ITU-BDT Regional Seminar on Mobile and Fixed Wireless Access for Broadband Applications for the Arab Region, Algiers 19-22 June 2006

Abstract of the presentation « IMT-2000 networks delivering full BWA»

Rémi Thomas, Orange France

The ITU process called "IMT 2000" is briefly recalled.

Then a focus is made on UMTS and on the migration process from GSM to UMTS both from a radio point of view and from a Core Network and services point of view. This comprises a brief description of the items to be tackled when rolling out a UMTS radio system.

The main benefits of UMTS phase 1 are described.

Then we explain the present evolutions of the UMTS radio system, this comprises mainly HSDPA (High Speed Downlink Packet Access) and HSUPA (High Speed Uplink Packet Access).

The HSDPA is based on shared channels mechanisms for the downlink and on dedicated channels for the uplink. The HSDPA allows higher throughputs and reduced latency times compared to UMTS phase 1. It further provides efficient sharing mechanisms between users aiming to utilise simultaneously a given UMTS cell.

A roll out status of HSDPA in different markets is given.

Then we shed light on HSUPA which will allow to provide higher throughputs in the uplink. Efficient broadband services will be based on the combination of HSUPA and HSDPA.

Finally we give some hints on the benefits to roll out UMTS in frequency bands below 600 MHz.