

# Functional separation: the UK experience

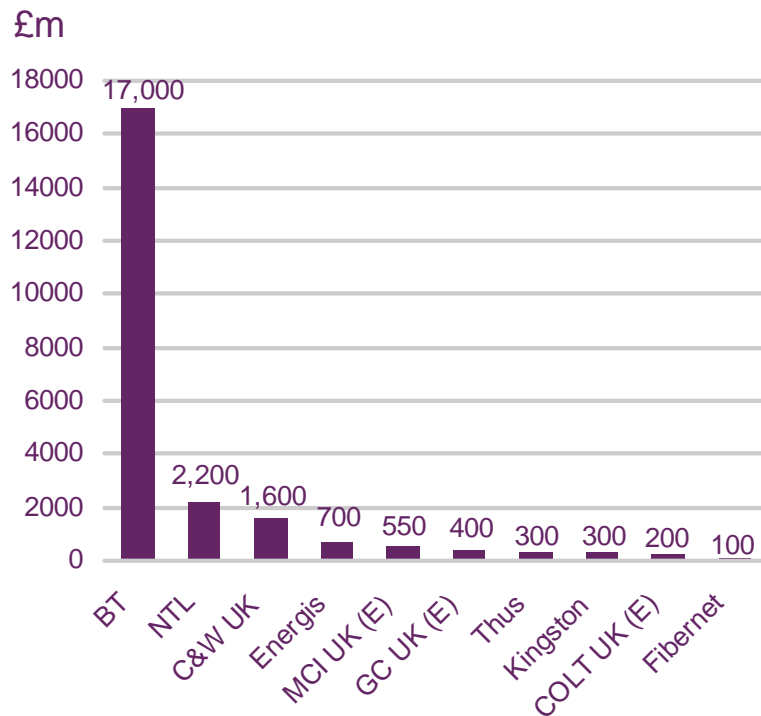
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# Agenda

- Section 1 – Background and context
- Section 2 – Approach and rationale
- Section 3 – Taking stock
- Section 4 – EU Policy Considerations

## The UK fixed market in 2004 was highly polarised

### UK fixed telecoms revenues in 2004



Source: Ofcom Phase 2 TSR consultation

### Market characteristics

- Highly fragmented market:
  - Only two players had positive EBITDA
- Limited infrastructure competition:
  - Cable only covered 45% of country
  - Very little LLU deployment
- Barriers to those relying on BT infrastructure included:
  - Lack of transparency
  - Inferior wholesale products
  - Poor transactional processes
  - Slow product development

## Our Strategic Review asked five fundamental questions:

1. In relation to the interests of citizen-consumers, what are the key attributes of a **well-functioning** telecoms market?
2. Where can effective and **sustainable competition** be achieved in the UK telecoms market?
3. Is there scope for a significant **reduction in regulation**, or is the market power of incumbents too entrenched?
4. How can OFCOM incentivise efficient and timely **investment in next generation networks**?
5. At various times since 1984, the case has been made for structural or operational separation of BT, or the delivery of full functional equivalence. Are these still relevant questions?

## **Conclusion: Sustainable and effective competition requires infrastructure-based operators with scale**

- In the Telecoms Strategic Review, we found:
  - Mesh of conflicting and restrictive regulation
  - Fragmented industry base
  - No equality of access to bottlenecks (e.g. access & backhaul networks)
- Customers increasingly demanding choice and innovation - best driven by competing infrastructures extending as close to customers as is economically sustainable
- Need for investment in emerging technology and new platforms by competing scale operators alongside BT for UK economy to remain competitive

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## Decision to go down the functional separation route

### Options consulted on

- **1. Full deregulation**
  - Reliance on ex competition law to resolve issues
  - Option considered unviable by most given BT's market power
- **2. Enterprise Act investigation**
  - Investigation under UK antitrust law with the objective of a referral to the Competition Commission and subsequent structural separation of BT
- **3. Real equality of access**
  - Product level equivalence and behavioural and organisational change by BT



### Why Option 3?

- **Support** from **most** stakeholders
- **Flexibility** – enables boundary issues to be revisited even over the medium to long term when significant changes occur
- Process for Option 2 would be **long, fraught** and **uncertain**
- Option 2 carries more **inefficiencies** associated with the loss of vertical integration

## What we mean by functional separation?



### **Equivalence at product level (‘equivalence of inputs’)**

- Access to same or similar set of regulated wholesale products as BT
- Same product, price, systems, product development processes

