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Debalkanize the Telecommunications Marketplace

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This article analyzes the technology-specific regulatory environment of the United States subscription television marketplace. The article examines the need for a more rational technology-neutral implementation of telecommunications policies in order to enhance innovation, full utilization of advanced technologies, and U.S. competitiveness. In tracing the origins of today's checkerboard regulatory framework, including the evolution of laws and regulations which currently apply to cable television and alternative multichannel delivery systems such as the telephone companies, wireless cable, SMATV, TVRO, and DBS, the article finds that the resulting compartmentalization of individual technologies has been caused by historic accident rather than driven by any underlying policy objectives. The article documents a consistent pattern of underutilization of new technologies, with development and delivery to consumers of the full benefits of innovations repeatedly slowed by regulatory impediments rather than by any lack of commercial viability. In particular, the article highlights the debates surrounding telco entry, inter-industry cross-ownership restrictions, the cable compulsory license and a variety of other telecommunications issues to illustrate how incidental regulatory distinctions among technologies have impaired the growth and competitiveness of the U.S. telecommunications marketplace. In the authors' view, regulatory distinctions among industries and rules that restrict the use or the combination of different technologies are not appropriate unless there is a compelling policy reason to distinguish among the technologies. The authors do not argue for deregulation of telecommunications, but rather for regulation better designed to serve public policy. The article concludes that telecommunications laws, regulations and policies should, to the extent possible, be technology-neutral. Congress and regulators should pursue technology-neutral policies and resist pursuing policy goals on an ad hoc, technology-specific basis. Only by debalkanizing the telecommunications market from unnecessary technology-specific legal barriers will all U.S. telecommunications industries realize their full potential.

INTRODUCTION

In the United States, the telecommunications marketplace remains a
checkerboard pattern of distinct industries reminiscent of a pre-World War I map of Europe. The various radio, telephone, and television video delivery systems, for example, are divided into separate industries by statutory, regulatory, and judicial boundaries rather than by technological or business realities. The technology-specific legal environment of established industries can also create an array of protective barriers that are unfavorable to new commercial applications of advanced technologies. This combination of compartmentalized and protective telecommunications law is unable to anticipate and keep pace with the inevitability of rapid technological change, stunts the growth and efficiency of U.S. telecommunications businesses and hinders their international competitiveness. Recognizing the inhospitality of the legal terrain, there are significant efforts underway in Congress\(^1\) and at

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\(^1\) See, e.g., H.R. 550, 102d Cong., 1st Sess. (1991) (would prohibit local cable companies from unreasonably discriminating among their subscribers and prohibit programming distributors that are affiliated with cable operators from unreasonably refusing to deal with other multichannel distributors of cable and from imposing other terms on their programming that would impede retail competition); H.R. 1303, 102d Cong., 1st Sess. (1991) (would facilitate access to programming for multichannel video providers by barring national and regional programmers affiliated with cable operators from unreasonably refusing to deal with distributors in prices, terms, and conditions of programming, provide for cable rate regulation in absence of effective competition, etc.); H.R. 2546, 102d Cong., 1st Sess. (1991) (would promote the development of a nationwide broadband telecommunications infrastructure by 2015 and permit increased telephone company entry into the video marketplace subject to certain safeguards) [hereinafter H.R. 2546]; H.R. 3420, 102d Cong., 1st Sess. (1991) (would require programmers to establish nondiscriminatory prices, terms, and conditions for distribution of their programming through third-party packagers, require satellite television programmers who encrypt their services to make those services available to home satellite antenna users, and require programmers to establish reasonable and nondiscriminatory criteria for licensing satellite distributors); H.R. 3560, 102d Cong., 1st Sess. (1991) (would provide for fair access to programming, encourage multiple franchises, protect against horizontal concentration and vertical integration, provide for rate regulation, etc.); H.R. 3701, 102d Cong., 1st Sess. (1991) (would encourage the development of a national fiber optic network by creating a special fund, financed by requiring the FCC to use competitive bidding in awarding telecommunications licenses rather than awarding by lottery); H.R. 4451, 102d Cong., 2d Sess. (1992) (would clarify Congress' intent to provide a technology neutral cable compulsory license); H.R. 4511, 102d Cong., 2d Sess. (1992) (would reform the cable and satellite compulsory license systems); S. 12, 102d Cong., 1st Sess. (1991) (would bar national and regional programmers affiliated with cable operators from unreasonably refusing to deal with distributors in prices, terms, and conditions of programming; provide for cable rate regulation in absence of effective competition; etc.) [hereinafter S. 12]; S. 211, 102d Cong., 1st Sess. (1991) (would prohibit local cable companies from unreasonably discriminating among their subscribers, and prohibit programming distributors affiliated with cable operators from unreasonably refusing to deal with other multichannel distributors of cable or from charging prices or imposing other terms of their programming that would impede retail competition); S. 218, 102d Cong., 1st Sess. (1991) (would require the Secretary of Commerce to make additional frequencies available for commercial assignment in order to promote the development and use of new telecommunications technologies, and for other purposes, and would reinstate the fairness doctrine); S. 431, 102d Cong., 1st Sess. (1991) (would provide that basic cable rates can be regulated in the absence of effective competition, which would be defined as the presence of more than one multichannel video programming distributor in a particular cable franchise area, and would prevent cable operators who offer multiple tiers of basic service from forcing consumers to buy channels which they do not want in order to receive those programming services which they do want); S. 432, 102d Cong., 1st Sess. (1991) (would require vertically integrated cable programmers to offer their programming to alternative technologies on fair terms and at nondiscriminatory prices and restrict horizontal concentration in the cable industry by forbidding any one cable company from providing service to more than twenty-five percent of cable subscribers in the country); S. 1200, 102d Cong., 1st
the FCC\(^2\) to modify existing telecommunications rules to improve the legal landscape.

U.S. business’ inability to take full advantage of recent advances in television technology vividly demonstrates how commercial opportunities are determined and limited by anachronistic, technology-specific laws. Historically, broadcast television was seen as the dominant force in the video marketplace. In 1975, the United States had no cable networks, since cable was used solely as a broadcast retransmission medium, and, in 1976, only seventeen percent of television households subscribed to cable.\(^3\) In a very short time, however, the video marketplace changed dramatically. The broadcast industry began facing increasingly intense challenges from a powerful cable television industry. By 1990, the prime time viewing share of the three major commercial networks had fallen to sixty-four percent from a ninety-three percent share in 1975.\(^4\) Today, cable television is accessible in over ninety percent of television households.\(^5\) In addition, new commercial delivery systems, including “wireless cable,”\(^6\) SMATV (“private cable”),\(^7\) and the TVRO (“home satellite dish”) industry\(^8\) now provide

2. Presently, the FCC is considering amending a number of current regulations which place restrictions on broadcasters, the telephone companies, cable television, and wireless cable, as well as other subscription television technologies. For example, the FCC has recommended easing restrictions on telephone company entry into the video marketplace, 56 Fed. Reg. 65,464 (1991), and eliminating certain restrictions on network-cable cross-ownership, 57 Fed. Reg. 6792 (1992).


4. Id. at viii.

5. Id. “[C]able subscription [grew] from 17 percent of households in 1976 to 56 percent in 1990.” Id. at 11.

6. “Wireless cable” systems use the Super High Frequency (SHF) portion of the radio frequency spectrum to transmit multiple channels of video programming from terrestrial transmitters to small antennas mounted on subscribers’ rooftops. Wireless cable is now able to provide multichannel programming using a combination of the following services: multipoint distribution service (MDS), multichannel multipoint distribution service (MMDS), instructional fixed television services (ITFS), and the former operational fixed service (OFS). The OFS channels have been reallocated to MDS, effective January 2, 1992. 56 Fed. Reg. 57,808 (1991). Through its combination of services, wireless cable can now provide up to thirty-three channels.

7. Satellite Master Antenna Television (SMATV), otherwise known as “private cable,” serves private, multi-unit dwellings. A SMATV system connects a master antenna television system (MATV), which links the units in the dwelling to a single external television antenna, and a receive-only satellite earth station (TVRO).

8. Television receive-only satellite earth stations, otherwise known as home satellite dishes, or backyard dishes, are used to receive satellite delivered programming. These dishes “access primarily C-Band satellite transponders and in some instances access Ku-Band transponders.” S. Rep. No. 92, 102d Cong., 1st Sess. 15 (1991). C-Band antennas are usually approximately...
subscription television services to a small but growing number of users. On
the horizon, emerging technologies such as direct broadcast satellite (DBS),
fiber optics, digital transmission, channel compression, and high-definition
television (HDTV), as well as the increased involvement of telephone
companies promise to further alter the video marketplace.

If, in this time of rapid technological change, the United States wishes
to promote an internationally competitive telecommunications industry, it
cannot afford to maintain rigid, static laws that protect established technolo-
gies at the expense of innovative and potentially competitive technologies.
Instead, to allow the realities of the marketplace to control the industry and
spur competition, the United States should adhere to telecommunications
policies and general principles which are technology-neutral.

