ADVANCED COMMUNICATIONS AND THE PUBLIC TRUST

Law, Ethics, and Communication

By Joseph Van Eaton, Esq.
and Holly Saurer, Esq.

Miller & Van Eaton, P.L.L.C.
Washington, D.C. – San Francisco, CA

ADVANCED COMMUNICATIONS AND THE PUBLIC TRUST

Law, Ethics, and Communication

Table of Contents

1. Summary

The right to receive information and the right to act as a source of information are widely recognized as fundamental rights, critical not only to the development of the individual but to the health and welfare of society. It may be beyond our capacity to ensure that all have identical access to information, or that all are in an equal position to speak. However, we should at least recognize that the social benefits associated with free speech cannot be fully achieved if some classes of society are relegated to communicating (to borrow an image from de Sola Pool) via the technological equivalent of a horse and buggy, while others control advanced communications infrastructure and its content.[1] It can be argued that in the absence of some equalizing mechanisms, advanced communications technologies will fragment and divide our nations and our communities far more than they will bind and unify. The efforts of many nations to eliminate what has been called the "digital divide" stems in part from the recognition that while communications technologies can benefit societies enormously, the technologies also have potentially negative effects which must be ameliorated. Active responses are required to ensure that communications technologies help build our communities.

This paper argues that, in order to offset some of the potential negative effects of modern communications systems, it is necessary to do more than ensure that technologies are *available* and *affordable*. Based on our work with municipalities in the United States, at least three other policy elements can help ameliorate some of the challenges presented by modern communications systems.

First, networks must be open. By that, I do not mean that all systems must be common carriers or utilities in the tradition of the public switched telephone network. I mean that systems must be designed so that there is at least capacity available for use by the public and non-profit

[1] In *Technologies of Freedom* (Harvard University Press, 1983) at 73, Ithiel de Sola Pool made the following observation regarding cable systems in the United States, and the efforts by cable operators to maintain absolute control over information transmitted via that medium: "Whatever alternative means of communication exist, nothing else can offer the equivalent of the multiservice broadband cable running past every house…One can imagine a railroad owner in the nineteenth century denying being a monopolist because anyone refused access to a train could use a horse and buggy."

entities for mass communication. An infrastructure owner should not be able to block a communication merely because it disagrees with the content, or to enhance its own private profit-making interests. A goal should be to create a sort of public space in every medium. The importance of having such resources has been recognized in a number of countries, where capacity in the broadcast spectrum or on cable systems is set aside for use by the public or non-profit groups.

Second, and as critically, members of the public must be able to learn how to use the systems available to them. Ensuring that communications systems can be used effectively to build community is not *just* a matter of making infrastructure available. We all recognize that teaching someone to read or write is not just a matter of providing the student an alphabet or a pen. Enormous resources are devoted to teaching students not just how to read, but how to comprehend what they are reading; and to teach students not just how to write, but how to write in a manner that communicates effectively. Experience in the United States suggests that the ability to use modern communications infrastructure to build community involves a skill that is no more intuitive than effective reading or writing. It requires professional assistance: a paid staff whose job is to facilitate the effective use of communications resources through (a) outreach to all in the community; (b) training; and (c) technical assistance. It requires a predictable and longer-term source of funds, so that available resources can be managed and maintained effectively (and so that staff can be trained and retained).

Third, local communities should be involved in infrastructure planning, and should have a right to demand facilities, equipment and resources at the local level that are necessary to vindicate the rights of individuals and groups within the community to speak and to receive information via modern communications systems. The goal is not simply to promote freedom of speech and to allow diverse voices to be heard. It is also to provide the local community with the tools necessary to use communications resources to solve community problems and deliver social services more effectively.

How are these policy goals to be achieved? One aspect of United States regulation of cable systems deserves particular attention. In order to function, a cable company must utilize properties – streets, rights of way and sometimes utility poles or conduits – that are held by the local government in trust for the entire community. Title 47 of the United States Code at 47 U.S.C. §§ 531, 541, 542-544 provides that in return for making these resources available for

private for-profit use, the local government can require a cable company to pay rent to the local government; to provide channels, facilities and equipment for local use; and to provide support for the use of those channels, facilities and equipment. This model is an important variation on traditional "public trust" models long implicit in communications regulations. Public trust models generally recognize that a private entity which receives government benefits must provide some form of *quid pro quo* to the public.[2] The cable model allows a local community to control a portion of the cable system and to require the financial support required to utilize the system effectively in return for granting the company the right to use public streets. The company, in short, can be required to compensate the community in forms which help ensure that cable technology positively benefits the community. To my mind this model has significant advantages over other common regulatory approaches, and can be applied to other communications technologies which depend on public resources for their operation.

2. The Right to Speak and to Receive Information; and the Freedom of the Press

Many governments and international organizations recognize the right of individuals to be a participant in public discourse as both consumer and producer of information. In the United States, this right is embodied most dramatically in the first amendment to our Constitution, which states "Congress shall make no law . . . abridging the freedom of speech…" Internationally, the United Nations' Universal Declaration of Human Rights Article 19 states that "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." Similar language is reflected in the Council of Europe's Convention for the Protection of Human Rights and Fundamental Freedoms Article 10,[3] the

[2] The idea of a public trust suggests a partnership, where the public is contributing resources collectively; an entity is taking advantage of those resources to its benefit; and in return, the entity assumes an obligation to the community at large which may be satisfied by cash payments, provision of services or facilities or some combination of the three. By contrast, the term "public interest" suggests an appropriate standard for regulation for utilities and quasi-public utilities, but does not depend on the notion of a quid pro quo.

[3] "Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This article shall not prevent States from requiring the

Organization of American States' American Convention of Human Rights' Article 13,[4] and the Organization of African Unity's African Charter on Human and Peoples' Rights Article 9.[5] These charters provide protection not only for individual expression, but for the processes necessary to acquire knowledge and to develop opinion leading to expression: the right to seek out and find information, and the ability to share and impart ideas to others. It is also recognized that people should be able to receive and disseminate information using many media.[6] The exercise of free speech rights benefits not only the individual, but also the society at large by, *inter alia*, establishing a rule which permits critical public debate to occur; and establishing a rule that permits each member of society to participate in -- to feel invested in – public life in a meaningful way.[7] It is therefore a fundamental assumption that members of the public cannot be limited to communicating only via outmoded or inefficient means of communication.

These same sources also provide special protections for media of mass communication. The Council of Europe's Convention for the Protection of Human Rights and Fundamental

---

licensing of broadcasting, television or cinema enterprises." Article 10, section 1, as amended by Protocol No. 11, Nov. 4, 1950, Rome.

[4] "Everyone has the right to freedom of thought and expression. This right includes freedom to seek, receive, and impart information and ideas of all kinds, regardless of frontiers, either orally or in writing, in print, in the form of art, or through any other medium of one's choice." Article 13, section 1. Pact of San Jose, Costa Rica, November 22, 1969.

[5] "1. Every individual shall have the right to receive information. 2. Every individual shall have the right to express and disseminate his opinions within the law." Article 9, adopted June 27, 1981.

