

Mobile WiMAX in Western Europe: Separating Hype from Reality

The communications industry is not learning from its past mistakes. In January 2003, in the face of some pretty hostile opposition and prevailing industry hysteria regarding Wi-Fi services, Yankee Group wrote:

“...PWLAN [public access WLAN] poses no real threat to GPRS and 3G in Europe. These technologies share very few common characteristics and they address fundamentally different end-user requirements. PWLAN differs from GPRS and 3G in network coverage, end-user value propositions, performance, ease of use, pricing and addressable customer segments. These differences preclude a direct competitive threat in almost all usage scenarios.”

January 2003 Yankee Group Report, [Public Access Wireless LAN Will Not Cannibalize 3G in Europe](#)

This proved correct, and it serves us well to remember these conclusions as we examine the current hype surrounding mobile WiMAX. The wireless industry has been obsessed with creating the mobile internet for more than 10 years, particularly during the first few years of this millennium. So far it has failed.

Now in 2007, the proponents of mobile WiMAX technology are promising personal broadband. The similarities between these promises and the Wi-Fi and mobile internet hype cycles of 2000 to 2003 are striking. Although the terminology has changed a little, a bit more speed has been added and some new acronyms have been introduced, we still are expected to believe the personal broadband market will finally take off.

Ubiquitous broadband connectivity will eventually be delivered to European consumers through a combination of existing and new technologies. Mobile WiMAX will certainly play a role in this, but its supporters are overstating its contribution. The hype surrounding mobile WiMAX far exceeds the reality of its future impact in Western Europe. The February 2007 Yankee Group Report, [Time to Get Real About Mobile WiMAX in Europe](#), as well as this excerpt of that Report provide a much-needed reality check, balancing the hype with the reality. Exhibit 1 summarizes the main conclusions.

These conclusions focus primarily on the consumer market, although we understand that early mobile WiMAX services will be heavily targeted at business users. In addition, we have intentionally avoided the well-worn regulatory obstacles that may prevent mobile WiMAX from ever becoming a mainstream service in some European countries. Therefore, the emphasis is on services and customers rather than technology. We should also stress that we specifically examine mobile (IEEE 802.16e) rather than fixed WiMAX opportunities.

The Addressable Market Is Inadequately Defined

Hype	Reality
Mobile WiMAX will create a personal broadband utopia and will drive demand for high-speed mobile services.	A new technology will not, on its own, overcome customers' reluctance to adopt these services (but it will help).
Mobile WiMAX will enable many new successful mobile broadband applications.	Most services that will initially be provided over WiMAX are already available today. WiMAX will enhance the performance of only a few.
Mobile WiMAX will drive significant substitution of voice traffic from cellular to personal broadband networks.	Customers don't want VoIP; they want cheap voice calls. MNOs can offer that if they choose to do so. VoIP will be incidental to the mobile WiMAX business case.
Mobile WiMAX will enable dramatically new form factors for mobile devices and other wirelessly connected consumer devices.	Few new device form factors will emerge that do not already have 2G/3G capabilities or that do not already have these capabilities under consideration.

Substitutes Are Everywhere

Hype	Reality
Mobile WiMAX can compete effectively with high-speed mobility services.	Mobile WiMAX is still a technology seeking a market.
Mobile WiMAX will be able to compete with residential, landline broadband services.	High-speed mobile data providers don't need to compete with residential broadband SPs.
Mobile WiMAX will seamlessly interoperate with and complement 3G technologies.	Technologically, mobile WiMAX can complement 2G/3G as well as Wi-Fi and DSL. But commercially it must be distinct, differentiated and competitive.
Mobile WiMAX can be used to deliver broadband mobility in urban areas, with 3G used to fill the gaps in other locations.	To succeed, mobile broadband services must be ubiquitous. Mobile services that provide different customer experiences, depending on location, will fail.

Not as Many New Mobile WiMAX Service Providers as You Think

Hype	Reality
MVNOs will be major players in mobile WiMAX, with different types of MVNOs offering customized services to different target customer groups.	MVNOs will not make a substantial contribution to the advancement of mobile WiMAX in Europe.
Mobile WiMAX creates an opportunity for new SPs to enter the communications market and challenge the old guard.	Some greenfield mobile WiMAX players will emerge. Most will not survive.
MNOs and content companies will partner to commercialize rich mobile WiMAX services.	MNOs should only provide the plumbing.

No New Mobile WiMAX Ecosystem

Hype	Reality
Mobile WiMAX and 4G will create new, more open models to deliver the mobile internet.	This is happening anyway. It's got nothing to do with mobile WiMAX or 4G.
Municipalities will deploy large-scale WiMAX networks to meet their citizens' demand for wireless broadband access.	Don't rely on public sector organizations to create this market.

But It's Not All Doom and Gloom

This is a pragmatic view of the opportunity for mobile WiMAX in Western Europe. Unless its supporters deal with the issues raised, the technology will never get off the ground in this region. Despite this, and in the interest of balance, it's important to highlight some developments that are more positive:

- Fixed WiMAX will be important.
- Mobile WiMAX will be the right technology choice in other regions of the world.
- Some owners with deep pockets will emerge to deploy mobile WiMAX in Europe.

Conclusions

Yankee Group has a good memory—not perfect, but pretty good. We remember the mistakes with 3G. We remember the hype that surrounded Wi-Fi. How can we ever forget WAP? We have experienced the mobile internet and we have not liked it much so far.

Now we can relate those experiences to the current situation with mobile WiMAX. Our inescapable conclusion is that this technology is over-hyped. Although it will be commercialized and will play a role in Western Europe, it will not change the face of the communications and media industries.