

UKIF – UK Network Operators Forum

Ofcom and Internet Technology

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Ofcom and our approach to regulation

- Various duties under the Communications Act 2003, summarised as:
 - *“Ofcom exists to further the interests of citizen consumers through a regulatory regime which, where appropriate, encourages competition”*
- These will be performed with a light-touch approach:
 - *“Ofcom will operate with a bias against intervention, but with a willingness to intervene firmly, promptly and effectively where required”*
- Striking the right balance:
 - *“Balance the promotion of choice and competition with the duty to ... protect ...customers”*

Ofcom and our approach to technology

- Technology neutral

- *“Ofcom should not favour one form of electronic communications network, electronic communications service or associated facility over another”*

- But with a mandate to encourage standards-based interoperability

- *“Ofcom should encourage such compliance with (ETSI, ITU...) standards as is necessary for facilitating service interoperability; and securing freedom of choice for the customers of communications providers.”*

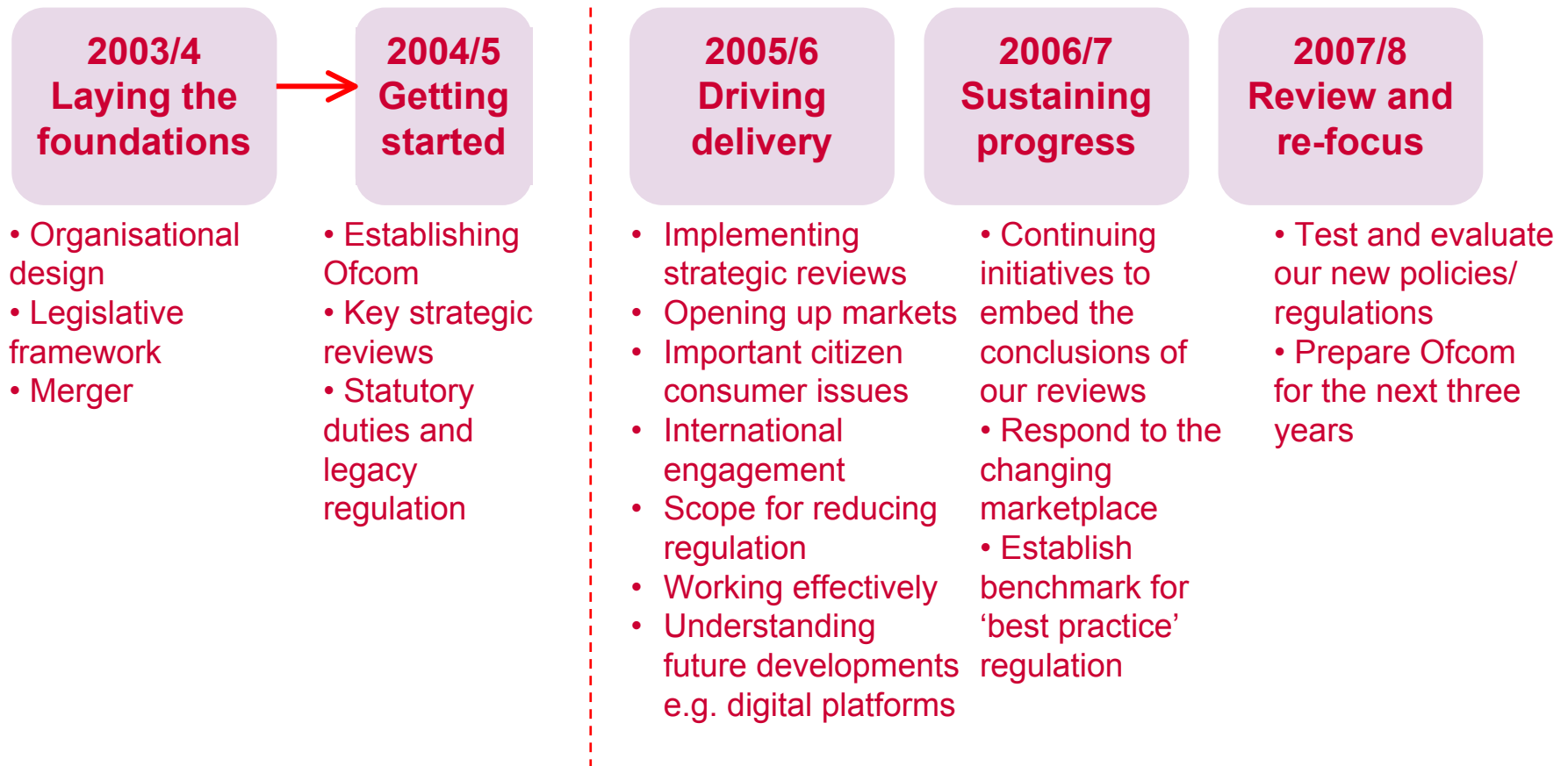
- And to promote the widespread deployment of new services, e.g.:

