



## Equipment Makers Enter Fray Over 'Network Neutrality'

by [Drew Clark](#)

Technology Daily 2/14/06

Makers of telecommunications equipment have authored "white papers" for cable and Bell telephone companies that promote their technical capability to prioritize high-speed Internet traffic and offer tiered Internet service, depending upon the service or application.

The documents, from major vendors including Alcatel and Cisco Systems, lend some heft to the increasingly contentious plans by Bell and cable companies to create a tiered Internet with different prices for different services. The white papers envision a world where carriers will use equipment providers to better manage the content that flows through their data pipes so as to recoup higher average revenues per user, known as ARPU in industry terminology.

"Faced with increased costs for network capacity, new network management challenges, and declining ARPU, broadband service providers need to fundamentally change their business models," read Cisco's paper.

What is needed, according to the Cisco paper, is greater intelligence within data networks so that carriers can "open the door for new revenue-sharing schemes" with application providers.

That idea was specifically criticized Feb. 7 by Google Internet evangelist Vinton Cerf and several senators. Sen. **Ron Wyden**, D-Ore., said he would introduce legislation "that will make sure all information is made available on the same terms so that no bit is better than another one." His measure would ban the creation of private networks "that are superior to the Internet access they offer consumers generally."

Much of the dispute has centered on comments by AT&T chief **Ed Whitacre** and **Bill Smith**, the chief technologist for BellSouth, that their companies want to charge Internet companies like Google or Vonage for priority service.

Elaborating on the comments, an AT&T spokesman said, "In exploring ways to offer enhanced capabilities and services to consumers and other providers, nothing will be taken away from consumers or other providers that they have today. We are adding lanes to the highway, not taking lanes away."

Many Internet companies are fighting back. Amazon.com, eBay, Google, InterActive, Microsoft and Yahoo have formed a coalition to argue for "network neutrality," or non-discrimination in the fees for delivering Web content.

Technology companies and public-interest advocates do not object to carriers offering bandwidth-based tiers service. But Alcatel and Cisco call those tiers inadequate. "Regardless of how conservatively a service provider designs its network infrastructure, it cannot economically avoid oversubscription of network bandwidth," Cisco said.

Because the heaviest data users consume so much bandwidth, Cisco said, other users may have unsatisfactory experiences. By providing greater "granularity," carriers can implement pay-as-you-go broadband.

Cisco suggests monthly charges by application. Instead of charging \$10 a month for 3 megabits per second -- a more conventional "broadband light" package identified by Cisco -- a hypothetical pay-as-you-go model would charge \$5 a month to surf Web sites and get e-mail; an additional \$10 for file-sharing applications; and a further \$15 to use video streaming, gaming and Internet telephone service.

"By crafting such customized service tiers, an operator can raise the revenue potential of each customer type," Cisco said.

Neither Alcatel nor Cisco officials returned calls.