Wireless World Research Forum Athens, 24 April 2012

Technologies and Visions for a Sustainable Wireless Internet

«European Spectrum Policies for the bridging of the digital divide»

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Ladies and gentlemen,

It is with great pleasure that I accepted your invitation to address the Wireless World Research Forum, in my capacity as President of EETT, the Hellenic Telecommunications and Post Commission and Incoming Chair 2013 of BEREC, the Body of European Regulators for Electronic Communications.

Radio spectrum is a scarce and extremely valuable national resource. Indispensable in broadcasting and mobile communications, it can play a key role in broadband development, particularly in rural areas. At the same time, it can help vastly improve the efficacy of a wide range of services, including transport, education, healthcare, public safety, energy production etc.

In this perspective, it is crucial for all Member States to ensure the efficient use of spectrum, in a way that promotes innovation and maximizes its economic and social benefits.

The European Radio Spectrum Policy Program (RSPP) translates the political priorities of the European Union into strategic policy objectives for the efficient use of radio spectrum. Based on the policy objectives defined in the RSPP, the European Commission, together with all Member States, will also work until 2015 on the following concrete actions:

• Ensuring that at least 1200 MHz of spectrum are identified to address the increasing demand for wireless data traffic and that the need for additional harmonized spectrum bands is assessed;

- Allowing spectrum trading throughout the EU in all harmonized bands where flexible use has already been introduced;
- Making available sufficient harmonized spectrum for the development of the internal market for wireless safety services and civil protection;
- Fostering different modes of spectrum sharing in Europe in order to ensure the efficient use of spectrum and increase spectrum access opportunities for wireless innovation;
- Ensuring that the radio spectrum can be used to support a more efficient energy production and distribution in Europe so that wireless innovations contribute to a low-carbon society;
- Finding appropriate spectrum for wireless microphones and cameras; and
- Defining, by mid 2013, at the latest, the details for the EU's radio spectrum inventory as well as for an adequate analysis of the efficiency of spectrum use in particular in the 400 MHz to 6 GHz range. This will form the basis, where appropriate, of further action on the coordination or harmonization of specific bands.

In particular, the Member States have to authorize the use of the following frequency bands which have been reallocated for high speed electronic communication services:

- The harmonized bands 900/1800 MHz, 2.5-2.69 GHz, 3.4-3.8 GHz by the end of 2012
- The 800 MHz band, by 1 January 2013, in particular to cover sparsely populated areas, except in case of individual derogation obtained before that date.

It is widely recognized that the digital transition not only increases the capacity of broadcasting networks but at the same time can release a substantial amount of spectrum in the 800 MHz band for other uses, the so-called "digital dividend". Technical studies are currently carried out to include the 700 MHz band in the digital dividend.

Numerous studies have amply demonstrated the economic and social benefits emanating from releasing such spectrum. Indicative is a study performed in August 2009, on behalf of the European Commission, according to which, using the 800 MHz band for wireless broadband

could generate, in addition to the social value, between 50 and 190 billion euro of private value (discounted value over 25 years), across the EU.

Another, more recent study, performed by the Boston Consulting Group in January 2011, estimates that the deployment of wireless broadband in the 700 MHz band would add 729 billion US\$ to the Gross Domestic Product of Asia, in addition to bringing significant consumer benefits, such as better access to education, improved healthcare and social inclusion.

The exploitation however of the digital dividend is anything but simple. Policy makers and regulators are called to address several challenges, which are highlighted in a study performed by Aetha Consulting on behalf of the GSM Association. According to this study, the main such challenges fall under three categories:

- (a) Justification of band clearance to facilitate mobile broadband use, including economic justification and structural challenges;
- (b) Obstacles related to clearing historic users from the band, including compensation issues, particularly when this also involves military uses.
- (c) Measures to prevent harmful interference to uses of neighbouring bands (or same band in neighbouring countries).

BEREC, which I have the honour of chairing in 2013, addresses some of the above issues. In fact we are currently performing, in cooperation with RSPG, the Radio Spectrum Policy Group of the European Commission, a study on the economic and social value of spectrum.

Ladies and Gentlemen,

There is little doubt about the value of the spectrum as a scarce resource and the challenges that it poses to policy making. The National Regulators and BEREC, in collaboration with the RSPG, are ready to contribute to the development of sustainable and forward looking national spectrum policies, which will promote the efficient use of spectrum, according to national circumstances, and contribute to the objectives of the European Digital Agenda 2020.