



CENTER FOR THE DIGITAL ECONOMY  
AT THE MANHATTAN INSTITUTE

## Washington's Wireless Wars

**Thomas W. Hazlett**

Thomas W. Hazlett is a Senior Fellow at the Manhattan Institute's Center for the Digital Economy. His research focuses on law and economics, with particular emphasis on telecommunications policy. The following remarks were delivered by Dr. Hazlett at a recent Manhattan Institute forum in New York City.

---

### Introduction

There has been a great deal of commentary in recent years about the Telecommunications Act of 1996. The news coverage spikes each February, on the anniversary of President Clinton's signing of the measure, and is routine. "Intended to open local markets to competition, the act has done little more than encourage industry consolidation while deregulated phone and cable rates surge." The reports are laced with inaccuracies, supported by quotations from advocates or interests that exist to support such boilerplate: "Markets Fail—Film at 11."

The real news in telecommunications is that half the marketplace—wireless—was untouched by the deregulation of 1996. In fact, the basic rules governing our use of radio spectrum have been fixed since another February event—the signing of the Radio Act by President Calvin Coolidge exactly 75 years ago, February 23, 1927.

### Socialism with a Wireless Interface

The airwaves were then emerging as a tremendously valuable natural resource in an amazingly

influential new medium: AM radio. For the first time, words spoken by one person could simultaneously be heard by millions. The change in communications was so breathtaking that pundits had to come up with a new word for it. From agriculture they borrowed the term "broadcasting," which meant "throwing seeds far and wide."

Radio broadcasting took root, grew, and gave rise to powerful electronic media. But through it all, the 1927 Radio Act has stunted the emergence of an efficient competitive marketplace by outlawing property rights to radio waves.

The frequencies that make possible wireless communications are to be owned by no one. Access to the airwaves is a privilege, not a right. All decisions as to how bandwidth may be used reside in the federal government.

This command-and-control system—"socialism with a wireless interface"—combines the inefficiency of Soviet resource allocation with the bawdy ethics of the building-permit process in Chicago. Five commissioners dedicate wave band X to amateur radio, Y to satellite television, Z to fixed private relays. The standard used is "public interest, convenience, and necessity."

No one has ever been able to figure out what that phrase means, not in 75 years. Ten years ago, then-Federal Communications commissioner Ervin Duggan insisted that the standard could be clearly defined, saying that the Commission would soon do so. Patiently, we wait.

### **A Dogfight Favoring Incumbent Interests**

Among those versed in telecom regulation, there is a broad consensus that the FCC stifles new ventures in wireless. In fact, this was recently the conclusion of a bipartisan group of economists who had served at the White House, the Federal Trade Commission, the Department of Justice, and the FCC itself.

*Lawyers and lobbyists get paid generously to generate these delays.*

In a rather remarkable policy pleading, filed at the FCC in February 2001, this group of 37 experts noted that few of the Commission's regulations actually bear on matters of the "public interest." Instead, the FCC engages primarily in protecting private, established interests. The experts therefore called for the elimination of all regulation of wireless, except for those few and simple rules needed to prevent interference and monopolies.

The essence of the problem is this. Under the '27 Radio Act, entrepreneurs have no right to offer consumers additional choices or lower prices. Before they can risk their capital, they must surmount a lengthy and arduous lobbying process, assuming a burden of proof in establishing that their rivalry will enhance the "public interest."

That is exactly the sort of dogfight that incumbent licensees relish. They can file position papers, raise objections, question assertions of entrants, demand additional information, and

present doomsday scenarios about the effect of additional competition. All the while, they win the game through mere delay. After all, they're already in the market, and the new competitors are not. "Heads we win, tails let's flip again. I think that coin is lopsided. When was it calibrated? Who authorized this coin toss? Let's go 447 out of 893. Comments due by July 1, reply comments October 15."

Lawyers and lobbyists get paid generously to generate these delays. Nevertheless, the process is wrong. The consumers' interest is sacrificed. Public-interest outcomes—which are supposed to make the regulated market superior to an unregulated one—are either forgotten or are dwarfed by massive processing costs.

### **Burying New Technologies**

A useful illustration of the regulatory dynamic is offered by Digital Audio Radio Satellite service, or DARS. This technology offers commercial-free, CD-quality radio to the car or home, directly from satellites, for a modest monthly fee. Many people have recently subscribed to DARS providers XM or Sirius, and there's a buzz about this potentially wonderful new service.

But the technology is not new. In fact, four firms petitioned the FCC to supply DARS in 1990. The regulatory battle lasted for most of the last decade, with licenses for just two systems—two being lost in the bureaucratic shuffle—in 1997. The FCC considered that timetable a resounding success, an example of streamlined procedures.

