33. Telecommunications

Congress should

- establish full private property rights in the broadcast spectrum
 and end restrictions on the use of that spectrum;
- end FCC intervention in standard setting;
- repeal 47 U.S.C. §254, which forces telecommunications customers and businesses to subsidize universal service; and
- roll back the interconnection obligations imposed on phone companies.

Decades of experience with telecommunications regulation teach a simple lesson: regulation stifles competition and growth. By contrast, the computer and software industry, largely unfettered by regulation, is one of the most vibrant, competitive, and innovative sectors of the economy. In 1996 Congress tentatively deregulated some aspects of the telecommunications industry. But the work of deregulation is not done. The telecommunications industry should be free to build itself on a sound foundation of freedom of contract and property rights.

Recognizing That Regulation Doesn't Work

The rapid pace of change in the telecommunications industry makes regulatory micromanagement harmful for two reasons. First, regulators cannot adapt regulations fast enough to keep up with changes in the industry. Cellular phones were delayed for 10 years by the Federal Communications Commission, at a cost to the economy estimated by National Economic Research Associates to be \$85 billion. Regulators' attempts to adjust to change create further uncertainty and delay.

Second, regulators are most friendly to familiar technologies and see new competition as an attack on regulatory goals. MCI had been using microwaves to send signals over long distances in competition with AT&T for decades, although competition was long discouraged by the FCC. For years the FCC suppressed cable to protect television broadcasters.

In enacting the Telecommunications Act of 1996, Congress recognized that traditional regulation hurts business and consumers. Local and long-distance phone companies were permitted to enter one another's markets and to compete with cable television. Cable operators were freed from rate regulation. The antitrust consent decrees that had brought the business planning of the Bell Companies, AT&T, and GTE under the jurisdiction of the federal courts were terminated. But the act did not go far enough in freeing the industry to manage its own affairs.

Although the act did remove some statutory barriers to competition, the FCC retains the authority to impose formidable barriers of its own. The act delegated at least 80 matters to the FCC. A statute that makes it illegal for Company A to compete with Company B is not a good thing. But allowing competition only if Company A spends two years wrestling with regulators and subsidizes Company C is not much better. Regulatory discretion is not the same thing as freedom.

Setting the Market Free

Congress should do the following four things to move the telecommunications industry toward an efficient market structure.

Privatize the Electromagnetic Spectrum

Once mainly television and radio broadcasters and a few primitive point-to-point devices used the electromagnetic spectrum. Now the spectrum is used by satellites sending voice, data, and video communications and by cellular phones, personal communications services, pagers, and wireless local area networks. Perhaps in the future it will be used by wireless Internet access services. The wireless sector of the economy is ready to leap ahead into the 21st century.

But the current regulatory structure that governs spectrum allocation and assignment holds the industry back. Early in the history of broadcasting, government claimed the electromagnetic broadcast spectrum as public property. The only way to prevent interference, the theory was, was to have the government allocate blocks of spectrum to particular uses and then assign licenses to those frequencies within a certain area to individual users. For example, a certain range of frequencies is set aside for FM radio, and would-be broadcasters apply for licenses to provide FM service to a particular region or city. In 1993 spectrum licenses began to be

distributed by auction, rather than by hearings or lotteries. That reform did not go far enough.

The government, not the marketplace, still decides which "blocks" of spectrum will be used for what services. The slowness of the process costs the economy tens of billions of dollars. A Progress and Freedom Foundation analysis estimates that a six-year delay in bringing personal communication service technology to the market cost the economy \$9 billion.

Even if delays could be eliminated (history suggests they could not be), it makes no sense for government to dole out spectrum to some industries and close it off to others. Bureaucrats cannot know better than entrepreneurs how to use the spectrum. Consumers should not be forced to pay more for mobile phone service because the government thinks that the part of the spectrum that could be used for mobile telephony should be used only for advanced television.