This article will discuss the issue of technology-neutral regulation in the
context of the subscription television market. Of course, the analysis
supporting technology-neutrality in telecommunications policy is not limited
to that field. Ideally, telecommunications policy should be flexible enough
to encourage rather than discourage combinations of technologies and innova-
tions which are efficient and commercially promising.

I. CABLE TELEVISION COMES OF AGE

In large part, cable television owes its present dominance to the fact that
it became legally feasible much earlier than other potentially competing
delivery systems for subscription television. If cable had not obtained the
compulsory license to retransmit distant broadcast signals and if it had not
been given a big boost by Congress in the Cable Communications Policy Act
of 19849 (Cable Act of 1984) it could not have risen to its current position
of expanding dominance.10 The resulting statutory and regulatory environ-
ment favored cable-only systems as the exclusive distributor of subscription
television in most communities, rather than local systems employing the most
rational combinations of technologies for each geographic market.

Initially called "community antenna television" (CATV), cable was
developed in the United States in the late 1940s.11 These early systems
were used primarily to improve reception of over-the-air broadcast signals
for subscribers who, due to local topography, could not receive clear

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(1991)).
10. Currently, about ninety percent of the homes in the country are passed by cable systems
and over sixty percent of these homes subscribe to cable. 138 CONG. REC. S561 (daily ed. Jan.
29, 1992) (statement of Sen. Inouye). An estimated fifty-four million households have basic
cable in 1992. Paul Farhi, Reregulating Cable: A Political Response to a Wired Nation, WASH.
11. See DANIEL L. BRENNER, ET AL., CABLE TELEVISION AND OTHER NONBROADCAST
VIDEO § 1.02 (1991).
reception of television signals. Beginning in the 1960s, CATV, or "cable television" as it came to be known, branched out, importing distant broadcast signals in order to provide programming to its subscribers.

At first, cable television developed slowly. This was due in part to technology-specific regulatory barriers which protected broadcasters from cable competition. For example, in the 1970s cable's development was hindered by the Federal Communication Commission's (FCC's) "anti-siphoning" rules. The FCC promulgated rules which prohibited cable operators from providing movies that were more than three, but less than ten, years old.\(^\text{12}\) Cable operators were also prohibited from airing specific sports events shown on broadcast television within the previous five years.\(^\text{13}\)

In 1977, the "anti-siphoning" rules were struck down by the U.S. Court of Appeals for the District of Columbia on the grounds that they were beyond the FCC's jurisdiction, unsupported by the record, and violative of the first amendment.\(^\text{14}\) The removal of these restrictive regulations helped pave the way for cable to compete with broadcast television by offering a full range of alternative programming.

The "anti-siphoning" rules were just one regulatory hindrance in cable's early development. During the 1970s cable's growth was also impeded by distant signal,\(^\text{15}\) syndicated program exclusivity,\(^\text{16}\) minimum channel capacity,\(^\text{17}\) and leased access rules.\(^\text{18}\) However, as each of these rules was rescinded or struck down, and as Congress and the FCC began to encourage the emergence of cable, the industry began to flourish. Unfortunately, in its efforts to promote cable, the government established rules that later would unintentionally hinder the development of alternative subscription television technologies. Ironically, this caused the children of cable—its technological

\(^{12}\) 47 C.F.R. § 73.643 (1975).

\(^{13}\) Id.


\(^{16}\) 47 C.F.R. §§ 76.151-.161 (1980). These rules, which authorized a local television station which had purchased exclusive exhibition rights to a program, to demand that a local cable system delete that program from its distant signals, regardless of whether the television station was simultaneously showing, or ever planning to show the program, were repealed in 1980 along with the distant signal rules. In re Cable Television Syndicated Program Exclusivity Rules, 79 F.C.C.2d 663.

\(^{17}\) 47 C.F.R. § 76.252 (1977).

\(^{18}\) 47 C.F.R. §§ 76.254, .256 (1977). Together, the minimum channel capacity and leased access rules required "cable television systems that ha[d] 3,500 or more subscribers and carry[ed] broadcast signals to develop, at a minimum, a 20-channel capacity by 1986, to make available certain channels for access by third parties, and to furnish equipment and facilities for access purposes." FCC v. Midwest Video Corp., 440 U.S. 689, 691 (1979). Both of these rules were struck down by the Supreme Court in 1979. Id.
offspring—to face an even stiffer fight to gain a toehold in the marketplace.\textsuperscript{19} In the late 1970s and early 1980s, the cable industry grew dramatically, facing virtually no competition in the subscription television market. Both technological advancements and favorable government policy propelled the industry forward. Newly emerging satellite technology enabled cable to efficiently distribute programming, including the made-for-cable programming that was becoming available. Gradually, cable began to offer innovative programming that was not available through over-the-air broadcasting.

Legislative, regulatory, and judicial decisions contributed to cable's rapid emergence as the preeminent subscription distribution system. For example, the cable industry was assisted by the enactment of pole attachment legislation. Because most cable systems use poles to run their wires to their subscribers, the ability to access existing utility poles is crucial to the cable industry. During the early 1970s, the cable industry battled with the telephone and utility industries over access to telephone and utility poles. In certain cases, the telephone and utility companies were accused of demanding highly unreasonable pole attachment rates from the cable companies.\textsuperscript{20}

In response to this heated battle and the FCC's decisions that it lacked jurisdiction to regulate cable television pole attachments on non-telephone utility poles\textsuperscript{21} as well as on telephone utility poles,\textsuperscript{22} Congress enacted pole attachment legislation to assist the young cable industry. Under this

\textsuperscript{19} Ironically, in its early pursuit of legislative assistance, the cable industry voiced many of the same arguments its competitors and newly evolving technologies have raised against cable during the late 1980s and 1990s. See, e.g., Hearing on Domestic Telecommunications Common Carrier Policies Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science and Transportation, 95th Cong., 1st Sess. 1066 (1977) (statement of Ralph M. Baruch, President and CEO, Viacom International, Inc.) (“Government should foster competition. I believe that monopolies have no incentive to innovate, to bring about technological advances which the American consumer can expect and should obtain.”); Hearing on Pay Cable Television Industry Before the Subcomm. on Antitrust and Monopoly of the Senate Comm. on the Judiciary, 94th Cong., 1st Sess. 38 (1975) (statement of Ralph M. Baruch, President and CEO, Viacom International, Inc.) (“I would also suggest that this committee consider taking the necessary steps to make certain that no medium have the right to exclude product from any other medium.”); Oversight Hearing on Cable Television Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation, 95th Cong., 1st Sess. 176 (1977) (statement of Ralph M. Baruch, President and CEO, Viacom) (“Well, what are the broadcasters really concerned about? It seems to me that all they are concerned about, and this was illustrated here again, is competition. Now, competition I don't think this should concern them particularly. And we have never seen a television station go off the air because of either cable or pay cable.”); Id. at 179 (“If the networks continue or increase their exclusivity against pay cable, I believe there is a move designed to foreclose competition.”).


\textsuperscript{22} In re California Water and Tel. Co., Tariff F.C.C. No. 1 and Tariff F.C.C. No. 2 Applicable to Channel Service for Use by Community Antenna Televisions Systems, 64 F.C.C.2d 753 (1977) (Memorandum Opinion and Order).
legislation, the FCC was granted jurisdiction\textsuperscript{23} to ensure that the "rates, terms and conditions" for pole attachments\textsuperscript{24} are "just and reasonable."\textsuperscript{25} By ensuring the cable industry's fair access to utility poles, this legislation helped "[lead] the way for the expansion of the cable industry and its prosperity."\textsuperscript{26}

The final boost which assured the preeminence of coaxial cable in the market was the enactment of the 1984 Cable Act.\textsuperscript{27} This Act created the first national policy towards cable television.\textsuperscript{28} Before the 1984 Cable Act, "the FCC had only indirect authority to oversee the cable industry, which it

\textsuperscript{23} Jurisdiction is limited to states which do not employ their own attachment regulations. 47 U.S.C. § 224(c)(1) (1992).

Each State which regulates the rates, terms, and conditions for pole attachments shall certify to the Commission that—
(A) it regulates such rates, terms, and conditions; and
(B) in so regulating such rates, terms, and conditions, the State has the authority to consider and does consider the interest of the subscribers of cable television services, as well as the interests of the consumers of the utility services.

\textsuperscript{24} "Pole attachment" is defined by the statute as "any attachment by a cable television system to a pole, duct, conduit, or right-of-way owned or controlled by a utility. 47 U.S.C. § 224(a)(4) (1992).

\textsuperscript{25} 47 U.S.C. §§ 224(b)(1) (1992) ("[T]he Commission shall regulate the rates, terms, and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable, and shall adopt procedures necessary and appropriate to hear and resolve complaints concerning such rates, terms, and conditions. . . ."). A rate is just and reasonable if it assures a utility the recovery of not less than the additional costs of providing pole attachments, nor more than an amount determined by multiplying the percentage of the total usable space, or the percentage of the total duct or conduit capacity, which is occupied by the pole attachment by the sum of the operating expenses and actual capital costs of the utility attributable to the entire pole, duct, conduit, or right-of-way.

\textsuperscript{26} Id.