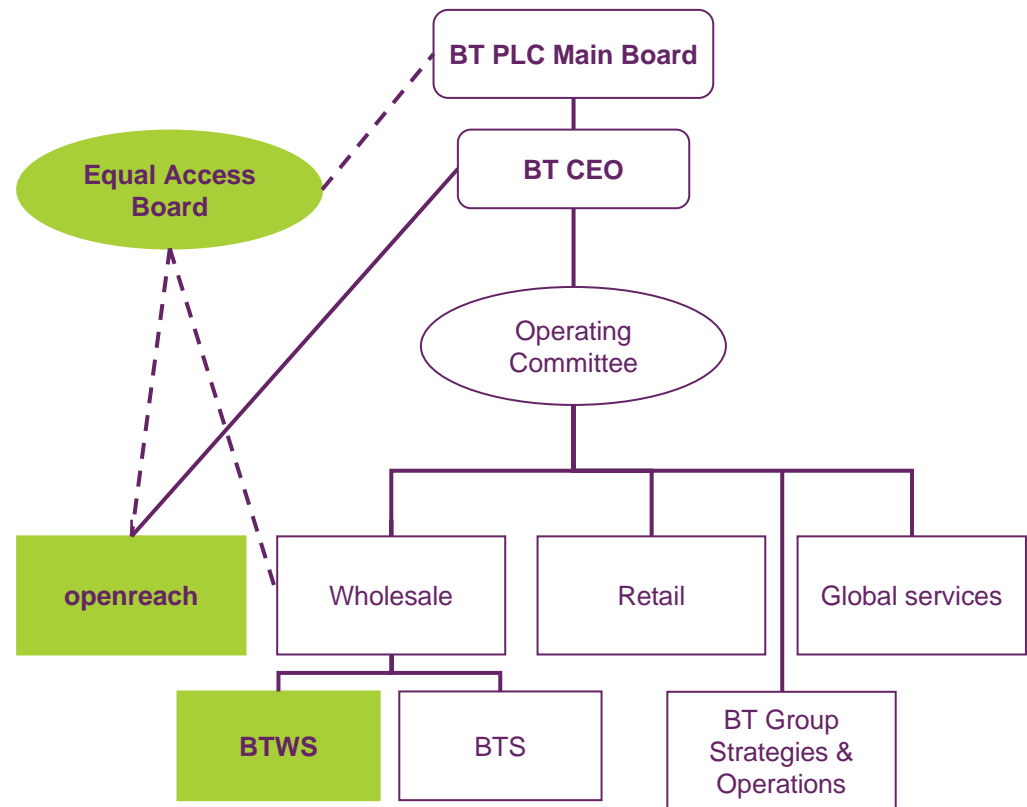
### **Functional/operational separation**

- Functional/operational separation of unit providing bottleneck products
- To address (part of) the incentives and (almost all of) the ability for unfair treatment

# BT's Undertakings led to a new structure within BT

## Key changes

- Creation of Openreach, a new ringfenced upstream division
- New governance rules within BT Wholesale to separate SMP and non SMP activities
- Creation of Equality of Access Board supported by Equality of Access Office with role of monitoring, reporting and advising BT on BT's compliance with its Undertakings



■ New organisational units within BT    — Management reporting    - - - Compliance reporting

## Openreach focuses primarily on access and backhaul which are the bottleneck areas



- Connectivity from end customer to a BT local access node
- Includes copper and fibre access network

- Connectivity from local access node to another BT local access node or aggregation point, or another operator's network

- Connectivity between 2 BT aggregation points or a BT aggregation point and another operator's network

- Design and operation of value added services platforms and applications

- Billing
- Customer service
- Marketing
- Sales and distribution

- Primarily Openreach
- Primarily BT Wholesale (although many activities have now moved to new divisions BT Design & BT Operate)
- BT downstream divisions (BT Retail & BT Global Services)