Furthermore, the current spectrum allocation system allows citizens to benefit from the use of assigned portions of the spectrum only temporarily. Users of the spectrum get licenses, not full property rights. As residents of the former Soviet Union learned the hard way, private property rights are central to a thriving economy. Temporary licenses make investment in the industry more risky and less rewarding. David Colton, author of a report prepared for the Reason Foundation, cites estimates that auctioning off full property rights in the electromagnetic spectrum could raise from \$100 billion to \$300 billion in revenues.

Anyone (including foreign investors) should be able to use any part of the spectrum to provide any service, as long as he or she complies with rules against interference. Rights in spectrum should be full property rights, freely transferable.

End Government Intervention in Industry Standard Setting

Different bits of telecommunications hardware, such as switches, television sets, and telephones, need to be compatible with the rest of the telecommunications network. So the industry needs standards that operate well without being too expensive. Can government help? No. Government cannot do better than entrepreneurs in choosing industry standards.

Recognizing that, the FCC refused to decide whether digital phone systems should use time division multiple access or code division multiple access technology. Customers, engineers, and businesses will decide which is the better standard. The absence of mandated standards encourages

companies to develop the best product they can, knowing the product will be tested in the marketplace, not in endless politicized hearings.

But the FCC has not consistently applied that wisdom. In the late 1980s the FCC began trying to pick a standard for high-definition television (HDTV). Almost a decade later, the FCC still has not chosen a standard. Representatives of the computer industry believe that the standard the FCC favors will not work well with computer graphics, which will keep computers from evolving into digital televisions and competing in new markets.

The FCC's venture into HDTV standard setting reveals two hazards of government involvement. First, government standard setting means delay. And, because the technology changes so quickly, the standard will need to be adjusted. That means more delay at every stage. Second, government standard setting becomes a political football, used to restrict competition.

In the land of opportunity, no federal commission should have the power to say to a business that technology it invested millions to develop may not be sold. Standard setting should be removed from the FCC's jurisdiction.

Repeal Universal Service Laws

Lawmakers erroneously enshrined an expansive concept of universal service in the Telecommunications Act of 1996, extending subsidies to cover advanced services for the first time. The universal service provisions are incompatible with competition and should be repealed.

The FCC first formalized a universal service policy in 1970. Revenues from artificially high prices on long-distance phone service subsidized artificially low prices for local phone service. That meant that the FCC could not allow competition because competition would force long-distance prices down. There would be no money left to subsidize local services.

When the FCC could hold back competition no longer, business users and intrastate long-distance customers paid more so local service could cost less. As competition grew between providers of local business phone service, the monies that had been siphoned from business users to residential users began to dry up.

The answer in the Telecommunications Act of 1996 was to make all telecommunications service providers pay something toward the universal service subsidy. But that will force all telecommunications customers to pay extra, in the form of a surcharge or a tax, for service. The extra charge

will actually *slow* the spread of new services, hurting both consumers and the telecommunications industry. Businesses with the least healthy balance sheets will be hit the hardest.

It's unfair to ask some telephone customers to pay more so that other customers can have lower bills. Subsidizing service to rural areas is particularly unjust. Many rural telephone customers are wealthy. And people live in rural areas by choice. Some things cost more in urban areas (housing), and some cost more in rural areas (transportation). People living in those areas should bear the consequences of their decision to live where they do.

History suggests that competition will work better than subsidies to bring services to the poor and to rural areas. By 1920, after a period of competition between independent telephone companies, rural households in the United States had the *highest*, not the lowest, levels of telephone service. In Ohio, Indiana, Illinois, and Kansas, subscription levels ranged from 60 to 70 percent. More recently, intense competition in the computer industry has illustrated how quickly prices come down when free markets are unleashed. Competition, not subsidies, will make even advanced services accessible to the poor.

Finally, telecommunications service providers should be willing to offer services at reasonable prices to schools. LEXIS and Westlaw, for example, offer law students free use of their databases, hoping to win customers in the future.