\textsuperscript{27} "The Communications Act of 1934 . . . was enacted well before the advent of cable television. As a result, there has never been a national policy to guide the development of cable. . . . [This bill] establishes a national policy that clarifies the current system of local, state and Federal regulation of cable television. . . ." H.R. Rep. No. 934, 98th Cong., 2d Sess. 19 (1984), \textit{reprinted in 1984 U.S.C.C.A.N.} 4655, 4656.
obtained by virtue of its obligation to ensure that broadcasters served the public interest." In all but about a dozen states which had laws controlling certain cable activities, local government entities controlled cable because these systems had to pass through public rights of way. "As a result, the cable industry was subjected to a crazy quilt of regulation, often to its detriment and to that of the subscriber."30

Believed to be suffering from the hand of government regulation, cable was in great part deregulated by the 1984 Cable Act. Supporters of the 1984 Cable Act urged that competition from "such sources as MDS, MATV, SMATV, DBS, STV, television, radio, movie screens, videocassettes, LPTV, and other media" would keep cable in line. The 1984 Cable Act provided that a cable system's prices would not be regulated as long as the system faced "effective competition," as defined by the FCC.32 Congress intended that "the 1984 [Cable] Act [would provide] the cable industry with the potential to develop its systems and its programming."33

The 1984 Cable Act achieved part of what it set out to do—it assured that cable became a robust and productive industry. However, there is mounting concern that the reality of today's marketplace is entirely inconsistent with the other purpose behind the 1984 Cable Act. That purpose was to "allow cable television to become a vigorous and effective competitor,"34 while at the same time serving "the best interests of consumers."35 As Senator Danforth, sponsor of recent cable reform legislation,36 has stated, cable's "impressive growth has been achieved by a distortion in the marketplace. Cable today is an unregulated monopoly. The promise of competition goes unrealized today."37

The cable television industry has evolved far beyond the entity that arguably needed protection in 1984. While in 1984 cable was "largely a collection of local franchise operators dependent on the major networks and the vaults of Hollywood reruns for programming,"38 today the cable industry is dominated by large multiple system operators (MSOs),39 such as

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30. Id.
35. 130 CONG. REC. 27,975 (1984) (statement of Rep. Wirth). In response to concerns about the lack of competition in the cable industry, a number of cable reform bills have been introduced in Congress. See, e.g., S. 12; H.R. 1303, 102d Cong., 1st Sess. (1991).
36. S. 12.
39. MSOs are large cable companies that own a number of local cable systems.
Tele-Communications Inc., which have monopoly power and significant control over their programmers, competitors, local broadcasters, and consumers.

Cable's hold on the market extends both vertically and horizontally. Vertical integration occurs when a single company owns or controls both the programming and distribution systems. Because many of the cable networks are owned or controlled by the large cable MSOs, these operators control the flow of programming. This vertical integration encourages cable operators to favor the programming in which they have equity interests. Vertically integrated cable programmers often refuse to offer programming to competing cable systems or alternative technologies or do so only at discriminatory prices and conditions.

In addition, since deregulation, cable has become increasingly horizontally concentrated. In 1985, the five largest MSOs served approximately 29 percent of the cable subscribing households in the country and by 1990, the five largest companies served almost half the nation's subscribers. Cable's horizontal control of the market raises concerns about both the availability of diverse programming and anticompetitive acts by the large cable operators.

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42. In the last four years no new programming service has emerged in which a large cable MSO has not taken an equity interest.


44. See, e.g., Media Ownership: Diversity and Concentration: Hearings Before the Subcomm. on Communications of the Senate Comm. on Commerce, Science, and Transportation, 101st Cong., 1st Sess. 88 (1989) (statement of Ben Bagdikian) ("[T]he major cable companies increasingly insist on owning a financial interest in shows and programs they use on their channels, and since in most cities, the cable system is a local monopoly, they have total control of content on their producers and in choices presented to the cable audience."); id. at 307 (statement of Preston Padden, INTV) ("As a practical matter, it is almost impossible in the present environment to start a new cable system service without surrendering equity to the owners of the monopoly cable conduits.").


Today, cable has grown to provide millions of subscribers with increased channel capacity and a wide variety of programming. However, cable's position of dominance was achieved in large part through beneficial laws such as the 1984 Cable Act and is propped up by regulatory impediments to the use of other technologies that provide consumers with competitive services.

II. BARRIERS TO TELEPHONE COMPANY ENTRY INTO THE VIDEO MARKETPLACE

While cable has benefitted from regulation's helping hand, legal barriers generally have prevented another major player—the telephone industry—from participating in the video marketplace. Telephone company (telco) entry into the video marketplace has been restricted by three barriers: (1) judicial decree, (2) the 1984 Cable Act, and (3) FCC regulations. The telephone industry and others argue that these restrictions unfairly impede the telephone companies from providing valuable competition and technological advances in the video marketplace. Despite serious opposition, momentum is building to ease each of the existing legal barriers to telco entry into the marketplace.

A. Judicial Decree

As part of the 1984 court-ordered break-up of American Telephone and Telegraph Co., the newly created regional Bell Operating Companies (RBOCs) were barred from entering the information services industry. The prohibition on "information services" was modified in 1987 to allow the RBOCs to perform gateway functions. Other than this modification, the bar remained in effect until 1991, when Judge Harold Greene, who is responsible for overseeing the AT&T break-up, very reluctantly held that the RBOCs could enter the information services industry. The court of appeals still must rule on Judge Greene's order which has been appealed by

49. Section II D of the Modification of Final Judgment in AT&T, prohibits the regional Bell operating companies from providing "information services." AT&T, 552 F. Supp. at 227. "Information services" are defined in section IV of the Decree as "the offering of a capability for generating, acquiring, storing, transferring, processing, retrieving, utilizing or making available information which may be conveyed via telecommunications." Id. at 229.
50. United States v. Western Electric Co., 673 F. Supp. 525 (D.D.C. 1987). The RBOCs were permitted to acquire and operate the infrastructure needed to transmit information services generated by others. However, the RBOCs were still prohibited from generating their own information content.
newspapers, cable companies, and other organizations. Assuming Judge Greene's order stands, the RBOCs can now provide information services, including advertising, stock quotes, sports scores, news reports, and electronic "yellow pages."

However, even if Judge Greene's order is upheld, statutory restrictions still prevent the telephone industry from fully entering the video marketplace. The Cable Act of 1984 includes cross-ownership provisions prohibiting telephone companies from providing video programming to subscribers in their telephone service areas. In its report accompanying the 1984 Cable Act, the House Energy and Commerce Committee stated that "nothing in this section shall be construed to limit telephone company provision of information services or other non-video programming, transmissions or communications services." Thus, if Judge Greene's order is upheld, the 1984 Cable Act's restrictions on telephone companies will not go so far as to provide for an independent restriction on the ability of the RBOCs to provide information services.

B. FCC Regulations

The FCC has also enacted rules limiting telco entry. These rules, which were adopted in 1970, provide that no telephone company "shall engage in the provision of video programming to the viewing public in its telephone service area either directly, or indirectly through an affiliate." There are two possible exceptions to this general prohibition. First, rural areas, as defined by the FCC are exempted. Second, a waiver to the general rule may be obtained.

[i]n those areas where the provision of video programming to the viewing public demonstrably could not exist except through a cable system owned by, . . . or affiliated with the local telephone common carrier, or upon other showing of good cause . . . if the Commission finds that the public interest, convenience and necessity would

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54. 47 U.S.C. § 533(b)(1) (1992). This restriction does not apply to common carriers providing local service to rural areas, as defined by the FCC. 47 U.S.C. 533(b)(3) (1992). Currently, Congress is seriously considering widening the rural exemption. A bill that recently passed the Senate included a provision which would expand the definition of "rural areas" in which telephone companies could provide cable television services. "Rural areas" would be newly defined as areas without an incorporated community of more than 10,000 residents, an increase over the current 2,500 resident limit. S. 12, § 24, 108 CONG. REC. S666 (daily ed. Jan. 30, 1992).
56. 47 C.F.R. § 63.54(a) (1991).
be served thereby.\textsuperscript{58}

The FCC is currently considering amending its policies to allow greater telco entry into the video marketplace. Most recently, the FCC proposed a rule to permit the regional Bell operating companies to provide "video dial tone."\textsuperscript{59} Under the video dial tone plan, the RBOCs could carry video, voice, and data services over their networks.\textsuperscript{60} However, due to the 1984 Cable Act's cross-ownership provisions, the local telephone companies would still be prevented from owning or originating the video programming carried on these systems. Instead, the telcos would be required to offer channel space to other program providers, such as existing broadcast stations, or cable networks such as ESPN, on a first come, first serve basis.\textsuperscript{61}

The video dial tone would be offered in two levels of service. The first level would consist of certain basic regulated services and "would provide an 'electronic platform' or 'window' that opens to a broader network."\textsuperscript{62} Through this system, end users could access video and non-video communication services provided by a variety of competitive service providers. The second level would consist of enhanced services subject to competition among service providers.\textsuperscript{63} This second level would permit a telco to provide an "advanced video gateway and related non-programming services."\textsuperscript{64}

This plan has been criticized by the cable industry, as well as the telcos.\textsuperscript{65} In order to enact this proposal, the FCC must overcome not only this opposition, the FCC must also mollify concerns that the telephone companies will abuse their market power, engage in discriminatory behavior, and pass the costs of building a fiber-optic network to telephone customers.