[6] See Council of Europe's Article 10, at fn. 1

[7] See Lee C. Bollinger, *Free Speech and Intellectual Values,* 92 Yale L.J. 438 (1983). The importance of ensuring that all citizens have a stake in their society has been widely recognized, in a variety of fora. See. e.g., Romano Prodi, President of the European Commission, "Shaping the New Europe," prepared remarks for the European Parliament (February 15, 2000), available at http://europa.eu.int/comm/external_relations/news/02_00/speech_00_41.htm. "Europe needs a sense of meaning and purpose. We Europeans are the heirs of a civilisation deeply rooted in religious and civic values. Our civilisation today is being enriched by its openness to other cultures. What we need now is a humanistic perspective. Daily and systematically, our economic and social system must recognize the primacy of human dignity. It must ensure that all our citizens have genuine access to liberty, inter-personal communication, culture and spiritual life….Our citizens are not happy with the way things are done at European level. It is not just the Commission's recent performance they criticize: they feel remote from all European institutions, and are sceptical that we can deliver the kind of society they want. They are rightly calling for a much greater say in shaping the New Europe."

Freedoms Article 10 has been found to extend to the media.[8] In addition, Organization of American States' American Convention of Human Rights' Article 13 contains a subsection dedicated to media.[9] In the first amendment to the U.S. Constitution, there is a "freedom of the press" distinct from the freedom of speech…reflecting, in part, the reaction of our country's Founders to taxes and acts of censorship directed to the act of publishing itself. In 1734, John Peter Zenger published a weekly newspaper whose writers criticized the colonial governor. The governor condemned the newspaper and had Zenger, *as the newspaper's publisher*, arrested and charged with libel. Zenger was acquitted, thanks to a sympathetic jury. Today the first amendment would protect Zenger as publisher, the pressman who printed the article, and Zenger's writing staff (who at the time wrote under assumed names in order to escape Zenger's fate). It would be impossible to restrict the pressman or publisher in order to effectively silence the voices of the writers.[10] What could not have been envisioned at the time the first amendment was adopted was that the pressman would be in a position to effectively silence the speakers. [11]

3. The Conflict Between the Rights of Individuals and Corporate Media

Yet, that is precisely where we are today. There is a real risk that consolidated and vertically integrated media companies will be in a position to combine control over distribution networks and content in a way which diminishes competition (limiting practical outlets for

---

[8] Caroline Uyttendaele & Joseph Dumortier, *Free Speech on the Information Superhighway: European Perspectives*, 16 J. Marshall J. Computer and Info. Law 905, 921 (1998).

[9] "The right of expression may not be restricted by indirect methods or means, such as the abuse of government or private controls over newsprint, radio broadcasting frequencies, or equipment used in the dissemination of information, or by any other means tending to impede the communication and circulation of ideas and opinions."

[10] For more information on the history of John Peter Zenger, see http://earlyamerica.com/earlyamerica/bookmarks/zenger/index.html .

[11] One of the quintessential and most influential examples of participation in public discourse in America was Thomas Paine's *Common Sense*, a pamphlet arguing for independence from Great Britain in 1776. Close to 150,000 copies were sold within three months of publishing, and possibly as many as 500,000 copies were sold….a huge figure for the time. Indeed, in colonial America, many critical works were still being written and transcribed by hand. Hall, David, "Technology and Community," MIT Communications Forum, Media in Transition seminar, May 10, 1997, available at http://web.mit.edu/transition/tof/comm_frame_panel_5.html. The output of what was the "mass media" of Paine's time is utterly dwarfed by the output of today's mass

speech) and which limits the ability of individuals and groups to receive information other than that which the network is designed to encourage them to receive.

These dangers were recognized in both Europe and the United States during review of the merger of America Online (AOL) and Time Warner, although responses varied because of differences in the companies' European and U.S. market penetration. Europe's main concern was the potential control AOL Time Warner, in combination with Bertelsmann, could exercise over music. The EU concluded that:

> "[a] company holding a dominant position in the market for the licensing of music publishing rights required for on-line delivery would be in a position to play the gatekeeper's role dictating the conditions for the delivery of music via the Internet by refusing to license or threatening to withhold the rights."[12]

In the U.S., where AOL is the dominant provider of Internet access services, the concerns were far broader. The Federal Trade Commission concluded that the merger could adversely affect competition, including competition in the provision of residential broadband (or high-speed) Internet access.[13] The Federal Communications Commission ("FCC") determined that the public interest required "ensuring the existence of a nationwide communications service, available to everyone; implement[ing]… Congress's pro-competitive, deregulatory national policy framework designed to open all telecommunications markets to competition; the preservation and advancement of universal service; and the acceleration of private sector deployment of advanced services. The FCC concluded that these public interests could be adversely affected by the AOL Time Warner merger if the merger was not conditioned.[14]

---

media. N'Sync, a popular "boy band" sold 2.4 million copies of its album "No Strings Attached" in its first week of distribution.

[12] See Commission Decision of Case No COMP/M.1845 - AOL/Time Warner (11/10/2000).

[13] According to the Commission's complaint, the "proposed transaction would violate [United States antitrust laws] by: lessening competition in the residential broadband Internet access market; undermining AOL's incentive to promote DSL broadband Internet service as an emerging alternative to cable broadband; and restraining competition in the market for interactive television ("ITV")." See *In the Matter of America Online, Inc., and Time Warner Inc*., FTC File No. 001 0105, Docket No. C-3989 at http://www.ftc.gov/opa/2000/12/aol.htm.

[14] The FCC summarized its conclusions thusly: "First, we find that the proposed merger would give AOL Time Warner the ability and incentive to harm consumers in the residential high-speed Internet access services market by blocking unaffiliated ISPs' access to Time Warner cable

The Time Warner AOL merger is part of a trend toward a concentration of ownership that affects the openness of communications infrastructure, and the nature of the services available via that infrastructure.[15] In the U.S there are now fewer daily newspapers than there

---

facilities and by otherwise discriminating against unaffiliated ISPs in the rates, terms and conditions of access. To remedy this harm, this *Order* conditions approval of the merger on certain conditions relating to AOL Time Warner's contracts and negotiations with unaffiliated ISPs. Second, we find that the merger would make it more likely that AOL Time Warner would be able to solidify its dominance in the high-speed access market by obtaining preferential carriage rights for AOL on the facilities of other cable operators. We particularly find that the merger would harm the public interest by allowing for greater coordinated action between AOL Time Warner and AT&T in the provision of residential high-speed Internet access services. To remedy these harms, we impose a condition forbidding the merged firm from entering into contracts with AT&T that would give AOL exclusive carriage or preferential terms, conditions and prices. Third, we find that the proposed merger would enable AOL Time Warner to dominate the next generation of advanced IM-based applications. To remedy this harm, we impose a condition requiring AOL Time Warner, before it may offer an advanced IM-based application that includes streaming video, to provide interoperability between its NPD-based applications and those of other providers, or to show by clear and convincing evidence that circumstances have changed such that the public interest will no longer be served by an interoperability condition. Fourth, although we have concerns that the merger may give AOL Time Warner the ability and the incentive to discriminate against the interactive television ("ITV") services of unaffiliated video programming networks, we find that the terms of the FTC Consent Agreement will adequately protect the public interest by prohibiting certain types of discrimination and that it is not necessary for us to impose further conditions in this proceeding; however, we have initiated a Notice of Inquiry ("*ITV NOI*") to explore ITV issues in the market generally." *Id.* at para. 18.

