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Meeting with NCC

Introduction to Ofcom

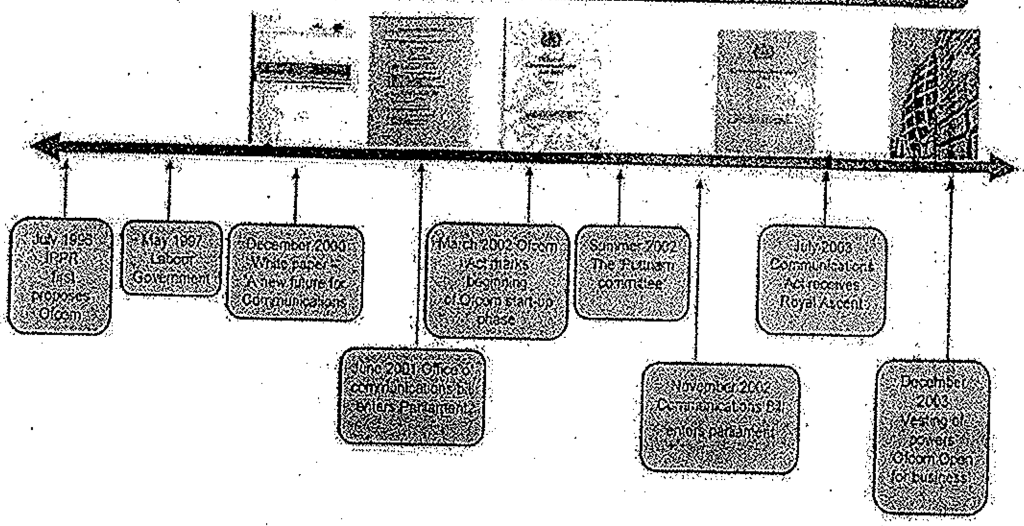
13 July 2011

Helen Keefe, International Policy

Ofcom: created in 2003 to respond to "convergence"

- Convergence changing the communications sector
  - Networks: same network to deliver different services (voice/data, TV/broadband)
  - Devices: different services over the same device (web to PC, web to phone)
  - Consumption: new media, stacking and substitution
  - Business models: previously separate industry boundaries are blurring
- UK Government seeking better standards of regulation (governance, transparency)
- New issues emerging (Broadband, Spectrum, shift to digital TV (DSO))

The genesis of Ofcom

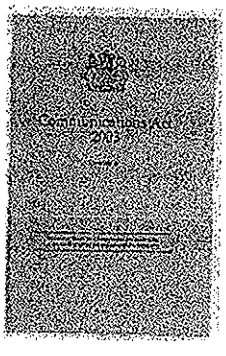


Extensive Consultation

White Paper December 2000
Office of Communications Act 2002
Joint Communications Bill Scrutiny Committee – 2002

Communications Bill
- 17 days of parliamentary debate
- 26 Commons Standing Committee sessions
- more than 300 industry submissions
- more than 500 amendments tabled

Communications Act 2003
- 263 statutory duties for Ofcom
- but not a consolidating piece of legislation



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The Communications Act 2003

The Act covers the transition to a converged, all-digital sector

Incorporated EU Telecoms Regulatory framework

New spectrum management powers

Liberalised media ownership rules

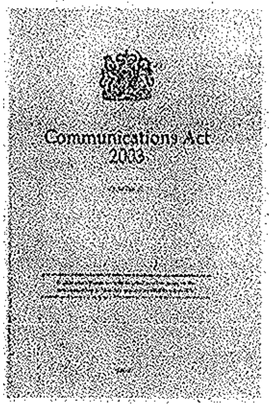
EU Television without Frontiers Directive

Clarified new regime for broadcasting;
- Content Standards
- Quotas
- Self-regulation

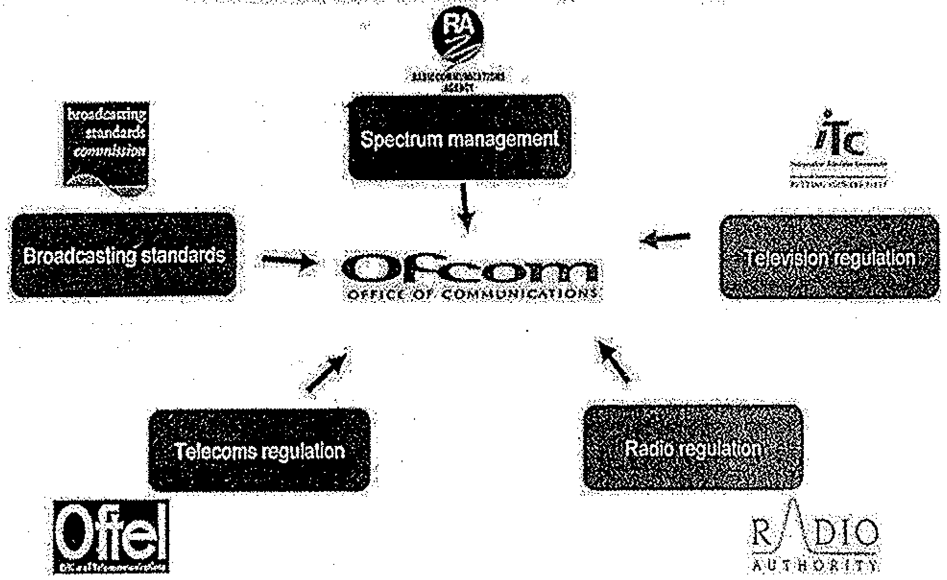
Digital licences

Internet is not regulated

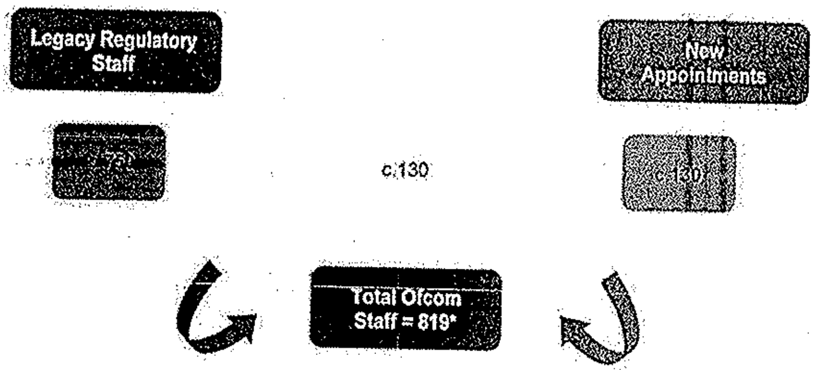
Media Literacy



Ofcom formed in 2003, from 5 previous regulators



Ofcom Staffing - Existing expertise and additional new skills



* Staffing level at September 2007

Ofcom's Duties

Under the Communications Act 2003:

Art. 3(1) it shall be the principal duty of Ofcom, in carrying out their functions;

(a) to further the interests of **citizens** in relation to communications matters; and

(b) to further the interests of **consumers** in relevant markets, where appropriate by promoting competition

Six areas of specific duties - ensuring:

- ❑ optimal use of the electro-magnetic spectrum
- ❑ a wide range of electronic communications services - including high speed data services - throughout the UK
- ❑ a wide range of TV and radio services of high quality and wide appeal
- ❑ plurality in the provision of broadcasting
- ❑ adequate protection for audiences against offensive or harmful material
- ❑ adequate protection for audiences against unfairness or the infringement of privacy

Ofcom – what we do.........

Our main legal duties are to ensure:

- the UK has a wide range of electronic communications services, including high-speed services such as broadband;
- a wide range of high-quality television and radio programmes are provided, appealing to a range of tastes and interests;
- television and radio services are provided by a range of different organisations;
- people who watch television and listen to the radio are protected from harmful or offensive material;
- people are protected from being treated unfairly in television and radio programmes, and from having their privacy invaded; and
- the radio spectrum (the airwaves used by everyone from taxi firms and boat owners, to mobile-phone companies and broadcasters) is used in the most effective way.

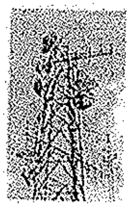
Ofcom – what we do not do........

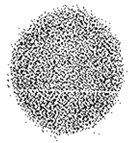
We are not responsible for regulating:

- disputes between consumers and telecoms providers
- premium-rate services, including mobile-phone text services and ringtones
- the content of television and radio adverts
- complaints about accuracy in BBC programmes
- the BBC TV licence fee
- newspapers and magazines

Digital Economy Act (April 2010) – new responsibilities

- Illegal file-sharing
- Infrastructure assessment
- Radio licensing
- Public service content across platforms
- Wireless licences – charging and enforcement powers





Ofcom an overview..

Responsibilities

- Assumed duties of 5 previous regulators and took on 135 other statutory duties
- Telecoms regulation
- TV & Radio Regulation
- Spectrum Management
- Broadcasting Standards
- Competition Authority (concurrent competition powers with Office of Fair Trading)

Duties

- 'Further interests of citizens'
- 'Further consumer interests'

Approach

- Bias against intervention
- Evidence-based decision making, consultation

Governance

- Statutory public corporation – independent of Govt.
- Accountable to Parliament (not ministers)
- Ofcom staff are public servants (not civil servants)
- Board Structure
- Board subject to Code of Ethics & Standards
- Duties to consult, publish annual plan and reports
- Decisions appealable to specialist tribunal (CAT) that sets standards for all UK regulators

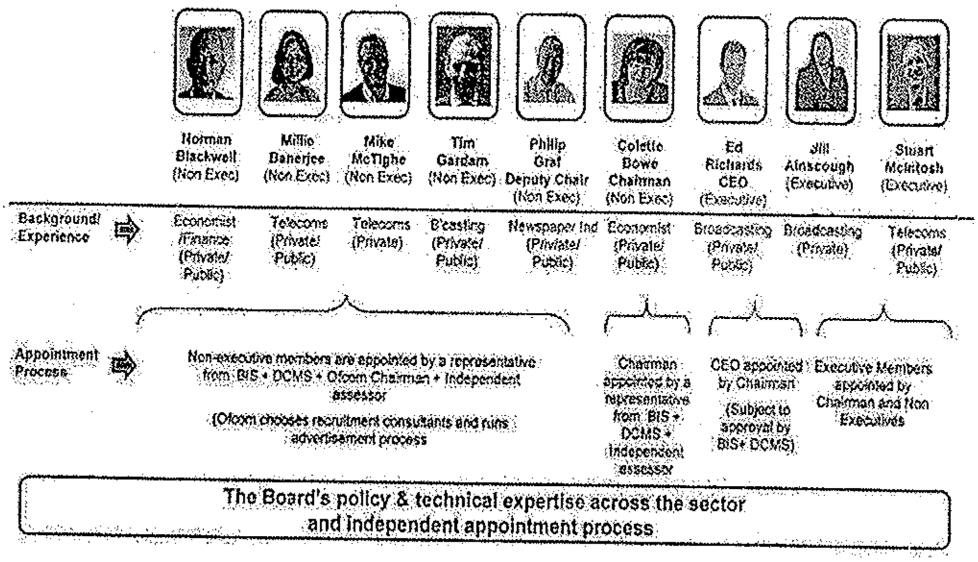
Funding

- Funds raised by industry licence fees
- Ofcom retains a % of revenue from spectrum licenses rest passed to Treasury

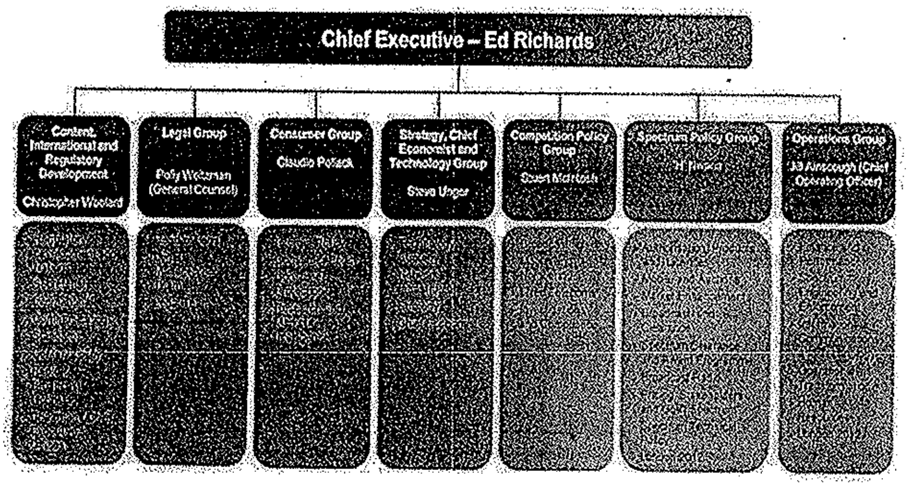
Staff

- 861 in Ofcom (July '09) (from 1152 staff in legacy regulators).