\footnotesize{\textsuperscript{58} \textsuperscript{58} 47 C.F.R. § 63.56(a) (1991).}
\footnotesize{\textsuperscript{59} 56 Fed. Reg. 65,464 (1991).}
\footnotesize{\textsuperscript{60} FCC Pushes Telco Video Dial Tone, MULTICHANNEL NEWS, Oct. 28, 1991, at 41.}
\footnotesize{\textsuperscript{61} See id.; Paul Farhi, FCC Favors Phone Firms Providing TV Service, WASH. POST, Oct. 25, 1991, at A12.}
\footnotesize{\textsuperscript{62} 56 Fed. Reg. 65,465 (1991) (These basic services are regulated under Title II of the Communications Act which regulates common carrier services.).}
\footnotesize{\textsuperscript{63} Id. (These are services not regulated by Title II.).}
\footnotesize{\textsuperscript{64} 56 Fed. Reg. 65,465 (1991). Such a "gateway" would consist "essentially [of] a menu and other aids to help users navigate through network services, and non-video programming services, such as billing and collection." FCC Pushes Telco Video Dial Tone, supra note 61, at 41.}
\footnotesize{\textsuperscript{65} Members of the cable industry assert that the video dial tone plan would violate the 1984 Cable Act's prohibition on cable-telco cross-ownership while telcos generally argue that the plan does not go far enough. See FCC Video Dial Tone Proposal Unpopular With Most Commenters, COMMUNICATION DAILY, Feb. 5, 1992, at 2.}
C. Congress and Telco Entry

In addition to the uncertainties surrounding the status of the Modification of Final Judgment and the FCC regulations on telco entry into the video programming marketplace, Congress is considering a number of bills concerning this issue. Congress, however, has not yet reached a consensus on how telecommunications policies should affect telco entry. At one extreme, legislation has been introduced which would combat efforts at the FCC and in the courts to ease limitations on telco entry by codifying restrictions on telephone company participation in the video marketplace. At the other extreme, legislation has been introduced which would step beyond actions taken by the FCC and the courts to further ease restrictions on telco entry.

Some members of Congress support legislation which would make telco entry into the video marketplace difficult. While there are some differences in the House and Senate versions of such legislation, both bills would restrict the RBOCs from offering information services, such as video yellow pages and electronic publishing services, in their local telephone service regions until they face competition for local telephone service. These bills also attempt to safeguard against cross-subsidization by the telephone companies by requiring RBOCs to form separate subsidiaries in order to provide information services.

Proponents of these restrictions claim that such legislation is necessary to prevent the abuse of market power by RBOCs that inevitably would result if they were let into the information services market. The proponents argue that the RBOCs would cross-subsidize and discriminate against competitors and that the FCC and state regulators are not equipped to adequately monitor such anti-competitive acts.

In contrast, proponents of telco entry support legislation such as the Communications Competitiveness and Infrastructure Modernization Act. That bill would permit increased telco entry to encourage the modernization of the nation’s telecommunications infrastructure and to promote competition to the cable industry. Initially, this legislation would allow telephone

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67. S. 2112.
68. Competition would exist if at least fifty percent of residential and business users have access to competitive phone service and at least ten percent of the market subscribe to this competitive service. S. 2112, § 227; H.R. 351 102d Cong., 1st Sess. (1991). In the Senate version of this legislation, this entry test would expire after twelve years. S. 2112, § 227. The House version, H.R. 3515, contains no such sunset provision.
69. S. 2112, § 227.
71. H.R. 2546; S. 1200.
companies to engage only in video dial tone services. The telcos would not be allowed to transport their own programs. Only after securing approval from the FCC and a state regulatory commission could telephone companies begin to offer their own programs.

This legislation includes a number of provisions designed to prevent future anti-competitive actions by the telcos. For example, the telephone companies could only offer their own programs on twenty-five percent of their channel capacity, thus leaving the remaining seventy-five percent for programs from outside parties. Additional safeguards include prohibitions on both cross-subsidization and buyouts of existing cable systems, the requirement of separate video programming subsidiaries, and a “death penalty” which would mandate the telco’s divestiture of its separate video programming subsidiary for willful violations of any safeguard.

Sponsors of this legislation maintain that by allowing the telephone companies to enter the video programming marketplace, this legislation would create the incentive for these companies to modernize the telecommunications infrastructure. This improved infrastructure, they assert, will enable telcos to deploy a valuable fiber optic network into homes, businesses, schools, and health care institutions. Moreover, this advanced nationwide telecommunications infrastructure would allow the U.S. to compete with those nations, including Japan, which already have committed themselves to the development of their own domestic fiber optic networks. Supporters of telco entry legislation also argue that eased telco entry will increase competition in the video marketplace by providing an alternative to coaxial cable.

The telco entry issue illustrates an inadvertent, yet common, result of U.S. telecommunications policies. Often technology-specific restrictions, such as various bars to telco entry and analogous cross-ownership restrictions, are driven by the perception that powerful established industries such as telcos or cable must be prevented from using emerging technologies to abuse or extend their market power. Some fear that without such

72. H.R. 2546 § 303(a); S. 1200 § 303(a).
73. H.R. 2546 § 303(a); S. 1200 § 303(a).
74. See H.R. 2546 § 303(a); S. 1200 § 303(a).
75. H.R. 2546 § 303(a); S. 1200 § 303(a).
76. H.R. 2546 § 303(a); S. 1200 § 303(a).
77. H.R. 2546 § 303(a); S. 1200 § 303(a).
78. H.R. 2546 § 303(a); S. 1200 § 303(a).
79. H.R. 2546 § 303(a); S. 1200 § 303(a).
81. See, e.g., id.
83. For discussion of cross-ownership restrictions see infra Section III.B.
restrictions consumers will be deprived of the potential full benefits of the new technologies. However, these well-motivated intentions have been outpaced by changes in the marketplace. Preventing abuses by keeping telcos out of the business entirely may be unnecessarily restrictive and may deprive consumers of the benefits of advanced technology and a competitive service.

The solution to the concern that telephone companies, if let into the video marketplace, would abuse their market power is not to prevent entirely the particular technology from competing in the market. Rather, the better solution is to open the market to new technologies, including the telephone industry, and to implement safeguards to prevent all technologies from engaging in anti-competitive practices. To develop laws that are more technology-neutral while not jeopardizing consumer interests, lawmakers may start with safeguards like those set out in the Communications Competition and Infrastructure Modernization Act. For example, cross-subsidization and buyouts of existing cable systems should be prohibited and separate video programming subsidiaries should be required. While the telephone industry's monopolistic tendencies do raise valid concerns, these concerns

84. For example, one principal argument against telco entry is that due to the telcos' cross-subsidization, consumers will end up paying increased telephone rates. Some also argue that because telco entry will in essence replace one monopoly—the cable industry, with another—the telcos, consumers will ultimately be precluded from receiving the benefits of a competitive subscription television marketplace.

Another example involves concerns about cable acquiring rights to other technologies and either warehousing them or otherwise assuring that they could not be used as competitive subscription television providers. See, e.g., S. Rep. No. 92, 102d Cong., 1st Sess. 47 (1991). Consider, for example, the controversy surrounding the "K Prime" deal in which concerns were raised that a group of nine MSOs attempted to foreclose competition from DBS by controlling all of the then commercially available satellite transponder capacity for DBS service. In 1990, GE American Communications and a group of nine MSOs agreed to form a joint venture (K Prime) to launch a direct broadcast satellite service, known as Primestar, using GE's Satcom K1 Ku-band satellite. Since K Prime would provide only ten stations (seven superstations and three pay-per-view channels), critics argued that the venture was designed merely to supplement rather than compete with cable. See, e.g., Jeannine Aversa, Cable Opponents Say DBS Not Competition, MULTICHANNEL NEWS, Feb. 26, 1990, at 3. Presently, a number of states are apparently considering filing antitrust actions alleging that this joint venture "acted for the purpose of forestalling competitors who might use the satellite to circumvent local, hardwired cable TV monopolies." Multi-state Cable TV Monopolization Suit Near; Justice Department Undecided on Federal Charges, FTC: WATCH, Mar. 9, 1992. The K Prime situation does not, however, establish that cross-ownership in itself is anticompetitive and harmful to consumers. While deals that are clearly anti-competitive should be prohibited under the antitrust laws, policymakers must be careful not to restrict those cross-ownership arrangements that may stimulate competition and technological advancement.

85. This point may be made for other cross-ownership restrictions as well. It may well be time to consider the merit of encouraging cable MSOs to enter the telephone business, which in turn might, through competition, ameliorate concerns about telco entry into the cable business.

86. H.R. 2546; S. 1200. See supra text accompanying notes 71-79.

87. As such measures are debated additional safeguards will likely be suggested. For example, a provision ensuring fair access to the telco's fiber loop by competing cable and alternative technology operators may be needed. See Daniel Brenner, Telephone Company Entry Into Video Services: A First Amendment Analysis, 67 NOTRE DAME L. REV. 97, 109 (1991). Concerns that the FCC and state regulators lack the resources to adequately monitor anticompetitive practices of the telcos must also be addressed.
should be addressed in a technology-neutral manner that prevents any industry, including both the cable and telephone industries, from engaging in discriminatory conduct.

