

Alcatel-Lucent builds first commercial Universal 802.16e–2005 WiMAX Network in Germany

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Alcatel-Lucent is deploying Germany's first commercial universal WiMAX network - based on the 802.16e–2005 standard (also known as Rev-e) - in the Saar region for VSE NET, a regional telecommunications service provider in Saarbrücken.

The project is being conducted in close cooperation with VSE NET, Inquam Broadband -- a nationwide license holder in Germany -- and Alcatel-Lucent. VSE NET is establishing the first regional WiMAX network in an area not covered by conventional DSL technology. Work on the network will start in the autumn of 2007, and commercial operation is set to commence in January 2008.

The network will support high-speed Internet access and voice over IP (VoIP) and other data services with transfer rates of up to six megabits per second (Mbps). In the initial stage of the deployment, wireless broadband will be made available to residential and business customers in the sparsely populated northern Saar region, where it is not economically viable to build a conventional DSL infrastructure. Based on the WiMAX Rev-e standard and operating in the 3.5 GHz frequency band, the VSE NET broadband network will enable stationary, nomadic and mobile applications and will efficiently complement existing landline-based broadband services.

“Alcatel-Lucent's advanced WiMAX solution will enable us to deliver a

wide range of broadband services, including high-speed Internet access and voice over IP (VoIP), in areas of the Saar region that are currently under-served,” said VSE NET Director Michael Leidinger at the signing of the agreement. “WiMAX is a key technology that will let us set up a broadband network quickly and economically, with a minimum number of base stations, and without costly civil engineering work to lay copper or optical fiber cable.”

“This contract is an example of how WiMAX complements existing broadband technologies in a partnership between service providers, infrastructure suppliers and license partners,” added Christian Reinaudo, President of Alcatel-Lucent’s activities for Europe and North. “We’re proud that our technology and expertise will be a critical part of the creation of Germany’s first commercial WiMAX Rev-e network.”

Under the agreement, Alcatel-Lucent will provide its compact WiMAX base stations as well as wireless access controllers to support the seamless handover of mobile broadband subscribers between individual base stations, allowing VSE NET’s customers to benefit from the service while moving. The base stations are suitable for indoor installation as well as outdoor mast mounting. The full range of functions is united in a single housing that merely requires power, an Ethernet connection and an antenna. Innovative smart antenna technology automatically adapts to the terminal device, delivering transmitter power exactly where it is needed to significantly improve in-house reception. Alcatel-Lucent also will be responsible for installing, commissioning and maintaining the network.

With more than 70 pilots and deployments across the world and 13 commercial contracts signed since the beginning of 2007, this new project clearly underscores Alcatel Lucent's leading position in the WiMAX market.

WiMAX (802.16e-2005) stands for Worldwide Interoperability for Microwave Access. It enables Voice and Broadband connectivity for fixed, nomadic or mobile use in urban, suburban and rural areas. WiMAX solutions are important last-mile components for universal broadband access, fulfilling the needs of many consumers for fast Internet access and new services. QoS monitoring of individual point-to-point connections guarantees best connection quality for video-on-demand, high-speed Internet access for mobile applications and Internet telephony (VoIP) in real time. The technology's low latency times and point-to-point communication also make it ideal for gaming with a high degree of interactivity. A single 3-sector WiMAX base station can connect up to 100 small businesses or over 500 households to the Internet. For more information about WiMAX, please [click here](#)

Source: Alcatel-Lucent

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