- *“Ofcom should have regard to the desirability of encouraging the availability and use of high speed data transfer services throughout the United Kingdom”*

Ofcom's work areas – and IP-driven disruptive change

- Management and allocation of scarce publicly-owned resources (radio spectrum, broadcast licenses, telephone numbers)
 - *How does our policy in relation to number allocation handle explosive growth in VOIP providers ?*
- Competition regulation, and associated consumer information / protection
 - *The migration to IP-based NGNs is one of the biggest challenges currently facing telecoms regulation, both in relation to the promotion of competition, and the protection of consumers*
- Content regulation
 - *As content delivery converges, what happens to content regulation ?*

Ofcom's Work Programme

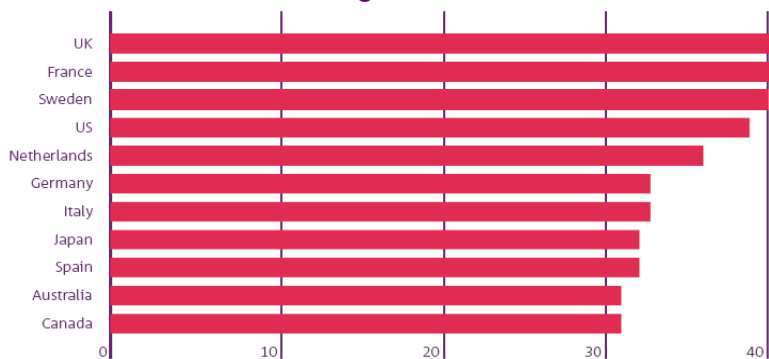


Source: Ofcom Annual Plan

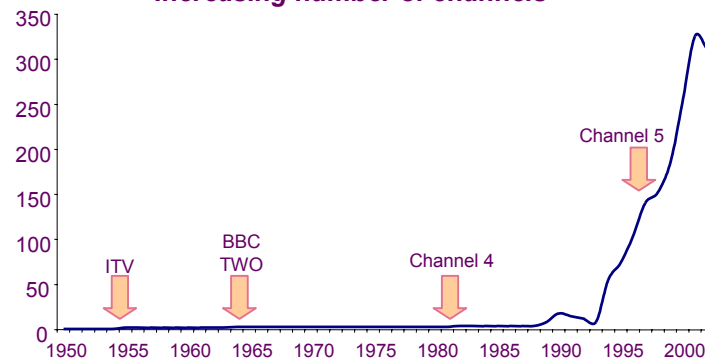
Public Service Broadcasting Television Review

- PSB channels still an important part of the UK's broadcasting scene but coming under increasing pressure in the digital age