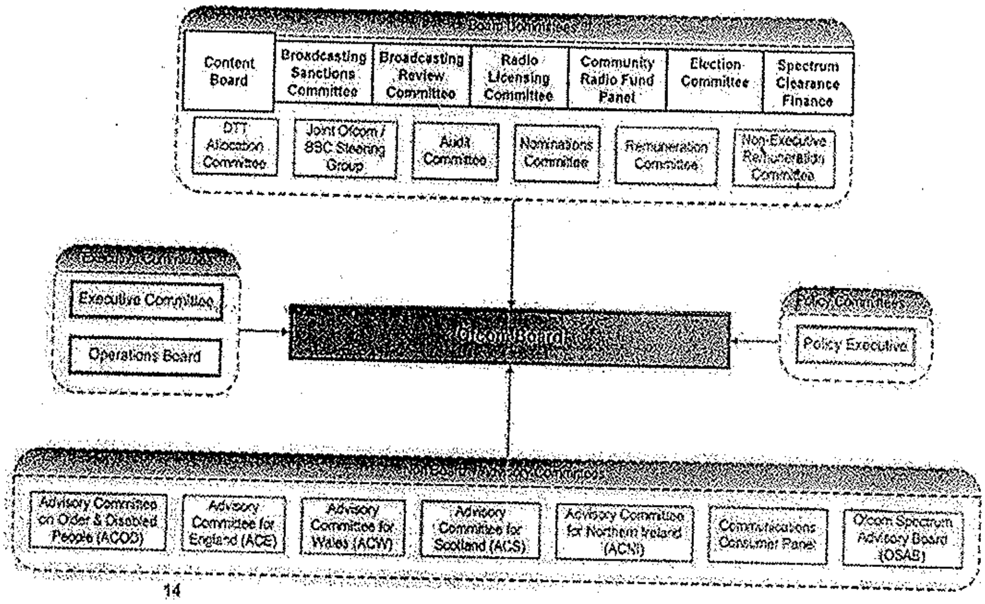
Ofcom Board



Organisational Chart & Reporting Structure



Ofcom's Board & Committee Structure



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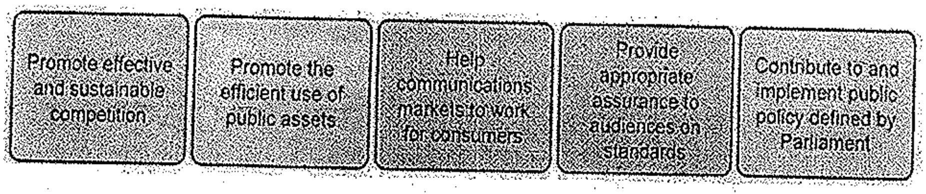
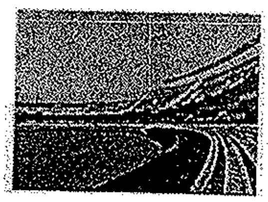
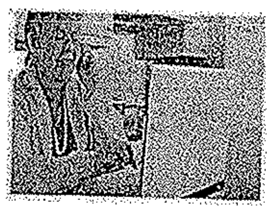
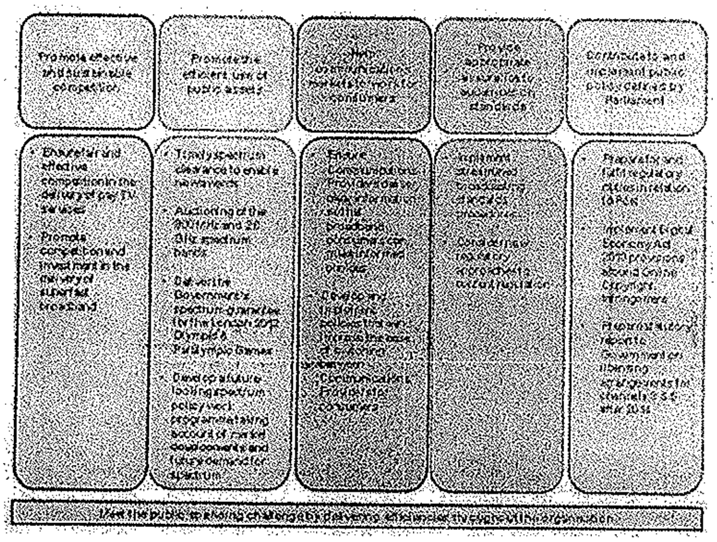
Annual plan 2011/12: Ofcom's five strategic priorities to 2015







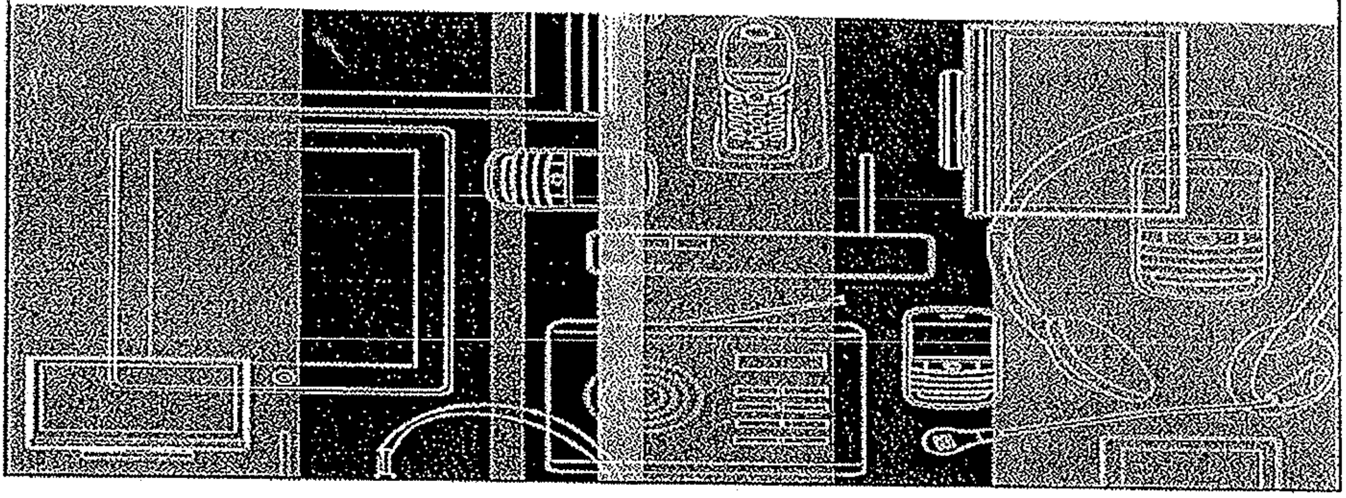
Annual plan: priorities for 2011/12



附件六 (ofcom)

The UK's communications market

13 July 2011



Introduction

Overall patterns of technology adoption and of media consumption

Television industry – technologies, market shares, revenue, new media

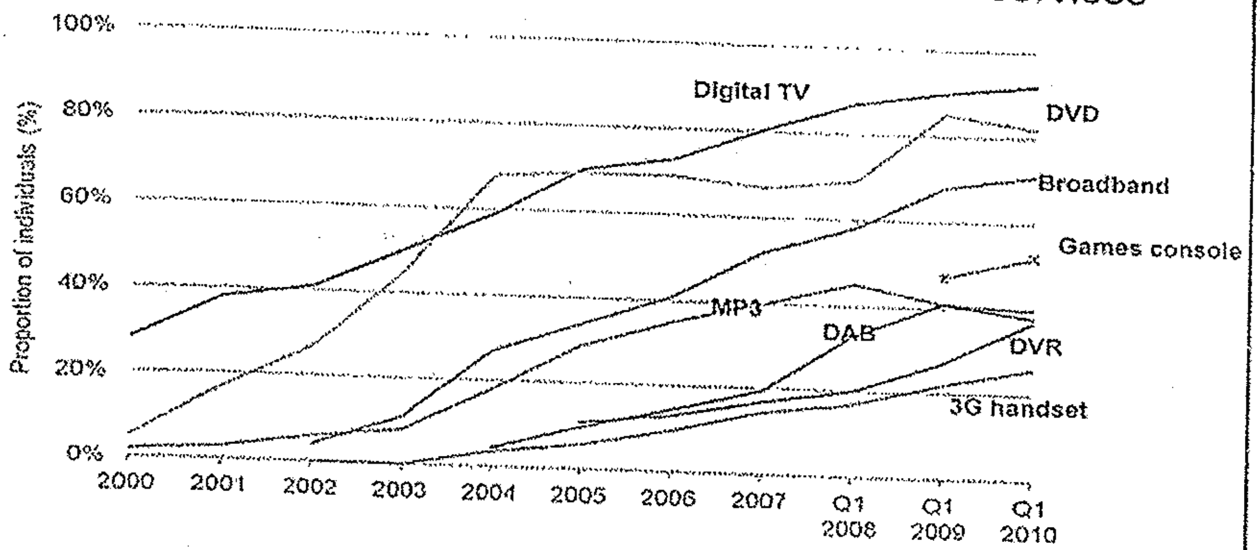
Radio industry – revenues, market shares, digital

