

2006 a “critical year” for wireless technologies

> 2006 will herald a turning point for broadband wireless technologies, according to a report from US research firm Northern Sky, with key developments like the first Zigbee, UWB (ultra-wide bandwidth) and Wimax-based products due to be launched. The report, *Broadband Wireless Markets – Assessing the Market Potential for Wimax, 3G, 4G, UWB and Zigbee*, said that 2006 will bring further solidification for the Wimax 803.16e standard, while other technologies will launch without a standard.

3G will continue to lead the broadband wireless market in terms of subscribers and revenue over the next five years, the report said. By the time mobile Wimax is available, 3G will have a three-year time-to-market advantage, and its evolution will continue as new technologies make their plays. 3G will become increasingly embedded in laptops and could eventually compete with the planned 802.11n Wifi solution, Northern Sky believes.

Chris Baugh, president of Northern Sky Research said: “I think Wimax is getting to the point of being launched with a standard. Other technologies are still jockeying around with what standard there will be. UWB and Zigbee have competing standards. It is along the lines of what happened with Wifi.” Standardisation and interoperability will produce greater volumes and bring prices down, he said.

A possible eventual 4G network could tie all these emerging technologies together, Baugh said, and enable operators and service providers to reconcile these new technologies. NTT Docomo wants its 4G network to become a reality by 2007.

The report also said market growth will increase dramatically through to 2010 with 3G subscribers more than doubling in this time. John Krzywicki VP marketing, strategy and business development at wireless solution provider Gigabeam added: “In 2006, I think we will see tremendous expansion and acceptance of new technologies.” ■

Analyst's Eye >



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US MUNICIPAL BROADBAND

DAVID BALLARINI FINDS THAT US MUNICIPALITIES ARE SHAKING UP THE MARKET FOR TRIPLE-PLAY SERVICES, OFTEN AT THE EXPENSE OF THE LOCAL INCUMBENT TELCO

> There's an interesting battle emerging in the US over providing residents and businesses within municipalities with next-generation communication services. Traditionally these localities have been served by incumbent telcos and cable TV companies, but now what we are seeing is an attempt strategically to reshuffle the playing field at the local level.

In widely publicised shake-ups – such as the city of Philadelphia's move with ISP Earthlink to provide its residents with wireless broadband services and effectively displace Verizon's local position – legal battles have emerged over whether municipal governments have the right to use taxpayer funds to compete with private enterprise. Philadelphia's view is that private service providers have been too slow to invest in the communications infrastructure for all but the most affluent customers. In Palo Alto, California, the local government succumbed to legal pressure from incumbent SBC who protested at attempts by the government to provide a public fibre-to-the-home network. Similar battles have emerged in Illinois, Utah, and Louisiana and are appearing on the legislative agenda in virtually every region of the US.

In other municipalities, the telcos themselves are staging frontal assaults on the cable industry by petitioning municipal governments for the rights to offer consumers a TV service through fibre-based IPTV offerings and effectively create competition to the long-treasured rule of the cable franchises. In the rapidly growing and affluent DC suburb of Herndon, Virginia, the local government council unanimously approved the granting of a cable franchise to Verizon (despite Comcast's strong legal opposition), whose fibre-optic service promises to offer consumers 15Mbps connectivity – more than enough to provide integrated voice, internet and TV. Interestingly, the IPTV service has the potential to bring differentiated messaging and collaboration services to the TV screen – an area that gets the likes of Microsoft motivated to use its clout to advance the technical and regulatory environment.

And even in neglected municipal areas – such as rural West Virginia – which increasingly are lagging behind in the digital age, significant political pressure from the likes of governor Manchin and senators Byrd and Rockefeller have led to the effective takeover by some local governments of the future of telecommunications services. Some rural municipalities are now partnering with private enterprises, such as start-up Itown Communications, to build and manage a competitive communications infrastructure aimed at delivering world-class, fibre-based triple-play offerings to the underserved local community. Such services are likely to be funded through a combination of municipal bonds and private financiers.

The outcome for consumers and businesses under virtually every future legal scenario is likely to be an improvement in communications services – new entrants will likely build out new infrastructure (despite often questionable financial models). In cases where new entrants are blocked, the political pressure on incumbents will force an upgrade of the infrastructure and a more rapid deployment of broadband. This outlook does not come without risk – municipalities have not garnered stellar track records in managing public services in the past and may squander enormous taxpayer dollars in an arena in which they have virtually no ownership experience. The outcome for service providers is hard to predict, but it is certain to entail more and more competition and investment to expand or just maintain their positions. ■