

**TABLE 1—SUMMARY OF 802.16 STANDARDS**

	<b>802.16</b>	<b>802.16a/802.16REVd</b>	<b>802.16e</b>
<b>Completion date</b>	Dec 2001	802.16a: Jan 2003; 802.16REVd: Q3 2004	Q3 2004
<b>Spectrum</b>	10 to 66 GHz	<11 GHz	<6 GHz
<b>Channel conditions</b>	Line of sight only	Non line of sight	Non line of sight
<b>Bit rate</b>	32 to 134 Mbps (28-MHz channelization)	75 Mbps max (20-MHz channelization)	15 Mbps max (5-MHz channelization)
<b>Modulation</b>	QPSK, 16QAM, 64QAM	OFDM 256 subcarriers, QPSK, 16QAM, 64QAM	Same as 802.16a
<b>Mobility</b>	Fixed	Fixed	Pedestrian mobility, regional roaming
<b>Channel bandwidths</b>	20, 25, and 28 MHz	Selectable between 1.25 and 20 MHz	Same as 802.16a with uplink subchannels
<b>Typical cell radius</b>	1 to 3 miles	3 to 5 miles (30 miles max based on tower height, antenna gain, and power transmit)	1 to 3 miles

Courtesy of the WiMax Forum

**Notes:**

QPSK = Quadrature phase shift keying;

QAM = Quadrature amplitude modulation;

OFDM = Orthogonal frequency division multiplexing