Broadband – patterns of adoption, unbundling, super-fast BB, mobile TV

Overall patterns of adoption

A range of digital technologies have been adopted rapidly

Take-up of a range of communications devices and services



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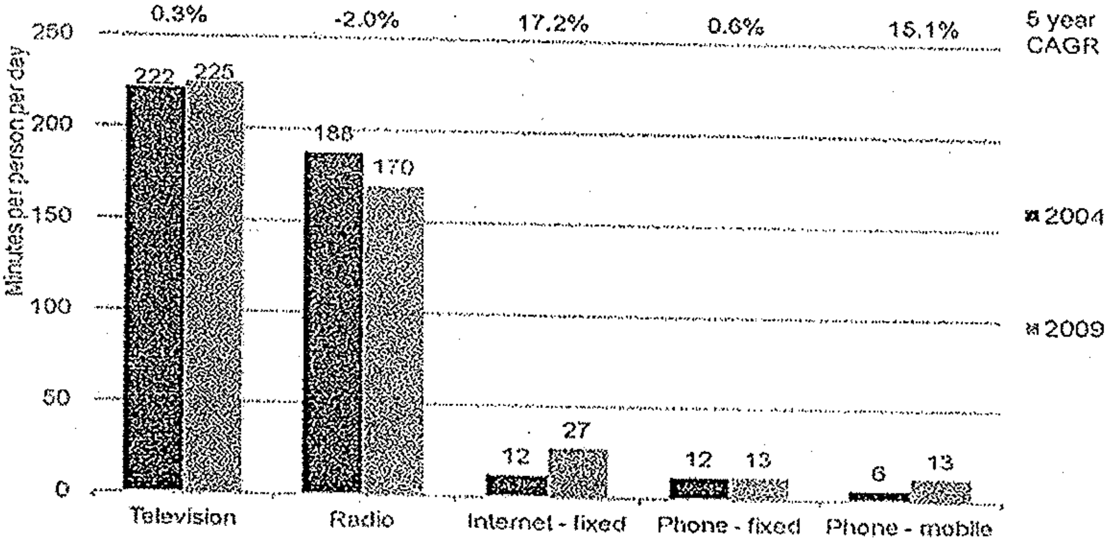
TV and radio consumption dominate
Average time per day spent using communications services



Television platforms

sky

Virgin media

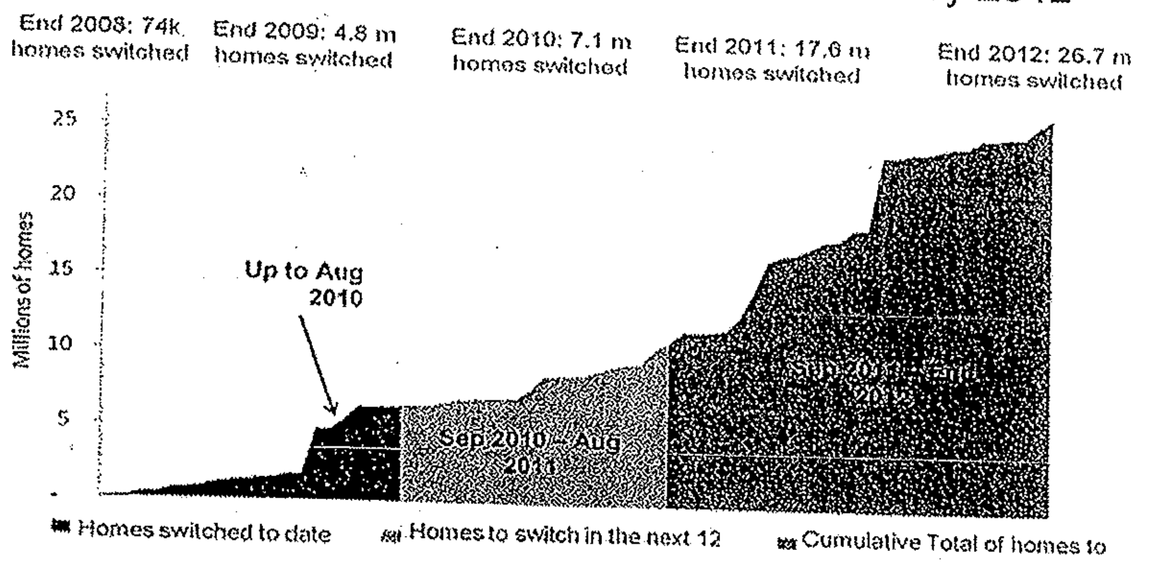
有線电視

Freeview

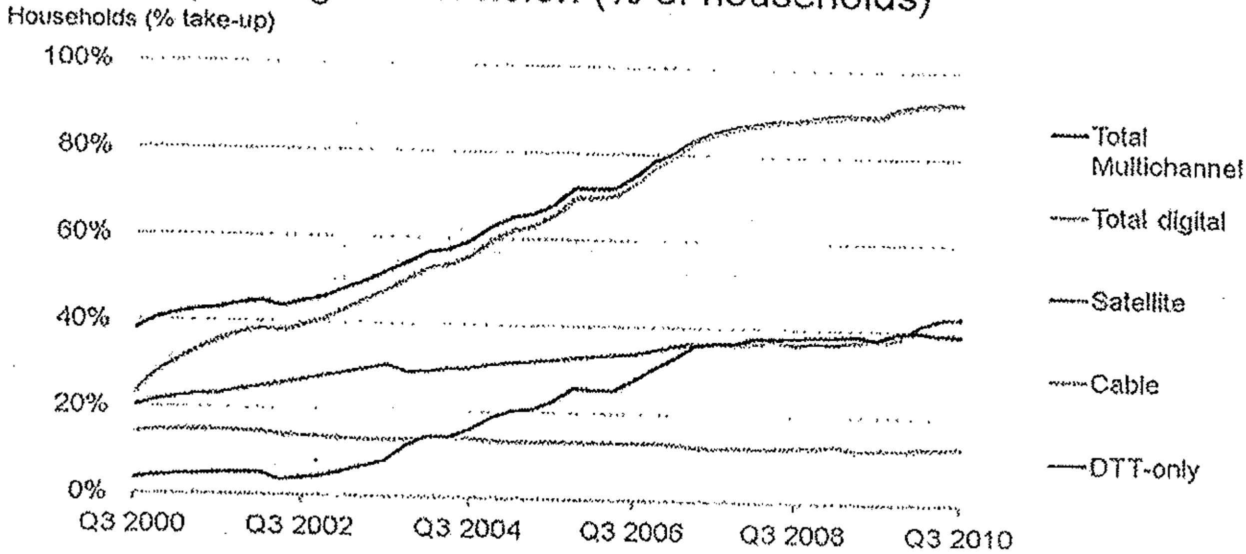
BT Vision

topup tv

Digital switchover gathering momentum
7.1m homes switched by end 2010; all switched by 2012

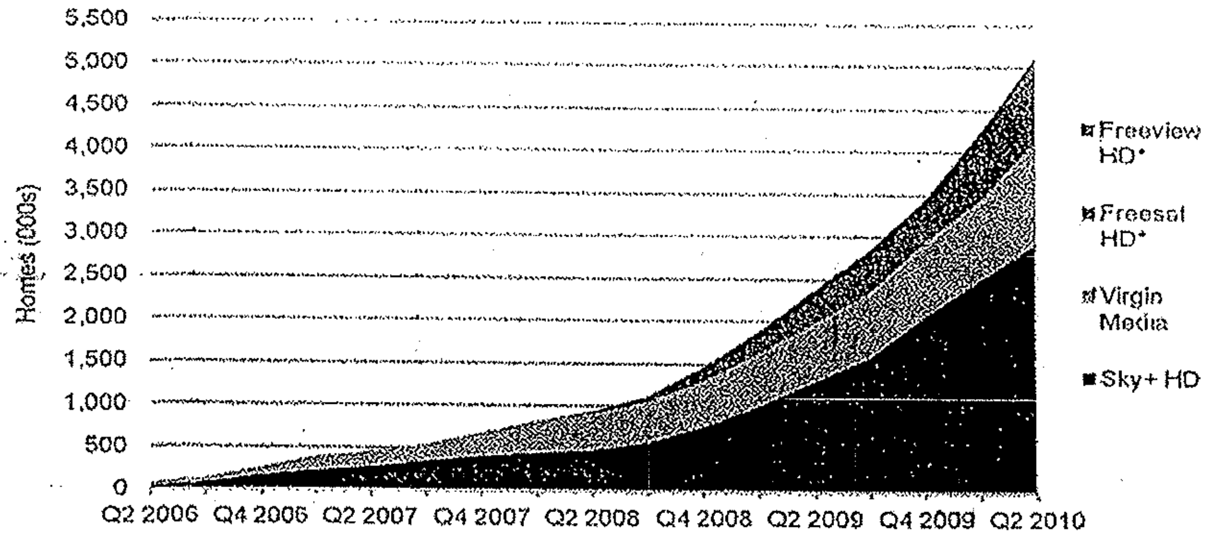


Satellite is the largest DTV platform, followed by DTT
Take-up of digital television (% of households)



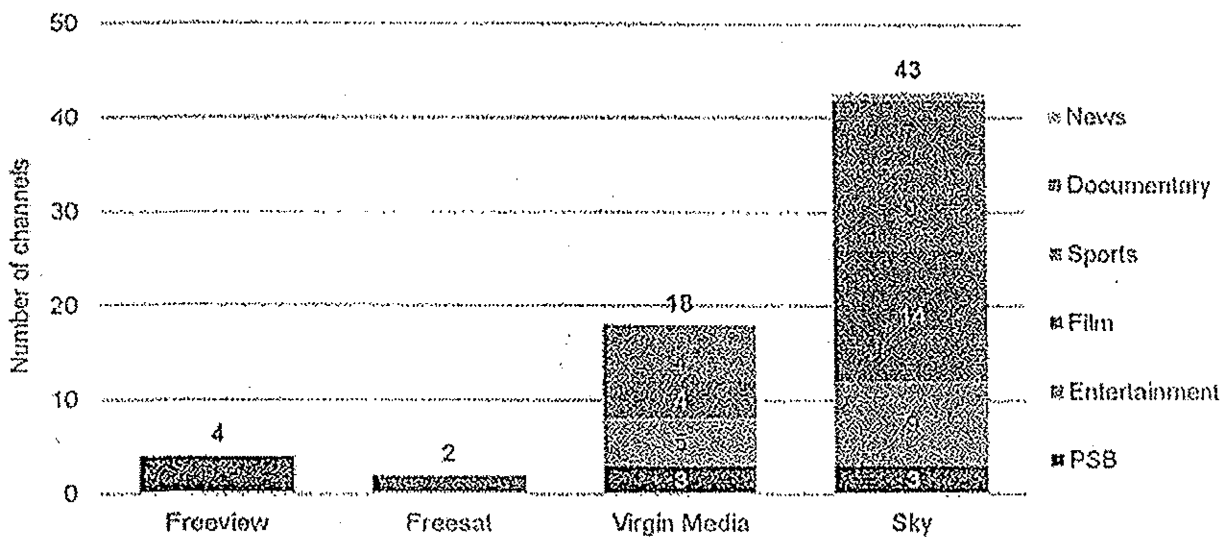
HD services growing in popularity

Number of broadcast HD homes



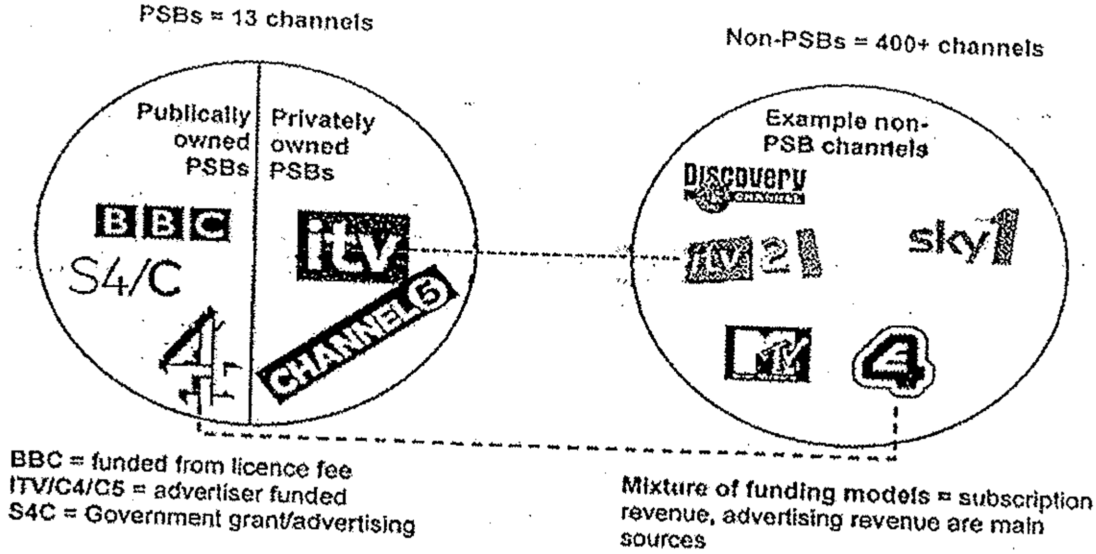
HD channel availability varies by platform