Universal service subsidies impose a massive hidden tax on telephone consumers. The universal service provisions of the Telecommunications Act of 1996 should be repealed.

Reexamine New Interconnection Regulations

The interconnection obligations imposed on telephone companies by the Telecommunications Act of 1996 were drafted with the best of intentions. Unfortunately, good intentions do not necessarily make good law. Legislators should begin rolling back interconnection regulations.

Ordinarily, no one gets to use his **competitor's** facilities to help **him** compete. One moving company is not obligated to carry other **companies'** shipments on its own trucks. But that is precisely what interconnection obligations require. By comparison with almost every other industry, interconnection obligations are an extraordinary remedy.

Clearly, requiring one company to connect to its competitor violates the first company's property rights. And it is a subsidy to the second company. Let us assume that invasions of property rights can sometimes be justified to prevent monopoly (which was argued in the case of the companies that once formed the old Bell System). Even then, lawmakers should move carefully to make the invasion as limited as possible.

Instead of proceeding with caution, the Telecommunications Act of 1996 imposes interconnection obligations broadly on *all* telephone companies, regardless of whether those companies threaten to monopolize anything. Interconnection was assumed to be a cure-all for sick markets—all benefit and no cost—and the drawbacks of interconnection were never explored.

First, the interconnection obligations described in the act embroil telecommunications companies in an enormously complex political regulatory apparatus, embodied in the FCC's 700-page interconnection order. Connecting two communications networks requires businesspeople to wrestle with difficult issues of engineering, pricing, and billing. By giving the parties to the negotiations the option of playing political games in the federal or state regulatory arena, the act makes already uncertain negotiations less likely to proceed smoothly.

Second, the act gives interconnecting companies almost complete parity with the incumbent service provider. That gives interconnecting companies little incentive to develop their own networks. They can be parasites on the incumbent networks indefinitely. Incumbents are less likely to undertake the expense of building new networks, knowing those networks will be used by competitors. Too generous interconnection could diminish chances of facilities-based competition.

Third, mandated interconnection may be a form of subsidy; property is taken from one company to be used by another. The more generous the interconnection rights, the greater the subsidy. Expansive interconnection brings into existence a plethora of feeble competitors, all dependent on others' networks. Thus, expansive interconnection will lead to weak competitors who must use the political process to survive.

Because the costs of the interconnection regulatory apparatus probably outweigh the benefits, Congress should consider repealing the interconnection obligations entirely. Congress might also consider second-best alternatives. First, reform the interconnection laws so that companies that never had government help in maintaining monopoly power need not allow their networks to be used by competitors. Second, give companies that benefit from interconnection incentives to build their own networks, and make it harder for parasitic competitors to survive. Start by

amending the interconnection provisions to sunset on a clear, certain date:

- reforming the law so companies need not offer complete parity in interconnection agreements; and
- discouraging companies entering interconnection negotiations from manipulating the regulatory process.

Conclusion

The regulatory strictures that have been placed on the telecommunications industry were put there with good intentions. But this regulatory regime and the litigation that goes along with it have severe consequences: The market works less efficiently. The uncertainty of the regulatory system deters investment. The regulatory system is used to impede and delay competition. Telecommunications entrepreneurs should be free to develop a communications infrastructure for the 21st century.

Suggested Readings

Colton, David. "Spectrum Privatization: Removing the Barriers to Telecommunications Competition." Reason Foundation Policy Study no. 208, July 1996.

Gasman, Lawrence. *Telecompetition:* The Free Market Road to the Information Highway. Washington: Cato Institute, 1994.

Keyworth, G. A. n, et al. *The Telecom Revolution: An American Opportunity*. Washington: Progress and Freedom Foundation, March 1995.

Mueller, Milton. *Universal Service: Competition, Interconnection, and Monopoly in the Making of the American Telephone System*. Cambridge, Mass.: MIT Press, 1996.

-Prepared by Solveig Bernstein and Lawrence Gasman