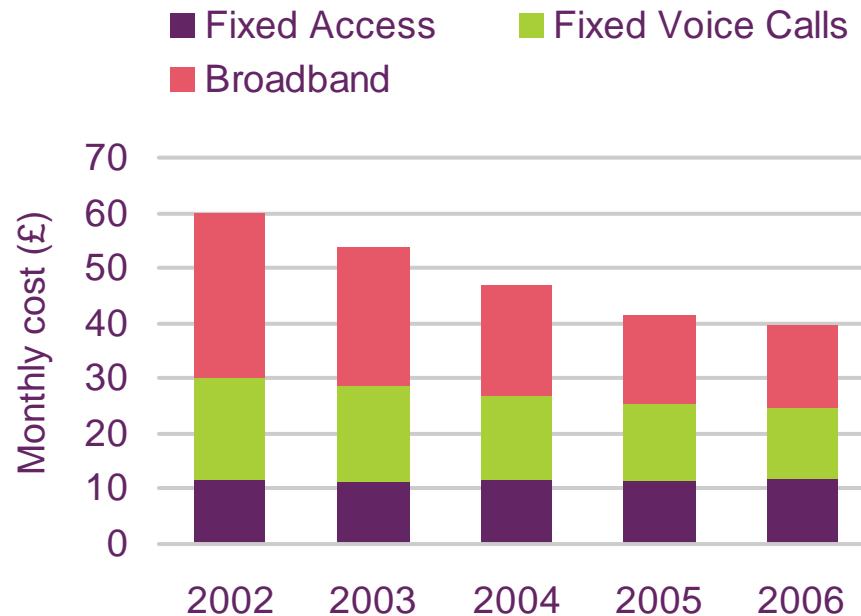
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## We measure the impact of the Undertakings across a number of dimensions

- Impact on consumers:
  - Price, broadband take-up, choice of products & providers
- Impact on industry:
  - Increase in take-up of BT wholesale products, investment, market share
- Impact on BT:
  - Financial performance, investment incentives
- The benefits of functional separation are difficult to assess in isolation:
  - i.e. wholesale product price reductions will have also been a driver

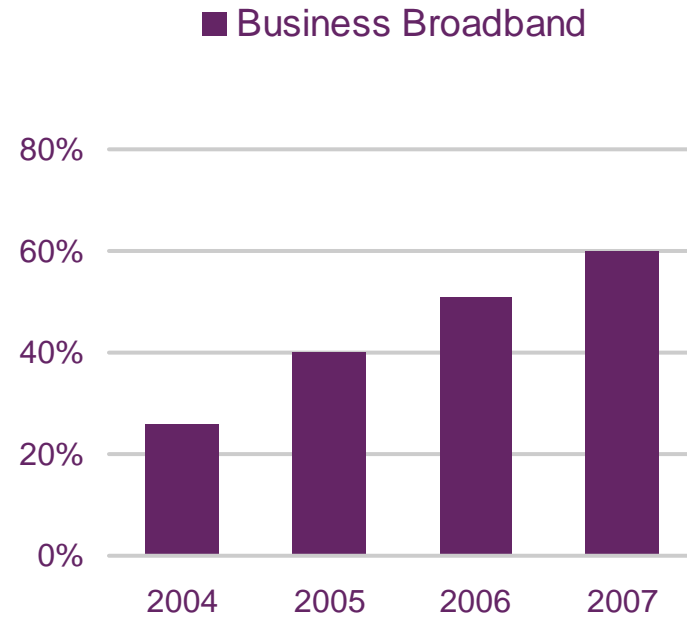
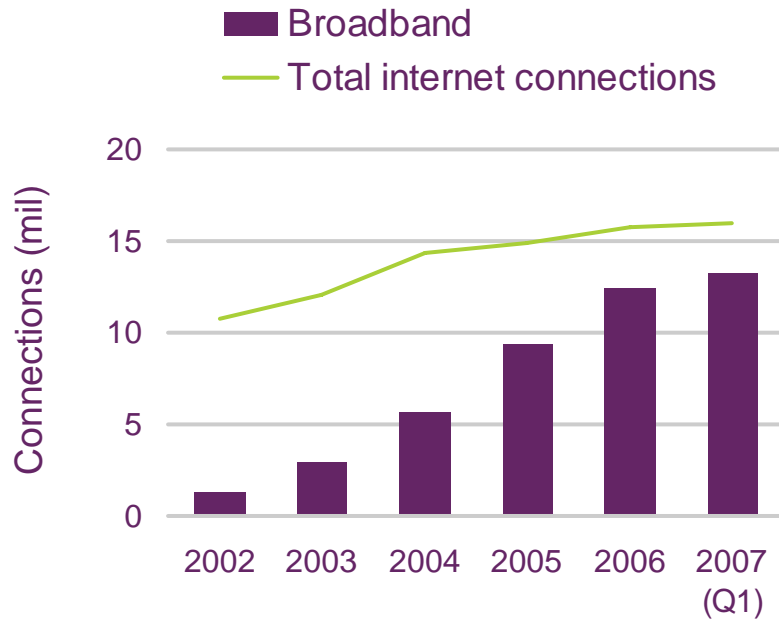
## Outcomes for consumers - price

- Residential monthly cost of a basket of fixed telecoms services has fallen:



