WORKSHOP

Digital Dividend: Market Challenges and Public Interest Goals

PRESENTATIONS SUMMARY

10:20-10:40 **THE SPANISH EXPERIENCE. FRAGMENTATION OR REGIONAL APPROACH?**

Antonio Fernández-Paniagua DÍAZ-FLORES | *Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información*

- Digital Terrestrial Television evolution in Spain, present situation and after the switch over.
- Plan to promote Digital Terrestrial Television.
- National Technical Plan for Digital Terrestrial Television and National Technical Plan for Local Digital Terrestrial Television.
- Spanish Technical Plan for Digital Terrestrial Television switch-over that was approved in Council of Ministers on September 7th 2007.
- The Geneva 2006 (GE-06) Agreement.

And how all of them influence the availability of digital dividend in Spain.

11:00-12:30 **TRENDS AND INNOVATION – MOBILITY, UBIQUITY AND ACCESS TO INFORMATION | VISION OF THE INDUSTRY AND APPLICATIONS**

Jean-Pierre LACOTTE | HD-Forum France, representing DIGITALEUROPE / AGEFE – *Associação Empresarial dos Sectores Eléctrico, Electrodoméstico, Fotográfico e Electrónico*

- DIGITALEUROPE – This is the new name of the European Information and Communication Technologies and Consumer Electronics Association (EICTA). This seminar comes at the right moment for the pan-European (and portuguese) commercial roll-out of digital television, even during a general economic crisis (television helps people keep going… even through difficult times).
- New formats of broadcast services in Europe are meant for mass audiences. The variety of these digital broadcast services, point to multipoints, radio, television, SD, HD, mobile, and many others, requests the usage of VHF-UHF radio frequencies combined with an optimized management of available scarce frequencies for indoor, outdoor or mobile reception. This is especially true in areas where the frequency allocation have to be managed with the neighbouring countries. Bear in mind that in many countries terrestrial broadcast transmission

represents for the household a large percentage of them, often ahead of satellite, cable or ADSL reception. This social weight of direct broadcast needs to be taken into account by the policy and frequency planners. The frequency spectrum needs adequate management to protect these services against interference.

- On top of those new formats, High Definition and mobile TV are the new "hypes" for television and will be shortly the de facto standard. By 2012 in most European countries, at least one TV per household will be HD. Once you have seen it, you don't want to go back to lower definition. A suitable regulator framework and the availability of very attractive direct broadcast contents are acceleration factors for the take-up by consumers.
- After the introduction of new formats of broadcast services, the corresponding digital switch-over may free some frequencies for other applications. Frequencies may be open for allocation to new services, with a decision power for each Member State of the European Union, at country-level.
- The spectrum efficiency for data transmission over allocated frequencies must continue to be improved with existing and up-compatible technologies on compression and transmission whether it is for broadcast or other network types. However major migrations when they appear mandatory must be anticipated first. Reallocation of bandwidth must also be prepared to avoid damage or pollution of the already installed base (e.g. potential problems for channels 61 to 69)
- Given the high value of the spectrum associated with the UHF digital dividend, DIGITALEUROPE recommends that policy makers decide quickly on this matter. Undue delay may result in missed opportunities. The following principles, however, should be taken into account:
  - observing the existing diversity and pluralism in terrestrial broadcasting media, but at the same time considering the availability and usage of a multiplicity of new and mobile media channels;
  - acknowledging the differences of national markets, but aiming in particular at growth and maximization of the internal European market;
  - recognizing that pan-European harmonization is highly desirable, for broadcasting and mobile applications where common pan-European frequency arrangements for mobile use will provide economies of scale and will provide a wider selection of devices and networks. Pan-European frequency arrangements will also facilitate roaming whereas deviations from harmonization will result in market fragmentation;
  - within these constraints the spectrum should be managed with a technology and service-neutral approach;
  - considering the consumer trends and preferences as well as related trends in business and professional communication;
  - maximizing the overall economic, social and environmental benefits in each country and the European Union;
  - ensuring emergency communications have the necessary bandwidth to enable data and video applications in a mobile environment to protect safety of life;

