802.16sgm-02/16

802m_ecsg-02/15

MBWA and 802.16e

Two Markets – Two Projects

Unique Identities (1)

Dimension	802.16e	MBWA	3G
End-user	High data rate fixed wireless user with adjunct mobility service Symmetric data services End-user devices for fixed subscribers (CPE) and PC Cards for mobile devices Support of low-latency data and real time voice services	Fully mobile, high throughput data user Symmetric data services End-user devices initially PC Card enabled data devices Support of low-latency data services	Voice user requiring data services Highly asymmetric data services End user devices initially data enabled handsets Lack of support for low latency services
Service Provider	Evolving off Fixed Wireless service providers and WISPs adding mobility as enhance-ment to service offering Local/Regional mobility and roaming support	Wireless Data Service provider – Greenfield start or evolving Cellular carrier Global mobility and roaming support	Cellular voice service provider evolving to data support Global mobility and roaming support

Unique Identities (2)

Dimension	802.16e	MBWA	3G
Technology	Extensions to 802.16a MAC & PHY	New PHY & MAC optimized for packet data and adaptive Antennas	W-CDMA, cdma2000
	Optimized for and backwards compatible with fixed stations	Optimized for full mobility	Evolving of GSM or IS-41
	Licensed bands 2-6 GHz	Licensed bands below 3.5 GHz	Licensed bands below 2.7 GHz
	Typical Channel BW >5 MHz	Typical Channel BW < 5 MHz	Typical Channel BW < 5 MHz
	Packet oriented architecture	Packet oriented architecture	Circuit oriented architecture – evolving to packet on the downlink
	Channelization and control for multimedia services with QoS	Channelization and control for mobile multimedia services. Mobile-IP Based	Channelization and control optimized for mobile voice services. MAP/SS7 based
	High efficiency data uplinks and downlinks	High efficiency data uplinks and downlinks	Medium efficiency data downlinks, low efficiency uplinks
	Low Latency architecture	Low latency data architecture	High latency data arch.