HD channel line-up by platform and genre, 2010



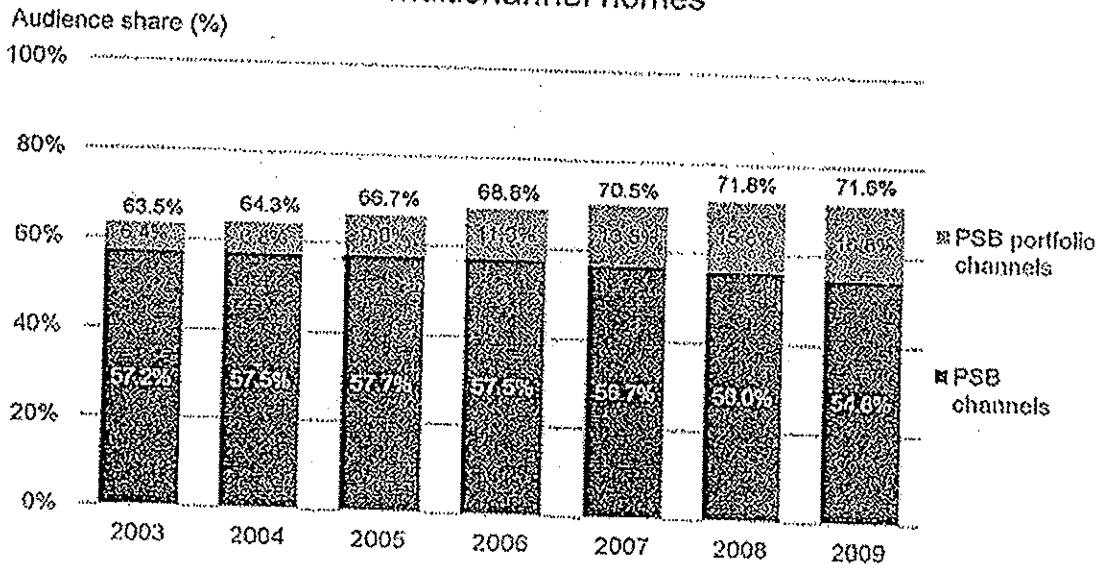
Large number of television services available in the UK

Structure of UK television industry



PSBs still account for a substantial viewing share

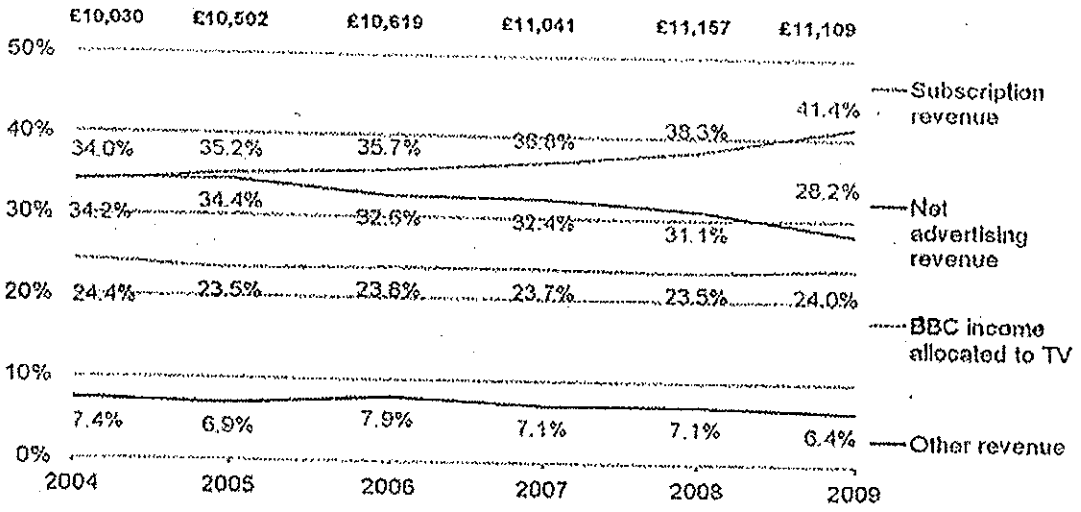
PSB portfolios' share in multichannel homes



Source: BARB

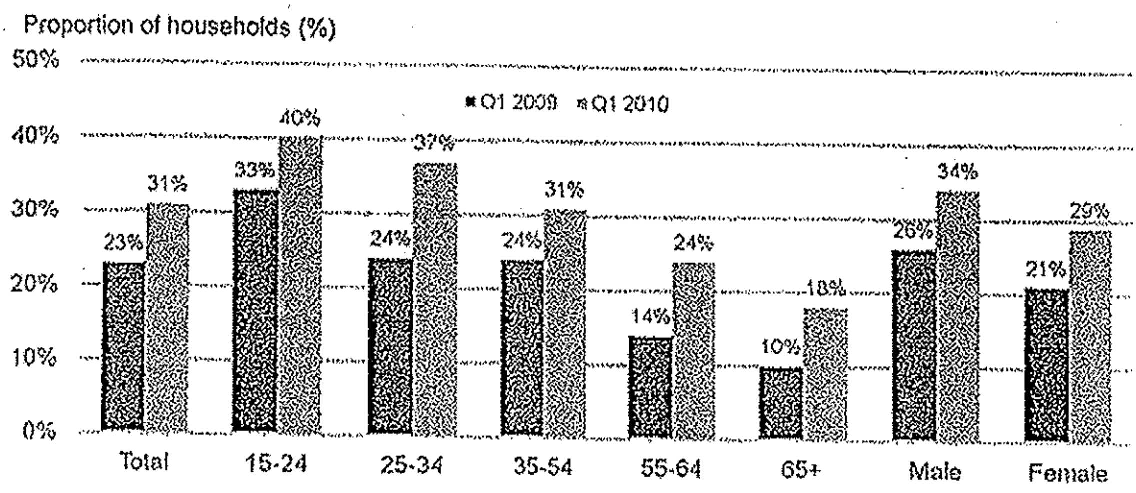
TV industry revenues totalled £11bn in 2009

Subscriber revenue was the largest and fastest growing component



Accessing TV content over the web

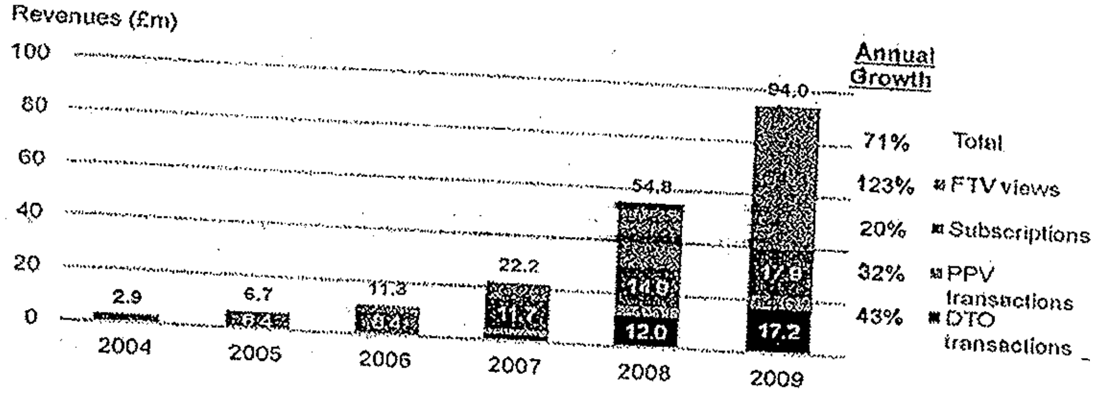
Proportion of adults with home internet who watch online catch-up TV



Source: Ofcom research Q1 2010
QE12. Which, if any, of these do you or your household use the internet for whilst at home?
Base: All adults who have the internet at home (n=6183 UK, 1048 15-24, 1100 25-34, 2464 35-54, 860 55-64, 691 65+, 2015 Male, 3148 Female)

Commercially-generated online TV revenues modest

Online TV revenues

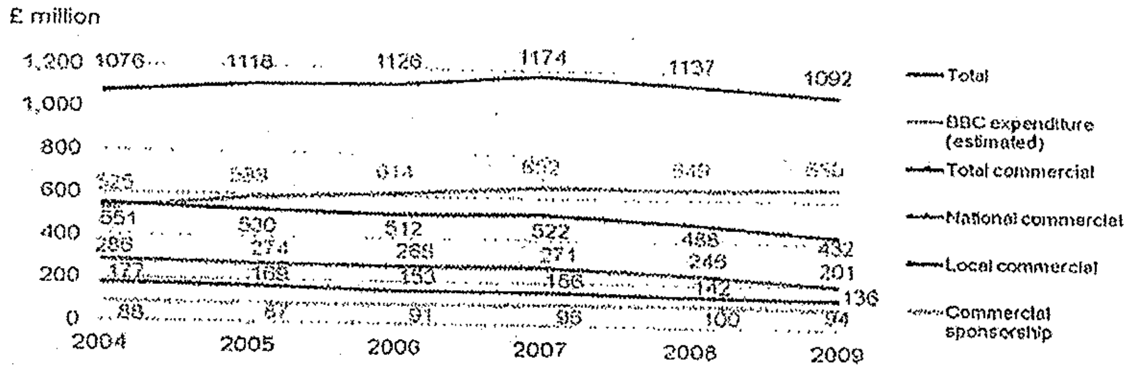


Source: Screen Digest.
Note: FTV = free to view; PPV = pay per view; DTO = download to own.