III. LEGAL RESTRAINTS ON THE GROWTH OF ALTERNATIVE MULTICHANNEL VIDEO DELIVERY TECHNOLOGIES

While cable was experiencing its initial growth spurt in the 1970s, it faced minimal competition because technologically feasible alternative distribution systems were not yet legally possible as viable multichannel alternatives. Even as innovations and the growth of the market made the use of alternative technologies more attractive, their expansion has been slowed by an inhospitable regulatory environment as well as opposition from the entrenched cable industry. Technologically and economically viable alternative distribution systems include wireless cable, satellite master antenna television service, home satellite dishes, and direct broadcast satellite systems.

A. Alternative Delivery Systems

1. Wireless Cable (MDS, MMDS, ITFS, OFS)

"Wireless cable" was created by the FCC to stimulate competition with traditional cable television. Wireless cable systems utilize the Super High Frequency (SHF) portion of the microwave radio frequency spectrum to transmit multiple channels of video programming over the air from terrestrial transmitters to small antennas mounted on subscribers' rooftops. Wireless cable can provide services in some areas that are not wired for coaxial cable, such as rural areas and inner cities. Typically, operating with lower fixed costs, wireless cable can deliver as good or better picture quality and signal security than coaxial cable at competitive prices. Accordingly, wireless can also compete in cable-wired areas thus providing an alternative to the local coaxial cable system. Government regulation, however, unintentionally prevented wireless cable from developing at a natural pace to provide this competition to cable television.

In the mid-1980s, the FCC began enabling the expansion of wireless cable's multipoint distribution system from a single channel to a multichannel business. The first of the FCC decisions that made wireless cable possible as a commercial venture was not issued until late 1983, and it took several more years for the complete regulatory structure to develop. Pursuant to

FCC decisions issued from 1983 to 1987, wireless cable is now able to provide multi-channel programming using a combination of the following government created services: multichannel multipoint distribution service (MMDS), multipoint distribution service (MDS), and instructional fixed television services (ITFS). Through its combination of services, wireless cable can now provide up to 33 channels of satellite programming along with the locally available broadcast television signals.

The FCC authorized wireless cable because it recognized that “there is no multichannel alternative to cable available now.” However, wireless cable, like other alternative technologies, is the victim of unintended regulatory impediments. Because wireless cable was created by combining different microwave services for commercial purposes (i.e., MDS, MMDS, and ITFS), it has suffered from fragmented regulation by different bureaus of the FCC. Until recently, wireless cable was subject to the FCC’s Common Carrier, Mass Media, and Private Radio Bureaus, each of which acts independently. Having to deal with each bureau separately contributed to wireless cable’s lengthy FCC licensing process and compounded the difficulty of navigating the regulatory process on a variety of issues. Recognizing this problem, the FCC recently reallocated the three H Group OFS channels to MDS. This rule eliminates an additional regulatory burden on wireless cable, because the industry will generally no longer be governed by the Private Radio Bureau.

Recently, the FCC has removed other regulatory obstacles in wireless cable’s path. Recognizing that many of the rules affecting wireless cable were “established in the infancy of the various services they govern, long before the development of the wireless cable industry” and that these “rules not only contain possibly obsolete limitations but also vary substantial-

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89. ITFS uses the same microwave frequencies used by educators. In the past, wireless cable has also used the operational fixed service (OFS), which employs the same microwave frequencies used for many years by municipalities. See 56 Fed. Reg. 57,808 (1991).


91. The Common Carrier Bureau processes MDS and MMDS applications.

92. The Mass Media Bureau regulates ITFS applications.

93. The Private Radio Bureau has, in the past, dealt with OFS licenses.


95. One exception to this new rule is that the Private Radio Bureau will continue to administer point-to-point authorizations. See Paul Sinderbrand, Wireless Continues to Prevail at the FCC, PRIVATE CABLE, Nov. 1991, at 40.

ly from service to service,"97 the FCC took needed steps to help bring the regulatory framework up to speed with technological advances. For example, in 1990, the FCC eliminated rules barring common ownership of MMDS and Operational Fixed Service (H Group OFS) channels in a given market.98 In accordance with these new rules, a single wireless operator may now secure all of the MMDS and OFS channels available in a single market.

The FCC's recent rule clarifying the definition of "cable system" in the 1984 Cable Act may also eliminate some inadvertent regulatory hurdles facing wireless cable. Under the Act, an operator of a "cable system," which is defined as a "facility, consisting of a set of closed transmission paths,"99 must obtain a local cable franchise.100 While this text suggested that Congress had not intended to include systems merely transmitting via microwave, two lower courts had misread this definition by holding that transmissions over the airwaves constituted use of "a set of closed transmission paths."101 To clarify the issue, the FCC issued a Report and Order which ruled that systems which only use radio waves to interconnect separate buildings are not "cable systems" under the 1984 Cable Act and therefore are not subject to the requirement to secure a local cable franchise.102

In this instance, the FCC acted to correct an inadvertent misinterpretation of Congress' intent to distinguish between certain technologies. Because systems such as wireless cable do not use public rights-of-way, but only utilize radio facilities to interconnect buildings, Congress, as reflected in its definition of "cable system," did not intend to subject these systems to the franchise requirement.103 Here, Congress acted pursuant to a valid underlying policy distinction—that only those systems utilizing public rights-of-way should be required to secure a local cable franchise. In those cases where distinct regulatory treatment of certain technologies is based on such legitimate policy concerns, the courts must be careful not to hinder individual technological growth with unintended regulatory barriers.

However, the definition of "cable system" contains an additional distinction that is not based on such an underlying policy. In certain cases, even if a system does not use public rights of way, it may be a "cable

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97. Id.
102. 56 Fed. Reg. 1931 (1991). According to the FCC, operators who use wiring to connect buildings are subject to the 1984 Cable Act's requirements unless (1) the interconnected buildings are multiple unit dwellings under common ownership, management or control; and (2) their wiring is located solely on private property. Id.
system” and thus be subject to local franchise requirements. This wrinkle in the 1984 Cable Act may unintentionally hinder the full development of SMATV systems.\footnote{104. The 1984 Cable Act’s definition of “cable system,” as interpreted by the FCC, distinguishes between systems using wires to connect commonly owned, controlled or managed buildings and those connecting separately owned, controlled or managed buildings even though neither type of system crosses public rights-of-way. In a recent case, the Court of Appeals for the district of Columbia held that the FCC’s interpretation of the definition of “cable system” in the 1984 Cable Act would violate SMATV’s equal protection rights absent a rational basis for such a distinction. Beach Communications v. FCC, No. 91-1089, 1992 U.S. App. LEXIS 3511 (D.C. Cir. Mar. 6, 1992).}

2. SMATV—Satellite Master Antenna Television

Satellite Master Antenna Television (SMATV), commonly known as “private cable,” typically serves subscribers residing in private multi-unit dwellings, including apartment complexes, housing parks, hotels, and hospitals. The SMATV service combines a master antenna television system which links the units in the dwelling to a single external television antenna, and a receive-only satellite earth station.

Like other alternative subscription television technologies, SMATV’s ability to compete has been affected by regulatory policies. For example, the SMATV industry has raised concerns about the definition of “cable system” in the 1984 Cable Act. As discussed above, “cable systems,” as defined by the Act, are subject to franchise requirements. Due to the underlying policy distinction singling out those technologies that use public rights-of-way, SMATV systems serving more than one multiple unit building connected only by radio are not “cable systems.”\footnote{105. 56 Fed. Reg. 1931 (1991). Likewise, SMATV systems that use closed transmission paths only within the premises of a multiple unit dwelling are not “cable systems.” \textit{Id.}} However, private cable systems that serve “multiple unit dwellings connected by physically closed transmission paths are cable systems, unless the buildings are both (a) under common control or ownership, and (b) do not use a public right-of-way.”\footnote{106. 56 Fed. Reg. 1931 (1991). \textit{See} 47 U.S.C. § 522(6) (1988) (“the term 'cable system' means a facility consisting of a set of closed transmission paths . . . but such term does not include . . . a facility that serves only subscribers in 1 or more multiple unit dwellings under common ownership, control, or management, unless such facility or facilities uses any public right of way, . . . ”) Thus, under the 1984 Cable Act, a private cable system that does not use public rights of way, but only connects adjacent multiple unit dwellings not under common ownership constitutes a “cable system” and is subject to franchise requirements merely because of the closed transmission path technology it employs. On the other hand, those systems using radio frequencies to connect separately owned multiple unit dwellings are not “cable systems.” While under most circumstances the statutory distinction between closed transmission paths and radio frequencies is justified by the underlying policy regarding the use of public rights-of-way, this policy rationale appears to be
absent in the case of connecting separately owned adjacent dwellings.