What was that regulatory battle about? What "public interest" did the Commission ponder during those years?

In a word: localism. Incumbent radio broadcasters claimed that if the FCC allowed national programming to be distributed in this very efficient

fashion, local broadcasters would lose millions of advertising dollars. The effect of that loss, the argument ran, would be to eliminate local broadcasting as a competitive medium.

The irony here is that the best way to get local broadcasters to do local programming is, in fact, to subject them to satellite-radio competition. Turn on an AM/FM radio, and you'll hear a lot of programs that do not originate down the block. Syndicated radio has taken off over the last several years, crowding out local content. But if Rush Limbaugh were beamed directly to customers via satellite, local stations that used to carry his show would be free to provide alternative content. In fact, they would be *forced*, by the market, to provide local programs as a competitive response, delivering a service to customers that nationally distributed programs cannot.

That's a 30-second analysis, and assuming that localism was really what the FCC wanted to achieve, it should have embraced satellite radio. But it took the FCC seven years to permit this efficient rival in the radio market to invest billions in its attempt to give listeners greater choice.

There is an interesting footnote to DARS. Earlier this year, when one of the satellite-radio firms obtained a patent for a technology with potential for allowing it to beam individualized content into local markets, the firm was not praised for seeking to serve community interests. Instead, it was ferociously attacked by broadcasters for seeking to gain undue advantage and for violating its pledge to provide only national programs. The satellite-radio company quickly retreated, vowing not to use its patented product to provide local content.

Despite official pronouncements, "localism" is not about localism. It is about burying technologies that might allow new firms to compete with established ones.

## A Surplus of Unused Bandwidth

Today there is a long line of DARS-like innovations that can't get to market. For instance, there are slots for tens of thousands of new low-power stations in the FM radio band. The entry of these community broadcast stations has been blocked by resistance from both commercial broadcasters and National Public Radio—strange bedfellows that get very affectionate when conspiring to thwart new entrants in radio markets. In television, low-power TV stations attract minuscule audiences. They are, however, allocated prime frequencies that could be used to provide highly valued broadband access to the Internet and local loops for telephone service. In the midst of a national regulatory dilemma over how to get more competition to cable companies as well as to the local telephone exchange carriers, unleashing the TV band for wireless telecommunications would seem a no-brainer. But efforts by the low-power TV stations to use their allocated spectrum for services that customers actually want to pay for have thus far proven ineffective.

*. . . service providers can't get access to radio spectrum.*

There are advanced technologies providing personal location devices. These are the kinds of gadgets that would have been extremely useful on and immediately after September 11. The technologies are all lined up; they have been for years. They'll wait for more years, because service providers can't get access to radio spectrum.

Software-defined radio is another exciting technology, as is ultra-wide band. But regulatory gridlock and over-conservatism at the FCC on the interference issue guarantee to tie them up in red tape for years.

## The Negroponte Switch

M.I.T. computer scientist Nicholas Negroponte once opined that, while we were born into a world in which we get phone calls over a wire and watch TV over the air, we will—if lucky—die in a world where it’s just the reverse. The current FCC-mandated transition to digital television has not grasped the subtle importance of this tectonic transition.

Already, 87 percent of American households subscribe to cable or satellite subscription TV service, forgoing “free, over-the-air” TV to pay for wider video choice. By 2005, just 10 million households of the over-100 million U.S. households will view “off-air” TV.

*. . . we will probably see even more draconian methods adopted . . .*

In the midst of the stampede by consumers away from broadcast TV, the FCC has decided to force a hugely expensive *expansion* of the TV band, mandating investment in another generation of broadcast technology. This puts us in the midst of what’s called the Digital TV Transition.

As configured by the regulators, it is going nowhere fast. Every TV station in America is supposed to transmit digital programming by May 1, 2003. There are 1,400 full-power TV stations, but only about 200 have gone digital thus far, and 55 percent of all TV stations have officially informed the FCC that they will not make this deadline. By the end of 2006, we’re supposed to turn off the old analog signals, going to all-digital TV broadcasting. That deadline will, likewise, be a figment of the FCC’s imagination.

While there is little consumer interest in the broadcast TV service to which the FCC devotes bandwidth, there is intense demand for alternative uses.

Technology firms, the great builders of networks, clamor for access to the TV band for wireless telecommunications. But the FCC won’t let them in.

