COMMLAW CONSPECTUS continues its tradition of academic excellence with this present installment. This volume contains a number of articles and comments that delve into the key legal and public policy issues which the legal establishment, as well as many policymakers at the Federal and State levels, will wrestle with over the coming months and years.

Congress has enacted many changes to communications statutes on several occasions in recent years. In general, the purpose of these changes has been to update antiquated communications laws in order to deal with two relatively new factors—rapid technological change and emerging global competition. Updating our laws while remaining true to the core values of the Communications Act of 1934—namely, universal service, localism, and diversity—is an ongoing challenge.

Without question, the Internet will be both a key economic engine and an open platform for economic growth and opportunity for our workforce. We are in a period of what Joseph Shumpeter referred to as "creative destruction." Essentially what Shumpeter espoused was that innovation compels archaic technologies to yield to new technologies and be swept away and rendered obsolete. Shumpeter himself placed no value judgment on whether this radical change was beneficial or unhealthy for individual marketplace participants, only that the process of replacing the old with the new is integral to growth and helps to promote higher standards of living. Shumpeter said, "Without innovations, no entrepreneurs; without entrepreneurial achievement, no capitalist returns and no capitalist propulsion."

The Internet contains innovation as part of its "technological DNA." And, I believe that the "technologically-recombinant DNA" of the Internet will propel both its growth and America's economic growth for decades to come. As innovation is a key factor in sustaining and fostering growth in many liberal democracies, this proclivity, as Shumpeter explained, of new technologies to promote innovation, serves to precipitate the decline of old technologies, companies and corporate business plans. This phenomenon is clearly evidenced in the Internet revolution.

The Internet has quickly become an indispensable medium for commerce, communications, education and entertainment. I believe that the key to the Internet's successful advance is its open architecture and global interconnectivity. Any network over any medium that can effectively speak in Internet Protocol (IP), is part of a new Esperanto, a "technological Esperanto" of zeros and ones. As a result, many expect IP-based networks to have profound effects on how products are positioned, transactions are performed, prices determined, and fees and taxes assessed.

So what should the government do? While we should not overstate government's role in this process, I find it is more frequently understated. The birth of our digital economy has clearly had government as its midwife. The new economy was born of government policies and fueled by the advent and expansion of digital technologies.

As change in our economy accelerated in the 1990s, it was clear that the lines delineating what we called the old economy companies and the new economy companies (which includes, but is not limited to, the storied rise and fall of dot.coms) became increasingly blurred. We now have "paleo-new economy" companies (such as Amazon.com) and "neo-old economy" companies (such as BarnesandNoble.com) battling anew on the Net for market share.

Particularly, with respect to telecommunications policy (yet also true with national energy

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policy), many new, whiz-bang gadgets or services cannot challenge the status quo unless and until the government insists on open markets, is willing to battle historic monopolies (such as local telephone companies or incumbent cable providers) or gives new services or technologies life by allocating scarce airwave frequencies to the private sector.

Government action is therefore often a condition precedent for entrepreneurial activity in the marketplace to materialize. This process of the government—creating markets and industries in the telecommunications sector—has a long storyline, with many interwoven subplots, but I want to briefly highlight some of the key government decisions of this story by way of example.

**AT&T BREAKUP**

First, let us look at the seminal example, the AT&T antitrust case. AT&T and its Bell system formed a government-sanctioned, regulated monopoly serving more than 95% of the country. It had more than a million employees as of 1980. It had a storied research center in Bell Laboratories but, nevertheless, because of its monopoly status, kept innovation in the labs and out of the marketplace. Introduction of new services and products rarely occurred, as AT&T was financially content because its service was profitable and regulated to be so. AT&T sat on its monopoly for years, seeing no reason to invest in, for example, fiber optics. It was only after a competitor, MCI, with the vision of its founder Bill McGowan, started to vigorously challenge AT&T’s monopoly and after Sprint placed a significant order of glass fiber from Corning that AT&T finally “heard the pin drop” and began to move to the new technology and make real investments in innovation.

Parenthetically, I should also mention here that the government-forced divestiture of AT&T not only created new opportunities for long distance competition, but often overlooked is the benefit of manufacturing competition. AT&T had been a monopoly provider of telephone service. But from a manufacturing standpoint, AT&T was a monopoly—it was the only major purchaser of telco equipment in America. The breakup of the Bell system served to create multi-million dollar opportunities for manufacturers of customer equipment for the home and office, and also for manufacturers of network equipment, as telecommunications companies built out their own competitive infrastructure.

**INTERNET ACCESS CHARGES**

In 1987, the FCC was insisting that fledgling online companies—such as Prodigy and CompuServe, who at that point in time had only a few thousand subscribers—pay the “enhanced service provider” (“ESP”) access fees to the local telephone monopolies. Essentially, this meant that ESPs would pay fees similar to those that long distance companies paid for access to the local network.