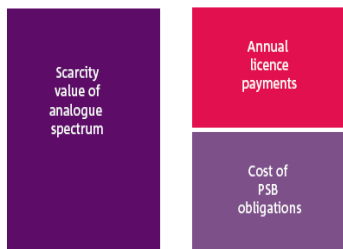
Viewing of PSB channels



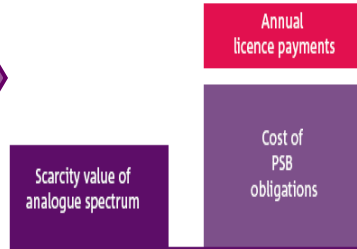
Increasing number of channels



Funding model 2003



Funding model 2010

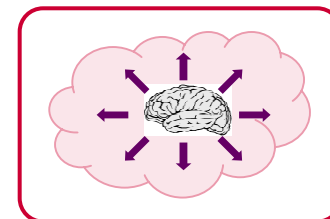
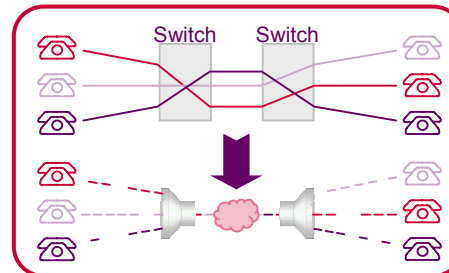
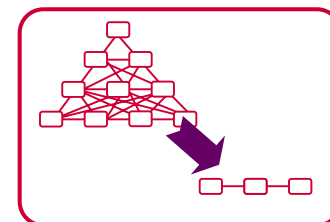
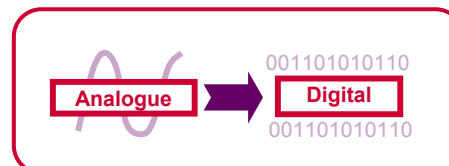
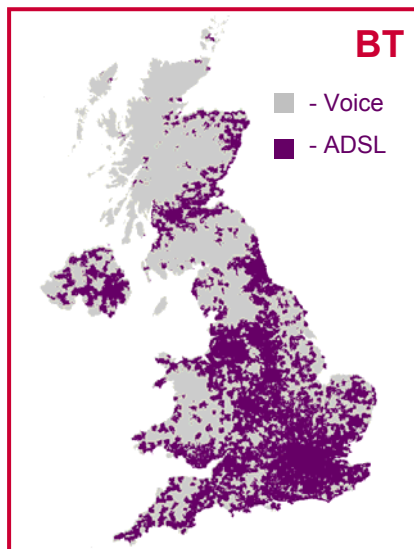
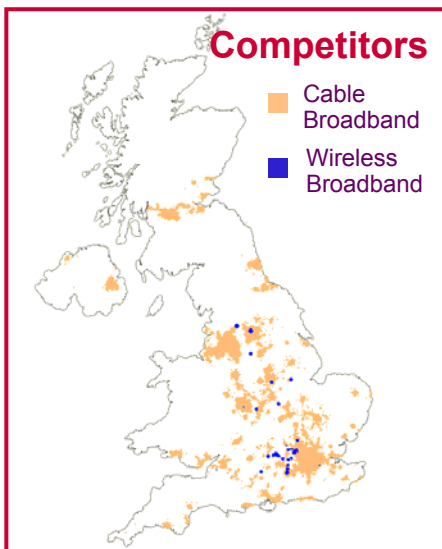


- PSP fund to complement BBC services

Current PSB obligations

	ITV1	Channel 4	Five
Tier 1	Basic broadcasting standards		
Tier 2	Independent production quotas		
	Regional production quotas		
	65% original	60% original	51% → 60% original
	News Current Affairs Regional News Other regional	News Current Affairs	News Current Affairs
Tier 3	Religion Children's Arts Education Documentaries	Religion Education Schools Multicultural + "Innovation"	Religion Children's Documentaries Arts Education

