



IMT-Advanced: New Milestone in Global Mobile Broadband

Specifications for the next step in mobile broadband wireless technology – IMT-Advanced – were agreed by the Radiocommunication Assembly.

With the completion of an intensive programme developed by ITU's Radiocommunication Sector (ITU-R) to stimulate global development of the future IMT technologies and following a detailed evaluation against stringent technical and operational criteria, ITU has determined that "LTE-Advanced" and "WirelessMAN-Advanced" should be accorded the official designation of IMT-Advanced.

IMT-Advanced systems include new capabilities that go beyond IMT-2000, widely deployed since 2000 and referred to as 3G mobile technology. ITU has now specified the standards for IMT-Advanced, the next step in global wireless broadband communications.

IMT-Advanced provides comprehensive support for broadband wireless data and brings major improvements. These include increased spectrum efficiency to handle more users at higher data rates per radio channel; a fully packet-

based architecture for reduced costs; lower latency leading to more responsive Internet and multimedia applications; improved radio resource management and control to enhance quality of service, and new capabilities for the radio interface such as wideband radio channels and multiple-input and multiple-output (MIMO) for the use of multiple antennas at both the transmitter and receiver end to improve communication performance.

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

