

# Alcatel-Lucent response to Public consultation on the draft RSPG opinion on EU spectrum policy implication on the Digital Dividend

## **Introduction**

Alcatel-Lucent<sup>1</sup> thanks the RSPG for this opportunity to provide comments to the draft RSPG opinion on EU spectrum policy implication on the Digital Dividend.

In responding to this RSPG opinion, Alcatel-Lucent recalls our opinions expressed in the review of EU Regulatory Framework where we gave strong support to the EC in its new approach to spectrum management since we view this as a key factor enabling the globalization of markets, large economies of scale, global circulation of terminals and international roaming of users.

A spectrum policy designating appropriate amounts of commercial spectrum bands and applying harmonization to the extent necessary are pre-requisites for long-term R&D investments by industry.

Furthermore, Alcatel-Lucent recognises the regional and global leadership role that Europe can take in this matter to encourage a harmonised approach throughout our Region and beyond.

## **Spectrum requirements for new users of UHF**

On top of the well-known requirement to support terrestrial broadcast television services, Alcatel-Lucent recognises the need to also support other users of the valuable UHF band resource.

Our priorities for access to the Digital Dividend are by decreasing order:

1. Rural Broadband Access (preferably above 700 MHz), a key enabling technology to bridge the Digital Divide
2. Mobile TV (preferably below 700 MHz) based on a harmonised Europe wide “corridor”
3. Rural Mobile Services (preferably around 500 MHz)

In addition we note the need to find adequate spectrum resources for Public Safety using Digital Dividend or other spectrum.

## **Specific Responses to Draft RSPG Opinion**

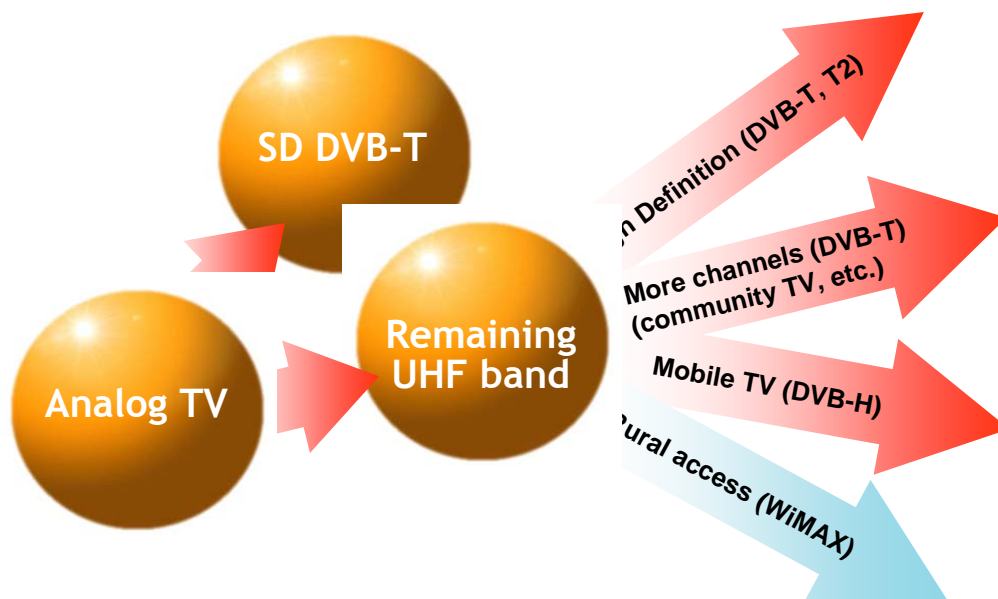
1. EU-wide benefits to the use of the digital dividend by fixed/mobile applications must be clearly acknowledged (i.e. change “may” to “would” in section 4.11)
2. The use of low-power, lower antenna height transmitters would be a viable technical solution to make available a high field strength downlink service for applications such as mobile TV. In particular, co-siting of such transmitters at existing mobile cell sites may prove to be an economical solution to provide adequate indoor coverage. It is noted that such an approach may facilitate the EU objective of finding a harmonised solution across

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<sup>1</sup> Alcatel-Lucent (Euronext Paris and NYSE: ALU) provides solutions that enable service providers, enterprises and governments worldwide, to deliver voice, data and video communication services to end-users. As a leader in fixed, mobile and converged broadband networking, IP technologies, applications, and services, Alcatel-Lucent offers the end-to-end solutions that enable compelling communications services for people at home, at work and on the move. With 79,000 employees and operations in more than 130 countries, Alcatel-Lucent is a local partner with global reach. The company has the most experienced global services team in the industry, and one of the largest research, technology and innovation organizations in the telecommunications industry. For more information, visit Alcatel-Lucent on the Internet: <http://www.alcatel-lucent.com>

Europe for this service without a significant disruption to the GE-06 Agreement (i.e. additional technical alternatives should be considered under section 4.10)

3. Rural broadband access is likely to require support for highly asymmetric down and up link capacities and should be handled on a technology neutral basis and hence a dedicated uplink band should not be designated (section 4.11)
4. Furthermore, rural broadband systems are expected to be a significant export business, while allowing the “Digital Dividend” to efficiently resolve the “Digital Divide”. A harmonised spectrum management approach within the EU of these advanced technologies would have a positive impact on the export potential of European technology throughout emerging markets in the Region and beyond (i.e. section 4.11.4 should address the need to balance the efforts of re-planning activities against the economic benefits of global rural broadband solutions, technologies and spectrum)
5. Advanced broadcasting technologies such as DVB-T2, further advances to video coding methods beyond the capabilities of MPEG4 and alternative broadcast platforms such as satellite, cable, DSL and FTTH should be anticipated. The pressure on UHF spectrum for High Definition Television may therefore prove to be less critical than currently considered (i.e. further technical advances beyond the introduction of MPEG4 should be added to section 4.12)



Overview of future evolution of UHF band utilization