EBU ECS Workshop
Geneva, 7 October 2010

Implementation of the Digital Dividend in European Countries

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Purpose of the Workshop

To discuss

- the status of the implementation of the Digital Dividend in European countries
- address how and when 790-862 MHz band will be freed from broadcasting services
- how broadcasting services will be affected
- the licensing conditions to award the band to mobile operators

Workshop programme

- Harmonized technical conditions for the use of the 800 MHz - EC Decision (2010/267/EU)
- Individual country situations and auction approaches
- Presentations from administrations and network operators from Croatia, Germany, Netherlands, Sweden, Spain, UK
- DigitiTAG position paper: Necessary measures for limiting potential interference from mobile/fixed communication networks to broadcasting services in the 470-790 MHz
- Panel Discussion

What does the Digital Dividend mean?

Since digital television needs less spectrum than analogue television for roof-top reception some spectrum may be released after the analogue TV services have been closed down. This release of spectrum is usually referred to as “the digital dividend” (DD).

The released spectrum could be used for a range of purposes such as

- increasing the number of digital terrestrial broadcasting services (e.g. designed for reception on roof-top antennas or set-top antennas);
- improving the coverage of digital TV transmissions enhancing indoor, portable and mobile reception;
- digital TV services designed for reception on hand-held receivers (e.g. DVB-H)
- enhancing sound and picture quality, in particular High Definition TV;
- non-broadcasting services, such as WiMAX, UMTS, etc.

What does the Digital Dividend mean?

- A fair and well-balanced reallocation of the spectrum between the mobile broadband, broadcasting and ICT industries will ensure that society reaps the full social and economic benefits of the Digital Dividend

- The Digital Dividend spectrum is located between 200 MHz and 1GHz. This spectrum band offers an excellent balance between transmission capacity and distance coverage

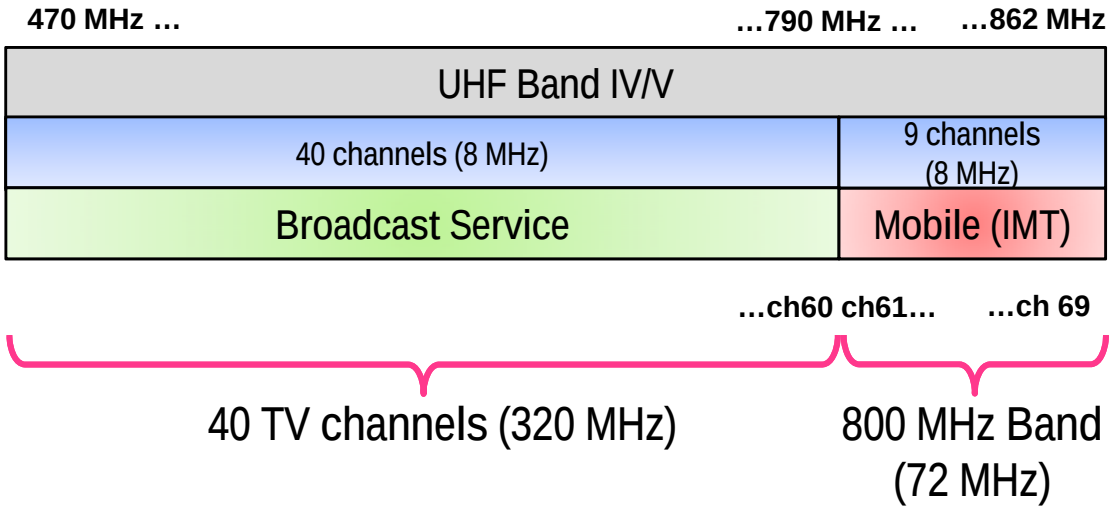
- If just 25%, or around 100MHz, of the spectrum currently used by analogue TV (470 - 862 MHz) was re-allocated to mobile communications, the mobile industry could dramatically speed up the rollout of broadband communications and increase coverage

Extract from GSMA web site

Digital Dividend

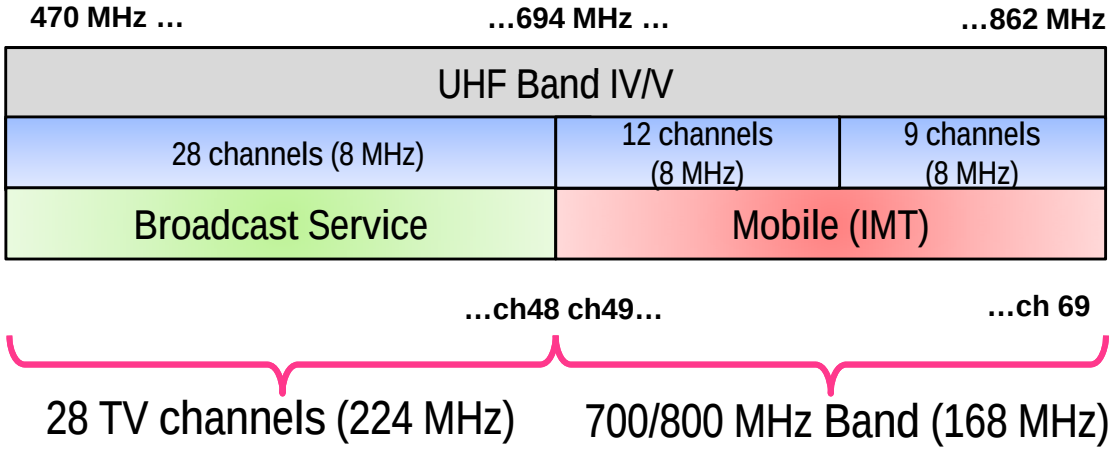
- **Europe, Africa and Middle East and some of Asia Pacific**