Recently, the Court of Appeals for the District of Columbia held in *Beach Communications, Inc. v. Federal Communications Commission*\(^\text{107}\) that absent a rational basis set forth by the FCC this distinction between systems serving commonly owned and separately owned buildings would violate the equal protection clause of the Fifth Amendment. While the court found itself "unable to imagine any basis for the distinction,"\(^\text{108}\) it remanded the case directing the FCC to address this particular issue.

3. Home Satellite Dish Industry\(^\text{109}\)

Today, roughly two to three million homes own satellite dishes.\(^\text{110}\) These dishes usually access C-band satellite transponders, and in some cases access Ku-band transponders.\(^\text{111}\) Through their satellite home dishes, viewers receive programming similar to that available via coaxial cable.\(^\text{112}\) In some areas viewers can receive over 100 channels via satellite.\(^\text{113}\) Backyard dishes are particularly appealing in rural areas which are not reached by coaxial cable systems.

One regulatory burden the satellite industry has historically faced is local zoning restrictions. Some localities have used their zoning laws to discriminate against satellite receiving antennas by treating them differently from other receiving antennas.\(^\text{114}\) In response to this problem, the FCC promulgated rules in 1986 which preempted local zoning ordinances which discriminate against satellite receiving antennas. According to this rule, state and local regulations can differentiate between home satellite dish (TVRO) systems and other antennas only if they have a "reasonable and clearly

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\(^{107}\) *Beach Communications*, 1992 U.S. App. LEXIS 3511.

\(^{108}\) *Id.* at ¶41.


\(^{111}\) *Id.*. Satellite television operates by delivering land-based circuits to an uplink facility which beams the program to a satellite. The satellite then transmits the signal back to earth on either a C-band or Ku-band frequency. *REPORT OF THE REGISTER OF COPYRIGHTS, CABLE AND SATELLITE CARRIER COMPULSORY LICENSES: AN OVERVIEW AND ANALYSIS* app. D, at 3 (1992) [hereinafter COPYRIGHT OFFICE COMPULSORY LICENSE REPORT].

\(^{112}\) "Until the 1979 deregulation of earth stations, the home satellite industry was reduced to the few who could comply with the Commission's licensing policies and had the room to construct and maintain ten- to twenty-foot earth dishes. While today's dishes of three to five feet in diameter are more commonplace—it is estimated that there are somewhat over two million home dish users today—this is a relatively recent phenomenon." Daniel L. Brenner, *Was Cable Television a Monopoly?*, 42 FED. COMM. L.J. 402 (1990).


defined health, safety or aesthetic objective" and "do not operate to impose unreasonable limitations on, or prevent, reception of satellite delivered signals by receive-only antennas, or to impose costs on the users of such antennas that are excessive in light of the purchase and installation cost of [the] equipment."  

The FCC took efforts to prohibit municipalities from making a technology-based distinction absent a compelling underlying policy justification. However, according to representatives of the satellite industry, the FCC rule is not being adequately enforced and some municipalities continue to discriminate against satellite receiving antennas. The satellite industry maintains that "[t]hrough their zoning ordinances, building codes, or sheer bureaucratic weight, the localities are flying in the face of the FCC's preemption rules and preventing households from acquiring or using home satellite dishes."  

To foster the full development of the satellite industry, zoning ordinances must be enforced in the technology-neutral manner the FCC intended.

4. DBS—Direct Broadcast Satellite

In the early 1980s, the FCC adopted the Direct Broadcast Satellite (DBS) service and licensed a number of providers. Compared to traditional satellite systems, the DBS signal is higher powered. It can be received by dishes of only one foot in diameter, which is much smaller than the larger satellite dishes needed for C- and Ku-band reception. Although there have been high expectations for DBS since at least 1984, the technology has yet to be launched. As this industry begins to emerge, however, which some believe may be soon, issues regarding its regulatory treatment must be dealt with in a technology-neutral manner.

B. Cross Ownership Restrictions

To create the most efficient telecommunications systems, operators

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115. 51 Fed. Reg. 5519, 5526 (1986). The FCC's "objective [was] to ensure that satellite receiving antennas are not treated less favorably than other antenna devices such as Amateur Radio antennas and Satellite Master Antenna Systems (SMATVs)." Id. at 5523.

116. Hewitt Statement, supra note 114. As a means of combating this problem, the satellite industry urges Congress to "grant the FCC sufficient enforcement authority in this matter to act against jurisdictions which willfully violate its preemption rule on TVRO's." Id.


118. For example, in enacting the 1984 Cable Act, Congress expressed its belief that the cable industry would face increasing competition from DBS. See S. Rep. No. 67, 98th Cong., 1st Sess. 20 (1983).

should be allowed to draw from all of the available technologies. All the current technologies are compatible and should be used together to create efficient and internationally competitive hybrid telecommunications systems. Government policies, however, inadvertently prevent the full, integrated utilization of these technologies. The numerous ownership restrictions placed on telecommunications technologies, for example, unintentionally impede the development of efficient hybrid systems.

Historically, Congress and the FCC have enforced a number of restrictions limiting the ownership of media systems. For example, in 1943, the FCC adopted a rule prohibiting a party from owning more than one broadcast station in a local market. In addition to such inter-industry rules, restrictions have been placed on simultaneous ownership of both cable and broadcast stations as well as cable and telco ownership. The FCC imposes restrictions on cable involvement in wireless cable and Congress is currently considering placing restrictions on the cross-ownership of cable and SMATV or MMDS systems. While these restrictions are well-intentioned, cross-ownership bars may, in fact, erect artificial barriers inhibiting the advancements of new technologies.

Under rules adopted by the FCC in 1970 and later codified by Congress in the 1984 Cable Act, licensees of local broadcast television stations are prohibited from owning a cable system within the station’s predicted grade B contour. In addition, FCC regulations prohibit cross-ownership between cable systems and national television networks.

The 1984 Cable Act prohibits a telephone company from offering cable television services in the same geographical area in which it provides telephone services. This restriction does not apply, however, to common carriers providing service to rural areas or to areas where the video programming would not be provided “except through a cable system owned by, operated by, controlled by, or affiliated with” the common carrier.

Cable systems are also restricted from operating wireless cable systems. FCC regulations generally prohibit cable operators from acquiring MDS

120. 47 C.F.R. § 73.3555(a) (1991).
122. See, e.g., S. 12, § 9.
123. In re Amendment of Part 74, Subpart K, of the Commission’s Rules and Regulations Relative to Community Antenna Television Systems, 23 F.C.C.2d 816, 817, (1970) (Second Report and Order); 47 U.S.C. § 533(a) (1988) (“It shall be unlawful for any person to be a cable operator if such person directly, or through I or more affiliates, owns or controls the license of a television broadcast station and the predicted grade B contour of such stations covers any portion of the community served by such operator’s cable system.”).
licenses or leasing MDS transmission time if the cable system’s franchise area encompasses a portion of the MDS stations’ protected service area.128 This prohibition does not apply, however, when there is a second cable system in the first cable system’s franchise area.129

Presently, Congress is considering legislation which would create new cross-ownership restrictions for wireless cable (MMDS) and SMATV. Under this legislation, a cable operator would be prohibited from owning an MMDS or SMATV system in the same areas in which it holds a franchise for a cable system.130 The FCC could waive this requirement, if necessary, to ensure that residents in the cable community receive video programming.131 In addition, under this legislation, if ten percent of the nation’s households with television sets subscribe to multichannel programming services provided via satellite, the FCC would be required to promulgate regulations limiting ownership of such direct-to-home satellite services by cable operators and other persons having media interests, and requiring access to such service by unaffiliated programmers.132

There appears to be a growing belief, particularly at the FCC, that cross-ownership restrictions should be eased to promote growth in the telecommunications marketplace. For example, the FCC has proposed eliminating certain restrictions on network-cable cross-ownership.133 This rule was initially adopted in 1970 in response to the concern that the “networks, if permitted to own cable systems at this critical stage of their development, could potentially thwart the industry’s growth and inhibit competition.”134 Today, given the cable industry’s tremendous growth and the broadcast industry’s relative decline, the FCC asserts that this concern may no longer carry the weight necessary to justify the cross-ownership restriction.135 As discussed above,136 the FCC has also proposed easing telco-cable cross-ownership restrictions by permitting local telephone companies to provide video dial tone.

Such efforts to ease cross-ownership restrictions may be needed to promote an efficient and competitive use of technology. While intended to promote diversity of programming, cross-ownership restrictions inhibit technological advancements in telecommunications. Again, lawmakers must look beyond such clear-cut technological distinctions as cross-ownership restrictions. Their policy objectives may be better served by other regulatory

129. Id.
130. S. 12, § 9.
131. S. 12, § 9(B).
132. Id.
135. See id.
136. See supra text accompanying notes 59-64.
measures. For example, if a purpose of cross-ownership restrictions is to prevent a party from buying up rights to the use of a technology to "warehouse" it to assure that its competition does not use it, it is possible to permit cross-ownership so long as the technologies are used and the resulting combination does not impede competition. It should not be possible to acquire SMATV and wireless cable licenses and warehouse them to prevent competition in their markets. In addition, safeguards can be adopted to prevent cross-subsidization without barring entry into the market. For example, telephone consumers should be protected from indirectly paying for telephone company entry into the cable arena. By eliminating cross-ownership restrictions and replacing them with more technology-neutral safeguards, lawmakers can help achieve both media diversity and efficient technological utilization.

