

## IIC: Next Generation Networks – what does the future hold?

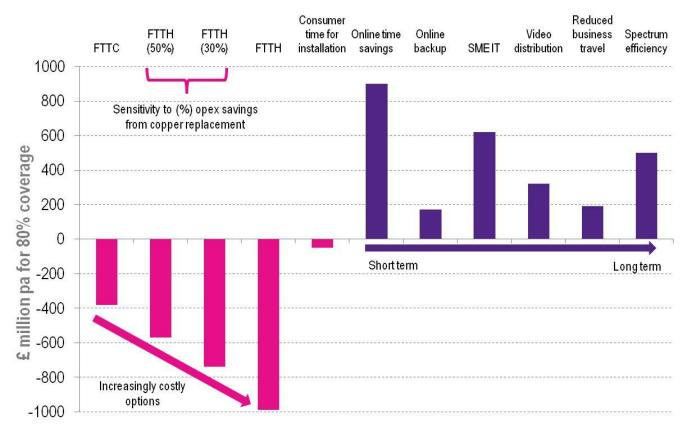
**Brian Williamson** 

24-25 June 2008, Madrid, Spain

#### Sources of value from NGA



#### Indicative incremental annual costs and benefits



Williamson and Marks. June 2008. "A framework for evaluating the value of next generation broadband." A report for the broadband stakeholder group. http://www.plumconsulting.co.uk/

#### Value from "Creative destruction"



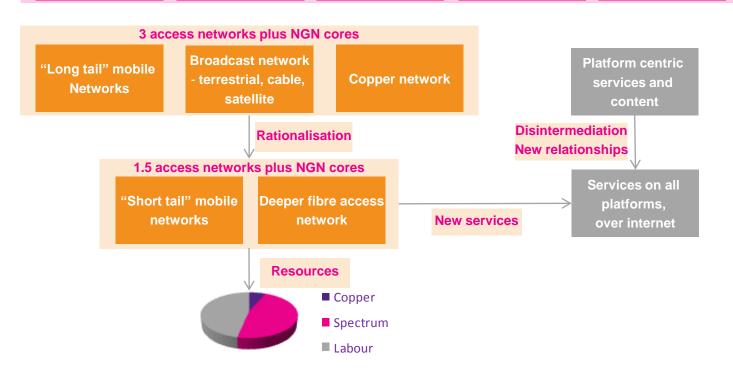
Telecoms & broadcasting USO technology neutral

UHF spectrum pricing and/or trading

Copper "switch off"
- enabling policy
environment

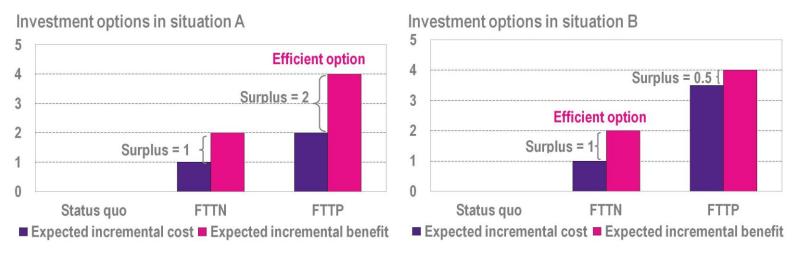
Policy enablers for transformation

Price flexibility, ownership & contracting freedom Anchor product regulation & equivalence







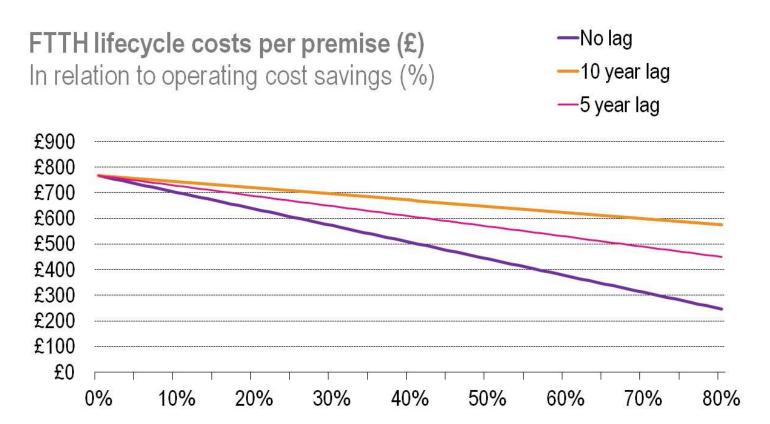


 $Source: http://www.london.edu/assets/documents/PDF/LBS\_functional\_separation\_investment\_decisions\_September\_2007.pdf$ 

- Wide range of investment options technology and timing
- Value needs to be reflected in the decision
- Need price flexibility, or very good central planning

### Copper switch off would lower costs



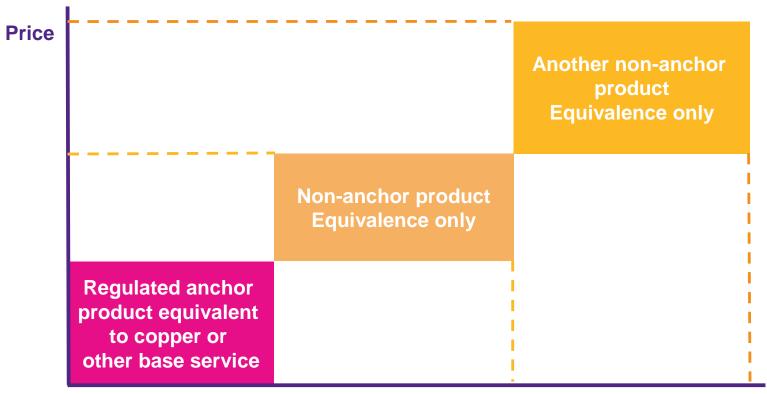


Source: Plum Consulting calculations with base operating costs of £71 per annum

Williamson and Marks. June 2008. "A framework for evaluating the value of next generation broadband." A report for the broadband stakeholder group. http://www.plumconsulting.co.uk/

# Anchor product provides protection plum





Bandwidth offers over fibre MB/s

Brian Williamson (July 2007) "New regulatory approaches to next generation access" http://www.broadbanduk.org/component/option,com\_docman/task,doc\_download/gid,944/Itemid,9/

### Challenges to realising benefits



- Exercise of efficient investment options
  - Price flexibility
- Value chain restructuring
  - Long term relationships
    - Ownership
    - Contracts
- New competitive model
  - Active bitstream product
  - Network element unbundling infeasible or unattractive

- Copper switch off
  - Power from premise for service continuity
- Broadcasting switchover
  - Platform neutral broadcasting policy
  - UHF spectrum trading
- Short tail wireless network
  - High speed wireless requires dense "base station" network
  - Fibre everywhere

"The difficulty lies, not in the new ideas, but in escaping the old ones." John Maynard Keynes