  - supporting technology innovation, but maintaining and even improving long term overall spectrum efficiency;
  - considering the urgency of this matter as other regions of the world are already on the way of implementing the UHF digital dividend spectrum.
- In the convergence age, users, media and operators all recognise the joint value of broadcast and other (interactive) networks: new combined services with demonstrated added value for the end user are needed. The right balance between broadcast, network and user connectivity should be the common aim.
- Consumers buying an HDTV set will inquire on the programmes available. Those which are received free to air are particularly important for the consumers, because they are available anywhere and to anyone, hence they comfort the customer at the point of sale in his/her choice to go HD. DIGITALEUROPE has defined and implemented with its member a logo programme giving instant and unambiguous information to the consumers on the capabilities of the TV sets:
  - HD Ready label: the TV can display HD.
  - HDTV: the TV can receive HDTV.
- Similarly, for Digital Radio, DIGITALEUROPE is in the process of defining a Digital Radio label, aiming at unambiguously signalling receivers equipped for the newly agreed digital pan-European radio reception profiles.
- Portugal is on the tracks to digital SD and HDTV! Let us wish you, on behalf of DIGITALEUROPE, a good start, and a successful take-up. You will not be alone in the race: at DVB World 2009, substantial implementation results have been reported for France (DVB-T, HD in MPEG4) and UK (DVB-T2 for HD) among others. You can count on us should you need to consult the industry, or just wish to ensure that the technologies chosen are aligned with the rest of Europe.

Cengiz Evci | Alcatel Lucent France

- Opportunities of Digital Dividend Spectrum Clearance: An Industry Point of View (ALU)

  Release of spectrum from band IV/V called digital dividend will provide major challenges for the provision of new services other than broadcast, such as mobile. An efficient use of this spectrum, identified as 72 MHz, in Europe allows mobile operators to allow a cost-effective, continuous, broadband experience, targeting for expanded rural coverage and better quality coverage in urban areas. With regard to the European situation, prompt harmonisation across Europe of UHF spectrum for mobile broadband services will significantly benefit Telecom players while ensuring the most cost-effective use of this valuable spectrum. For mobile customers, this band will be available in Europe around 2012, will use either of the UMTS/HSPA or LTE technologies depending on successive releases according to the decision of operators while taking the profit of the flexibility of the multistandard base stations. This presentation summarizes Alcatel-Lucent views on this highly strategic topic which is currently receiving worldwide considerable interest.

Hans HÖGLUND | Ericsson

The digital dividend gives an exceptional opportunity to satisfy both user needs and national policy requirements. If done properly the access to low frequencies in UHF band will give cost efficient operations and affordable services for all; with contiguous blocks for feasible terminal implementations; providing mobile broadband coverage wherever needed; and closing the digital divide.

Michael KRUMP | Nokia Siemens Networks

The digital dividend is a "one-in-a-generation opportunity" to get valuable spectrum for wide-area mobile broadband access to Internet and in particular for mobile broadband communication services. Excellent propagation characteristics at such frequencies will allow to extend mobile access to sparsely populated areas for providing broadband wireless services at economically viable conditions while at the same time, subscribers in urban areas may benefit from the increase of capacity at the cell-edge.

Luís MARTINS | Cisco

Applications, particularly video-related, as well as radio technologies used for mobile data, have developed exponentially, causing the accelerated growth in the use of Mobile Internet. The release of spectrum in the designated "digital dividend" band below 900 MHz can be an important mechanism for mobile Internet's expansion regarding speed and coverage in rural or half-rural areas in an inexpensive way. Several applications, such as the ubiquitous Internet access at any location, associated applications such as customized video, access to social networks, economic benefits of the general use of the Internet, and the connection to telemetry devices are all possible by using the "digital dividend" spectrum for mobile Internet service.

14:30-15:30 MOBILE OPERATOR PANEL

António CARRIÇO | Vodafone

- Broadband area across the country

15:30-16:00 DTT PLATFORM OPERATOR

Luis Miguel SANTO | Sonaecom

- Workshop "Digital Dividend: Market Challenges and Public Interest Goals" – Soanecom's perspective

The development of mobile broadband has been notable, not only in terms of the number of users, but also in terms of the growing level of data consumption. This

increase in data traffic requires operators to adopt an aggressive network development strategy, with the need for additional spectrum.
Another key aspect is the role which mobile broadband is playing as a driver of info-inclusion, giving context to the advantages brought by the deployment of future 3G and LTE networks in lower frequency bands, especially in the UHF band (digital dividend – DD).
The allocation of the spectrum resulting from the DD to mobile broadband will enable its social, cultural and economic potential to be harnessed, adding to the value created by its current use.

António Gil Moreira | PTC

- How conditions will be created to bring the "digital dividend" forward:
  - Full coverage of the population by the end of 2010 enables conditions which can bring forward the switch off.
  - Portugal as a case of success as the country with the shortest (or one of the shortest) network implementation times.
- Initiatives to raise awareness and encourage digital adoption by the population.

16:20-17:20 **Television Operator Panel**

Carlos Barrocas | RTP

- Options for using the available spectrum.
- The role of the Public Service in giving impetus to new radio and television services.

Francisco Maria Balsemão | SIC

- Digital Dividend: The Heritage