I held hearings in Congress, including a field hearing in Boston, and fought this proposal. Why was this important? If online companies had to pay the same per minute access charges that long distance companies paid, then this emerging industry would have been crippled. Per minute charges also would have changed the nature of the Internet experience because these companies would have undoubtedly charged on a per minute basis rather than on a flat rate. How many people could afford to surf the Net today if they were being charged on a per minute basis?

**WIRELESS COMPETITION**

In 1993, Congress took action to move more than 200 megahertz of radio-frequency spectrum, a swath of the airwaves used by the government, to the FCC for reallocation to the private sector. As part of the Omnibus Budget Reconciliation Act of 1993, this provision sought to get these frequencies out of the control of the Pentagon in recognition that the Cold War was over, and that, as policymakers, we were eager to promote new competitors to the existing cellular duopolies.

In order to ensure more wireless competition and to justify the fact that Congress had preempted the States from regulating wireless prices, many in Congress worked diligently to ensure that the FCC did not allow incumbent cellular companies to bid on the new frequencies within their existing service areas. Instead, we wanted a sufficient number of new licenses to go to new entrants in the marketplace so that consumers would have a sufficient number of choices and prices would drop. These additional frequencies
helped launch digital PCS service, and now we have five or more competitors for wireless service in most cities and wireless phone prices have declined dramatically.

TWO-WIRE WORLD

In the 1984 Cable Act, Congress intervened to further nurture the cable industry by preventing incumbent local telephone companies from getting into the cable television business. This policy was in furtherance of a congressional policy that sought to create a separate infrastructure to the telephone industry as well as to add voices and diversity to the media industry. This policy has led to today’s reality that 96% of American homes have access to a cable wire. It is important to note that it is unlikely that reliance upon any antitrust statute would have resulted in the creation of additional, independently-owned infrastructure in the home.

In 1994, I worked with the Ranking Republican on the House Telecommunications and Finance Subcommittee, Jack Fields (R-TX), in making the two-wire world the basis of national policy. Rather than agreeing to the creation of a “super-pipe” to the home, where incumbent cable and telephone companies could buy each other out and control access to the home over a common infrastructure, I insisted upon an in-region cross-ownership prohibition between cable and local telephone companies as a prerequisite for moving forward on telecommunications legislation. The resulting legislative effort, H.R. 3636, was approved overwhelmingly by the House in June 1994, only to succumb to Senator Bob Dole’s efforts to “kill” all pending legislation at the end of the Congressional session that fall in the Senate.

The following year, however, in what ultimately became the Telecommunications Act of 1996, new House Commerce Committee Chairman Tom Bliley (R-VA) retained this “two-wire world” provision in the House telecommunications proposal. I battled to help set the stage for a “two-wire world” by letting the telephone companies into the video business but preventing telcos from simply gobbling up the cable systems within their respective service areas through buy-outs.

By requiring this in-region, cross-ownership prohibition, competition between the two wires can develop and we are already beginning to see this two-wire competition as Internet access via cable is pushing the telcos to increase the digitalization of their networks and provide end-to-end digital service to consumers at lower and lower cost. Few countries in the world had the foresight to insist, through government policy, on the creation of competing wireline infrastructures to the home, and, as a result, few countries stand to reap the benefits of wire-to-wire competition the way America can if policies are put in place to maximize open competition for goods and services on those wires.

OPEN MARKETS VS. MONOPOLY BOTTLENECKS

So, should the government just get out of the way? Not always. Certainly not if we want to see the development of an open, fully competitive infrastructure that provides ample opportunity for public discourse and entrepreneurial fervor.

When you consider all of the fantastic changes that have occurred in the last few years in technology and the globalization of markets, I am reminded of the old line by Pogo: “We’re surrounded by insurmountable opportunity!”

Right now the insurmountable opportunity is an outgrowth to a certain extent of government-driven public policy decisions that have paid off. But in this period of technological convergence, new challenges and opportunities are presented to both entrepreneurs and policymakers. Convergence can allow for the greater democratization of technology throughout society, further fueling economic growth. Convergence will also avail certain companies and industries of the opportunity to devise new bottlenecks to further growth.

We must keep the “Barons of Bandwidth” at bay, and ensure an open architecture Internet so that entrepreneurial activity has a platform upon which to build and flourish. That will be a key theme of the next chapter of our story. Will cable broadband networks be open, consistent with the technological neutrality embodied in the Telecommunications Act of 1996? Will the Internet remain an open architecture medium? Or, will new corporate efforts succeed in making it a little less open, less chaotic, and less innovative?

This installment of *Commlaw Conspectus* touches upon many issues that revolve around the governmental decisions that affect our telecom-
communications marketplace and American consumers and workers. These decisions affect our fundamental freedoms as citizens and our hopes and aspirations for our democracy. The articles and comments contained herein—from the excellent article by former FCC Chairman Bill Kennard and Elizabeth Evans Lyle about universal access to telecommunications, to the articles dealing with local government roles and responsibilities, First Amendment issues in election reform, spectrum flexibility, and others—take in the breadth of the many public policy issues that Congress, the FCC and the courts will confront in the exciting years ahead.