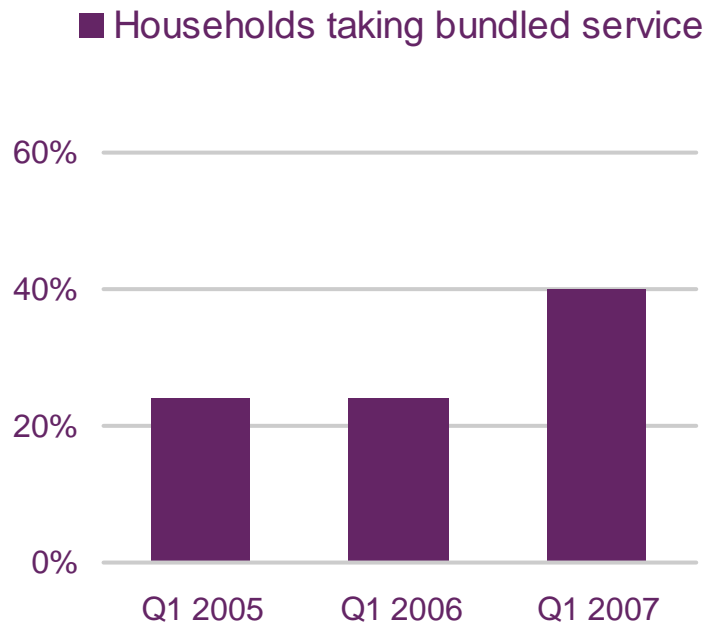
- SME and large business customers also saw a fall in prices

## Outcomes for consumers – broadband penetration



- Residential market shows both growth and replacement of dial-up with broadband
- UK now has one of the highest broadband penetrations in Europe

## Outcomes for consumers - choice



### Key trends

- Offers of bundled services increasing and take-up gaining momentum:
  - Launch of triple play and quad play services
  - Broadband increasingly offered at low or no marginal cost to bundle
- Consumers now more active in looking to switch but comparing offers and actually switching can be problematic
  - Business users are less likely to switch

Source : Ofcom research, Q1 2007

## Outcomes for industry – LLU investment

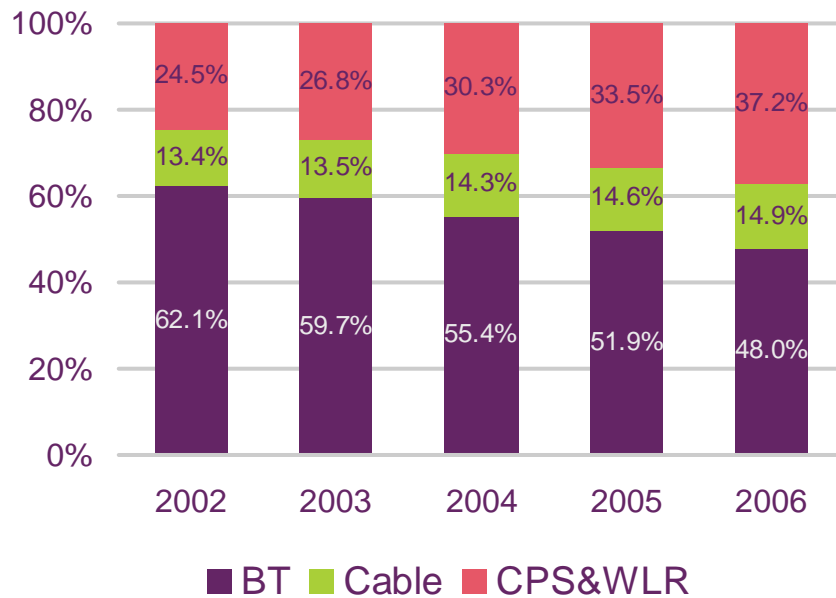
- The Undertakings have been effective for LLU operators:

	2005	2008
Number of operators investing in LLU	8	20
Percentage of end users covered by 1 or more LLU operators (in addition to BT)	40%	80%
Percentage of end users covered by 3 or more LLU operators (in addition to BT)	8%	59%
Number of unbundled lines	100,000	Over 4 million

- For communications providers targeting the business user market, the benefits of the Undertakings have been less clear to date

