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ITU/BDT Regional Seminar on Broadband Wireless Access (BWA) for CIS, CEE and Baltic Countries

Moscow (Russian Federation), 26-29 November 2007

ABSTRACT for presentation by Mr. Faouzi BEN HADJ HASSINE, Eng.

Challenges in WiMAX Network Planning and Deployment

WiMAX systems provide challenges in network planning and deployment that are unique to WiMAX mainly due to its OFDM structure and adaptive modulation mechanisms. In this presentation, these issues and potential solutions will be addressed. In particular, the deployment process can be made cost-efficient by utilizing state-of-the-art simulation tools and software. Issues such as smart antennas as well as MIMO should be addressed prior to deployment which would have affect on site selection criteria. The experience on 3G deployments in Europe shows that working on the optimal deployment prior to coverage can save great costs to the operator compared with the case where they are optimized after building the network for coverage.