Title: **Radio aspects of convergence**

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Abstract:

Around the world, the traditional divisions between broadcasting, telecommunications and information technology are diminishing, and we're seeing a convergence of markets, services and technologies. At the same time, we are witnessing high levels of growth in mobile, Internet and broadband access. While there is a large variety of access networks, radio access has a particularly significant role to play in this domain.

IMT-2000 (3G mobile) systems are now being deployed and will be enhanced considerably over the next 10-15 years. Nonetheless, it is considered that in about the same time-frame, new radio interfaces will be required to meet the demand for new services and capabilities.

To implement new radio interfaces, radio frequency spectrum will be required. The 2007 World Radiocommunication Conference (WRC-07) will address the spectrum requirements of systems beyond IMT-2000.

Within the ITU, ITU-R Working Party 8F has been responsible for the development of the radio standards for IMT-2000, and is now focussing its efforts on the anticipated service and market requirements, and the ensuing standardization, of systems beyond IMT-2000. The standards are developed in a cooperative process involving the ITU membership, national and regional standards development organizations, consortium and partnerships and industry forums. Working Party 8F has also been tasked with conducting the necessary studies on the spectrum requirements of systems beyond IMT-2000, in preparation for WRC-07.

In this presentation I will examine some of the implications of convergence and the growth in mobile, Internet and broadband access. Then, focussing on mobile access, I will give a brief overview of IMT-2000 and the state-of-play in the development of systems beyond IMT-2000. Finally, I will describe the work of ITU-R Working Party 8F and its involvement in the determination of spectrum requirements and development of standards for systems beyond IMT-2000.