Broadband from gas lines not pie-in-sky

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Multitasking is no stranger to those who are technologically savvy, including plans to use gas lines to offer Internet connectivity. According to Mountain View, Calif.-based West Technology Research Solutions, broadband-in-gas will allow residential and commercial developments to use the existing infrastructure of natural-gas pipelines to provide broadband.

Given that about 70 percent of homes and businesses in the United States are either directly connected to or passed by a natural-gas pipeline, the potential for the concept is considerable.

Currently, broadband Internet access is possible through telephone lines as well as cable and electricity lines. The proposal to use natural-gas pipelines would make use of ultrawideband transmission technologies that deliver a high-bandwidth signal through the gas pipeline and can be used for video on demand, Voice over Internet Protocol and other Internet services as well as basic Internet connection. The group estimates that the technology will provide double the bandwidth at the same installed cost as the conventional DSL system that currently connects many broadband users.

It is therefore "a compelling application of ultrawideband technology that will see wide adoption during the next five years. The simplicity of the physics behind the technology, combined with the use of an existing infrastructure yield a truly cost-competitive option in a market filled with expensive and overly complex last mile delivery alternative," said Kirsten West, principal analyst at West Technology.

The group, which specializes in analyzing emerging wireless-technology issues, estimates that the so-called BiG solution will account for about 25 percent of ultrawideband chip sales by 2010, supplying at least 18 million homes in the United States alone.

In fact, one company is already moving aggressively to promote the BiG technology. Escondido, Calif.-based Nethercomm specializes in developing the technology for application, and while its proposal is still subject to approval, the company argues that the relatively low cost of setting up broadband access through gas pipelines makes it particularly attractive for investors and users alike. It also pointed out that demand for broadband is soaring on the one hand, while at the same time it is still a costly service in the United States compared to other countries.

Indeed, Nethercomm pointed out that while U.S. users pay about $35 per month for relatively slow connectivity, their Japanese counterparts have far faster connections for about $25 a month on average. In addition, the company noted that about 60 percent of the U.S. population does not have broadband access, including about half of those earning over $75,000 a year.

The company also stated that its "solution is uniquely isolated from the rest of the wireless world eliminating the common broadband burden of sharing the spectrum ... and due to the isolated, contained environment, the natural gas flow and radio signals co-exist uninterrupted and cannot blow up."

Industry analysts broadly agree that the potential for gas pipelines providing Internet access is significant, especially for those who do not yet have broadband via DSL or cable.

Of course, such assessments rest on the assumption that the plan actually works. Nethercomm has yet to announce a licensing agreement with a

partner, and it is still trying to raise money for a pilot program to get the project going by next year on a trial basis.