

EBU TECHNICAL



**‘Digital Dividend:
Challenges and Opportunities in the New Digital Era’
Broadcasters’ perspective**

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EBU - European Broadcasting Union



75 Active EBU members from 56 countries

45 Associate members around the world

470 TV channels and 904 Radio channels

195 million TV households and 604 million viewers every week

more than 60 million people visit EBU members web services every day



What is dividend? What is the digital dividend?

- A '**dividend**' is the cash reward for your investment that you expect, and sometimes get, at the end of a business cycle. It is the payback for an investment.
- The **Digital Dividend** is similar. It is the payback for the investment in the **digitization of broadcasting**.
- The **investment** in digital broadcasting will be made
 - partly by the **broadcaster**,
 - and partly (read: mostly) by the **public** who have to change their receivers.

One can argue that both parties should have an a share in the 'payback' or dividend for going digital.

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Regulators' dilemma:

How to allocate the digital dividend?

Many candidate services /technologies:

- more (and new) broadcasting services
- mobile communications
- broadband
- bridging the digital divide
- new and emerging technologies (e.g. cognitive radio,...)

- public vs. commercial interests
- consumer's choice?

Policy issues:

- maximising economic benefits
- maximising social value
- 'broadband for all'; bridging the digital divide
- media and audiovisual policy objectives
- promoting innovation
- promoting competition

Decisions to be made now will have major implications in the coming years.

Some changes will be irreversible.

All players are not created equal - different missions, objectives, needs, business models, market positions, (inter)national situations, ...

They all require **access** to spectrum and sufficient **capacity** to deliver interference-free digital services in relation to their mission.



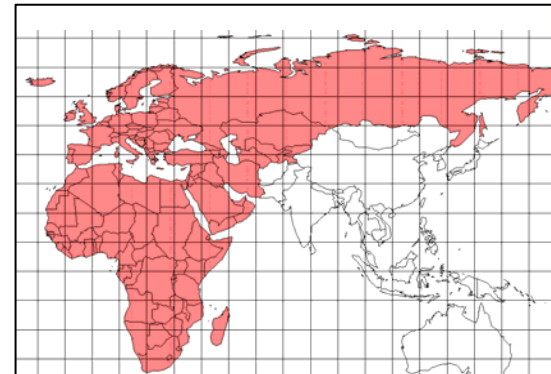
Broadcasters can make a good use of digital dividend

Digital terrestrial platform is unique as it combines many important aspects:

- free-to air, universal access
- relatively cheap consumer equipment
- universal, but also regional and local coverage
- delivery to roof-top fixed, portable indoor, mobile and handheld receivers
- DVB-T is a very efficient technology for delivery to a large audience
- potential for new services (mobile TV, HDTV, broadcast data, ...)
- the main driver of the digital switchover

The GE06 Plan for Bands III and IV/V

- harmonised in 180 countries
- based on the principle of equitable access
- based on the European standards (DVB-T, T-DAB)
- flexible and forward looking
- allows natural evolution of technology and services



Across Europe DTT is the fastest growing delivery platform - even in the countries with a high penetration of cable and satellite TV.

Public Service Broadcasting

PSBs deliver high quality content to all segments of the population, irrespective of their ability to pay for services.

- Broadcasters invest €19 billion in original European TV programming annually
- EBU Members invest €10 billion annually in new European TV productions
- That represents 87% of all investment in original European programming (excluding news programmes)
- Broadcasters employ 2.2 million people directly or indirectly

High public and consumer value – broader contribution to society (difficult to quantify):

- universal access
- free-to-air services; technical excellence
- social and cultural benefits
- leading the digital switch-over; making the digital dividend possible

→ Each national market needs a *critical mass* of Digital Terrestrial Television both public and commercial to ensure a functioning TV market
=> DTT must remain competitive to other platforms



Allocating the digital dividend (1)

Broadcasting

- Technology evolution (switchovers):
 - Analogue → Digital
 - MPEG-2 → MPEG-4
 - SDTV → HDTV
 - DVB-T → DVB-T2
 - ...
- New services (HDTV, mobile TV, broadcast data, ...)
 - Outside Europe (USA, Japan), HDTV has been the driver of DTT
 - In Europe, HDTV is already present on the terrestrial platform.
 - Virtually all TV sets on the European market are HDTV enabled
→ consumers' expectations
 - Mobile TV with different business models
- PSBs have legal obligations and constraints.
- Broadcasting is dynamic and innovative – spectrum capacity is needed for new services yet to be developed.