Allowing various technologies to be used together will lead to more efficient and internationally competitive hybrid telecommunications systems. Today, no alternative technology has yet been fully utilized, or has yet met its potential as a competitor or adjunct of coaxial cable delivery systems. For these technologies to have the chance to compete, existing laws must be interpreted and enforced, when possible, in a technology-neutral manner. In addition, new laws must be enacted to place all delivery systems on a more level playing field.

IV. THE NEED FOR TECHNOLOGY-NEUTRAL POLICY

Existing laws and policies should, to the extent possible, be technology-neutral. The ongoing debate over the scope of the cable "compulsory license" and its availability to providers of wireless cable and home satellite provides a useful illustration. This conflict shows the irrationality of distinguishing among technologies and applying different rules to different businesses depending on the nature of the hardware they employ to deliver signals to consumers.

A. Technology-Specific Copyright Policy

Cable owes much of its unparalleled growth today to the early benefits it received from the compulsory license. Initially, this preference was intended to assist the infant cable industry by guaranteeing it access to necessary programming and by freeing it from the burden of negotiating licenses on a program-by-program basis. Today, noncable technologies need to be assured the same benefits of the compulsory license.

Prior to enactment of the Copyrights Act of 1976,\textsuperscript{138} cable did not have to pay copyright royalties, because the Supreme Court had found that retransmission of television signals by cable systems did not constitute "performance" under the Copyrights Act of 1909.\textsuperscript{139} In 1976, Congress revised the Copyrights Act to hold that "cable retransmission is a public performance and therefore subject to full copyright liability."\textsuperscript{140} Because it believed that it would be "impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system,"\textsuperscript{141} Congress created a compulsory license system by which cable systems would meet their copyright obligations. Under this compulsory licensing scheme, cable systems must pay semi-annual fees to the Register of Copyrights in return for a license to retransmit television signals containing copyrighted programs. These fees are then distributed to copyright owners. In general, the compulsory license only applies to distant non-network programming.\textsuperscript{142}

In section 111, the Copyrights Act of 1976 authorizes a compulsory license for "cable systems," which are defined as systems making secondary transmissions "by wires, cable, or other communications channels."\textsuperscript{143} While the definition of "cable system" is broad enough to cover technologies other than coaxial cable, including wireless cable (MMDS), SMATV, and

\begin{footnotes}
\item[140] Fred H. Cate, \textit{Cable Television and the Compulsory Copyright License}, 42 FED. COMM. L.J. 191, 202 (1990). See 17 U.S.C. § 111(b) (1976). ("Notwithstanding the provisions of subsections (a) and (c), the secondary transmission to the public of a primary transmission embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509,...")
\item[142] Cable systems may generally carry local signals for free. However, those systems carrying nothing but local signals are "required to submit a statement of account and pay a basic minimum royalty fee." \textit{COPYRIGHT OFFICE COMPULSORY LICENSE REPORT}, \textit{supra} note 111, at 28 n.26. Section 111’s different treatment of local and distance signals is premised on a policy distinction between the impact of local and distant signals on the value of copyrighted works being broadcast. The carriage of local broadcast signals was seen as not impacting the value of the works because the signals were already available for free to the same viewers. The carriage of distant signals, on the other hand, was viewed as impacting the value since local broadcasters who compensate broadcasters would not be willing to pay more for programming reaching distant markets where viewers would not be likely to buy their goods. \textit{See id. at} 28.
\item[143] 17 U.S.C. § 111(f) (1988). The term "cable system" is fully defined as:

\begin{quote}
a facility, located in any State, Territory, Trust Territory, or Possession that in whole or in part receives signals transmitted by one or more television broadcast stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, or other communications channels to subscribing members of the public who pay for such service.
\end{quote}

\textit{Id.}
\end{footnotes}
satellite systems, as well as future technologies, the Copyright Office has refused to interpret "cable system" in the broad manner that Congress intended. Instead, the Copyright Office has interpreted section 111 in a more technology-specific manner.

In a 1991 Notice of Proposed Rulemaking (NPRM), the Copyright Office tentatively concluded that satellite carriers and wireless cable systems are not eligible for the compulsory license but that some SMATV systems are "cable systems" and thus are entitled to the compulsory license under certain conditions. Subsequently, in January 1992, the Copyright Office issued a final rule denying wireless cable and satellite carriers the compulsory license.

First, the Copyright Office found that satellite carriers are not "cable systems" under section 111(f) of the Copyrights Act. In reaching this conclusion, the Copyright Office noted that the "facilities of a satellite carrier, specifically the facilities which make the secondary transmissions, are not located in any state," which is a "critical requirement in the definition" of a "cable system." The Copyright Office went on to hold that wireless cable systems are not "cable systems" under the Copyrights Act. The Copyright Office asserted that because wireless cable systems "do not make secondary transmissions to subscribers via closed path transmissions," they are not "cable systems" under section 111(f).

Remarkably, the Copyright Office also tentatively held in its NPRM that "SMATV operations, under certain conditions, may satisfy the requirements to be considered cable systems." The Copyright Office conditioned SMATV's eligibility for the compulsory license on its compliance with newly proposed regulations. Such regulations, according to the Copyright Office, are designed to address the "unique problems for calculating royalty fees and filing statements of account pursuant to 37 CFR 201.17 associated with SMATV. This would ensure that only SMATV systems that meet the requirements for a "cable system" will enjoy the compulsory license. The Copyright Office listed a number of reasons for its conclusion.

147. See id. at 3290-92.
148. Rule, supra note 146, at 3290.
149. NPRM, supra note 145, at 31,593.
150. Id.
151. See id. at 31,594.
152. Id.
regarding SMATV,\textsuperscript{153} including the assertion that SMATV uses "cable and wire primarily to deliver broadcast signals."\textsuperscript{154}

By asserting that "the phrase ‘or other communications channels’ should not be read to encompass video delivery systems that do not \textit{primarily} retransmit broadcast signals via physically closed transmission paths such as cable or wires,"\textsuperscript{155} the Copyright Office ignored both the statutory text and Congress’ intent in creating the compulsory license system. The continued availability of the compulsory license to wireless cable, SMATV, and satellite systems is compelled by the plain language of Section 111, the legislative history of the Copyrights Act, judicial interpretations of the phrase "wires, cables, or other communications channels," and a decision by the Eleventh Circuit holding that a system utilizing no closed transmission paths at all is a “cable system” for purposes of Section 111.\textsuperscript{156}

The plain language of the Copyrights Act shows that Congress did not intend to condition eligibility for the compulsory licensing program on the type of “communications channels” used. Rather, the Act permits a system to avail itself of the compulsory license so long as it makes secondary transmissions “by wires, cables, \textit{or other communications channels}.”\textsuperscript{157} Section 111(f), which Congress cast in such broad terms, should not be read to exclude wireless cable or satellite systems simply because they utilize transmission technologies present but not fully developed at the time that the Act was enacted.\textsuperscript{158}

The “or” in the phrase “wires, cables, \textit{or other communications channels}” should be given its normal disjunctive meaning. In denying that wireless cable systems make secondary transmissions by “wires, cables, or other communications channels” because wireless does not “primarily” rely on closed transmission paths,\textsuperscript{159} the Copyright Office has ignored the plain meaning of the word “or” in the phrase “or other communications channels.”

Moreover, definitive judicial interpretations suggest that the phrase “wires, cables, or other communications channels,” as used earlier in Section 111(a) of the Copyrights Act, includes wireless cable, SMATV, and satellite systems. Section 111(a)(3) establishes an exemption from the statutory licensing scheme for common carriers that provide passive retransmission services to third parties via “wires, cables, or other communications channels.” As the Eleventh Circuit noted in \textit{National Broadcasting Company}
v. Satellite Broadcast Networks," the judiciary (including the United States Courts of Appeal for the Second and Eighth Circuits) has given the phrase “or other communications channels” its normal meaning and ruled that carriers who rely almost exclusively on satellite and terrestrial microwave channels to make secondary transmissions are eligible for the exemption because they use “wires, cables, or other communications channels.” Therefore, since microwave and satellite carriers are deemed to utilize “wires, cables, or other communications channels” for purposes of subsection (a), wireless cable, SMATV and satellite systems must be considered to use “wires, cables, or other communications channels” for purposes of subsection (f). There is no indication that Congress intended this phrase to be defined differently depending on whether it was in subsection (a) or subsection (f).

The legislative history of the Copyrights Act further indicates Congress’ desire to anticipate technological changes. The goal behind the compulsory licensing scheme, as with other copyright policies, is to promote “broad public availability of literature, music, and the other arts.” Clearly, diversity in programming will be promoted if a wider range of technologies are able to deliver video programming.

As an example of Congress’ intent, the definition of the term “transmit” in section 106 of the Copyrights Act “is broad enough to include all conceivable forms and combinations of wired or wireless communications media, including but by no means limited to radio and television broadcasting as we know them.” Congress included broad and flexible language in its 1976 Amendment to the Copyrights Act to take account of technological changes and to ensure that eligibility for the compulsory license is based on equivalency of function among delivery systems rather than on particular technological attributes of individual systems.