While the EU did not impose conditions on the provision of Internet services by AOL Time Warner, it also recognized the potential problems presented by large mega-media companies: "AOL's service has also been described as a "walled garden" or a "one-stop Shop," where the generality of Internet users would have the impression they can find whatever they want. This would appear to mean that a large number of services and content are offered on the AOL homepage. Many of these are exclusive to AOL."

"Once the user clicks on these hyperlinks he enters a cul de sac from which he can only access other affiliated services and certain key external content. However, AOL's customers can be guided away from content which competes too aggressively with AOL. The breadth of AOL services and content could give rise to considerable switching inertia as users may tend to identify AOL with the Internet and not look for competing sites." See Commission Decision of Case No COMP/M.1845 - AOL/Time Warner (11/10/2000) at para. 70.

[15] The recently announced merger of AT&T and Comcast, two of the largest cable operators in the U.S. would further concentrate U.S. cable ownership. The Washington Post notes that the proposed merger ratches up "an already fierce battle among an ever-shrinking handful of media, technology and telecommunications titans wrestling for control of news, movies and music and the way each is delivered to the home." Klein, Alec, "Comcast-AT&T Deal Spotlights Bigger Drama," *Washington Post*, December 21, 2001, p.1.

were in 1950, and the number continues to decline each year.[16] Furthermore, the number of newspaper owners continually declines as chains consolidate by buying out independents.[17] Concentration of video programming is at an all-time high. The top ten cable companies in the United States control 84% of the subscribers, the top 4 control 52.7%.[18] ABC, one of the most powerful broadcast networks, also controls Disney; Time Warner controls several of the most critical cable networks (including ESPN, CNN and the former Turner broadcast and cable properties). Former FCC Commissioner Harold Furchgott-Roth, an economist, foresees " problems with the vertical ownership of cable programming . . ., as you might with a Disney offer."[19] As the AOL-Time Warner merger suggests, consolidation of media is not a phenomenon unique to the US. The companies that are consolidating are transnational corporations, and the effects are transnational.

Some argue that the Internet will effectively counterbalance the problems of consolidation, because (it is argued) the Internet is effectively uncontrollable, and will (inevitably) provide effective avenues for communication that are beyond the control of government or media empires. I would like to think so: but I am less sanguine in light of technological development that appear to give those who own infrastructure the ability to control the flow of information over the Internet. Cisco Corporation's White Paper "Controlling Your Network – A Must for Cable Operators." (1999) is instructive. Cisco is the largest manufacturer of "routers" used to direct traffic over the Internet. Its White Paper points out at pp. 3 – 5 that Cisco routers provide the cable operator (and presumably the operator of any IP-based network) with the "ability to prioritize and control traffic levels." Among other things, the system owner "could specify that video coming from internal servers [which presumably the system owner controls] receives precedence and broader bandwidth over video sourced from external servers."

Moreover, the very structure of networks that are being developed limits the ability of those who do not control the network to participate fully in the new information society. Many

---

[16] In 1950 there were 1,772 daily newspapers. By 1999, there were 1,483 dailies, ten per cent of which were controlled by four chains. *See* http://www.naa.org/info/facts00/11.html.
[17] *Id.*
[18] *Annual Assessment of the Status of Competition in the Market for Delivery of Video Programming*, Seventh Annual Report, CS Docket No. 00-132 (Jan 8, 2001) at Table C-3. Recently, the FCC's cable ownership rules were struck down by the judiciary, on first amendment grounds, paving the way to even more consolidation in the cable industry.
[19] TR Daily, June 26, 2001.

of the networks and network services being deployed now – and certainly those services available at relatively low cost – are highly asymmetrical, and are subject to a variety of restrictions that limit the ability of the user to speak – as opposed to merely receiving information. For example, traditionally, broadcast and cable systems have been used almost exclusively for sending information *downstream*, to subscribers…placing the subscriber in the position of being a passive recipient of information. Cable systems have now been upgraded across the United States to offer Internet and other two-way services, but the cable systems are structured so that large amounts of information can be sent to the subscriber, but the subscriber can send relatively little information upstream for distribution to others: 128 kbps (about twice the capacity of an ordinary modem) upstream v. 1.5 mbps downstream. @Home, formerly the major provider of broadband services in the U.S., had an "acceptable use" policy that stated that "examples of prohibited uses include, but are not limited to, running servers for mail, http, ftp, irc, and dhcp, and multi-user interactive forums."[20] Telephone systems, originally built to support equivalent capacity two-way voice communication, are now being designed to implement advanced residential services using asymmetrical technologies. I am not arguing that symmetry must be mandated – I am simply pointing out that networks are not inherently open or democratic for all users, even where relatively universally available.[21]

The question before us therefore is: how do we achieve our interests in protecting the media, in fostering diverse and independent speech, and in fostering the use of the media to help build communities?[22]

4. Regulating Corporate Media To Build Community and Enhance Individual Rights – the Model of Cable Television Regulation in the U.S.

The model applied in the U.S. to the regulation of cable television contains some significant and distinct elements that may help achieve these goals more effectively than other

[20] The policy was available at the company's website at http://www.home.com/support/aup/.
[21] U.S. businesses can buy a wide range of services and facilities, configured to allow high-speed data transport in both directions. As a practical matter, ordinary consumers have a much more limited choice.
[22] The question is not a new one. The conflict between the freedom of the press and the rights of individuals was noted in such works as Jerome A. Barron's *Access to the Press – A New First Amendment Right*, 80 Harvard Law. Rev. 1641 (1967).

models. The portion of the cable regulatory model on which I will focus is the portion that permits localities to charge rent for use of the rights of way; to require operators to provide channels, facilities and equipment that can be used by the public to produce and cablecast information; and to require construction of infrastructure especially designed to bring advanced technologies to schools and government buildings. I begin by briefly contrasting the cable model to other regulatory models in the United States.

The U.S. Communications Act of 1934, as amended, establishes different regulatory requirements for persons providing telecommunications services, for broadcasters, and for operators of cable television systems.[23] Telecommunications service providers, broadcasters and cable operators may also be subject to certain local and state regulation. The structure of the law, until recently, effectively resulted in a separation of markets: in most cases a company would not be providing telephone services in the same geographic market where it was providing cable service, or vice versa. In 1996, however, the Communications Act was significantly revised in an effort to break down barriers to entry in the communications marketplace. U.S. law now permits cable operators to offer common carrier services, and telephone common carriers to offer cable services. Regulation follows the activity – to the extent a common carrier offers cable services, for example, it is subject to applicable federal, state and local cable regulations.

