All Star Network Access Workshop, 2-4 June 2004, Geneva, Switzerland Session 6: Status and evolution of network access standards

Standardization of IMT-2000 and Systems Beyond

José M. Costa costa@nortelnetworks.com

Abstract

International Mobile Telecommunications-2000 (IMT-2000) are third generation (3G) mobile systems which provide access, by means of one or more radio links, to a wide range of telecommunication services supported by the fixed telecommunication networks (e.g. PSTN/ISDN/Internet Protocol (IP) networks), and to other services which are specific to mobile users.

The purpose of this presentation is to highlight the ongoing development of standards for IMT-2000 and systems beyond. The evolving capabilities of the terrestrial radio access interfaces are briefly described. The collaboration between ITU and the partners of the 3G partnership projects, which enable the timely development of standards, and the structure of the ITU study groups (both in ITU-R and ITU-T) for IMT-2000 and systems beyond IMT-2000 standardization are explained.

The IMT-2000 coverage environments are shown as well as an illustration of a future network of systems beyond IMT-2000 with a variety of access systems around a common packet-based core network. The planned framework for development and the deployment and development timelines are also shown. In particular, the work currently underway in ITU-R Working Party 8F for the determination of spectrum requirements and potential frequency bands for the development of IMT-2000 and systems beyond IMT-2000, in preparation for the World Radiocommunication Conference 2007 (WRC-07), are shown. This is expected to lead to the development of new standardized radio interface(s) following WRC-07, as part of the work on systems beyond IMT-2000.