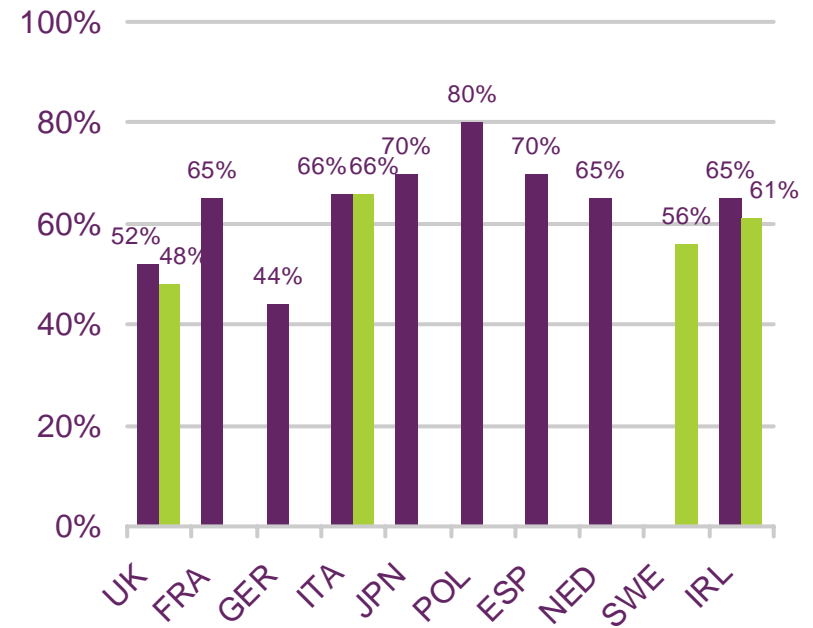
# Outcomes for industry – Voice market shares

Market share of fixed voice call volumes



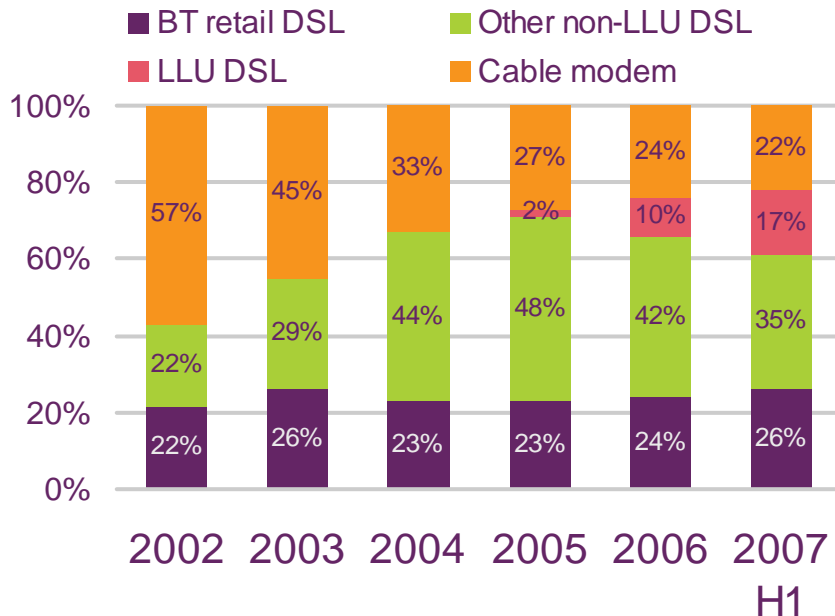
Incumbent market share of fixed voice volumes – international comparison

Share (%) for 2005 and 2006

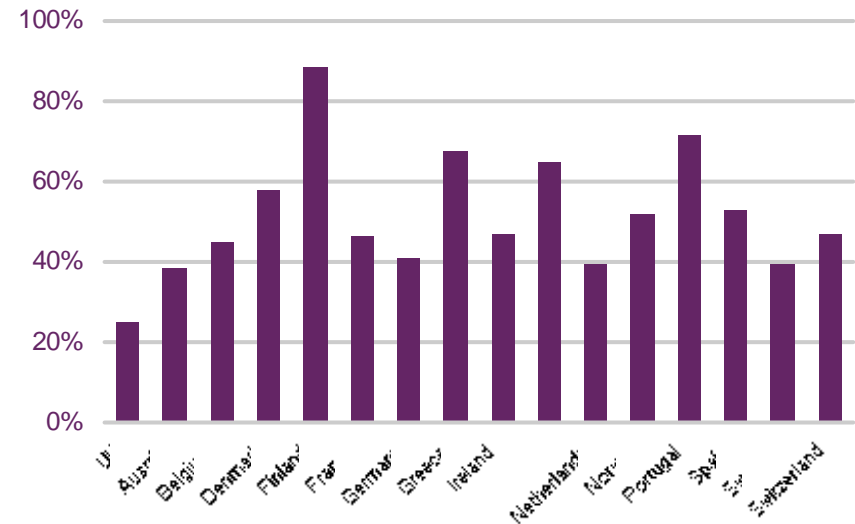


# Outcomes for industry – Broadband market shares

UK broadband service provision share of retail connections  
% Market Share



Incumbent share of retail broadband connections – international comparison (2006)