Title II of the federal Act regulates telecommunications services-- the *transmission* of information for hire for the public. Telephone companies engaged in interstate commerce are regulated by the federal government under this Title, as are certain other common carrier communication companies. States and localities are also involved in the regulation of telecommunications service. In addition, telecommunications companies also place facilities on public property must obtain various state and local authorizations; wireless providers must comply with local and state land use regulations affecting the placement of towers.

Broadcasters are regulated under Title III of the federal Act.[24] Broadcast regulation is almost exclusively the concern of the national government. Cable systems are regulated under yet another Title, Title VI. While Title VI provides for some federal regulation of cable, most

[23] The Communications Act appears at Title 47 of the United States Code.
[24] Title I is a general provision describing the scope of the Act and the powers of the FCC; Titles IV and V are administrative and penal provisions, respectively.

regulation actually occurs at the state or local level. The federal law is designed to ensure that state and local regulation of cable is exercised in a manner consistent with national goals.

Under each of the regulatory models, providers are subject to requirements designed to protect the public. Each model implicitly or explicitly reflects a notion that, in return for the grant of certain benefits to the provider, the provider must return benefits to the public. In other words, providers assume a public trust, and may be subject to regulations that are not applied to businesses that do not receive benefits from the government. The notion of a "public trust" is neither new nor unique to U.S. law. English law provided that those who placed inns on the Kings Highway were obliged to serve all who passed by.[25] In any case, the public trust is designed to accomplish two goals that are particularly important here, although there is a large gap between the goal and the result. First, the models are designed to prevent a grantee from using its ownership of distribution systems to control communications and debate. Second, the models are designed to ensure that services are available throughout the nation, and can be used effectively to address local and regional issues.[26]

Common Carrier

Government involvement in regulation of the telegraph and later the telephone dates from the commercial inception of those two technologies. In 1844, the United States subsidized

[25] *Allnutt v. Inglis*, 104 Eng. Rep. 206 (K.B. 1810). See also the writings of Lord Chief Justice Matthew Hale, which influenced this concept, including his treatise *De Portibus Maris*, 1 Harg. Law Tracts, 78, and *De Jure Maris*, 1 Harg. Law Tracts, 6.

[26] See discussion of FCC AOL Time Warner decision above. The goals of communications regulation are of course broader: 47 U.S.C. §151 states that the purpose of the act is "to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communication..." The preamble to the 1984 amendments to the Act (which added cable regulatory provisions) states that the goals of communication regulation include providing "the widest possible diversity of information sources and services to the public..." 47 U.S.C. §521(4). The preamble to the 1996 Act adds as a purpose "to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies."

the first telegraph line between Baltimore and Washington, and operated the line for a year, without charging customers for its use.[27] Competition eventually developed, as did cartels which attempted to restrict further competition. Congress then enacted the Post Roads Act in 1866. This Act was the most important piece of legislation to affect the telegraph, and later telephone, industry. The Act required all telegraph companies to interconnect with and accept traffic from its competitors.[28] In exchange, the companies were allowed to place their poles on all post roads, and to cut down trees for poles. In addition to this federal grant, municipalities throughout the nation concurrently issued authorizations permitting telephone and telegraph companies to use and occupy municipal streets, often for a fee reflecting the fair market value of the property used.[29] Courts treated the compacts between municipalities and telephone companies as traditional, bilateral contracts through which the locality could receive certain benefits (services for citizens at guaranteed rates) while the telephone company received the right to operate and to occupy public property.

In 1910 Congress enacted the Mann-Elkins Act, which brought interstate telephone regulation under the auspices of the Interstate Commerce Commission, the same entity that regulated railroads and other transportation systems.[30] At about the same time, states began to establish public service commissions responsible for regulating intrastate telephone service. Telephone companies were not seen as speakers – like newspapers – but as transmission companies, public service corporations whose obligations paralleled those of the great transportation utilities.[31] Content and transmission were distinct.

Within two decades, in response to massive consolidation, federal and state governments asserted even greater control over the telephone industry.[32] By the 1930s, AT&T was emerging as the primary provider of local and long distance telephone service.[33] Congress and the states responded by establishing a regulatory model that was to guide the industry for decades. The

---

[27] Stuart Brotman, *Communications Law and Practice,* §1.04[1] (Law Journals Seminar Press, 2000.)
[28] *Id.*
[29] *Western Union v. City of St. Louis,* 149 U.S. 465, 469 (1893).
[30] Stuart Brotman, *Communications Law and Practice,* §1.04[3] (Law Journals Seminar Press, 2000).
[31] Henk Brands and Evan T. Leo, *The Law and Regulation of Telecommunications Carriers,* 4-5, (Artech House, 1999).
[32] See Brotman at §1.04[4].

model was relatively simple: AT&T was protected against certain forms of competition within its service territories. In return the company was under an obligation to provide the services it chose to offer to all those within its service territory at regulated, non-discriminatory rates. The users, not the company, controlled the content of communications.[34] Because of the nature of the system and the services offered, most people were provided the opportunity to take advantage of the technology to receive and to originate communications. The facilities owner could choose how to package its services; the design of the network was also (to a large degree) left to the owner of the facility; but the content of the transmissions over the network were under the user's control.[35]

With the advent of computer technologies and more advanced signaling systems, it became more difficult to distinguish between content and transmissions. In a series of complex decisions, the FCC tried to divide those functions central to transmission of information from everything else.[36] The former were treated as regulatable telecommunications functions, while the latter were treated as (relatively unregulated) "enhanced" or "information" services.[37] Today, under this division, an Internet Service Provider ("ISP") is generally treated as offering an information service, because the ISP (at least in theory) does not perform the transmission function. Rather, it sells a computer networking service, with the transmission function being

---

[33] *Id.*

[34] *Id.* at §1.04[3]-[4].

[35] The law defines telecommunications services in terms of user control. "The term 'telecommunications' means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." A telecommunications service is "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 47 U.S.C. §153(44),(46).

[36] See *Regulatory & Policy Problems Presented by the Interdependence of Computer & Communications Services & Facilities*, 28 F.C.C.2d 267 (1971), *aff'd* 40 F.C.C.2d 293 (1971); *In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations* (Second Computer Inquiry), 77 F.C.C.2d 384 (1980); *In the Matter of Amendment of Section 64.702 of the Commissions Rules and Regulations* (Third Computer Inquiry), 104 F.C.C.2d 958 (1986).

[37] The 1996 revisions to the Communications Act states: "The term "information service" means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. §153(20).

purchased by the end user, or by the ISP itself. Telephone companies and other providers of the transmission function were permitted to provide enhanced/information services, subject to regulations designed to prevent them from stopping competitors from using the transmission functions of the network to offer similar services.

The efficacy of those regulations, as modified over the years, has been and continues to be subject to substantial debate. However, the model of separating content from conduit has worked relatively well, at least from the perspective of the individual. The Internet explosion has demonstrated that information revolutions can occur if networks are widely open (with content controlled by the user), interconnected, and available at a reasonable price. However, it is not at all obvious that the robust, open nature of the networks will be maintained for advanced or broadband services.

