

3G CDMA Technologies Enabling Advanced Broadband Wireless Access Services

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Abstract

Broadband wireless access technologies will play a relevant role in the social and economic development of emerging markets such as those in Asia. As IMT-2000 and systems beyond are deployed throughout the region, citizens' access to high speed broadband is expected to increase considerably. 3G CDMA technology innovations will particularly enable the introduction of enhanced capabilities, achievement of higher performance levels and rational utilization of existing resources, including radiofrequency spectrum and network infrastructure.

This presentation will initially attempt to define, characterize and situate broadband wireless access solutions within the universe of potential applications, taking into account market demand, service requirements and business related aspects, as well as trends and growth expectations. 3G CDMA technology features, functionalities and evolution paths will be depicted and correlated to associated operational and economic benefits.

3G CDMA wireless technologies – CDMA2000 and WCDMA – will be granted special consideration. A detailed description of recent developments tailored to support a variety of advanced high speed multimedia services, including CDMA2000 1xEV-DO Revision A, WCDMA HSDPA / HSUPA (High Speed Downlink / Uplink Packet Access) and multimedia broadcast / multicast functionalities, will be provided along with an overview of comparative performance figures for voice and data applications, worldwide adoption and availability.