So this hugely valuable swath of radio spectrum continues to defy rational allocation. In fact, we will probably see even more draconian methods adopted to force people to buy digital TVs, because consumers are rejecting the FCC’s initiative. By mid-2001, consumers had bought only 150,000 units capable of receiving an off-air digital signal. Meanwhile, abundant wireless services—for broadband access, local dial-tone competition, location devices, new networks, security systems, and PANS (pretty amazing new stuff)—thirst for radio spectrum.

## Waiting for Property Rights

In 1959, economist Ronald Coase wrote an important article, simply titled “The Federal Communications Commission.” His thesis was that, by allowing private property rights to exist in radio spectrum, a market could form to allocate bandwidth. If the airwaves were subjected to competitive forces, he argued, they would show the efficiencies seen elsewhere in a capitalist economy. Consumers could thereby get the wireless services that they most desired.

That insight led Coase to his most famous paper, “The Problem of Social Cost,” published in 1960. Thirty-one years later, Coase’s insight was recognized by the award of the Nobel Prize in Economics.

His thesis was not well received by regulators, however. Asked by the FCC to testify at a hearing after his first article came out, he was greeted by a member of the Commission: “Good morning, Professor Coase. Please tell us, is this all a big joke?”

Political hardball produces laughs but also shivers, censoring studies that challenge the status quo.

In the 1960s, for instance, the Rand Corporation spiked Coase's own follow-up paper on the potential for a market in bandwidth, because anonymous reviewers told them that the very idea of selling bandwidth would anger Congress, CBS, and the Defense Department. Incurring the wrath of those parties would not have been a sharp marketing move by a think tank dependent on government grants. And while I was at the Commission myself, ten years ago, I saw two excellent but controversial staff papers—one on deploying high-definition TV, another on reallocating UHF TV spectrum for cellular—barred from public distribution.

In the four decades since Coase's hostile reception at the Commission, however, markets have dramatically realigned. The old broadcasting cartels in radio and television are in free fall, emerging new networks are driving productivity increases across the economy, and radio spectrum

is increasingly seen as a key input powering the New Economy. Political realities are slow to change, but even glaciers can melt. The efficiency of a competitive market based on property rights, which enjoys broad support among economists, is no longer dismissed as a "joke." On February 29, 2000, then-FCC chairman William Kennard asked: Markets for bandwidth are emerging in wireline communications. Why not in wireless?

That was a trick question, of course. The Radio Act does not allow private ownership of radio frequencies, and ownerless assets are difficult to trade. Nevertheless, the FCC soon leaked the news—resulting in a front-page lead story in the *New York Times*—that it would soon enact reforms allowing de facto property rights to spectrum.

It's a policy that's long past due. And while we continue to wait, valuable wireless services go wasting.





**The Center for the Digital Economy** studies public policy issues in the information technology sector, where emerging technologies present policymakers with new challenges. The Center injects economic reasoning and empirical analysis into ongoing debates. It aims to improve understanding by applying three perspectives:

**Law and Economics.** By subjecting various legal institutions to standard economic analysis, the effectiveness of alternative regulatory regimes can be evaluated. Which laws are designed to encourage efficiency? Which pass the market test?

**Public Choice.** Legislators, regulators, and executive branch officials operate in a highly competitive environment. Explaining how and why regulatory regimes exist necessarily brings about scrutiny of the political forces and bargains that shape public policy.

**Policy Implementation.** Contrasting the costs and benefits of alternative approaches, the Center explores transitional devices capable of motivating pro-consumer policies.

The Center brings these three perspectives to bear on a wide range of issues, including:

- Spectrum allocation—using markets to alleviate wireless traffic jams
- Broadband—where impediments to facilities-based competition stifle development of the Internet
- Antitrust in software markets, squaring consumer gains from economies of scale and market-wide standards with new industrial organization theories
- Merger policy, confronting the new challenges of e-commerce, competition between networks, and consolidation in the wake of the dot.com meltdown
- Content regulation, applying the First Amendment to electronic speech
- Intellectual property, drawing the line around old rights in the New Economy

Confronted with these and other problems, regulators have steered between the heavily regulated model of traditional public utilities and the laissez faire of Silicon Valley. The resulting policies have at times been confused. The Center provides both a theoretical framework and a practical agenda for clarifying policy options. The result, it is hoped, will be a road map through the terrain of new technologies, which are increasingly important to our economic development as well as to the performance of democratic institutions.

The Manhattan Institute is a 501(C)(3) nonprofit organization.

Contributions are tax-deductible to the fullest extent of the law. EIN #13-2912529



MANHATTAN INSTITUTE FOR POLICY RESEARCH

52 Vanderbilt Avenue • New York, NY 10017

Non-Profit  
Organization  
US Postage  
**PAID**  
Permit 04001  
New York, NY