Radio

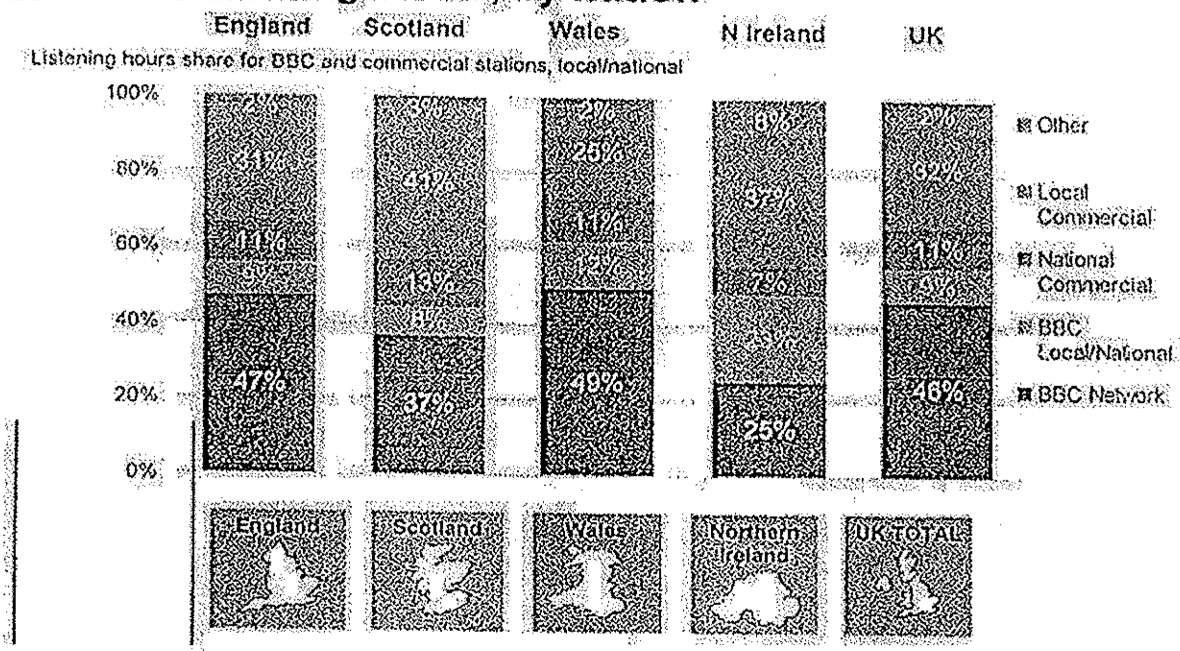
Radio was funded to the tune of £1bn in '09

Radio industry funding (£m)



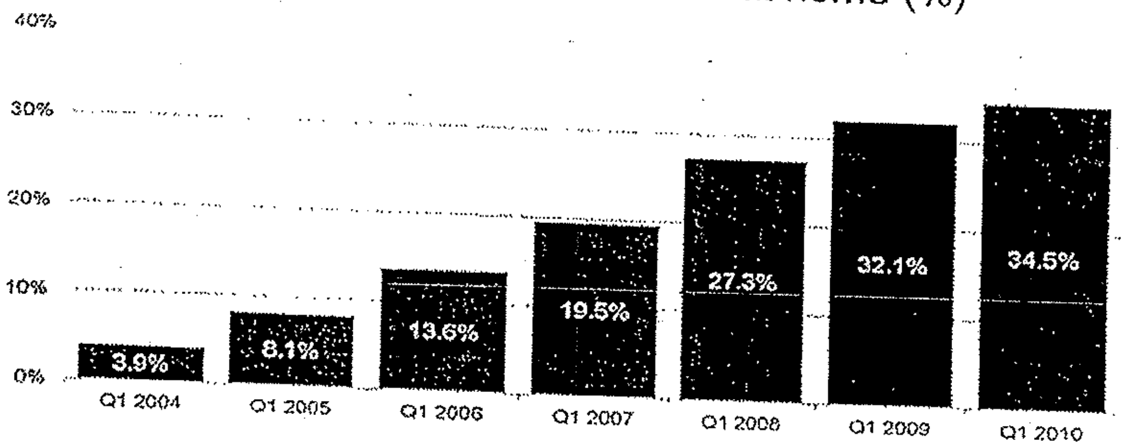
Source: Ofcom / operator data / BBC, 2004-2009
Notes: BBC expenditure figures are estimated by Ofcom based on figures supplied by the BBC; figures in the chart are rounded.

Share of listening hours, by nation



A growing proportion of people have DAB at home

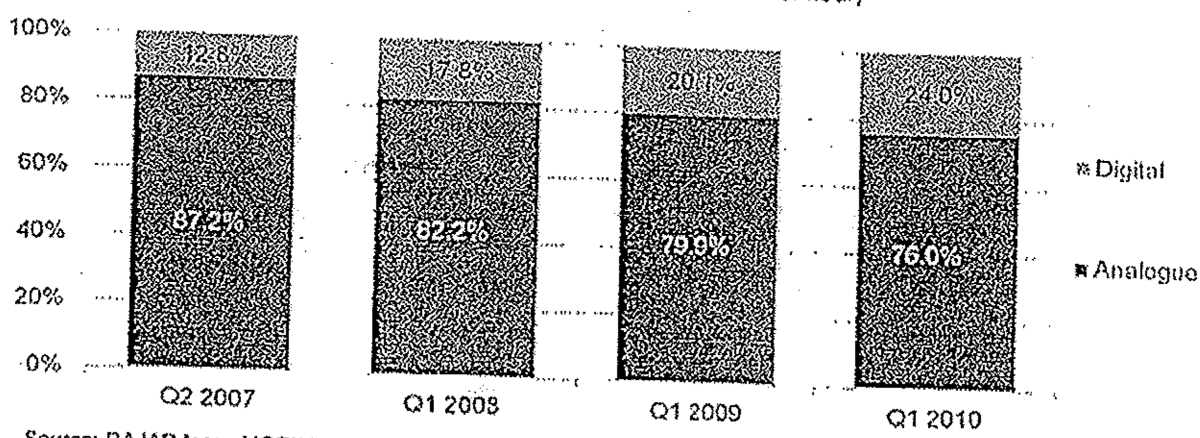
Individuals with access to a DAB radio at home (%)



Source: RAJAR / Ipsos MORI / RSMB Q1 2010

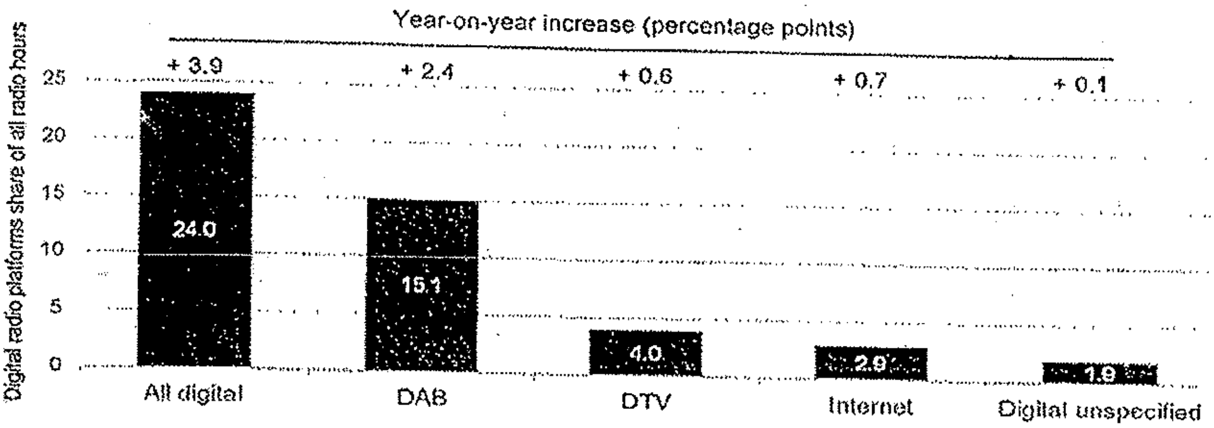
Around a quarter of radio listening hours are through a digital platform

Radio listening share by digital and analogue listening (% of all listener hour)



Source: RAJAR Ipsos MORI/ RSMB
Note: New digital radio listening share survey begun in Q2 2007 by RAJAR Ipsos MORI/ RSMB

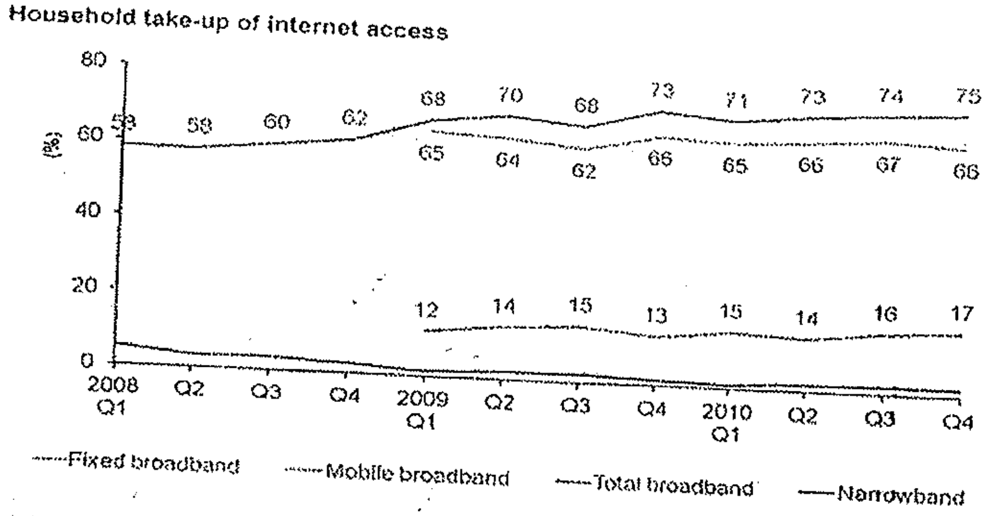
DAB is currently the most popular of the digital platforms



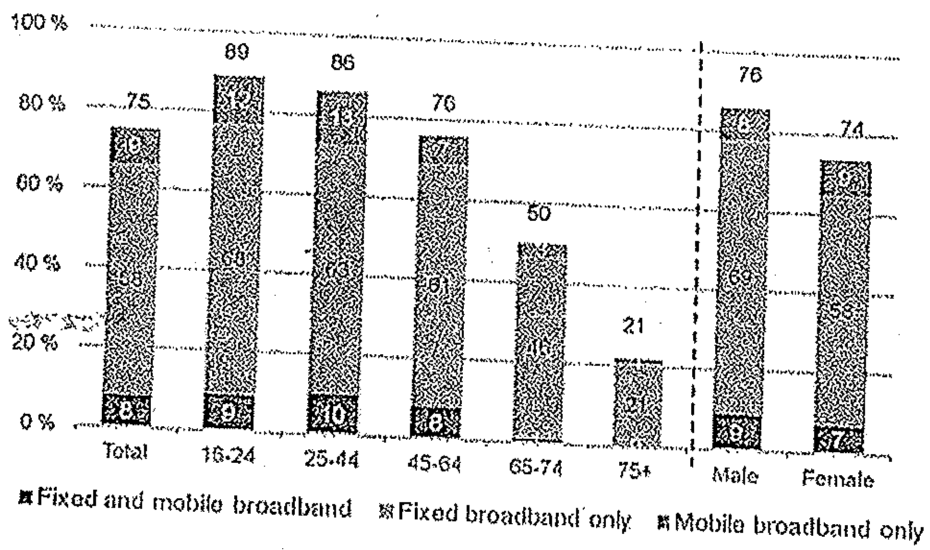
Source: RAJAR (adult listeners 15+), Q1 2010
Note: 'Digital unspecified' relates to listening to digital-only stations where the survey respondent has not specified the listening platform used.