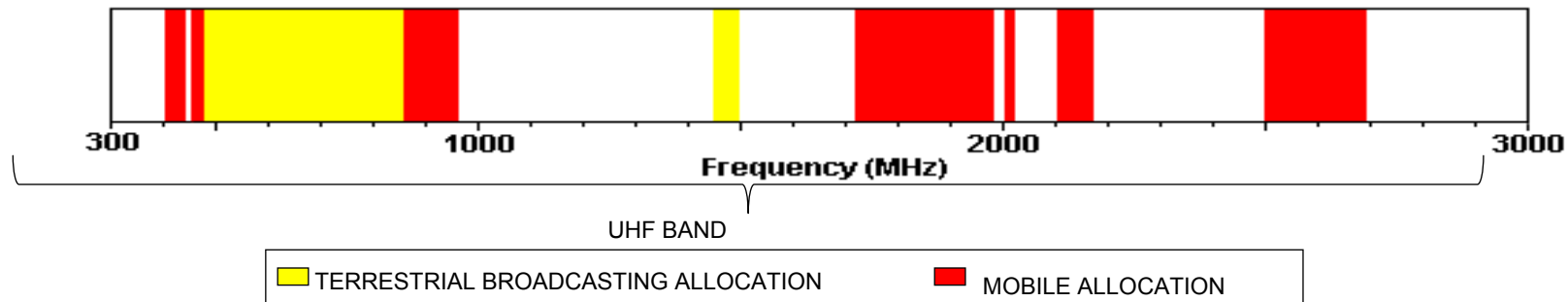


Allocating the digital dividend (2)

Mobile services

- Extending existing platforms (better coverage, reduced costs, ...)
- Introduction of next generation mobile systems (e.g. LTE)
- The spectrum already available to mobile services should be used first!

SPECTRUM ALLOCATION IN EUROPE TO TERRESTRIAL BROADCASTING AND MOBILE SERVICES



Wireless Broadband

- limited capacity in UHF band; potential QoS issues
- there is unused spectrum where higher bitrates can be achieved than in UHF
- business case is unclear

Possible **interference** problems between broadcasting and mobile services may result in inefficient use of spectrum.

On broadband

- Broadband is recognised as a new deliver platform that potentially offers big opportunities to broadcasters. In particular, wireless broadband is important for delivering innovative new media services.
- Media applications are among the main drivers of broadband deployment. Good quality content is the key!
- **We support universal high-speed access to the internet to everybody, everywhere!**
- It is important to examine which is the *most efficient and sustainable way* to achieve this result.

Rural broadband – UHF band is not an answer!

- Business case is weak: who will invest in the infrastructure in rural areas?
- What kind of broadband services will consumers get and for which cost?
- Insufficient capacity to meet the growing demand: If only a ‘second class’ broadband access is provided to rural areas it will broaden the digital divide.
- Alternative systems and competition already exist in the market
- Rural broadband will almost certainly need direct government subsidies



Conclusions

- In allocating the digital dividend public interest must be protected.
- Any allocation of spectrum should have the flexibility to accommodate evolving broadcasting services and the transition towards new technologies.
- Regulators should recognise differing business models of potential spectrum users, their overall value to society, their market respective position and their ability to monetise consumers.
- Consumer choice: DTT shall remain a competitive platform with attractive number of channels and services, both public and commercial.
- Broadband is an enabling platform which is vital for many services. It must therefore be considered in a broad context and shall not be confined within digital dividend discussions.
- Efficient use of spectrum should be imperative for all users.

The digital dividend spectrum has been used for public service.

- Will the public service frequencies continue to be used in public interest?
- The existing models of providing mobile broadband are purely commercial. If public spectrum is allocated to new broadband services, can we find a way to create a **public value** in this evolution?



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Thank you

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