## Improvements still needed in some areas ...

### Key challenges in the implementation of the Undertakings to date

- Openreach service quality has suffered (even to BT's own downstream divisions)
- Some products are being delivered late or to a lower specification than originally anticipated
- Openreach's approach to consultation needs to improve
- Access to space in local exchanges not perceived to be equivalent by BT's competitors
- Industry uncertainty over BT's NGN products / plans causing concern



### Implications

- Ofcom has had to intervene to secure additional commitments from BT
- Ofcom consultation proposing a new approach for Openreach service level agreements and compensation
- New commitments from BT on:
  - process for space & power allocation
  - NGN consultation & advance notification
  - Product development process

# ...but overall trust in BT is improving

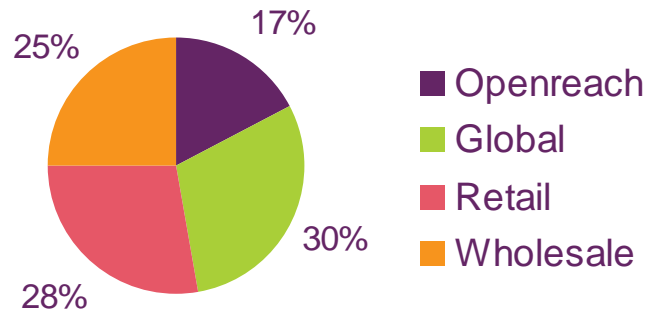
## Wholesale Customer Satisfaction with Openreach and BT Wholesale (2006 – 2007)



Source : Spectrum Value Partners survey on behalf of Ofcom

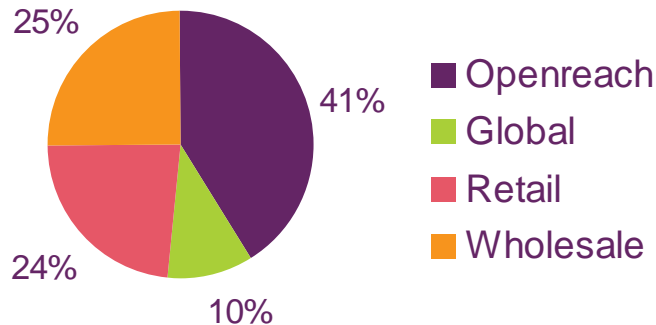
## Openreach generates reasonable returns

### BT Revenues – 2006/07



- **generated profit of £1.2bn (41% of BT profit) from £5.2bn (17%) of revenues \***
- likely to be significantly cash positive (est £0.5bn+)
- employs capital of c.£11bn, representing approx 45% of BT market cap (c.£25bn)