There are legislative efforts to treat broadband services and traditional "telephone" services differently. In 1996, Congress decided that the best way to speed the deployment of advanced services was to open markets to competition, while providing for government intervention to push the deployment of services to areas that were significantly lagging behind the rest of the nation. Congress attempted to establish a regulatory framework for fostering competition through either "facilities-based" or "non-facilities based" competition. A facilities-based competitor is one that builds physical facilities to end users, duplicating existing facilities. A non-facilities based competitor leases facilities from the incumbent. To this end, Congress required existing local telephone companies to "unbundle" elements of their systems, and allow potential competitors to pick and choose those elements that they desired to use.[38] The assumption was that competitors would be able to combine those elements with their own resources to provide competitive services (including advanced services) cost effectively. This model is now under attack, as potential competitors complain that they are not being provided with the access to network elements as Congress mandated, Local telephone companies complain that the requirements are so burdensome that they deter deployment of new services and facilities.[39] Some argue that to encourage deployment, facilities associated with the

[38] See 47 U.S.C. §251 ("Interconnection").

[39] See, e.g., Internet Freedom and Broadband Deployment Act of 2001 (HR 1542 - The Tauzin-Dingle Bill), currently pending before Congress. It is the first major attempt to significantly revise the 1996 Act. Opponents of this proposed bill believe it will hurt consumers and will allow large incumbent carriers to drive competitors out of the marketplace and control the flow

provision of advanced services should not be "open" on the same basis as traditional telephone network elements.[40] As the services provided over telecommunications networks diverge from the traditional telephone models, it becomes less and less clear that the networks will remain as widely open, or that the common carrier model will be applied in a way that adequately protects the public.[41]

The asymmetry of system designs will affect the ability of residential users to originate information, as suggested above. In addition, as the conduit is increasingly controlled by companies with enormous stakes in controlling content, the difficulties of effectively separating the transmission function and the content function through regulatory fiat will become even more pronounced. AOL, the predominant provider of Internet access services, is not regulated as a common carrier. It has no obligation to serve or carry the messages of others, nor are its rates regulated.

The common carrier model does not ensure that advanced services will be provided, nor does it ensure that the services that are provided will permit users to act effectively as creators of content in a broadband world.[42] The current "universal service" regulations in the United States are designed to provide everyone access to basic "dial tone" telephone service. There is no current government regulation designed to ensure that everyone has access to lines capable of supporting high speed Internet access.[43]

As importantly, the common carrier model by itself does little to assist the public in using communications technology to build community. The growth of the Internet shows that people

---

of information over advanced systems. Proponents believe this bill will encourage massive broadband deployment to all areas in the nation, beyond the urban and high-income areas which are primarily served today.

[40] See *In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferors, to AOL Time Warner Inc., Transferee*, Memorandum Opinion and Order, CS Docket No. 00-30 (Jan 11, 2001).

[41] Wehrbach, Kevin, Esther Dyson's Monthly Report, available at www.Edventure.com\release1\cable.html. The need for active antitrust enforcement has been widely recognized, as the AOL-Time Warner merger debate in Europe and the U.S. suggests. See also Robert Pitofsky, Chairman, Federal Trade Commission, "Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy," prepared remarks for the Antitrust, Technology and Intellectual Property Conference (March 2, 2001).

[42] See discussion of network symmetry, above.

worldwide are able and desire to use the communications tools available to them in creative ways. However, virtual communities can be and often are self-selecting; those interested in a particular issue can establish and enforce rules governing the topics of debate and the manner in which the discussion will proceed. In a geographic community, however, the goal is not to be selective, but to be inclusive and to bring together groups and individuals in a manner which bridges what can be dramatic differences in viewpoints and in style of expression. Using new technologies to bridge, rather than widen the gaps, is not as simple as dialing a telephone number and requires more protactive steps.

Broadcast Television and Radio

Broadcast regulation in the U.S. was shaped by the perceived scarcity of the public resource – the airwaves – required for broadcasters to function. No one could speak via the airwaves if everyone spoke at once (it was argued); therefore, it was up to the national government, as trustee of the airwaves, to establish rules for choosing who could and who could not speak.[44]

Under the U.S. model, the federal government selected private licensees, who were given control of the airwaves for a period of years, subject to various public interest obligations.[45] At the end of the license term, the performance of the licensee could be reviewed, and the license revoked if the operator had failed to act in the public interest. The government also chose to allocate spectrum so that broadcasters operated at the regional and local levels, rather than at the national level. This choice was designed, among other things, to ensure that there would be outlets for communication that could and would be responsive to local concerns. Broadcast regulations were to ensure that the "interests of the viewers" and not the broadcasters, were paramount.[46] As noted by one of the co-authors of the Radio Act of 1927, "licenses should be issued only to those stations whose operation would render a benefit to the public, are necessary

[43] See 47 U.S.C. §254 ("Universal Service"). The "universal service" obligation can expand over time.
[44] See *National Broadcasting Co. v. United States*, 319 U.S. 190 (1943). See generally Carter, Franklin & Wright, *The First Amendment and the Fifth Estate*, Chapter 3, (Foundation Press, 1996).
[45] *Id.*

in the public interest, or would contribute to the development of the art . . .the broadcast law will not be a right of selfishness. It will rest upon the assurance of public interest to be served."[47]

At its height, public interest regulation of broadcasting required broadcasters, among other things, (a) to survey the local community to identify local communications needs and interests; (b) to produce substantial amounts of programming responsive to those needs and interests; and (c) to produce programming regarding the important issues of the day.[48] The FCC required that a licensee provide "ample play for the free and fair competition of opposing views." The FCC stated that this principle applied "to all discussions of issues of importance to the public."[49] Licenses were issued through a competitive process, through which the government attempted to determine who would best serve the local community, examining, *inter alia*, whether the licensee company was locally owned.

The key characteristic of this mode of regulation is that it depends on the willingness and ability of a national regulatory institution to regulate basic operational and programming choices made by local broadcasters. The integrity of the process depended on the FCC's willingness to revoke licenses where a broadcaster failed to carry out its promises. As the political leaders were dependent in part on favorable coverage by licensees, it is perhaps not surprising that large portions of the "public interest" model were abandoned. The fairness doctrine, which required broadcasters to offer contrasting viewpoints on controversial issues, is no more, for example.[50]

---

[46] See *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367 (1969).

[47] 67 Cong. Rec. 5479 (1926) (statement of Congressman White).

[48] These requirements were first included in a report published in 1946, entitled *Public Service Responsibility of Broadcast Licensees*, also known as the "Blue Book." The requirements were more formally adopted in 1960 in *Report and Statement of Policy Re: Commission En Banc Programming Inquiry*, 20 Radio Reg. 1901, and clarified in 1971 with *The Primer on Ascertainment of Community Problems by Broadcast Applicants*, 21 Radio Reg.2d 1507 (1971), and 1980 with *The Amendment of the Primers on Ascertainment of Community Problems*, 47 Radio Reg.2d 189 (1980). These regulations, and the emphasis on localism, were later rescinded in *Deregulation of Radio*, 84 F.C.C.2d 968 (1981).

[49] *Great Lakes Broadcasting Co.*, 3 F.R.C. Ann. Rep. 32, 33 (1929).

