

# Broadcasting's survival in the age of Internet

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# The agenda...

- What is the technical and service 'horizon' for content delivery?
- How do broadcasters see broadband?
- What is the broadband landscape today?
- What needs to be done?

# What are the **three** most certain television changes?

- **Digital Switchover.** The transition to digital terrestrial broadcasting should take place in Europe in the next four years.
- **High Definition Television.** In five years, the only TV programme production equipment on the market will be HDTV. All TV receivers sold to the public will be HD-ready. Holiday videos will be better technical quality than normal TV. It must be done. Move to 1080p/50 production.
- **Internet TV.** By 20nn, Internet TV via broadband will have as many viewers/users as broadcasting. Internet is becoming a 'video based' medium. Services will include; Podcasting, Catch-up TV and Radio, iTunes, virtual worlds, and others not yet devised. The 'YouTube Generation' is growing.
- **These three changes are all happening at the same time.**

# What are the 'possible', but not certain, changes?

- **IPTV** (closed garden IP delivery of television). Business model based on pay services and subscription.
- **Broadcasting to handhelds**, using DVB-H, T-DMB, MediaFlo, etc. current business model are based on subscription.
- **Services to portables** using 2.5G, 3G, 4G. Business model based on pay services and subscription.
- **All of these are based on subscription and/or pay service models.**
- **They all need programmes/content that people are willing to pay for.**
- **Their success is uncertain but possible.** 'Join them, but don't start them'.

# Over the horizon.

- **3D Television.** No one knows yet how to make a 3D TV system that does not hurt your eyes after watching for a time. But a lot of labs are working on this today, so there may be breakthroughs. 3D is fashionable in Hollywood.
- **Digital cinema but** directly to the home. Warner Bros is negotiating with TV manufacturers to make near CinemaScope-wide TV sets for the home, for Blu-Ray HDTV play-out. Internet/satellite delivery?
- **Quality beyond HDTV – including SuperHiVision.** SHV will have pictures with 32 times as much detail as current HDTV, rather like “I-Max”. This is practical technology, but its use is probably some time away. Higher frame rates, and ‘surround view’ may be interesting.

# The Internet situation today for EBU broadcasters

- Over **90%** of EBU broadcasters have advanced web sites. Virtually all are in the top 100 sites in their countries.
- Over **70%** of EBU broadcasters do streaming of TV or radio programmes, and on-demand.
- Over **60%** Podcast radio or TV programmes.
- Over 80% assume 500kbit/s availability or higher.
- About 50% of EBU members provide services to IPTV networks.
- Based on Survey at EBU Technical Assembly. May 2008

# The addition of broadband to the 'broadcasters' delivery family.

- About 70% of EBU Members believe broadband will be as important as, or more important than, broadcasting at some point in the future.
- Most common projected timescale for this is 2012-2015.
- About 70% of EBU Members believe that the programme production budget for broadband content will match that for broadcasting at some point in the future.
- Most common projected time scale for this is 2012-2015.
- Need for broadcasters to become 'media providers' for broadcasting **and** broadband, and to develop/understand IP network architecture, to arrange for lowest cost, highest quality, distribution networks. CDNs may be a 'market'.
- Based on Survey at EBU Technical Assembly, May 2008

# What is happening on the web today?

- 800-1000 million people (world population 6.5 billion) use the web. Note that **globally** the web is popular, but not nearly as popular as TV or Radio (more than 4.5 billion) today.
- There are **tens of millions** of web sites available.
- But **less than one hundred** reach more than 93% of the worldwide audience
- **Less than ten** reach more than 90%. The so called 'long tail' has a very thin tail.
- The top nine web worldwide companies are: Google, Microsoft, Yahoo, Time Warner, EBay, Wikipedia, NewsCorp, Amazon, and Apple. **All** of them are big American companies.
- In reality, the web is becoming dominated by 'media giants'. Will the top ten even reduce to five?
- **“Every web user in the world is now working for Google”**

# What is happening on the web?

- EBU Members generally do 'not badly': All but two EBU Members are in the top 100 sites in their country.
- But the sites gaining are those which have big budgets.
- 'To he who already hath, will be given' .....
- Overall, the web will **not** be the 'great democratizer' of the media.
- Even on 'YouTube', the most popular clips are professionally produced.
- The web is a 'market economy', and will behave like one, not like a 'social service'.
- The web will be another means to provide viewers with content by big, rich companies, not by the citizen...
- The oligarchy-type order of professionally made content will not change...
- **We have to recognize the web for what it is – another means to distribute programmes, this time with world wide 'competition'.**

# What are the technologies we need?

We are on a journey.