Broadband

Broadband penetration continues to grow

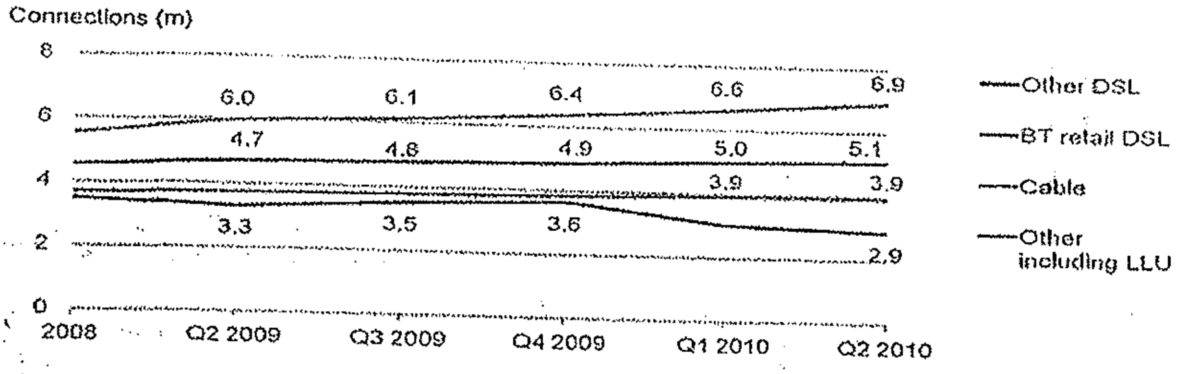


Age and gender profile of broadband users, Q4 2010



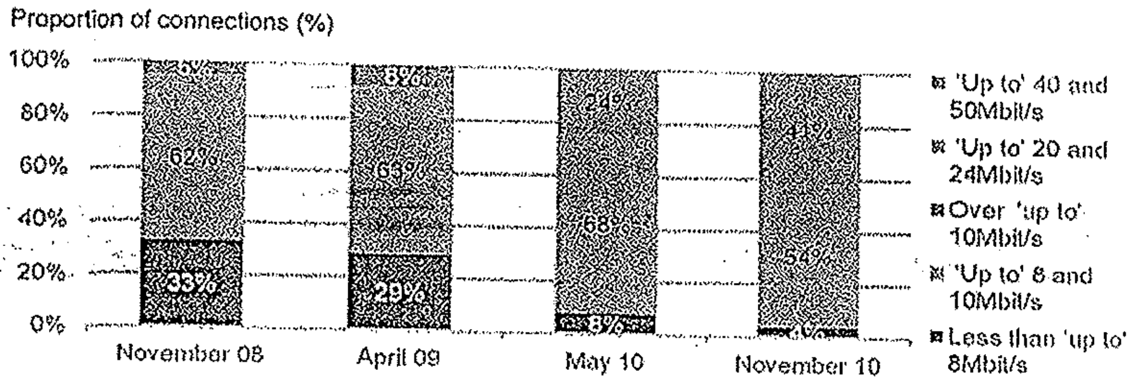
Unbundled connections continue to rise

Residential and SME broadband connections



Average headline speeds continue to increase

UK residential broadband connections by headline speed



Super-fast broadband roll-outs

BT

- Plans to cover two-thirds of the population with at least FTTC (fibre-to-the-cabinet) 40Mbps service by 2015.
  75% of this upgrade expected to be FTTC, remaining 25% expected to be FTTP
- Reportedly adding around 100 000 premises to its fibre network every week and has already covered four million homes by the end of 2010 with plans to cover 12 million by the end of 2012.
- Plans to deploy FTTP (fibre-to-the-premises) broadband to around 270,000 homes in the UK by September this year.

Virgin Media

- Entire cable network is already capable of delivering 50Mbps (covers nearly 50% of the population)
- 100Mbps service now covers over one million households (March 2011) and will be available across the entire network by mid-2012
- Over 780,000 Virgin Media customers now subscribe to at least 30Mbps service, with 118,000 of these using the 50Mbps service

Developments in Mobile TV

- Mobile TV has struggled to get off the ground in the UK.
- Technologies such as DVB-H have been widespread in Europe but recently have failed to maintain commercial viability.
- The majority of current Mobile TV services stream TV channels across the 3G network.
  - Large amounts of content but limited capability for widespread use due to limited bandwidth of the network.
- Orange, o2 and Vodafone are currently trialling IMB technology which utilises unpaired 3G spectrum.
  - IMB could deliver a limited number of TV channels to a large number of mobile devices.

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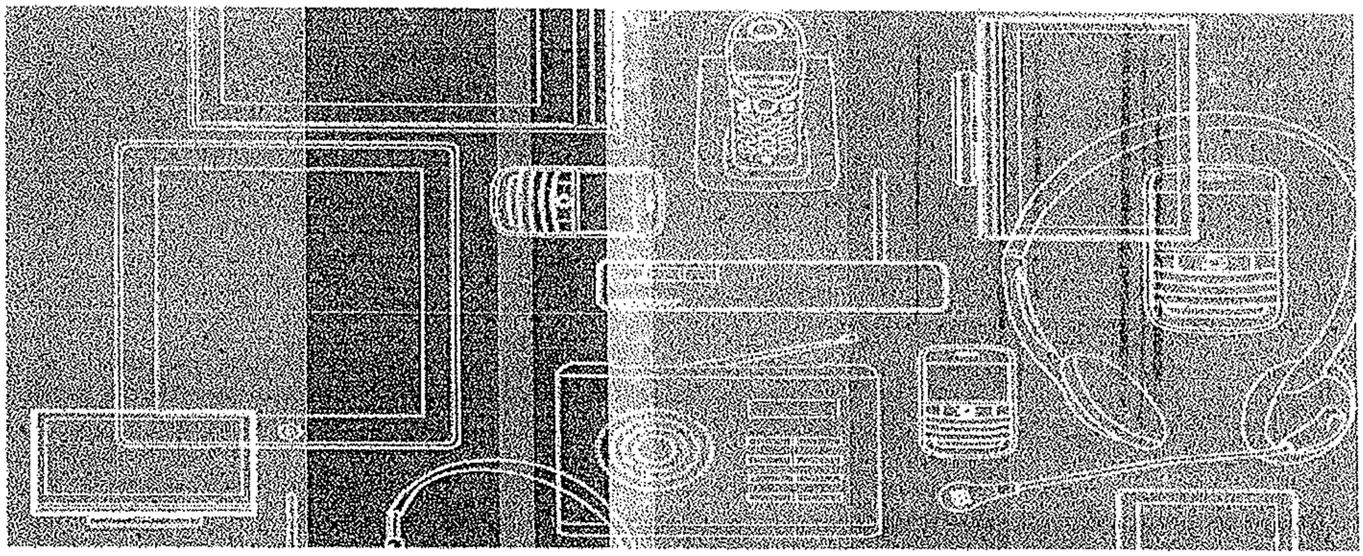
Content Regulation, Digital Switchover, Digital Dividend

13 July 2011



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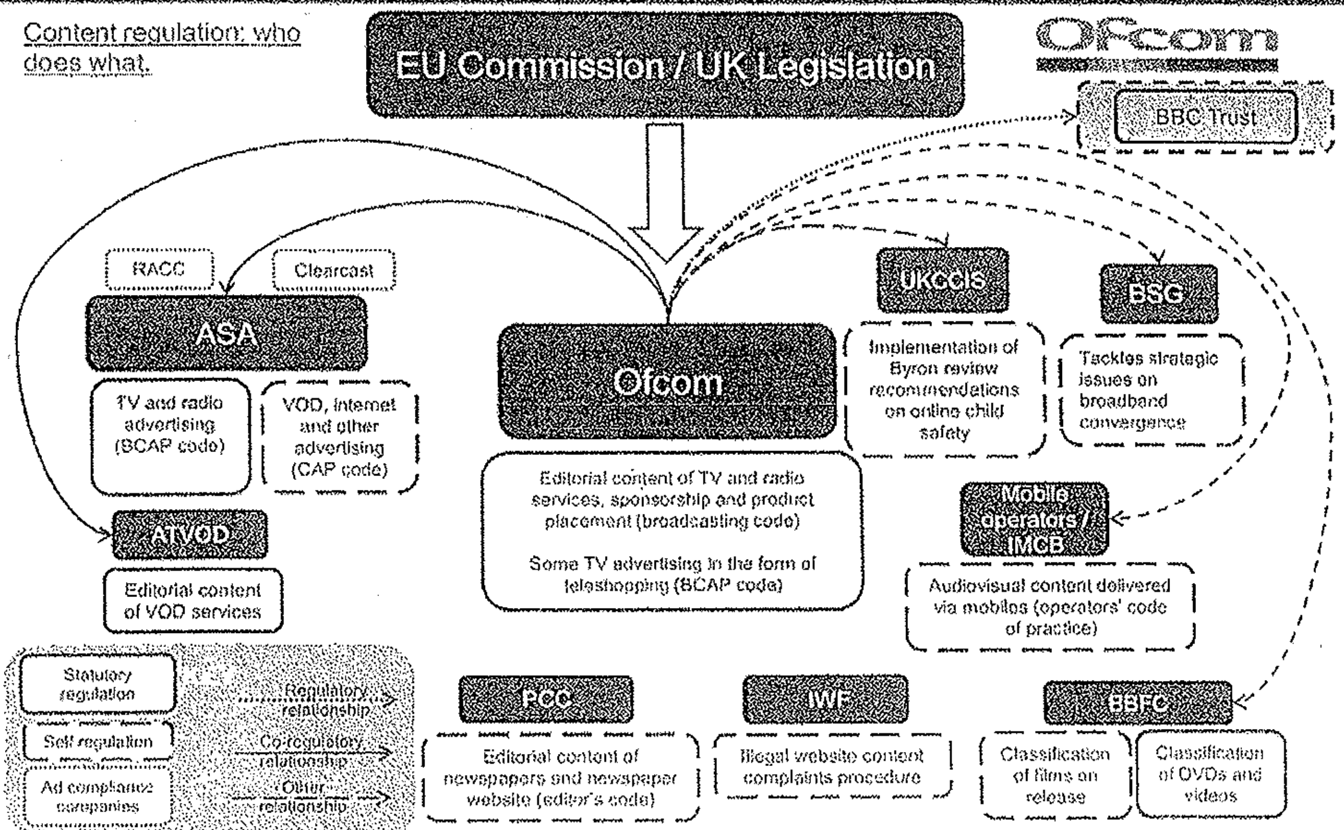
Content regulation: who does what.



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Ofcom's Protection Duties

The Core Purposes

Protection of minors
- Protection of minors as consumers of media
  - *Exposure* to adult or dangerous content
  - *Economic* harm

Harm
- Crime
- Religion
- Commercial

- Protection of adults as consumers of media
- Has two distinct aspects Hacking scandle
  - *Harm* (manipulation of vulnerable, discriminatory treatment)
  - *Economic* harm (surreptitious advertising, mis-use of PRS etc)

Offence
- Offence to sensibilities

Due Impartiality and Accuracy
- Protection of the democratic debate

Fairness
Privacy
- Protection of individuals as subjects of the media

What services must be regulated under AVMS?

Ofcom

- All audio-visual media services operating from the UK should be licensed today, regardless of platform.
- Services which are identical other than "technical distinctions in delivery" are subject to the same regulation. Services which are geographically based in the UK must be regulated.
- The major discretion in scope is on non-UK services and services where audio-visual delivery is not the primary purpose (aggregator / search services).

