

Opening remarks

ITU Workshop on White Space and Cognitive Radio Systems

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14h00**

Ladies and Gentlemen,
Dear Colleagues,

It is a privilege and a pleasure to welcome you this afternoon, on behalf of the ITU Secretary General, Dr Hamadoun Touré, for the opening session of this Workshop on Spectrum Management issues related to the use of White Spaces by Cognitive Radio Systems.

This workshop is organized by the Radiocommunication Bureau in close collaboration with the ITU-R Study Groups 1, 5 and 6.

I would like to thank the Speakers for this Workshop who have kindly accepted to provide presentations on this topic this afternoon.

The mission of the ITU is to provide an enabling environment for telecommunication networks, and in particular for radiocommunications, which can be expected to become the preferred means of providing broadband access throughout the world.

Thanks to harmonized spectrum and global standards, mobile telephony has now reached 7 billion subscriptions, with penetration rates approaching or surpassing 100% in many developing countries. Thanks to harmonised spectrum and global standards, broadband mobile has already passed the 2 billion subscribers mark.

Until recently, broadband mobile development in scarcely populated areas had been slowed by the relatively shorter range provided by the 2 GHz spectrum. As a result of ITU decisions at World Radiocommunication Conferences in 2007 and 2012, which allocated the digital dividend arising from the transition from analog to digital television broadcasting, the lower frequency bands, at 700 MHz and 800 MHz, are now becoming available for the economically efficient deployment of broadband throughout the world.

In two ministerial summits held in 2011 and 2012, the African countries have already agreed to make this happen and adopted in July 2013, a regional frequency plan confining digital television below 694 MHz, leaving 168 MHz to the mobile service. Similar efforts are undertaken in other parts of the world.

In parallel, global harmonisation of the use of the 700 and 800 MHz bands by the mobile service is progressing well, by the adoption, in Latin America, Asia and Europe, of frequency arrangements which can be used concurrently for both bands in the same terminals.

Political will and economies of scale are therefore setting in place the conditions for the rapid, ubiquitous and affordable development of broadband access through 3G/4G networks in developing and developed countries throughout the world, to a large extent through the extensive use of the UHF band.

As we know, WiFi systems at 2.4 GHz have also developed in recent years as a natural complement of mobile cellular networks. The ITU world radiocommunication conference of 2003 provided a several-fold increase in the spectrum made available for these systems by opening 455 MHz of bandwidth in the 5 GHz band (5 150-5 250 MHz, 5 250-5 350 MHz and 5 470-5 725 MHz to Wireless Access Systems), with part of it on a shared basis with military and meteorological radars, with the mandatory use of dynamic frequency selection. This is the first occurrence of a cognitive radio system.

In this context, the promoting the use of spectrum through further sharing arrangements with existing services can certainly be supported by the ITU, which has always supported new technologies, by introducing in the Radio regulations new provisions which enable their development while protecting other services, hence providing long term assurance for investments in radiocommunication systems.

ITU is also supporting more efficient use of spectrum, which was a key driver in adopting, in 2012, the ITU specifications for IMT-advanced, which will shortly be deployed in several countries with LTE- advanced systems.

The ITU World radiocommunication conference of 2012 concluded that the current international regulatory framework can accommodate cognitive radio, without being changed. The development of systems implementing this concept, such as TV white spaces, is therefore essentially in the hands of national regulators in each country. For this, regulators will depend on state of the art best practices which are currently developed by ITU-R Study Groups 1, 5 and 6.

Obviously, the goal is to provide a regulatory environment under which systems implementing cognitive radio can develop in a sustainable way, in harmony with other systems using the same spectrum.

For this purpose, collaborative discussions on the technical, operational, economical and regulatory aspects of this question are essential if progress is to be made quickly. The ITU radiocommunication sector is providing a forum for these discussions between governments, regulators, operators, manufacturers and academia. Workshops such as the one this afternoon are also necessary to open the participation and allow for more informal discussions. To this end, several workshops on this issue have been and will also be organised in the

coming months to complement the discussions through a wider participation. You are of course most welcome to these events and I look forward to the discussions that you will have this afternoon, since they will help in achieving a better understanding of what is to be expected from and for cognitive systems such as those using TV white spaces and assist the ITU in developing best practices in this regard.

I wish you a very successful workshop and, also, a Very Happy New Year and all the best success for 2014.