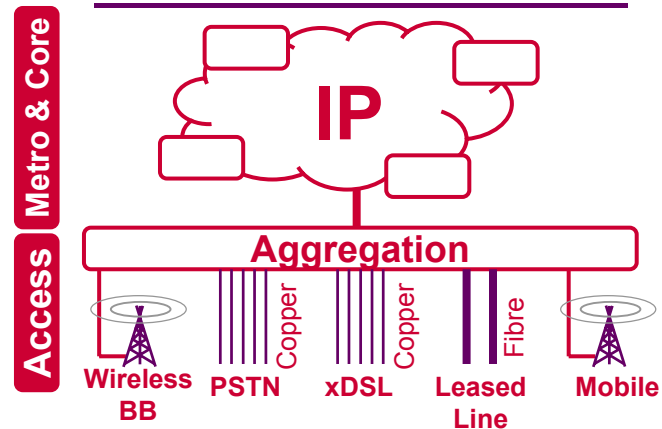
Strategic Review of Telecoms



Phase 2 Proposals

- Option 1: Deregulation
- Option 2: Reference under the Enterprise Act
- Option 3: Real equality of access

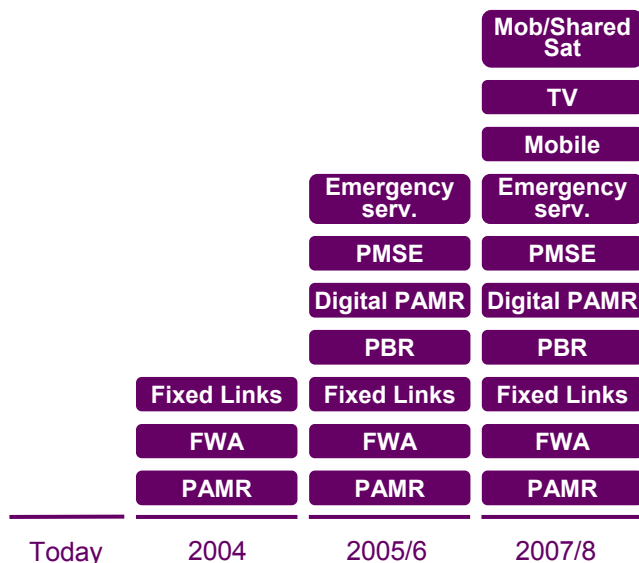
Next Generation Networks



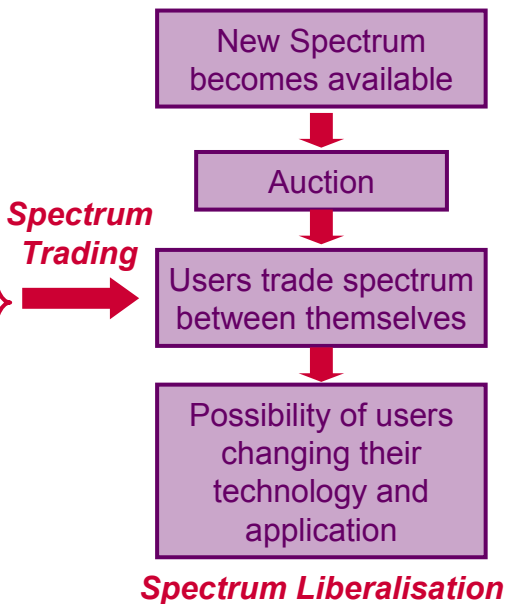
- Single IP core network
 - Voice, Data, Broadcast services

Spectrum Framework Review

Existing Assignments (95%+)