This is likely to be the situation in most European countries by 2015



- **America + 9 Asia Pacific countries (inc Japan, China, India)**

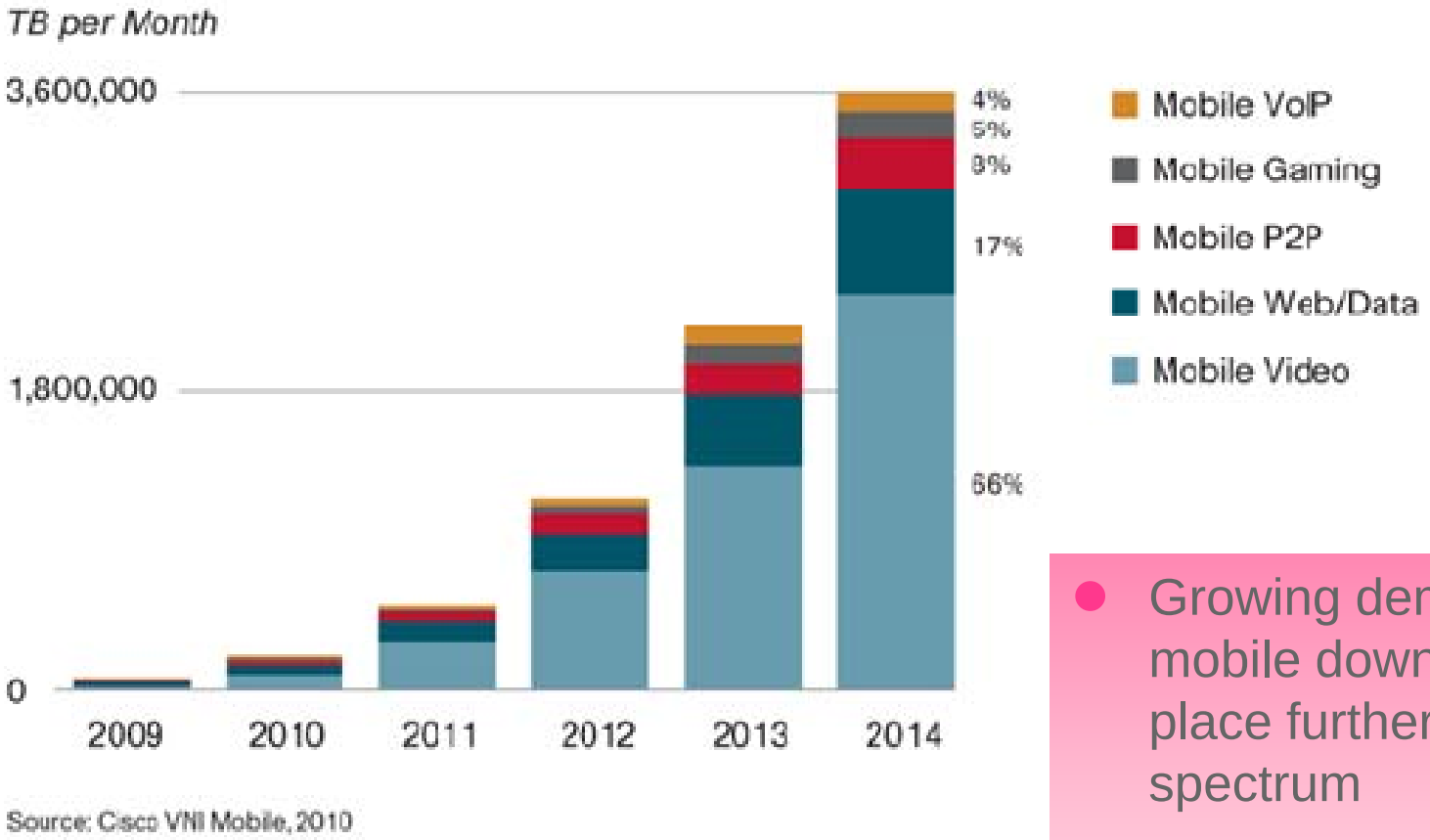
Pressure is increasing to go in this direction WRC-2016?



