in perspective

Bandwidth Trading and Telecommunications Post 9/11

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Last week's devastating attack on the World Trade Center struck at the heart of the nationís and the world's economy and at a critical global information and at a critical international communications hub as well. The destruction knocked out a major switching center and damaged five central offices serving some 200,000 access lines and the equivalent of three million data circuits in lower Manhattan, disrupted transmission facilities and damaged or destroyed 14 cellular sites. Communications were affected in the World Trade Center and Wall Street areas and in much of lower Manhattan. In addition to widespread service disruption, thousands of people were unable to remain in their homes and many thousands of workers in the World Trade Center and nearby have been displaced. Companies have had to find offices and facilities in other areas of New York City, in New Jersey or elsewhere, with immediate need for communications infrastructure and equipment.

AT&T reported heavier than usual call volumes but no serious service problems. Within hours after the attack, it should be noted, a team of people from local, long distance and broadband providers, including AT&T, Verizon and others, in centers across the U.S., maintained a continuing conference bridge to detect any potential problems and assure that necessary resources would be available when needed. AT&T's disaster recovery team was able to supply the functions previously provided by a transport node destroyed in the basement of the World Trade Center and distant switches replaced local NYC switches that had no power.

The telecommunications industry's response to these considerable challenges will tell us much about the resourcefulness of the industry in struggling out of its decline and about which companies are likely to survive and prosper in the difficult environment ahead. As companies focus on restoring switching and transmission facilities in New York City and at the Pentagon, and reexamine the vulnerability of vital communications links nationally and internationally, will heightened economic and service reliability concerns prompt carriers and service providers to give more consideration to the potential advantages of bandwidth trading, for example, or will immediate demands only add to existing reluctance? Several informed industry people shared their views.

Prebon Bandwidth's President, Rajan Chopra, is located in Jersey City, New Jersey, just across the Hudson River from New York City. Many people who worked in or near the World Trade Center are now in his building, at least temporarily, and service providers are pressed to provide new telecom lines to serve them. Chopra's view is that, with the meltdown in telecom markets hurting development of bandwidth trading even before last week, it is unlikely that there will be much growth in trading in the near term. He does suggest, however, that as companies move into new locations and order communications equipment, they may be more inclined to opt for videoconferencing and other broadband applications also, both to enhance overall communications capabilities and as an

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alternative to business travel. Such new applications could help improve demand for broadband, but the real brake on broadband, Chopra points out is lack of local connectivity.

A representative for a network equipment supplier agrees. The crisis in lower Manhattan is so overwhelming, he says, it will rivet carriers' and service providers' attention on the short term—what is needed today. There will be little or no thought of the advantages in sharing facilities or in commodity markets, although he thinks that companies may consider replacing some facilities with virtual networks.

Mike Moore, President of Amerex Bandwidth, has a more sanguine view. He thinks that as companies are engaged in restoring facilities and quality of service in affected areas, they may well recognize the advantages of being able to offer rapid provisioning through other networks. For facilities sharing to happen easily and transparently at critical times, such as after last week's destruction, Moore says, companies must have the infrastructure in place to allow a transparent handoff—including networks capable of supplying and picking up needed capacity; the companies must have people at hand who are familiar with the systems, technologies and tech niques required; and companies must have the motivation and willingness to cooperate.

Critical services need to be restored right away in the wake of last weekís disaster, Moore points out, but we must also take into account the long-term demographic changes affecting communications in New York City and beyond, even internationally. Companies considering network architecture and service provisioning must not lose sight of rapid changes that are transforming traditional telecommunications: hundreds of millions more people now on line than just a few years ago, international traffic increasing at an accelerating pace, new usage patterns, and more. Managing financial resources gets close attention today, in Moore's view, and companies are likely to recognize that sharing infrastructure and trading bandwidth have more of a place in their planning than ever before.

Wim Sweldens, Director of Research at Bell Laboratories, observes, "At this point, it is too early to tell the impact of this disaster on the market. We are currently focused on helping our customers and the government authorities deal with the aftermath of this disaster. The response to this disaster is really our customers' story and we are doing everything we can to support them."

Judith St. Ledger-Roty, a partner with Kelley Drye & Warren in Washington, DC, has pointed out that, compared with the trading of gas and power, the opportunity in bandwidth trading is greater, as are the difficulty and complexity involved. Focusing on a carrier or service provider's internal considerations alone, bandwidth trading is disruptive of traditional network provisioning and requires significant restructuring, accounting and pricing changes, realignment of systems and people, and more. Not easy to accomplish, for sure, but economic forces are unforgiving and how much different is this from other equally difficult transformations awaiting the telecommunications industry?

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