The Telecommunications Act of 1996: What’s in this Bill for Higher Ed?

by Michael M. Roberts

Shortly after the Telecommunications Act of 1996 was signed into law on February 8, Reed Hundt, Chair of the FCC, described the Act as “opening the doors to invention and creativity,” noting that the bill establishes incentives for the FCC and the States “to bring the Internet to every classroom in America.” What actually is in this bill for higher education, and how will it play out?

Our general goals for this legislation might be summarized as follows:

- Bring some relief to the excessive rates universities pay for telephone service and the generally low level of innovation and new technology provided by the local telephone company monopolies. Since our aggregate telephone bills are on the order of $2 billion a year, the predicted 10 percent to 30 percent savings over the next several years due to competition can be put to good use.
- Provide an operating environment for telecommunications in which there are normal business incentives for capital investment, in order to create new services and new technology that will enable colleges and universities to meet needs for interactive distance learning, outreach to communities and other levels of education, and partnerships with research organizations and the business community in general.
- Facilitate, or at least not inhibit, the continuing growth of the Internet and its culture of openness, competition, and inclusion.
- Do no mischief to other things we hold dear.

Along with dozens of telecommunications special interest groups and constituencies, we won some and lost some with this bill. There is hardly a page in a total of more than 200 pages that does not reflect a compromise or tradeoff of competing interests.

Winners

Benefits from competition

The pace of entry in new markets will be quite rapid. Chairman Hundt has said that the FCC will establish the ground rules for mandatory interconnection of competing networks, including wireline, wireless, and cable, within six months. He predicted that a major marketing effort will be made to attract consumers, both business and residential, to “full service” offerings. Most of the big players have decided that they do not need to build, own, or operate full service networks in order to attract customers. Many of the new bundled “end to end” service offerings will be based, partially or completely, on reselling or brokering of services purchased wholesale from carriers with investments in facilities. This is, in effect, a form of systems integration that college and university networkers are familiar with from their computing experience.

At a workshop on advanced educational networking held by the New York State University Regents in early February, Cathy Brown, head of the office of policy analysis for telecommunications in the Commerce Department, said there will be a special premium in the next several years to be a “smart consumer” of telecommunications services. This is a polite way of saying that the time-honored American snake oil salesmen will be out in force in the new competitive world of telecommunications. It is no simple proposition to evolve from a single monopoly industry, with common engineering practices, serving 250 million people, to a heterogeneous, disaggregated, multiple technology industry with many providers large and small.

Most colleges and universities, which have had years of reinforcement of their low opinion of regulated telephone monopolies, are eagerly awaiting the rush of wheeler-dealers. Their shopping list starts out with a requirement for big reductions in voice rates, further reductions in bandwidth adjusted Internet rates, and a vendor commitment to early introduction of integrated broadband services. Let the fur fly. At the Regents workshop mentioned above, it was announced that a bill will be introduced in the New York State legislature within the next several weeks which will facilitate a common bargaining and
procurement strategy for interactive broadband services for up to 10,000 educational and cultural Internet access points in that state.

One of the other developing competitive strategies is to avoid investing in new copper or coax facilities to serve the “last mile” to customers, especially residential subscribers. This is a relatively expensive proposition because of population density factors, and also runs into a hornet’s nest of residual “universal service” issues where vestiges of regulation will remain indefinitely. Consequently, we are likely to see end-to-end offerings based on new wireless services for the last mile. Similarly, the cable industry is basing great hopes for profits by providing Internet access over their existing analog coax networks with the addition of inexpensive two-way modems. A number of these tactics to build business without investing in the underlying facilities will run out of gas after a while, especially as pressure builds from content providers who want full interactive digital service delivery capability. The television set industry is very anxious to get started building digital televisions, which will command premium prices for a number of years. The impending FCC order adopting the Grand Alliance ATS standard will contribute significantly to competitive pressures on satellite, off-the-air, and cable system operators to provide full digital transmission facilities.

It’s hard to predict the success of any one of these strategies, and they will have little effect on existing campus connections to the Internet, which are hard wired and either already are fiber based or will be shortly. However, they will have an effect on the availability of outreach to off-campus sites and may facilitate campus plans depending on individual circumstances.

**Broadband services**

For the first time, the bill establishes a federal goal of accelerating the development of broadband network services and making them widely available, especially to education. Two years ago, the Administration drafted an entirely new section of the Telecommunications Act to deal with advanced services. This aggressive posture was attacked by both industry and Republicans as being too expensive and too centrist. But the watered down language in the new bill does oblige the FCC and the states to give weight to the development and delivery of advanced services, which will be very useful to colleges and universities.

**Internet growth**

The Cox-Wyden amendment barring the FCC from regulating the Internet was dropped in conference because of its interaction with the Hyde indecency amendment (about which see note below). There is now some talk of reviving such a rule as part of an independent bill, perhaps the FCC reform measure which Representative Fields and Speaker Gingrich are plotting to bring forward before the end of this session of Congress. In any event, there has been little sentiment at the Commission to regulate the Internet, where competition has produced such positive results, and the FCC can take credit for having been so prescient in deciding that “enhanced” data services should not be regulated. We are fortunate that almost everyone involved with the telecomm bill wants to move their piece of the business to where the Internet already is.