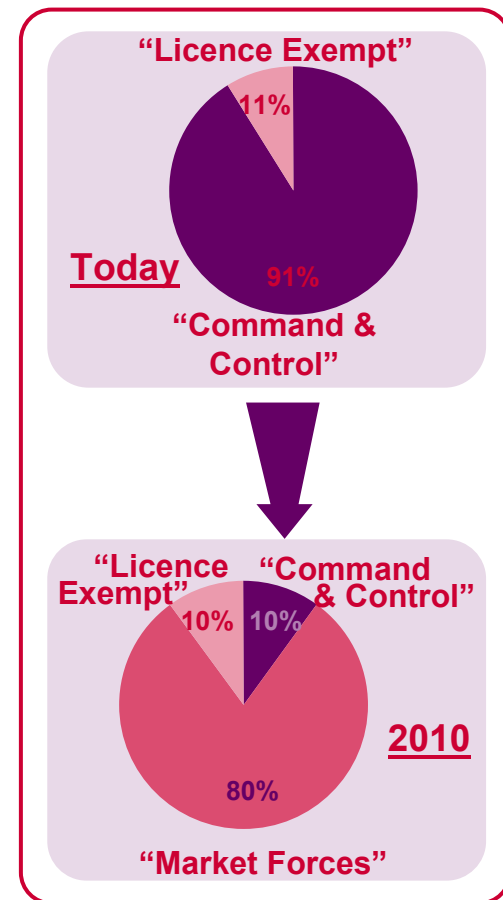


New Assignments (<5%)



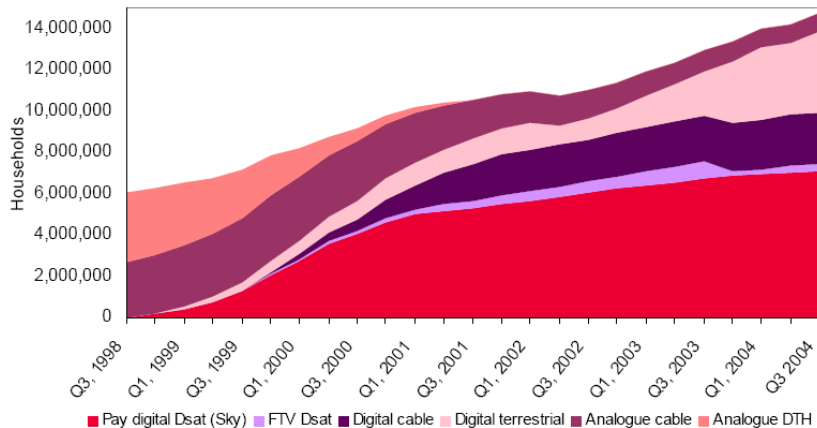
New spectrum

2005/2006	2006/2007	2007/2008
410-425, 872-921, 1781-1785, 1876-1880, 2010-2025, 2290-2302	1452-1492, 2500-2690	1790-1798
63MHz	230MHz	8MHz



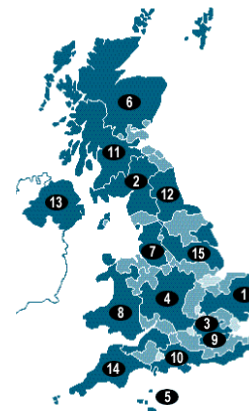
Digital TV Switchover

- Digital TV is now in more than 56% of UK homes

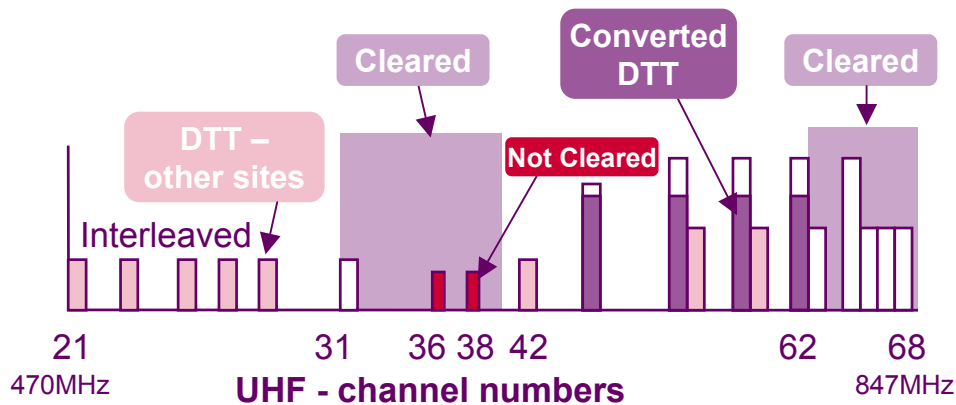


- Region by region conversion of analogue transmitters to digital starting in 2008 and finishing in 2012