	General law	AVMS	Broadcasting Code	VoD regulation
PSBs (BBC1, ITV1)	Y	Y	Y	N (as broadcast)
Non-PSBs (Press TV)	Y	Y	Y	N (as broadcast)
Non-UK licensed (Babestation)	Y	Y	N (Complies with other EU member rules)	N (as broadcast)
Catch-up (4od)	Y	Y	N	Y
IPTV (Sportstalk)	Y	Y	Y	N
Open internet (YouTube)	Y	N	N	N
Aggregator (Apple TV)	Y	N	N	N

Models of Regulation

Ofcom

	Self Regulation	Co-Regulation	Statutory
Example	Committee of Advertising Practice (CAP) Press Complaints Commission (PCC)	Authority for Television on Demand (ATVOD)	Ofcom
Pros	• Work well when stakeholders' interests are aligned with those of consumers • Allow a broad range of stakeholders to engage, across sectors and even national borders • Can be less costly to industry	• Can co-ordinate approaches across industry boundaries with different levels of statutory regulation • Can have more flexibility in approaching issues than a statutory body • Rarely requires intervention from a backstop regulator	• Can address cases where there is fundamental conflict between commercial and regulatory objectives • Can manage diverse stakeholders • Can offer greater regulatory certainty
Cons	• May lack transparency • May not cover all industry players as participation voluntary (e.g. Northern & Shell and PCC) • Lacks power to guarantee enforcement	• Can be time consuming to set up and then monitor by backstop regulator • Can struggle to deal with conflicts of interest • Can be more expensive than either statutory or self-regulation	• Can be regarded as too inflexible or slow to adapt • May make it difficult to draw on industry expertise for fear of regulatory capture • May be over-prescriptive

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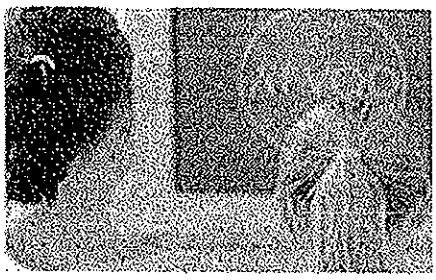
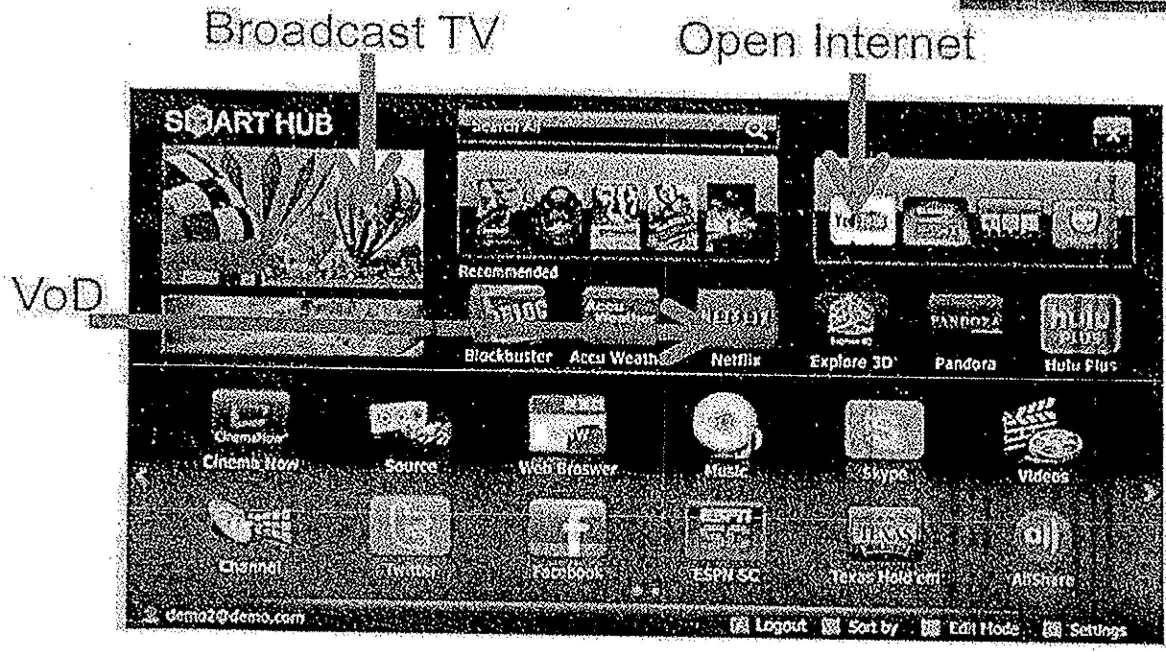
Case study: ATVOD

- Challenge of establishment
- Industry buy-in
- Scope of regulation
- Funding



Example: Samsung Smart TV

Ofcom



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Possible policy implications

- Protection of minors is a priority
- More or less regulation?
- Debates on blocking in all countries have raised both practical and philosophical questions
- Communications Bill Green Paper expected later this year

Areas for discussion...

- What is the political context at the moment in your country?
- Are there any calls for blocking in relation to audiovisual content?
- Any relevant experiences you can share (from any field)?

Media Ownership rules in the UK

Rule	Principle
Local radio ownership	sets the level of radio licences one entity can own in specified geographical areas
Local cross-media ownership	prevents one entity owning different types of local media over specified market share levels
National cross-media ownership	prevents one entity owning both a Channel 3 Licence and a greater than 20% market share in one or more national newspapers
National radio ownership	prevents one entity owning more than one national radio multiplex
Broadcasting licences	prevents or limits control of television and radio by certain owners whose influence might cause concern
Appointed news provider	ensures Channel 3 sources its news from an independent news source
Public interest test	enables the Secretary of State to intervene in media mergers on "public interest grounds"

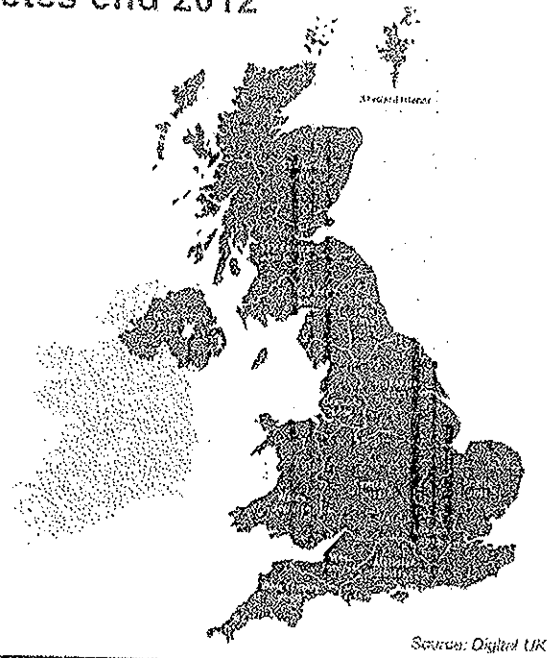
The current debate: Newscorp, plurality and BSkyB

- The media public interest test provides a backstop for the Secretary of State to prevent media mergers on public interest grounds
- Newscorp sought regulatory clearance to acquire all the shares in BSkyB- a material change in control
- SofS asked Ofcom to provide a report on the impact on plurality of the proposed deal
- This led to undertakings in lieu being offered by BSkyB
- Those have now been withdrawn and proposed deal has been referred by SofS to Competition Commission

Regional switchover – completes end 2012

Key switchover facts

- 15 TV Regions
- 67 Transmitter Groups – each switching in two stages at different times 2008-2012
- Over 1,100 main transmitters and relays in UK network – all need upgrading for DTT
- DTT currently covers 73% of UK households
- Switchover will deliver universal coverage of 98.5% (equivalent to analogue today)



Source: Digital UK

Division of responsibilities for switchover

Government	• Overall responsibility for switchover policy • Assistance for vulnerable groups • Public sector switchover implementation
Ofcom	• Licensing and regulation of broadcasters • Spectrum planning & international co-ordination • Research and market information
Digital UK (broadcasters & industry)	• Co-ordination and project management role • Consumer information • Rollout of DTT network nationwide
DSHS (BBC, DUK, DCMS)	• Delivering Help Scheme for eligible households • Appointing provider for main scheme • BBC managing contractor to deliver scheme

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Stakeholders involved in switchover

POLICY & REGULATION

Ofcom
OFFICE OF COMMUNICATIONS

dcms
Department for Media, Culture and Sport

BIS
Department of Business Innovation & Skills

IMPLEMENTATION

digitaluk

BBC, itv, 4, FIVE, S4/C, TELETEXT, SDN, arqiva

Switchover Help scheme, BBC

ADVISORY GROUPS

The Consumer Expert Group

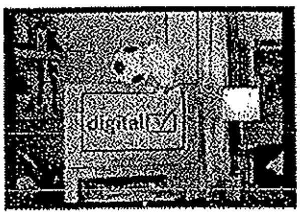
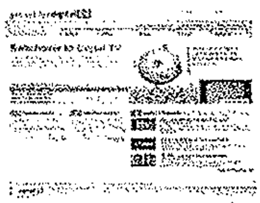
NCC National Consumer Council, AGE Concern, RNIB, Help the Aged, We will, RNID

The Platform Advisory Group

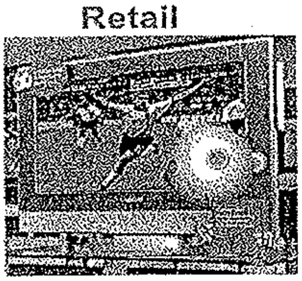
sky, Virgin media, freesat, Freeview

Ofcom

Digital UK's nationwide campaign

Television	Information leaflet	Website	Press ads
			

Retail



- Simultaneous ads on all main channels
- Press advertising – national and regional
- Radio – regional
- Website with postcode checker
- Call centre – 0845 6 50 50 50
- Information leaflets to 3m homes
- Retail information and promotion

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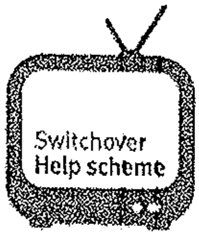
Helping vulnerable consumers

Government has allocated £600m of TV licence fee money to help older and vulnerable people with switchover.