### BT operating profit– 2006/07

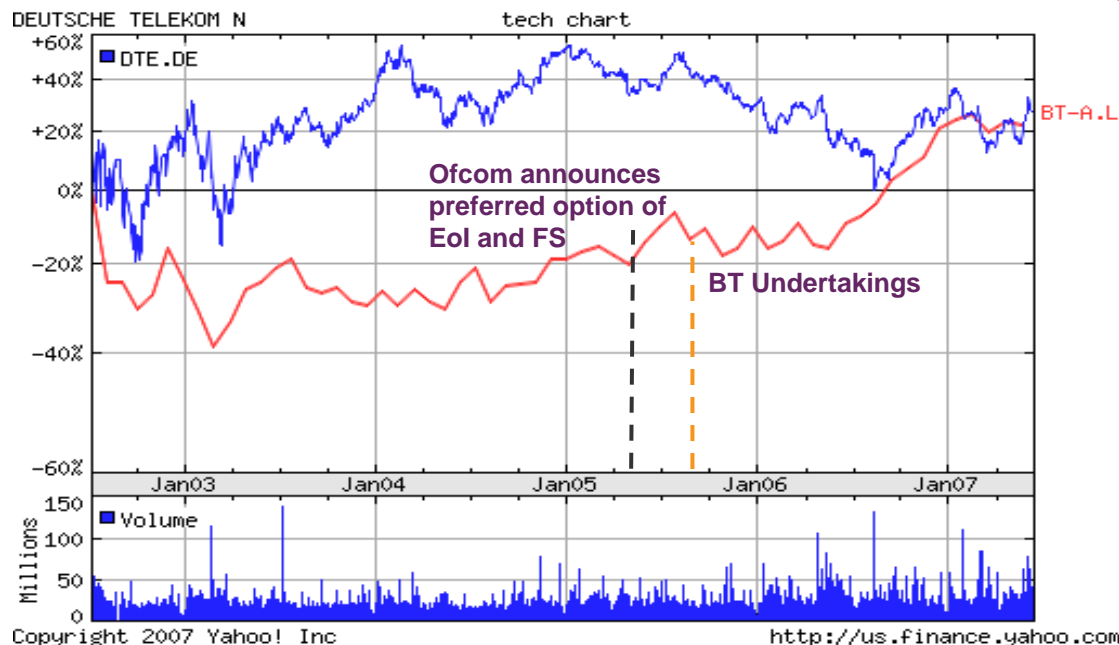


- \* Openreach revenue here includes payments from other BT operating components e.g. BT Retail, etc

Source: BT 2006/07 Q4 Results13

## BT as a group has benefited overall

### Performance of BT share price relative to DT



- BT downstream adopting a more outward looking strategy
- Functional separation enables gradual liberalisation of downstream markets:
  - E.g. Ofcom proposal to deregulate parts of the wholesale broadband market
  - Removal of price controls in voice market
- Creation of Openreach has clarified analysts' perceptions

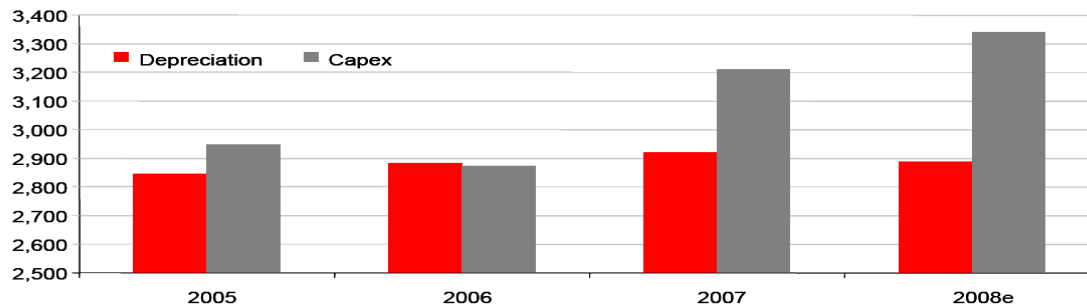
## Functional separation has not impacted negatively on investment current nor next generation:

### European wireline incumbents: comparison of key financial metrics in domestic business

€	Deutsche Telekom	Telecom Italia	Telefonica	France Telecom	BT (*)
Capex-per-pop	29.7	42.9	36.4	34.3	56.4
Capex-per-line	78.8	122.8	101.4	77.1	126.7

Source: SG Equity Research – (\*) BT financials converted at €/£ of 0.77

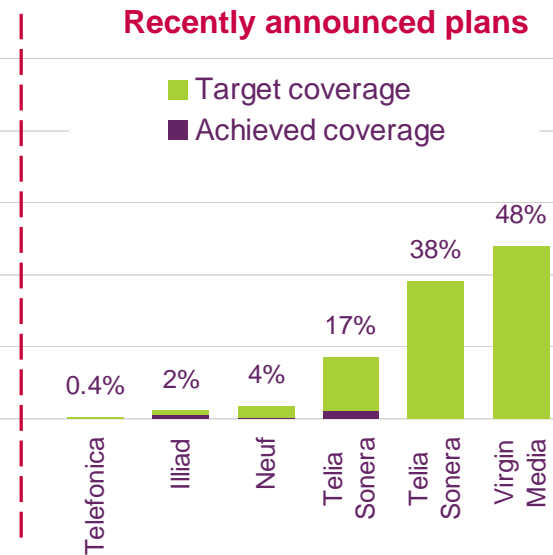
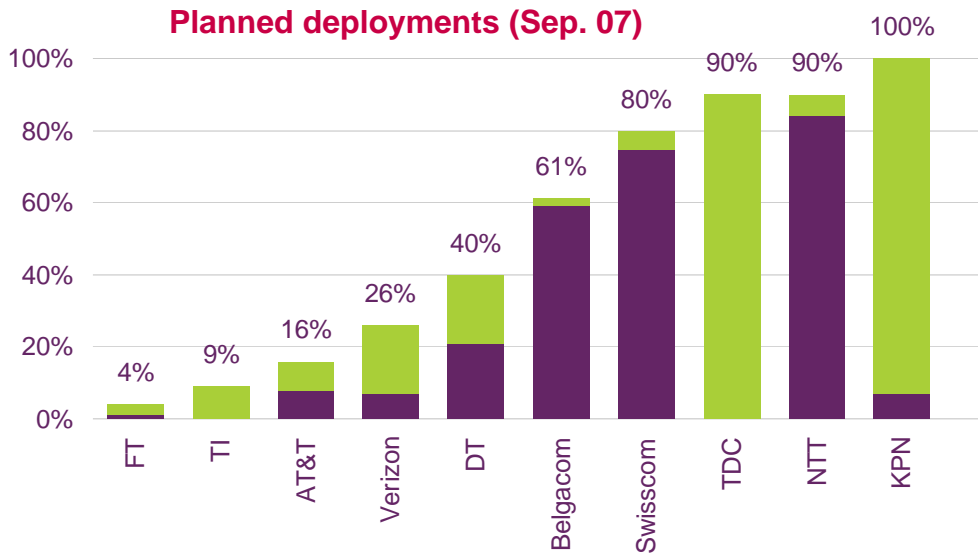
### Capex versus depreciation charges