[50] See *Syracuse Peace Council v. FCC*, 867 F.2d 654 (D.C. Cir. 1989). See also, *Telecommunications Research and Action Center v. FCC*, 801 F.2d 501 (D.C. Cir. 1986), and *Inquiry into Section 73.1910 of the Commission's Rules and Regulations Concerning the General Fairness Obligations of Broadcast Licensees*, 102 F.C.C.2d 143 (1985). There are many who argue that the regulatory model was properly abandoned. In their view deregulation has or will result in more diversity of thought and opinion, more debate, and more meaningful and provocative programming. The report cited at n.52 suggests otherwise.

With certain exceptions related to coverage of politicians, no one has a right to control air time other than the licensee.[51] The broadcast model simply does not provide individuals or even groups with a clear opportunity to participate in the marketplace of ideas, nor does the broader model serve local communities well. Broadcasters produce very little programming about the communities they serve.[52]

Perhaps recognizing the inherent difficult in forcing licensees to address public issues seriously, and the market's inability to create programming not aimed at a "lowest common denominator" audience, Congress enacted the Public Broadcasting Act. The Act established the Corporation for Public Broadcasting ("CPB"). The aim of the CPB is to "facilitate the full development of educational broadcasting in which programs of high quality, obtained from diverse sources, will be made available to noncommercial educational television or radio broadcast stations."[53] The goal, in short, was to create and fund non-commercial broadcast stations that could provide an alternative to the fare provided via the private, for-profit broadcast market. The public broadcasting system has been underfunded, and perhaps more significantly, is under increasing significant pressure to produce or broadcast programming which appeals to a mass audience. The hope is that the public broadcasting system will attract enough viewer and corporate contributions and create enough cross-marketing opportunities to make the entire network self-supporting.[54] Many observers criticize the public broadcasting structure for not

---

[51] See *Columbia Broadcasting System v. Democratic National Committee*, 412 U.S. 94 (1973).

[52] See *What's Local About Local Broadcasting?, A Joint Report of the Media Access Project and the Benton Foundation*, available at http://www.benton.org/Television/whatslocal.html. This study analyzed a two week period in late February and early March of 1998. Of the five markets and 40 commercial broadcasters surveyed, only 46.5 out of 13,250 hours of programming were devoted to local public affairs. That accounts for .35% of all programming. Much of this programming is provided before 8:00am on weekends, and only 2 hours were provided in prime time. Further, in three of the markets, there was no local public affairs programming at all. 25% of the stations offered neither local public affairs programming nor local news.

[53] 47 U.S.C. §396(g)(1)(A).

[54] Funding for the CPB depends largely on Congressional appropriations. In the last ten years, appropriations have more often decreased than increased. Appropriation funding is available at the CPB's website at http://www.cpb.org/about/funding/appropriation.html. For further analysis of the CPB and its financial pressures , see Allan Siegal, *Public Broadcasting: Why is Congress breaking a Contract with America?*, available at http://interact.uoregon.edu/MediaLit/FA/MLArticleFolder/pbssanders.html; see also George Piler, *Big Bird Meets Cash Cows: Foundations, Corporations Respond to Fear Tactics*, available at http://www/capitalresearch.org/fw/fw-0499a.html.

developing into an outlet for substantial local or community programming, and argue that it in fact provides few opportunities for individual expression or community debate.

Cable

The common carrier model is in part a reflection of the development of national and state-wide telephone networks controlled by monopolies. As suggested above, that regulatory model seeks to protect the public in part by separating the control of the network's content from the conduit, by requiring extension of service to all at regulated rates, and by requiring carriage of all messages indifferently. The vitality of that model depended, in part, on the relatively uniform nature of the service provided, and on the nature of the companies involved in providing the service -- both of which have changed dramatically. The regulatory model for the broadcast system gave control of the communications conduit and content to a single licensee. It originally sought to protect the public by requiring the licensee to produce programming it might not otherwise produce. The model's ability to protect the public depended on the ability and willingness of a national regulatory body to establish and effectively enforce rules governing content.

The cable industry and its regulatory structure developed differently. The cable operator controlled a wire line conduit, but unlike a telephone company, the operator selected the content to be carried on the network. That content originally consisted of over-the-air broadcast channels, and was of interest primarily in communities where over-the-air reception was not good. Cable systems were therefore not originally designed to be part of a nationwide network (like the telephone network), but instead were designed to serve particular local markets. Broadcasters used a national resource – the airwaves. Cable operators did not, at least not directly. Instead, their wired systems depended on use of roadways under the control of local communities. Perhaps because it was seen as a service merely ancillary to broadcasting, carrying television signals to people who could not receive them over the air; because it developed community by community; because it did not involve a nationally linked system; and because it used primarily local resources (public rights of way), there was initially no broad federal mandate to regulate cable systems in the same way there was an early, national mandate to

regulate broadcasters or telephone companies.[55] Instead, cable regulation developed primarily at the local level. Cable companies and local governments entered into contracts called franchises which permitted the companies to occupy public rights of way subject to various public interest obligations.

During the 1970's, the FCC decided that cable was an important element of the national communications system, and proceeded to adopt and revise regulations that would apply to all cable systems. But, the regulatory model was not designed to be a model primarily administered by the national government. Instead, the regulatory model was designed with the FCC establishing certain broad federal rules, and local governments maintaining significant authority to establish franchise requirements. It was, in other words, a system of shared regulatory responsibilities.

In the late 70's and early 80's, local governments and the FCC came into increasing conflict over the proper balance of local and federal responsibilities. Local governments thought that because cable systems used mostly local and few national resources, federal regulation should be limited. The FCC thought local governments were interfering with cable's development. In 1984 Congress settled the issue by adopting what has become Title VI of the Communications Act, known as the "Cable Act." The Cable Act maintained the dual system of regulation. Most notably, it explicitly recognized two important principles:

First, that cable systems should compensate local (and state) governments for use of public rights of way. Second, that local governments should be able to establish minimum local requirements for cable systems through contracts – franchises – with cable operators. The legislative history explains that it was the intent of Congress "that the franchise process take place at the local level where city officials have the best understanding of local communications needs and can require cable operators to tailor the cable system to meet those needs," subject to certain uniform federal principles.[56]

---

[55] Many of the FCC's early regulatory efforts were designed to ensure cable systems continued to play a role ancillary to broadcasting, and did not undermine the over-the-air broadcast system. See, e.g., *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968); *Carter Mountain Transmission Corp. v. FCC*, 321 F.2d 359 (D.C. Cir. 1963). The U.S. Supreme Court upheld the agency's authority to adopt cable regulations that were related "to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting." *Southwestern Cable* at 178.

[56] H.R. Rep. No. 98-934, at 24 (1984), *reprinted in* 1984 U.S.C.C.A.N. 4656, 4661.

The Cable Act, among other things, allowed localities to obtain cash payments of up to 5% of the cable operator's gross revenues. In addition, localities could require cable operators to set aside channels for use by the members of the public, educators and government officials – so called "PEG access channels." The law required the cable operator to provide these "access" channels to every subscriber. But local rights did not end there. In other provisions of the Cable Act, localities were given the authority to require operators to provide equipment and facilities that would enable government officials, educators, and the public to produce content and transmit it to the system's subscribers, free of charge and free from cable operator censorship.