Assist seven million eligible across UK

- Are 75 or over, or
- Receive(or could receive) disability living allowance, attendance or constant attendance allowance, mobility supplement, or
- Have lived in a care home for six months or more, or
- Are registered blind or partially sighted



What is provided

- Practical help to convert one TV: digital box, installation (aerial/dish if needed), user support

How Much

- Two-thirds pay £40
- One-third receive for free (if on income support, income-based job seekers allowance or pension credit)

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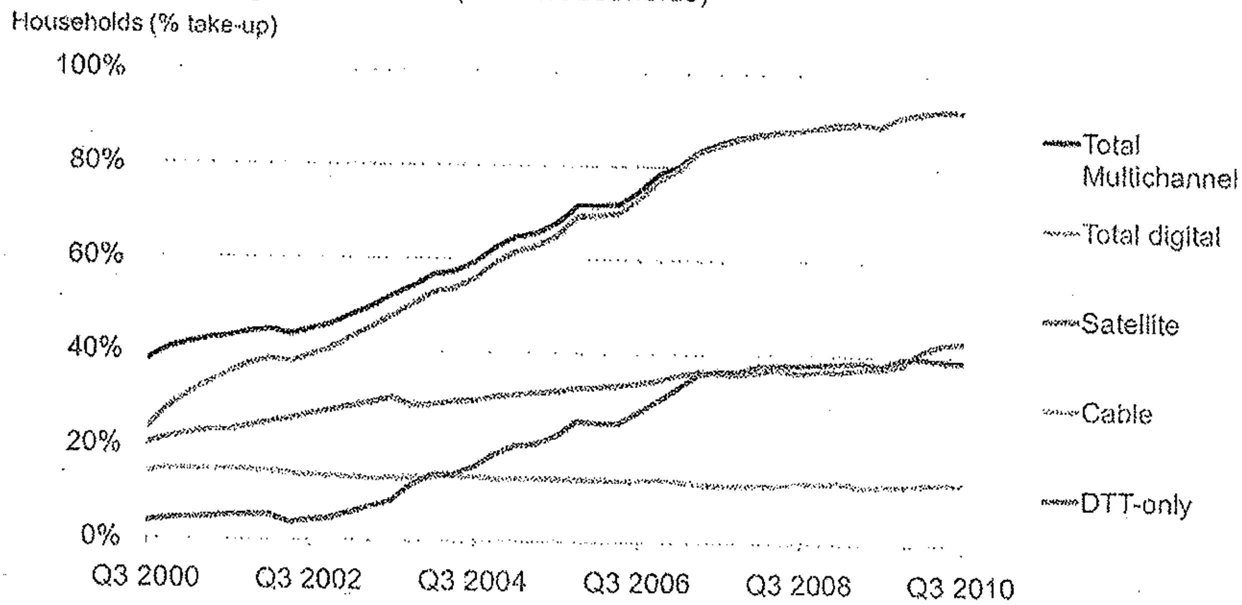
Progress to digital TV in the last 10 years

Take-up of digital television (% of households)



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Moving to HD on DTT → DVB-T2/MPEG4

Key linkage with switchover:
- Switchover creates 'spare' capacity from move to 64QAM modulation
- Allows one Multiplex to be cleared for DVB-T2/MPEG4
- Also means though that maximum coverage not reached until 2012

Advantage of aligning with switchover:
- Opportunity for viewers to upgrade to new technology
- Minimises channel changes and disruption for viewers

Content proposals:
- Capacity reserved for public service broadcasters
- HD services from BBC, ITV and Channel4/S4C initially available
- 2010 World Cup considered key driver for take up

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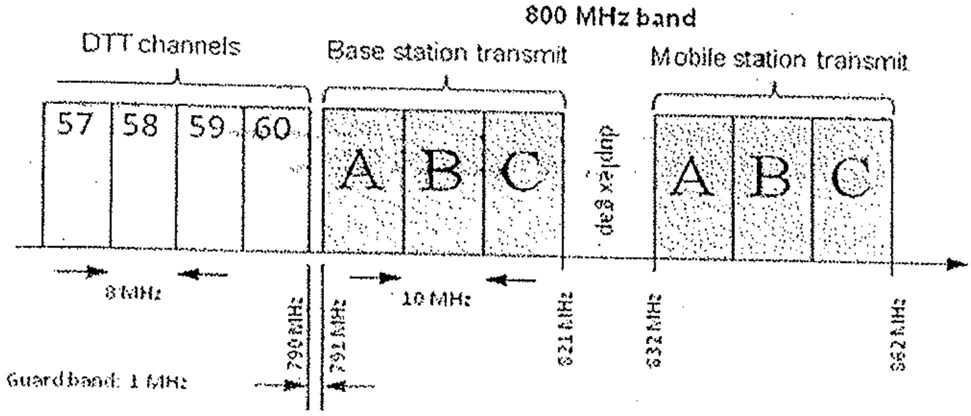
Digital Dividend

800 MHz Band



Significant programme of work related to 800MHz

- Consulting on how to award the 800MHz spectrum along with the 2600MHz spectrum
- Consulting on how to protect DTT viewers
- Implementing proposals to clear DTT broadcasting from channels 61/62 and PMSE users from channel 69
- Managing issues with emergency services at the top of the 800MHz band and possible other users
- Also work underway to manage interference from 2600MHz band into aviation radars

- *Following slides focus on just 800MHz and 2600MHz award and more for reference. Very happy to discuss any of the issues referenced above.*

Promoting investment, competition and coverage

- Our role is to secure the best use of the 800MHz and 2.6GHz spectrum for the benefit of UK citizens and consumers
- Our objective is to **support investment, promote competition** and **ensure wide availability of services**
- We published our consultation on 22 March:

  Assessment of future mobile competition and proposals for the award of 800 MHz and 2.6 GHz spectrum and related issues

- Consultation closed end May and currently considering responses
- Following slides highlight the key issues raised in the consultation.

Government Direction to Ofcom (December 2010)

- Liberalise existing 900MHz and 1800MHz licences
- Vary 2.1GHz licences
- Revise annual licence fees payable in respect of 900MHz and 1800MHz licences
- Make 900MHz, 1800MHz and 2.1GHz spectrum tradable
- Assess likely future competition in mobile markets, taking into account possible effects of the combined auction, and including consideration of potential for new entry; put in place appropriate and proportionate measures to promote competition in such markets, including rules governing the auction
- Hold auction as soon as practicable after completion of competition assessment

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Assessment of likely future competition

- Grounded in results of Mobile Sector Assessment of 2009, and other work on mobile competition (e.g. mobile call termination)
- Considering different levels in the value chain:
  - retail, wholesale and network
- And different types of competitor:
  - national network operator, sub-national network operator, MVNO and reseller
- Focused on mobile broadband but considering implications for rest of the market
- Based in part on technical modelling of performance of next generation mobile broadband networks for a range of potential auction outcomes

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Provisional conclusions of assessment

- Outcomes likely to be better for consumers and citizens if there are at least four national wholesale competitors
- Holding enough spectrum of the right type is likely to be key to being a competitive national wholesaler in future
- Additional benefits if competitive sub-national networks were to develop further in future
- Access to suitable spectrum is likely to be key to such sub-national network development
- Do not see a need for regulated wholesale access if there are at least four national wholesale competitors

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Consequent proposals for combined award

- Rules to ensure that at least four parties each hold sufficient spectrum to be credible national wholesalers after the auction
- Safeguard caps on both sub 1GHz and overall mobile spectrum holdings, to mitigate the risk of distortions of competition in future from extremely asymmetric holdings
- Rules to facilitate bidding by potential sub-national network operators for part of the 2.6GHz band, to be used on a shared low power basis
- Possible reservation of part of the 2.6GHz band for this purpose

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Rules to promote minimum 4-player wholesale market

- Proposing rules guaranteeing that at least four licensees each hold at a minimum one of the following spectrum portfolios after the auction*:
  - 2x5MHz of sub-1GHz spectrum plus 2x20MHz or more of 2.6GHz spectrum
  - 2x5MHz of sub-1GHz spectrum plus 2x15MHz or more of 1800MHz spectrum
  - 2x10MHz of sub-1GHz spectrum plus 2x15MHz or more of 2.6GHz spectrum
  - 2x10MHz of sub-1GHz spectrum plus 2x10MHz or more of 1800MHz spectrum
  - 2x15MHz or more of sub-1GHz spectrum
- Bidders that do not already hold one of these minimum portfolios to have the option at the start of the auction of electing to compete to be one of the four
- May also have to compete with each other to win the specific portfolio that they most prefer
- In any case, all bidders to compete on an equal footing for any other spectrum that they wish to acquire (in excess of that needed to satisfy the condition)

*Other options are also considered in the consultation

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Safeguard caps

- Proposing safeguard caps on sub-1GHz and overall spectrum holdings in the auction:
  - sub-1GHz cap of **2x27.5MHz** (800MHz and 900MHz spectrum)
  - overall spectrum cap of **2x105MHz** (800MHz, 900MHz, 1800MHz, 2.1GHz paired, 2.6GHz paired and 2.6GHz unpaired spectrum)
- Intended not to prevent bidders from acquiring efficient quantities of spectrum, but to prevent them acquiring more spectrum than likely to be needed in practice
- Given only safeguard caps, no need for existing licensees to have option of relinquishing spectrum into the auction (although 2x15MHz of 1800MHz spectrum to be divested by EE might be included in the auction)

Shared low power use of some 2.6GHz spectrum

- Proposing rules to enable bidders interested in using some 2.6GHz spectrum on a shared low power basis (with perhaps up to 10 such concurrent users) to compete with individual high power bidders – most likely for 2x10MHz, but possibly for 2x20MHz
- Consulting on option of reserving some of the 2.6GHz spectrum for this purpose

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Ensuring availability of future mobile broadband services across the UK

- Proposing to include a coverage obligation in one 800MHz licence:
  - a minimum 2Mbps downlink service
  - covering 95% of UK population
  - to 90% of indoor locations
  - by end of 2017
- Consulting on whether, and if so how, to specify an additional obligation (on same licensee) to ensure a minimum level of coverage across the whole of the UK, including in 'rural' areas
- Consulting on option of retaining power to partially revoke licences in specific circumstances (when needed to meet specific public policy goals)

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Future annual licence fees

- Consultation includes details of how we propose to:
  - Assess competitiveness of auction for purpose of deciding whether bids are likely to reflect true market value
  - Derive estimates of the full market value of 900MHz and 1800MHz spectrum from bids
  - Convert those estimates of full market value into annual licence fees

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Auction design

- Proposing to use the same Combinatorial Clock Auction format as used for the L-band and 10-40GHz auctions, and proposed for the 2.6GHz auction
- Additional rules to implement competition proposals
- Slightly revised pricing rule
- Consulting on appropriate level of reserve prices:
  - Proposing that reserve prices should at least cover costs of clearance
  - Consulting on option of setting reserve prices for reserved spectrum (required to satisfy competition conditions) closer to market value of spectrum (to mitigate risk of inefficient outcome)

Non-technical licence conditions

- Proposing that:
  - licences be of indefinite duration, continuing until relinquished by the licensee or revoked by Ofcom
  - revocation on spectrum management grounds to be possible with 5 years' notice, but only after an initial period of 20 years (to end of 2032)
  - rights and obligations to be tradable, with all types of transfer permitted, subject to Ofcom being content that any trade would not give rise to a distortion of competition
  - licensees to be obliged to provide us with information about their use of the spectrum which we may then publish

Other issues

- Consultation document includes latest information about likely timing of clearance of 800MHz spectrum and remediation of 2.7GHz radars
  - Will publish further information as it becomes available
- Consultation does not include proposals for DTT coexistence, or technical licence conditions required to prevent harmful interference to other neighbouring spectrum users
- Propose to liberalise existing 900MHz and 1800MHz licences to allow use for LTE and WiMAX systems, as well as GSM and UMTS systems, once RSC Decision is amended (anticipate later this year); similarly for 2.1GHz licences in due course
- Separate work ongoing re mobile not-spots and how they might be addressed; further information in due course

Next steps

- Plan to make decisions and publish statement in the autumn, along with IM and draft regulations
- Plan to make regulations around the end of the year
- Plan to invite applications in Q1 2012 with auction starting shortly thereafter
- Anticipate auction ending in Q2 2012 with licences issued shortly thereafter
- Plan to consult on revised annual licence fees for 900MHz and 1800MHz licences reflecting full market value as soon as practicable thereafter