The Eleventh Circuit has confirmed that Congress intended the compulsory license provision to be technology-neutral. In Satellite Broadcast, the court found that “[t]he legislative history shows that in considering the Copyrights Act, Congress understood that the development

160. Satellite Broadcast, 940 F.2d 1467.
163. Twentieth Century Music Corp. v. Aiken, 422 U.S. 151, 156 (1975). Cf. Hubbard Broadcasting, 777 F.2d at 400, (rejecting interpretation of § 111 which, “if accepted, would largely freeze for Section 111 purposes both technological development and implementation . . . [and] would force both primary and secondary transmitters alike to forego available, economically feasible technology. We reject this stand still status quo oriented view of the compulsory licensing provisions.”); Eastern Microwave, 691 F.2d at 132 (“Interpretation of the [Copyright] Act must occur in the real world of telecommunications, not in a vacuum”).
of satellites promised a new channel for communicating in the future."\textsuperscript{165} The same legislative history provides ample evidence that Congress anticipated that the phrase "or other communications channels" would accommodate developing terrestrially-based microwave technologies. As the court noted, "[t]he legislative history supports our conclusion that Congress intended to paint with a broad brush."\textsuperscript{166}

When defining the term "cable system" in 1976 for purposes of the compulsory license, Congress rejected the FCC's then-current definition—a definition that limited the phrase to systems using closed transmission paths. Instead, Congress favored a more expansive definition by adding the phrase "or other communications channels" to Section 111(f). Congress had a purpose for adding that phrase, and, as the court implied in \textit{Satellite Broadcast}, the purpose appears to have been to make the cable system definition technology-neutral.

The Eleventh Circuit's decision in \textit{Satellite Broadcast} removed any possible rationale for the Copyright Office's conclusion that satellite carriers and wireless cable systems are not entitled to the compulsory license. In \textit{Satellite Broadcast}, the Eleventh Circuit ruled that a company which engaged in the secondary transmission of a broadcast signal via satellite is a "cable system" for purposes of Section 111(f) despite the fact that it did not primarily employ closed transmission paths.\textsuperscript{167} \textit{Satellite Broadcast} thus reversed an earlier district court decision, \textit{Pacific & Southern Co. v. Satellite Broadcast Networks},\textsuperscript{168} which held that the Satellite Broadcast Network did not constitute a "cable system" under section 111(f) of the Copyrights Act. Although acknowledging the Copyright Office's NPRM, the court nonetheless found that a system that primarily employs wireless transmission paths is a "cable system" because microwave channels emanating from a satellite are "other communications channels." Indeed, in addressing the NPRM, the Court of Appeals specifically stated that "we have considered the views of the Copyright Office on the language and legislative history of section 111, but we find those views unpersuasive."\textsuperscript{169}

For purposes of section 111(f), a wireless cable system is indistinguishable from the satellite system considered by the Court of Appeals. Just as the system at issue in \textit{Satellite Broadcast} utilizes microwave to transmit broadcast programming from a central site to subscribers, so too does a wireless cable system employ microwave. And, just as the microwave transmissions in \textit{Satellite Broadcast} were deemed by the Court of Appeals to satisfy the "wires, cables, or other communications channels" requirement, so too must the microwave transmissions by wireless cable operators be

\textsuperscript{165} \textit{Satellite Broadcast}, 940 F.2d at 1470 n.3.
\textsuperscript{166} \textit{Satellite Broadcast}, 940 F.2d at 1470 n.5.
\textsuperscript{167} See id. at 1469 n.3.
\textsuperscript{168} \textit{Pacific & Southern Co.}, 694 F. Supp. 1565.
\textsuperscript{169} \textit{Satellite Broadcast}, 940 F.2d at 1470 n.4.
deemed to satisfy the test.

The Copyright Office's technology-specific interpretation of section 111 to exclude satellite carriers and wireless cable from the broad definition of "cable system" is not well reasoned. Demonstrating the Office's irrational decision, the Copyright Office would even choose not to extend the compulsory license to any telephone company should the telcos be let into the video marketplace. The Copyright Office has stated that it would not offer telcos the compulsory license even though such eligibility seems compelled by the Copyright Office's reasoning requiring video delivery systems that "primarily retransmit broadcast signals via physically closed transmission paths such as cable or wires." Because telephone companies would ostensibly meet all of the requirements for a "cable system," the Copyright Office's statements that it would nonetheless deny telcos the compulsory license further underscores the irrationality of the Copyright Office's technology-specific interpretation.

The Copyright Office's final decision serves as an example of how even when Congress drafts legislation intended to accommodate emerging technologies, these technologies run into arbitrary barriers enforced by government agencies interpreting and enforcing these policies. To provide an environment in which all subscription television technologies can compete, these government entities should avoid narrow interpretations of telecommunications statutes.


Similarly, Congress must be careful to avoid, when possible, enacting industry-specific legislation. Such legislation creates unnecessary inequalities which hinder the development of some technologies and forces Congress to go through the cumbersome legislative process each time an additional industry raises a valid concern. Instead, in enacting telecommunications laws, Congress should focus on underlying policy objectives rather than the technological means by which it reaches this end.

170. COPYRIGHT OFFICE COMPULSORY LICENSE REPORT, supra note 111, at xi ("Direct broadcast satellite services and the telephone companies are forecast to be providing video services to subscribers in the near future and they too will be without the protection of the cable license.").

171. NPRM, supra note 145, at 31,593.

172. In response to the Copyright Office's rule, Congress has introduced legislation to clarify Congress' original compulsory license. This legislation would amend the definition of a "cable system" in § 111 to include "microwave, or any other technologies employed for the local distribution of secondary transmissions of broadcast programming." H.R. 4451, 102d Cong., 2d Sess. (1992). In amending this definition, the bill would ensure that wireless cable and other alternative video transmission technologies would be eligible for the compulsory license. Recognizing that its decision to deny wireless cable the compulsory license was controversial, the Copyright Office delayed the effective date of its decision until January 1, 1994, so that Congress could adopt just this type of legislation. See 57 Fed. Reg. 3284 (1992).
The Satellite Home Viewers Act of 1988\textsuperscript{173} is an industry-specific law. Partly in response to the District Court's decision in Pacific & Southern,\textsuperscript{174} Congress enacted the Satellite Home Viewers Act of 1988 to provide satellite carriers with protection similar to that they would have received had the compulsory license provision been interpreted to apply to them. This Act created an interim statutory license in the Copyrights Act for satellite carriers to retransmit television broadcast signals of superstations and network stations to earth station owners for private home viewing.\textsuperscript{175}

As stated in the House Report accompanying the Satellite Home Viewers Act, Congress designed this Act to allow "an exciting new communications technology—satellite earth stations—\ldots to develop and flourish."\textsuperscript{176} Unfortunately, as necessary and well-advised as this measure may have been to protect just the satellite industry, the approach Congress took may have weakened the position of other emerging technologies. Instead of singling out the satellite industry, Congress could have pointed to the broad language in section 111(f) of the Copyrights Act of 1976 as an illustration of Congress' original intent to provide alternative technologies, including the satellite industry, wireless cable, SMATV, etc., with the benefits of the compulsory license. By choosing to address the satellite industry's concerns through industry-specific legislation, Congress has made it unnecessarily difficult on other technologies to argue for their entitlement to the compulsory license under section 111(f). Once again, Congress' good intentions were mistakenly masked in an ultimately unintentionally harmful technology-specific statute.

CONCLUSION

As the debates surrounding telco entry, cross-ownership restrictions, the compulsory license, and a variety of other telecommunications issues illustrate, today's telecommunications law consists of a hodgepodge of rules in which incidental distinctions among various technologies have impaired the growth and competitiveness of the U.S. telecommunications marketplace. However, since these regulatory distinctions are largely historical accidents and are not the most appropriate means to achieve any identifiable policy objective, there often is no compelling reason to preserve them. In the development of the telecommunications market, there has been a consistent pattern of under-utilization of new technologies, with development slowed not by a lack of commercial viability, but by regulatory impediments. This is not to suggest that policymakers should follow the path of deregulation taken

\textsuperscript{174} Pacific & Southern, 694 F. Supp. 1565.
\textsuperscript{176} Id.
in the banking, airlines, or trucking industries. Rather, Congress and regulators should pursue policy goals through technology-neutral laws and rules designed to promote growth, innovation, and delivery to consumers of the full benefits of new technologies in the telecommunications marketplace.

Congress, regulators, and industry leaders should encourage efforts to develop technology-neutral policies and resist the urge to deal with policy questions on an ad hoc, technology-specific basis. Of course, in some situations there may be overriding objective policy justifications for distinguishing among individual technologies. Even then, however, certain questions should be asked before drawing these lines. For example, lawmakers should ask if distinguishing particular technologies is necessary to reach their policy objectives and if this distinction is likely to advance or hinder competition. Moreover, technology-specific exceptions to generally neutral policies must be crafted as narrowly as possible, which may entail adding sunset clauses to these provisions. Only by freeing the telecommunications marketplace from unnecessary technology-specific legal barriers will all U.S. telecommunications industries realize their full potential.