

802.16sgm-02/16

802m\_ecsg-02/15

# MBWA and 802.16e

## Two Markets – Two Projects



# Unique Identities (1)

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

# Unique Identities (2)

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