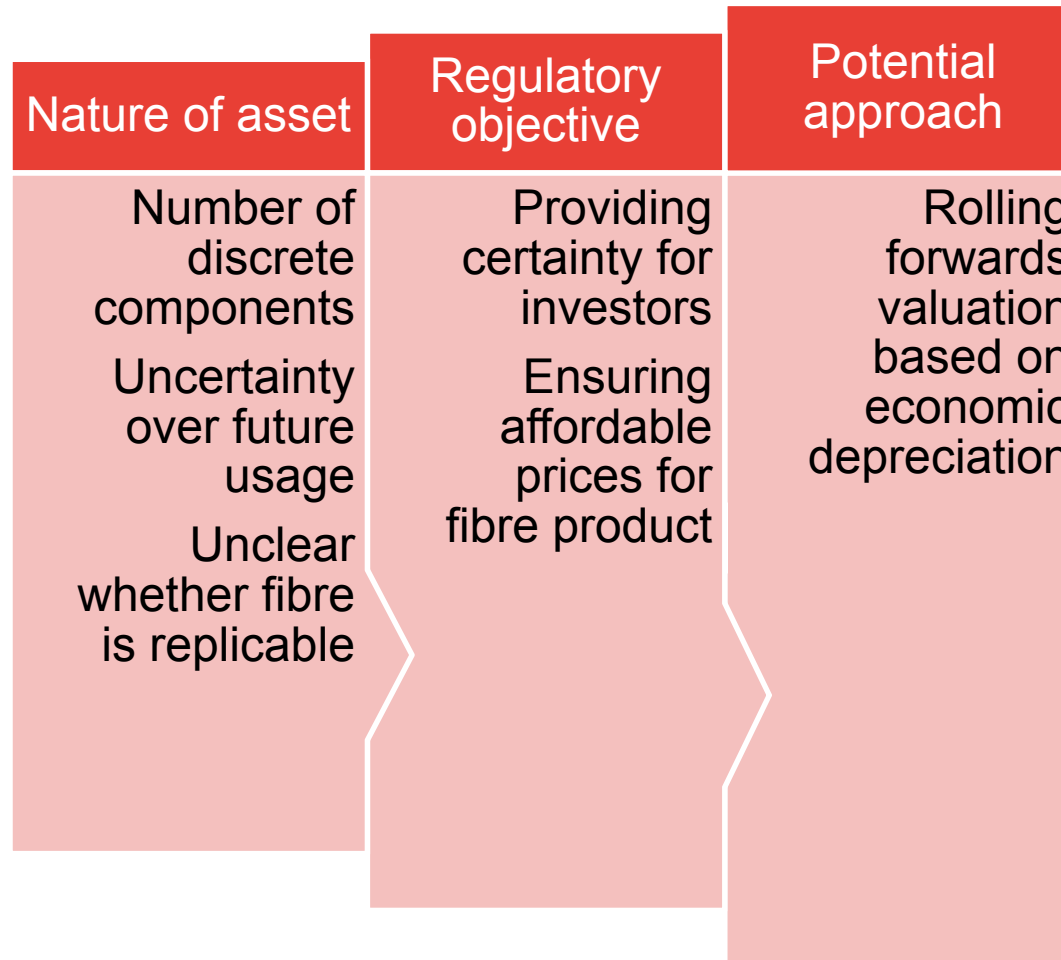
... requires determination of initial valuation

# Copper cable

Nature of asset	Regulatory objective	Potential approach
Number of discrete components Not the modern equivalent asset	Ensuring appropriate use of sunk asset Promoting an efficient transition to fibre	Regulatory asset value reflecting HCA valuation

... complex inter-relationship with fibre

# Fibre



... balance low prices with investment incentives

# Active equipment (electronics)

Nature of asset	Regulatory objective	Potential approach
Number of discrete components Short asset lives Rapid technological evolution Assets are replicable	Promoting efficient competition	Current Cost Accounting

... established regulatory approach is reasonable

# Conclusion

- Telecommunications costing may move from 'one size fits all' to a more varied approach
  - Subject to the Commission's current consultation



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