1. Anglia
2. Border
3. Carlton Weekday
4. Carlton - Central
5. Channel
6. Grampian
7. Granada
8. HTV- Wales
9. LWT
10. Meridian
11. Scottish
12. Tyne Tees
13. Ulster
14. Carlton- Westcountry
15. Yorkshire

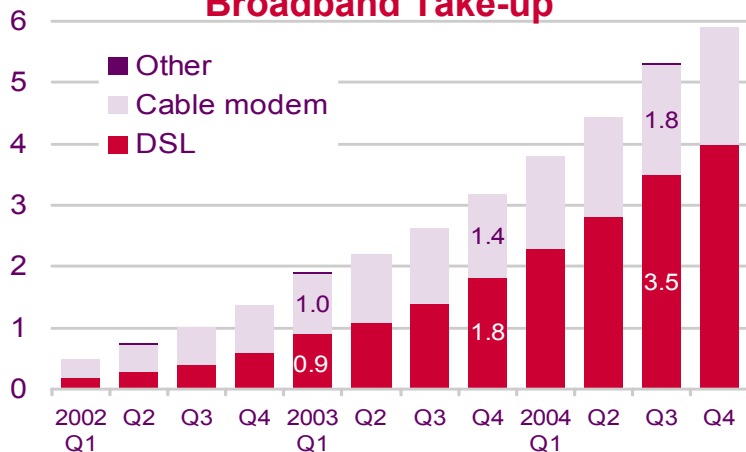


- Interleaved spectrum for local TV?
- Release 14 channels
 - HDTV, mobile multimedia broadcasting