Finally, local governments were allowed to require operators to build "institutional networks," and to provide capacity on those networks for educational and governmental use. Institutional networks are communications networks designed primarily to serve non-residential customers. Thus, the law effectively permits the localities to require high-capacity connections to schools, libraries and public buildings – connections that can then be used to transmit data and video from one location to another (creating what amounts to a high-capacity community intranet). By connecting the institutional network to other networks – including the Internet – basic community institutions are provided with critical distribution infrastructure.

"PEG access" is not a 1984 creation of the U.S. Congress. PEG access traces its origin to a variety of programs that developed in the 1960's and which were designed to teach individuals to use video as a tool to confront and resolve community problems. The "Challenge for Change" program developed by Canada's National Film Board is a notable example. Britain, Mozambique, Brazil, France and Chile experimented with the use of new media to effect social change.[57] By 1971, New York City had included a public access requirement in its franchise. The FCC followed a year later establishing minimum public access requirements for systems of certain size.[58] Thus, by 1984, Congress could report that "[a]lmost all recent franchise agreements provide for access by local governments, schools, and non-profit and community

[57] John W. Higgins, "The Praxis of Access, Access and Global Activism," *Community Media Review,* Summer 2001, p. 19. The idea of a public access channel for local communication also found inspiration with the first centralized public television system created in Washington, D.C., in 1967. Jason Roberts, Note, *Public Access: Fortfying the Electronic Soapbox*, 47 Federal Communications Law Journal 123, 127 (1994).

[58] These federal regulations were ultimately stricken as being beyond the FCC's authority to implement, but local requirements were left in place. *United States v. Midwest Video II,* 440 U.S.689 (1979).

groups..."[59] The purpose served by these channels was clear. "They provide groups and individuals who generally have not had access to the electronic media with the opportunity to become sources of information in the electronic marketplace of ideas."[60]

Thus, in contrast to the common carrier telephone model, and the broadcast model, cable regulation is based upon a model under which a portion of the communications resource comes directly under the community's control.

The difference between the cable model and the broadcasting model is stark. Under both the private and public broadcasting model an editor – the licensee – decides what is and is not broadcast. The licensee controls the channel's content. Under the cable model, the capacity set aside for community use is technically available to anyone in the community. The content is under the control of the people using the channel – there is no editor who decides what the content of the channels should be. There is, of course, an entity responsible for scheduling the channel and managing its technical operations. However, it is more accurate to think of that manager as a facilitator, or even a curator, whose job is to encourage others in the community to speak.[61]

There is also a dramatic difference between the cable model and the common carrier model. Under the cable model, the operator does not simply provide access to the network. The operator also provides equipment and facilities (studios, cameras, and so on) so that the network can be used effectively. The importance of this direct support cannot be underestimated. Because media inundates modern society, and because media tools (cameras, computers and so on) are so widely available, it is often assumed that all that is required to utilize new media is access to the network itself. Experience suggests that is not the case – at least if one is talking about video that serves the needs of the community and not the particular vanities of the producer. Creating local programming also requires outreach, training and stable resources. Outreach ensures that those organizations and individuals that help bind the community together are *aware* of the resource. Training ideally teaches potential speakers not

[59] H.R. Rep. No. 98-934, at 30 (1984), *reprinted in* 1984 U.S.C.C.A.N. 4656, 4667.
[60] *Id.*
[61] This distinction was reflected in rules adopted by the FCC during the 1970's. The FCC required that educational channels be open to all educational institutions serving a community, public access channels be open to the public at large, and government channels be open to all government agencies.

just how to "operate the equipment" in a technical sense, but also how to integrate technology with ongoing programs in a social sense … a much more difficult task. Both of these tasks require properly paid professional staff.[62] Finally, establishing the local studios and facilities and constructing the cable system takes time; learning how to use the technology takes time; and learning how to use the technology fruitfully takes even more time. That is why long-term and stable resources and funding are required.

The combination of locally tailored resources with long-term funding enables the local community to establish requirements that fit best with the way the community functions. The cable model is not sufficient in and of itself, and has obvious weaknesses. It depends on the ability and willingness of local communities to demand resources from the cable operator: Federal law permits but does not obligate a community to obtain PEG resources or require construction of institutional networks. Many communities in the U.S. have not done so, or have established inadequate requirements because the communities did not understand their rights (or what resources are required); or out of a reluctance to regulate or attempt to regulate very large companies; or out of fear that the community resources will be used to create speech that is offensive or controversial, and which is beyond the control of the government.

The cable television model does not resolve important commercial, competitive issues. In addition to being subject to local requirements, cable operators are subject to a variety of federal and state rules that are meant to prevent them from abusing their power to drive commercial competitors out of business.

But, none of the problems are insoluble, particularly if the PEG/I-Net requirements are viewed as simply one step – albeit an important one – towards communications equity. For example, if communities are too small to identify or obtain adequate resources, resources can be established on a regional basis. In some states where cities are relatively small, the state government establishes resource requirements statewide, with significant local community and

[62]Professional staff can, of course, work in conjunction with volunteers. However, reliance primarily on volunteers or underpaid or overworked professionals often results in an organization that is able to function well for a short period, but which is unstable in the long-term. Volunteers tend to become exhausted. Professionals leave to seek other opportunities. The result may be a resource that is used primarily by individuals who are highly motivated to pursue personal agendas.

non-profit group input.[63] The central point of the cable television model is to place adequate resources at the local level to enable effective use of the medium by the public and by local institutions. This model is quite powerful and serves goals that are not served, or are not served well by traditional regulation. That model could be applied across technologies, by permitting localities to charge local telephone companies for the valuable property that they use and then using these funds to support development of community communications resources, for example.

5. Examples of Local Regulation of Cable

The cable model has resulted in the establishment of thousands of PEG channels and development of sophisticated institutional networks across the United States. The requirements reflect the character of the community served. The Villages of Larchmont and Mamaroneck and the Town of Mamaroneck, New York (communities with a total population of about 50,000) jointly established a PEG facility at a local public library, next to a space used for public meetings. The studio thus became an integral part of facilities that are part of the life of these three communities. The PEG access operation receives over $1.00 per month per subscriber from the local cable operator, and the communities receive an additional 5% of gross revenues from the operator. This money is used to support PEG operations.

The City of Chicago, Illinois provides an example of the possibilities of PEG access on a much larger scale. The greater Chicago area has a population of over 7 million. The Chicago Access Network Television (CAN TV) helps the Chicago community produce programming for Chicago's five public access cable channels. More than 25,000 organizations have used CAN TV's non-profit services.

