Fixed or mobile WiMAX? Forecasts and assessment for the transition from 802.16-2004 to 802.16e WiMAX

Review Pack

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Summary

The report "Fixed or mobile WiMAX? Forecasts and assessment for the transition from 802.16–2004 to 802.16e WiMAX" presents an in-depth analysis of the market dynamics for the two versions of WiMAX, and for both fixed and mobile services.

The availability of two, mutually incompatible, versions of WiMAX creates a challenge for everybody in the industry, trying to understand how they will fare in the market, which one will dominate in the long term and which services they will support. 802.16–2004 WiMAX only supports fixed access, but products are already available.

802.16e WiMAX supports mobile and fixed access but products are still at least a year away. Vendors need to understand what demand there is for these two technologies in order to refine their product roadmaps. Service providers want to understand which technology best meets their requirements and will enjoy long-term support from vendors.

The report addresses these issues and in addition it provides an extensive overview of WiMAX technology, competing technologies, regulation, and business models. It gives a very detailed forecast of subscribers, service revenues and equipment revenues for 15 countries, 6 regions and for the worldwide market.

Topics covered:

- The differences between 802.16-2004 and 802.16e in terms of functionality, performance, services supported, target market segments and regulatory implications.
- The market dynamics for fixed and mobile WiMAX access in different regions and different market segments.
- WiMAX technology.
- Standardization efforts.
- The role of the WiMAX Forum and its certification program for interoperability.
- Upgrade paths to 802.16e WiMAX for service providers using 802.16-2004 WiMAX or proprietary solutions.
- Competition from wired technologies (DSL, cable modem, fiber-to-the-home) and from wireless technologies (Wi-Fi, 3G including WCDMA, HSDPA, EV-DO, TD-CDMA, and proprietary solutions like Qualcomm's FLASH-OFDM).
- Timeline for WiMAX product availability.
- Spectrum availability and regulatory impact on WiMAX deployments.
- WiMAX fixed and mobile services and applications.

- Comparison of the WiMAX opportunity for service providers in the residential and business, rural and metropolitan, emerging and developed markets, as well as municipal networks.
- Vendors' perspective on the development of the WiMAX market and their product strategy for transitioning current customers to 802.16e WiMAX.
- Profiles of 23 major vendors.
- Drivers towards adoption of WiMAX, deployment timeline, services offered and market size in the largest markets worldwide.

Extensive forecast (2006–2010) of WiMAX demand, service revenues and equipment revenues

The forecast presents data at the global, regional and country level as shown below.

Regions North America Latin America Western Europe Eastern Europe Asia Pacific Rest of the World

Countries	Argentina	Italy
	Australia	Japan
	Brazil	Korea
	Canada	Mexico
	China	Spain
	France	UK
	Germany	USA
	India	

For each market, the forecast includes:

- Fixed and mobile broadband subscribers
- Fixed and mobile WiMAX subscribers
- Data and VoIP service revenues
- Data revenues by market segment
- Residential, business and mobile ARPU
- Equipment revenues.

Companies mentioned

•		
02	Huawei	Runcom
Access Telecom	Iberbanda	Samsung
ADP Telecom	Iliad	Samsung
Afribone Mali	InfiNet Wireless	Corporati
Airspan	Intel	SBC
Alcatel	Intel Capital	SEQUANS
Altitude	IntroWeb	Sequoia (
Altitude Telecom	Inukshuk	Siemens
Alvarion	IP Wireless	SiGe Sem
Aperto	Irish Broadband	Singtel
ArrayComm	JStream Technologies	SK Teleco
AT&T	Korea Telecom	SkyPilot
Axtel	KT	Smart
Axxcelera Broadband Wireless	KTB Ventures	SOMA Ne
Beceem	Libera	Speakeas
BelAir	Link 3	Sprint Ne
Bell Canada	Lucent	SR Techn
BellSouth	Marconi	Telabria
Biva	MiTAC	TeleCis W
Brasil Telecom	Motorola	Telkom S
ВТ	MVS Comunicaciones	Telmex
Cambridge Broadband	Navini	Terabean
Clearwire	Netia	Time
Dedicado	Nex-G	Time War
Delta Networks	Nextel	T–Mobile
Deutsche Telekom	NextNet	TowerStr
Digitel	NextWeb/Covad	UHT
Digiweb	Nortel	UK Broad
EarthLink	Orange	Ultranet
Enertel	picoChip	Unwired
Entel	Pipex	VCom
Ericsson	Protel	Walden Ir
Ertach	Proxim	WavelP
FarmTel	Qualcomm	WaveRide
Flarion	Quantum Broadband	Wavesat
France Telecom	Solutions	Whoosh \
Fujitsu	Qwest	Wi-LAN
GemTek Technology	Radionet	WiMAX To
Global Catalyst Partners	Redline	Yozan
Hanaro	Reliance Infocomm	Z-Com
Hopling Technologies	Rogers Communications	ZTE

msung msung Venture Investment rporation С **QUANS** Communications quoia Capital mens Mobile e Semiconductor gtel Telecom **Pilot** art MA Networks eakeasy rint Nextel Technologies labria leCis Wireless lkom SA Imex rabeam ne ne Warner Cable Mobile werStream Т Broadband ranet wired om Iden International velP veRider vesat oosh Wireless -LAN MAX Telecom zan Com ZTE

About Senza Fili Consulting

Senza Fili Consulting provides advisory support on wireless data technologies and services. Our expertise extends to cellular communications, WiMAX, Wi–Fi, and other fixed and mobile Broadband Wireless Access (BWA) technologies. We assist vendors in gaining a better understanding of the service provider and end–user markets. We work alongside service providers in developing a wireless data strategy and gaining a better understanding of the demand for wireless services. Independent advice, a strong quantitative backing, and an international perspective are the hallmarks of our work.

At Senza Fili we have in-depth expertise in financial modeling, market forecasts and research, white paper preparation, business plan support, due diligence, training, and evaluation of end-user requirements. Our clients are international and span the entire value chain: they include fixed and mobile operators, ISPs, wireless ISPs, other service providers, vendors, solution providers, system integrators, investors, and industry associations.

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About the Author

Monica Paolini is the founder and president of Senza Fili Consulting. She is a well-known expert in wireless data technologies such as WiMAX, WCDMA, HSDPA, EV-DO, Wi-Fi and other 3G and fixed proprietary technologies. She has a PhD in Cognitive Science from the University of California, San Diego (USA), an MBA from the University of Oxford (UK), and a BA/MA in Philosophy from the University of Bologna (Italy). She can be contacted at monica.paolini@senzafiliconsulting.com.

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