Source: SG Equity Research

- The Undertakings have provided BT with regulatory certainty and BT continues with a £10bn (€12bn) investment in NGN core network

# Where are we with NGA?



Country										
Technology	FTTH/B	FTTC	FTTC	FFTH	FTTC	FTTC	FFTC	FTTC	FTTH	FFTC
Target coverage	4%	9%	16%	26%	40%	61%	80%	90%	90%	100%
Target year	2008	2010	2010	2010	2009	2008	2010	2010	2011	2010
Coverage so far	0.6%	n/a	8%	7%	21%	59%	75%	n/a	84%	7%

Country						
Technology	FTTC/H	FTTH/B	FTTH/B	FTTH	FTTH	Cable
Target coverage	0.4%	2%	4%	17%	38%	47.5%
Target year	n/a	2009	2009	2009	2013	2009
Coverage so far	n/a	0.9%	0.5%	2%	n/a	n/a

Note: AT&T is present in 35 out of 50 states. Verizon has presence in 28 out of 50 states. Virgin coverage is 50% of the UK. Iliad target coverage extends to 70% of Paris

# In the UK we are seeing trials and some announcements

## Communications providers



BT's only announcements on NGA is its intention to deploy fibre to new build developments



Virgin Media announced its plans to offer new 50Mbps cable broadband service to 70% of its customer base by end 2008, rising to 95% in 2009



## New business models

### *Sewers and alternative wayleaves*



H2O announced plans to deploy fibre through sewers in Bournemouth, Northampton and Dundee by 2010. Potential build cost savings may be 70- 80% versus traditional methods of network build



Geo sewers to deliver bespoke fibre networks to carriers and businesses. They have no plans for a residential network, but their approach could support NGA backhaul

### *New build fibre*

We are seeing an increasing number of fibre deployments to new build developments by new entrants

Examples include:



Titanic Quarter development, Belfast

## Our approach to new build is based on the principles outlined in the Future Broadband consultation...

Aim 1: Securing efficient and timely investment

Contestability

Ensure everyone can compete by making their own investments in their own time

Maximising innovation

Maximise consumer and business benefits from these new services

Equivalence

Allow fair and effective competition between all

Reflecting risk in access terms

Ensure regulation does not distort investment incentives

Regulatory clarity

Allow investors to make fully informed decisions

Aim 2: Promoting effective and sustainable competition

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## Functional Separation under a revised EU Framework

- Widespread recognition that such a remedy could be a useful tool to address discriminatory behaviour by a dominant vertically integrated operator, across a range of markets ...

... However:

- Let's not kid ourselves that FS is a pancea that will solve all the competition problems in the sector
- We have to make sure that it is only introduced where necessary as it won't be appropriate across the whole of the EU

Therefore:

- Instead of referring to FS explicitly but then having to notify it to the Commission as an exceptional remedy under Article 8(3)
- FS should be treated as an additional and complimentary remedy to the suite of other remedies available under the Access Directive, subject to notification scrutiny by Commission and ERG following careful analysis by an NRA.
- That way it would be subject to proportionality test, so by definition it would only be deployed as a last resort.
- 13a(2)(b) - currently skewed towards incentives of separated undertaking to invest. Should refer instead to investment incentives of ECN providers generally.