

Presentation 8: 3G CDMA Technologies Enabling Advanced Broadband Wireless Access Services

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Broadband wireless access technologies will play a relevant role in the social and economic development of emerging markets like the Americas. As IMT-2000 and beyond systems continue to be deployed throughout the continent, the provision of advanced services with broadband wireless access solutions is expected to be substantially fostered in the near future. 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. Dominant 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.