CAN TV provides the training necessary to use cable television, holding classes twice monthly. In 2000, CAN TV trained more than 740 students. Under its Community Partners

[63] The state of Vermont, population 650,000, is a good example. The largest city in that state has a population of about 40,000. The state recently adopted an Order under which Adelphia, the main cable operator, is required to provide up to 10% of total system capacity for PEG use. See *Petitions for renewal of Certificates of Public Good held by Mountain Cable Company and Better TV, Inc. of Bennington, both d/b/a Adelphia Cable Communications And Motion of Vermont Department of Public Service for a Show Cause Hearing re: Non-Compliance by Mountain Cable Company d/b/a Adelphia Cable Communications of Stipulation and Board Order*, Vt. Public Service Board Opinion and Order, Docket No. 6101/6223 (2000).

initiative, CAN TV is reaching out into the community to find a more diverse group of potential producers. More than 190 people were trained through Community Partners in 2000. The program has resulted in marked increases in the number of minorities, including Latinos and Asians, who have the video production skills to participate in the dialogue that cable programming can create.

The operating budget of CAN TV is $2.7 million. With this, CAN TV cablecast over 6,000 hours of original programming during 2000, including substantial coverage of community events. Programming includes Hotline 21, which allows nonprofit organizations to produce their own live, call-in programs, and Teen Express, which allows area teens to display their neighborhoods, through a video program and a print magazine. All programming is centered around the Chicago community, and the issues and concerns of the City's citizens. As noted by Danny K. Davis, who represents Chicago in the U.S. House of Representatives,

> CAN TV raises public awareness of important issues by making these discussions available to Chicagoans. This kind of television treats the public as members of a community rather than just potential consumers of sponsors' products. Through public access, people can create dynamic, constructive, substantial television programming, a real alternative to much of what the commercial media giants offer. One neighborhood, one city at a time, we truly can change the world.[64]

Tucson, Arizona is a community of about 475,000. A non-profit organization, Access Tucson, programs three channels (the City government program has its own channel). The access facility is downtown, surrounded by small shops and restaurants which generate large amounts of pedestrian traffic. During the year 2000, over 215 community groups and organizations used the access center's facilities; over 2,350 hours of new local television programming was produced.[65] Among other things, the organization has developed a special program aimed at at-risk youth, ages 13-19, encouraging them to produce programming reflecting the issues that concern them. The organization receives a portion of the franchise fee paid to the City, plus additional funding from the operator. Its annual budget is about $1.3 million.

---

[64] U.S. Rep. Danny K. Davis, "Building a Better Alternative," *Community Media Review*, Autumn 2000, p. 16.
[65] 2000 Access Tucson Annual Report.

The Grand Rapids, Michigan Community Media Center ("CMC") has developed into a true multi-media center, with community computer facilities, as well as facilities designed to assist in the creation of community video. CMC serves a community of 350,000 people with 130,000 households served by AT&T Cable. Its annual budget is $1.3 million. CMC serves over 150 independent producers, 35 churches from 22 denominations, 75 non profit groups, and 18 arts groups. Seven political parties used the CMC's facilities in the last election. The organization provides services which range from the high-tech (providing access to the Internet to people who otherwise could not obtain it) to the more mundane – a weekly "adopt-a-pet" segment run by the local Humane Society. The CMC illustrates the obvious: communities are bound together not only by the extraordinary, but by the ordinary.

In addition to creating significant amounts of local programming, each of these organizations places significant resources into outreach and training - in fact, each has personnel specifically dedicated to these tasks. The programming is one result of the outreach efforts, but the other effect is to empower groups and individuals, and to bring them into a dialogue with others in the community. The outreach to "at-risk" youth in Tucson is one example. Outreach to persons with disabilities in Portland is another. The combination of the technology with the outreach and training provides substantial additional social value.

This focus on community needs and interests is also present in different institutional networks (I-Nets). The City of Tacoma, Washington (population 194,000) provides a good example. The City's I-Net connects 300 city agency sites, including the school system, the police and fire departments, parks, public safety, libraries, and others. The I-Net uses fiber optics to provide data and voice services to these locations, and coaxial cable to provide video distribution. The video component supports the transmission of broadcast quality video between city sites and over sixty schools and higher education facilities.

The I-Net system was based on a plan created by representatives of the City's agencies, who worked to identify the needs of the City and each of its agencies. The mission of the I-Net system is to "to provide government and educational organizations with the means to transport voice, video and data, at high industry standards, in a cost effective manner."[66]

Not a single government institution, agency or school is more than a quarter of a mile from access to the I-Net. Agencies are responsible for covering the costs of the last quarter mile,

their end user equipment, installation and testing, as well as a monthly fee. The I-Net enables users to share resources, connecting multiple locations in a seamless pattern into a single operation. This system has enabled users to move the computer and telephone and video programming or training services off commercial or leased phone lines at a considerable cost savings to the agencies, and in turn, the taxpayers of Tacoma.

By contrast, the City of Santa Clara, California (population 102,000) has a different system, that addresses this much smaller city's needs. The Santa Clara I-Net connects 36 sites to a central facility. These sites include libraries, county facilities, fire stations, and all high schools. The I-Net is connected to the Internet; so by connecting the library to the I-Net, the community is able to provide a high-speed connection to the Internet for researchers and for members of the community who could not afford such a connection to their homes or businesses.

In Alexandria, Virginia (population 129,000) maintains a well-utilized system. There are 78 government sites, including fire stations, and all public schools, connected to its I-Net, with two fibers going into and two coming out of each site. The City is responsible for maintaining this system, and has contracted the work out to a private company. The system supports video, voice, and data. The City currently uses the system for video arraignments, thereby cutting operating costs, as prisoners do not have to be transported between jail and court. The City plans to connect the 9-1-1 public safety communications system for the police and fire departments to the I-Net, which is expected to save approximately $3,000 per month compared to its current system.

Finally, Santa Rosa, California (147,600) also uses its I-Net in innovative ways. The system is operated through a non-profit corporation, the Santa Rosa Community Media Center. The I-Net connects the libraries, local junior college, all high schools and middle schools, and seven other government buildings. The system supports data and video. Video is used to provide distance learning between two campuses of the junior college, which broadens the curriculum for its students. Future plans include being able to provide information regarding regional traffic, interconnecting all of the libraries in the region, and extending the I-Net to the airport and the juvenile justice centers outside of the City.

[66] City of Tacoma website at http://www.cityoftacoma.org.

6. Conclusion

The cable model does not eliminate the need for other regulation of anticompetitive and network discrimination issues. It does, however, offer an addition to traditional regulatory models. By putting a portion of the networks under the control of communities and as importantly, by providing the resources necessary to support effective community use of advanced technologies, this addition specifically addresses problems arising from complex vertically integrated networks, controlled by an ever smaller number of trans-national corporations who are in an ever stronger position to control the content of those networks. Put simply, the model recognizes that advanced systems offer the opportunity for people to receive information and participate in debate in ways never before anticipated. The capacity of these systems provides us with opportunities to give a new voice to the voiceless, not only because we believe that may be just, but because we understand that our societies need to be inclusive if they are to be stable. However, the opportunities presented by these networks cannot be realized unless resources are available at the local level and integrated into the community. There must be adequate, long-term funding to support using capacity dedicated to local voices. Resources can and should be locally controlled. A resource will not be absorbed by a community without the community's support. These support obligations are fully justified by longstanding legal doctrines which recognized that those who take advantage of public resources for private profit assume a public trust to the communities in which they operate.