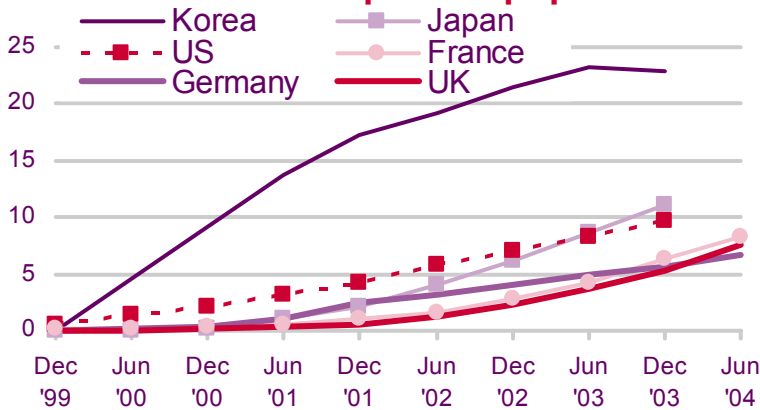


Broadband

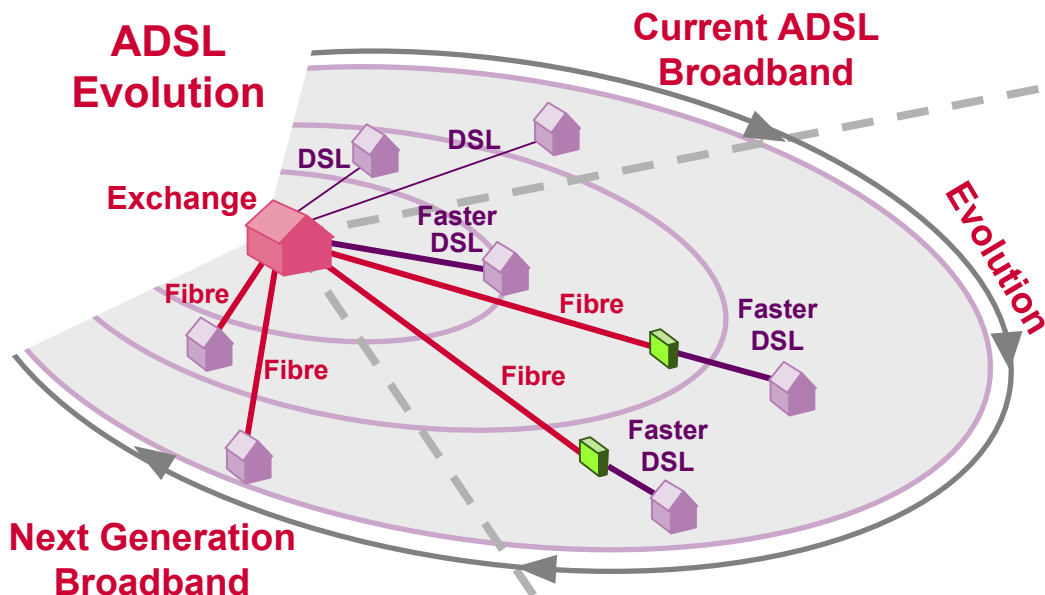
Broadband Take-up



Penetration – per 100 population

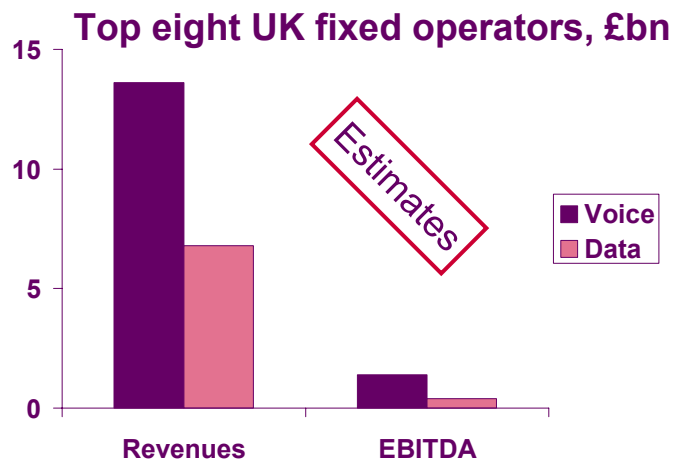


Nov 04	⇒ Phase 1 & 2 of the Strategic Review of Telecommunications
Sep 04	⇒ Publication of BT KPIs for Broadband products (e.g. fault %)
Aug 04	⇒ Datastream / IPStream margin setting (~£1.00 increase)
Aug 04	⇒ LLU price reductions announced (e.g. Shared connection £117 ⇒ £37.03, rental £53 ⇒ £12.64)
Jul 04	⇒ Telecoms adjudicator appointed (Peter Black)
May 04	⇒ Reduced migration cost IPStream to Datastream (£50 ⇒ £11)
Dec 03	⇒ Wholesale Broadband Market Review – changes to regulation to drive competition (e.g. non-discrimination, notification etc.)



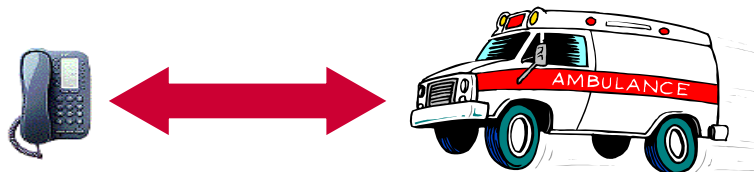
New voice services

Impact on traditional revenues



- Voice has dominated telecoms revenues
- And has relatively high margins
- How will VOIP impact these revenues ?
- And what services will pay for customer access ?

Consumer protection



- PATS status confers rights (e.g. portability)
- And obligations (network integrity, 999)

Impact on numbering

Number beginning	Designation
01 and 02	Geographic Numbers
055	Corporate Numbers
056	Location Independent Electronic Communications Service
070	Personal Numbering Service
076	Radiopaging Service
077 to 079 inclusive	Mobile Services
080	Special Services - No charge to Customer
082	Special Services: Internet for schools
084	Special Services: basic rate
087	Special Services: higher rate
090 and 091	Special Services at a Premium Rate

- Erosion of service boundaries
- Number conservation