The Internet is currently growing at the rate of more than 10,000 hosts per working day, and probably more than twice that in subscribers to the thousands of access service providers. The internets of the network are being sorely tested for several reasons. Many of the new providers are overcommitting their configurations, the arrangements among providers to exchange packets at high rates are not as reliable as they need to be, and the transition from IPv4 to IPv6, which solves many scaling problems, is still in front of us. As was the case with several major failures of the circuit-switched telephone network a few years ago, there is a possibility that a cascading major routing failure of the Internet would result in calls for the FCC to impose a version of the reliability reporting and correction regime on Internet providers, as it did on the telephone companies. This would be no mean feat, considering the distributed nature of the network. Let us hope that circumstances do not put us in that position.

**Losers**

**Indecency follies**

In October, higher education took the possession with the conference committee members that since pornographic content on the Internet was already subject to the provisions of Title 18 of the U.S. Criminal Code, the Congress should refrain from inserting redundant language to the same effect in the telecomm bill. While we were advancing rational arguments, the Christian Coalition and its allies were reminding senators and representatives of their obligations to the nation’s children. Following the passage of the bill, the Family Research Council spokesman said, “[this is] an absolute home run for families,” and added, “What this is really about is closing an online loophole in federal pornography law.”

On February 15, a federal court issued a

(continued on page 48)
If the situation isn’t covered by existing policies, YU has three major tasks: to handle the immediate situation, to make sure any future similar situations are covered by policies, and to educate students, faculty, and staff about the policies and their relationship to YU’s educational values. Now YU, probably in the person of the provost or some group he assigns this to, must decide how such behavior should be handled and by whom. If the small group on University policies is meeting, they can suggest remedies and consequences.

Once a decision has been made on this, the provost should talk to Tough and explain his responsibilities. Tough’s “contract” with Academic Computing forms part of the paperwork for this meeting. One of the sanctions should be a note in Tough’s personnel jacket. Ideally, the other sanctions are the same as they would be if the players did the same thing without using the electronic list.

The provost can now meet with the team members, in Tough’s presence, to explain what is wrong and what the consequences are going to be. Note that in all this, Mary Lou’s actual actions are irrelevant. The players may try to excuse themselves by saying they just told the truth about her. Even if the content of the list discussions of Mary Lou’s behavior is accurate, using University resources to discuss the situation is off limits.

Following these meetings, but not by too many days, are a series of actions which fall into the “prevention” category:
• Revise existing policies to cover misbehavior concerning computers and computer networks. Here, the computer policy may be folded into existing policies, or at least all policies should be made consistent.
• Schedule a series of meetings through regular sources (i.e., in the dorms, through the student government, sororities and fraternities, faculty meetings, dean’s council, and so forth) to review the revised policies and notify students, faculty, and staff of their responsibilities toward others. Use the campus newspapers and newsletters for more notification.
• Develop a written policy for owners of YU-sponsored lists, so they understand what they have agreed to as owners. Consider requiring list owners to regularly monitor list activities.

When these actions have been taken or planned, the provost should notify the Memorables what the resolution is going to be. Again, YU’s lawyers probably have to be involved, because both liability and privacy rights may be at issue. At a minimum, the Memorables ought to be told of the various activities undertaken, even if they aren’t told all the details.

In the ideal resolution, Mr. Memorable, in addition to being a doting father, is a man of the world and accepts YU’s response to his complaint as appropriate, acceptable, and one that helps all parties learn about themselves and their roles in a community. From YU’s perspective, the resolution is one that furthers its mission and principles, educates its community about the responsibilities of those who use and sponsor listservs, and establishes a framework and precedent for addressing such issues in the future. It is the best that can come from a regrettable incident.

Telecomm Act...

(continued from page 5)

temporary order restraining the government from enforcing the Communications Decency Act (CDA) provisions of the telecomm bill in response to a suit filed by the ACLU and nineteen co-plaintiffs.

In the Congress, Senators Leahy and Feingold have introduced a bill to repeal the CDA. The constitutional struggle over the indecency provisions of the bill will take center stage for some time. In addition to deciding how to deal with the constitutional challenge, the Justice Department is going to have to develop guidance for owners and operators of servers as to what “reasonable, effective, and appropriate” measures to avoid transmission or display of indecent content to minors actually means. The D.C.-based higher education associations are in the process of working with the university legal counsel organization and others to develop recommendations in the compliance area.

In a recent conversation with a campus CIO, I was reminded that a well-formulated policy on permitted uses of university computing and information resources, including Internet access, is necessary for more reasons than complying with a law that may be struck down. As the network becomes more pervasive in teaching, research, administration, and public service, there is a need to ensure that activities such as theft, fraud, plagiarism, sexual harassment, and invasion of privacy—to name a few—are no less sanctioned in the Internet environment than they are off line.

The foregoing comments are not meant to be exhaustive, and in particular do not deal adequately with the wide diversity of individual circumstances within the higher education community. The new telecommunications bill provides a range of opportunities for every school to one degree or another. The challenge for each of us is to seize them.