Future of 700 MHz band: a UK broadcasters perspective

- Any clearance of the 700 MHz band likely to require a complete re-plan
- It is likely that this would require a new ITU conference to re-plan the European DTT networks to ensure equitable access to spectrum
- Doubtful this would achieve the same levels of coverage from the same number of multiplexes. Could be a significant deprivation of service to those who have already undergone DSO and who rely on DTT
- Likely that expensive re-engineering on the scale of the current DSO network build-out would be required
- The process would require a similar level of public communication as for DSO (taking 4 years +) and it would be difficult to imagine it starting in less than 7 years from now

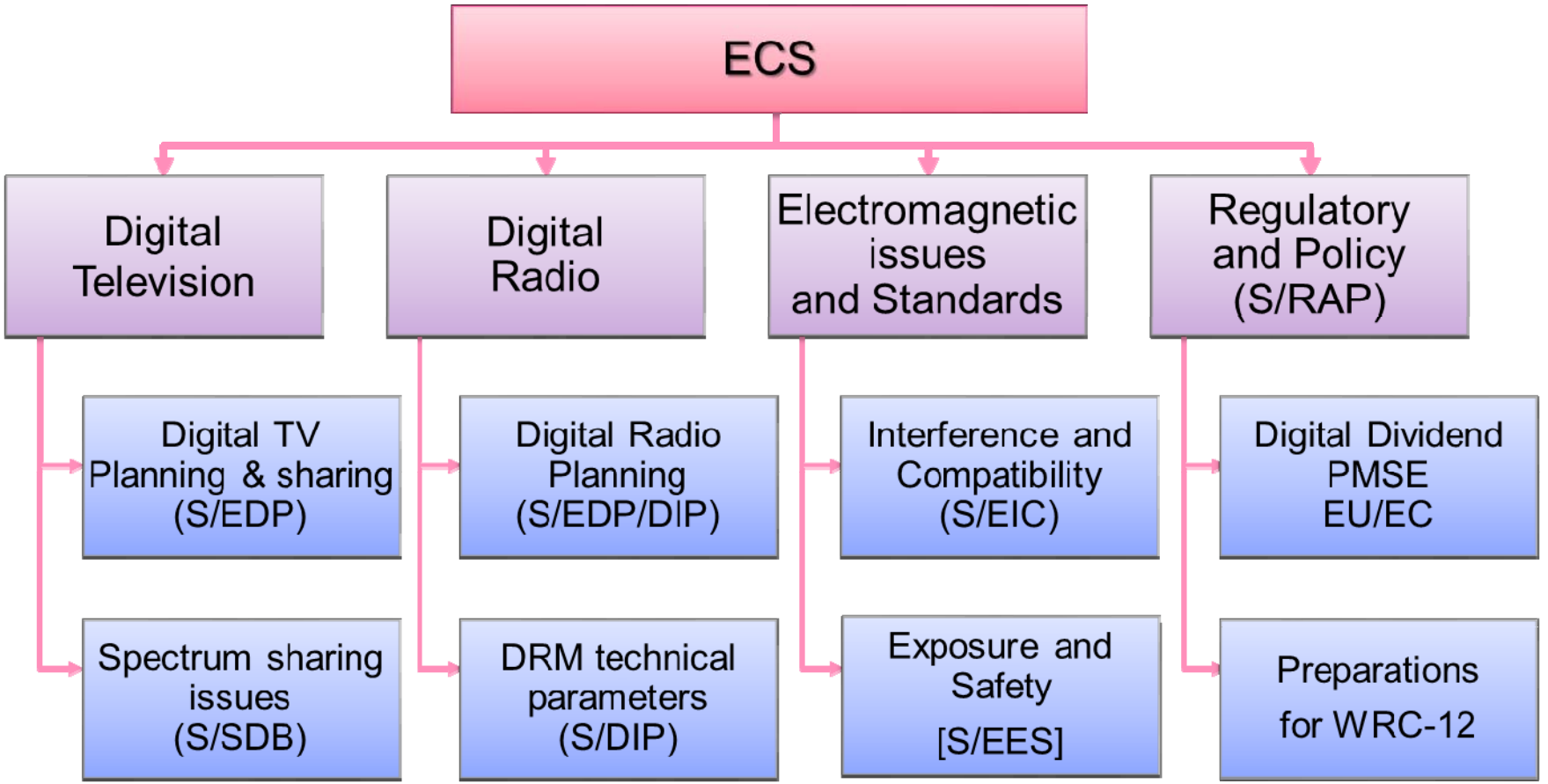
Drivers for further clearance of broadcast spectrum



Source: Cisco VNI Mobile, 2010

- Growing demand for 3G/4G mobile downlink capacity will place further demands on spectrum
- Opportunity or threat for broadcasters?

Activities of EBU Experts Community on Spectrum - ECS



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