# The tide is moving to 'free services'.

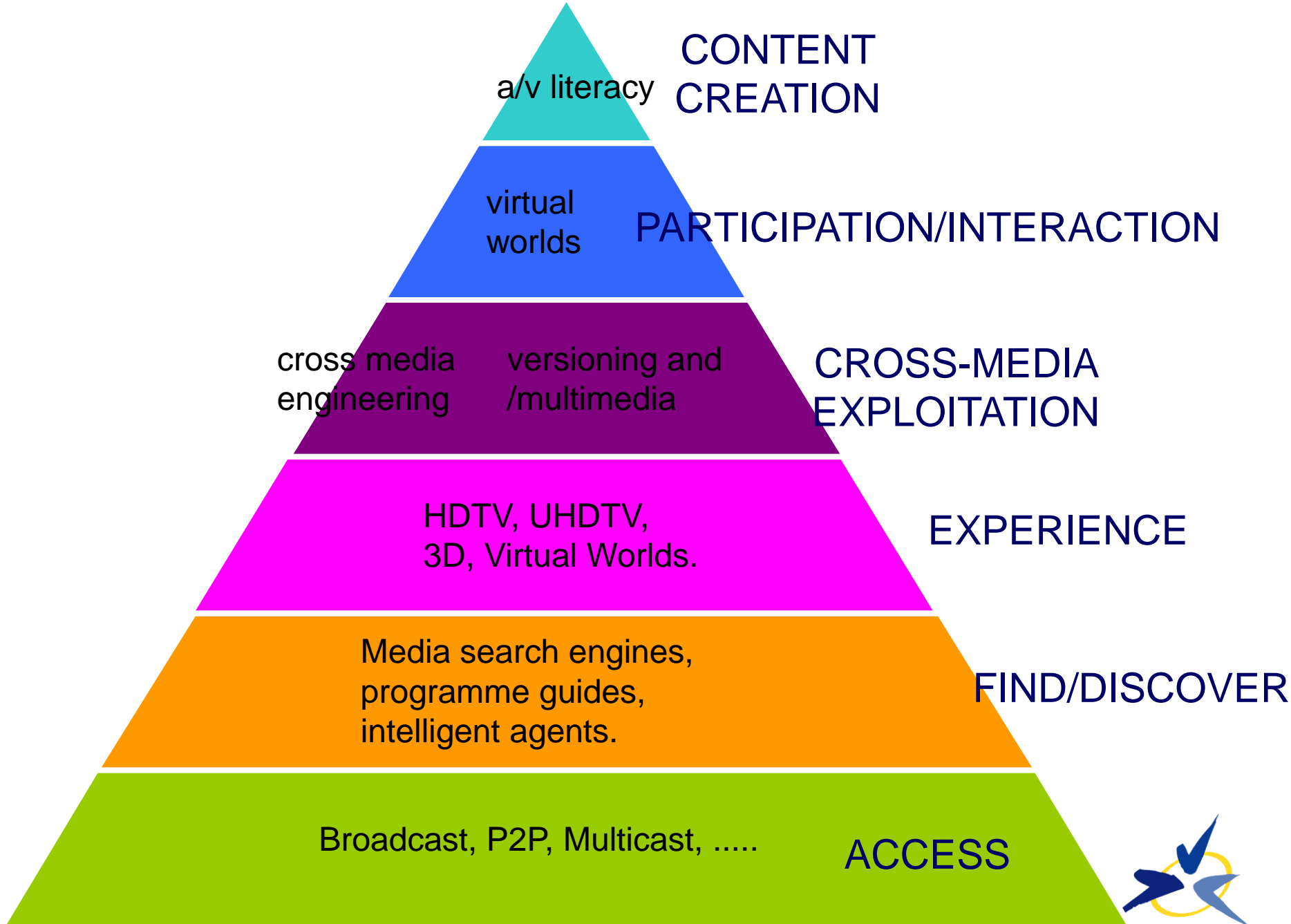
- Because of the Internet environment, the public is growing to expect 'free services'.
- The public has no conscience about 'pirating' music or video on the Internet. To succeed, pay services will probably need to cost less than the cost of pirating them.
- Free to air broadcasters are well placed for this environment. The public service broadcaster's mission is to reach viewers and listeners, **not** to make a large profit.
- No matter what DRM system we devise, someone will want to defeat it, and will eventually succeed.

# The tide is moving to 'social objectives'.

- The media is following an evolutionary path.
- The path is towards greater 'contribution' by the user – interactivity, content creation.
- The path is towards greater 'communities' by users. This includes sharing of videos, pictures, lives.
- These are social, not business, objectives.
- Free to air public service broadcasters are well placed for this.

# The most important motor for change in media..

- The greatest force for change is 'Internet'.
- This is because Internet infrastructure already exists (networks, PCs), and so introducing new services is simple. This is different to services such as broadcasting to handhelds, where new infrastructures (receivers, transmitters) are needed.
- Picture quality on the Internet is becoming 'watch-able', as broadband becomes more available, and as technologies like P2P are developed. The Internet is changing from a 'text' medium to a 'video' medium.
- **Internet TV looks to be the more important use of broadband compared to IPTV, because of lower costs, and much greater content availability**



# Let's invest in the long term...

- Free-to-air broadcasters will be a major (and European) part the broadband environment.
- Broadband will add to the range of delivery options, but never replace broadcasting.
- R and D: P2P seems to work well, but network asymmetry probably limits P2P delivery capacity..
- End notes: Multicasting capability in Europe please.....
- End notes: Aim for 140Mbit/s network capacity into the home in 5-10 years. 720p/50, 1080i/25 needs 10-14 Mbit/s.
- End notes: Wireless broadband' below 1GHz will NOT provide a future proof service. In 5 years the capacity available will inadequate. Europe needs higher bands WiMAX, or a 'fiber-optic' Internet service.

Thank you for your attention

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