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THE FUTURE OF COMMUNICATIONS POLICYMAKING

Fred H. Cate*

I. INTRODUCTION

In 1934, Congress created the Federal Communications Commission (“FCC” or “Commission”) and provided it with a simple yet compelling mandate: “[T]o make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges.”¹ The Commission’s regulations were to be guided by “public convenience, interest, or necessity.”² The capability of communications technology was virtually unlimited and largely unknown. However, nearly 600 radio stations were interfering with each others’ signals, the broadcast spectrum was in chaos, and the public was not being

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¹ Communications Act of 1934, Pub. L. No. 416, § 1, 48 Stat. 562 (codified as amended at 47 U.S.C. § 151 (1988)).

² 47 U.S.C. §§ 303, 307(a) (1988 & Supp. III 1991); *see id.* § 309.

served.³ Broadcasters themselves sought federal action. In fact, at the Third National Radio Conference in 1924, then Secretary of Commerce Hoover commented: "I think this is probably the only industry of the United States that is unanimously in favor of having itself regulated."⁴ After a decade of resistance, Congress stepped in and required that the radio frequency spectrum be regulated as a scarce public resource to serve the public interest.⁵

Sixty years later, Congress and the plethora of other federal communications industry regulators—including, among others, the National Telecommunications and Information Administration in the Department of Commerce, the Bureau of International Communications in the State Department, and the Commission—face far greater regulatory challenges presented by dramatically advancing technologies and an information-dependent, global marketplace. Among these challenges, five interrelated features of the modern economic and political environment present both opportunities and potential obstacles for communications policy: (1) the growing importance of information, not merely communications; (2) the inherently global characteristics of information; (3) the centrality of information to business and government activities, including those of non-traditional communications companies; (4) the importance of protecting privacy and of assuring accuracy, security, and reliability of information; and (5) the need to revise intellectual property law to take account of digital technologies and multinational issues.

Communications policymakers need to recognize the existence and importance of these five elements and to address them explicitly if future communications policies are to be effective and meaningful. In addition, these five dynamic features necessitate that policymakers re-examine the meaning and application of the longstanding touchstone of communications policy—"public interest"—and the constitutionality of pursuing the "public interest" in a multichannel, multitechnology, multinational market.

II. COMMUNICATIONS POLICYMAKING TODAY

Communications and related industries are among the fastest growing, most profitable segments of the United States economy.⁶ In 1991, for

³ ERWIN G. KRASNOW ET AL., *THE POLITICS OF BROADCAST REGULATION* 11 (3d ed. 1982).

⁴ SYDNEY W. HEAD, *BROADCASTING IN AMERICA: A SURVEY OF TELEVISION AND RADIO* 126 (3d ed. 1976).

⁵ See 47 U.S.C. § 151 (1988).

⁶ Cate, *Communications Policy Making*, *supra* note *, at 665; see also Anne W. Branscomb, *Global Governance of Global Networks: A Survey of Transborder Data Flow*

example, Walt Disney replaced steel behemoth USX in the Dow Jones Industrial Average and oil giant Mobil Corporation in Amex's Major Market Index.⁷ While domestic automotive, textile, and manufacturing industries fall victim to lower priced and often higher quality imports, the business of creating and delivering entertainment and information programming is second only to defense in its positive contribution to the U.S. trade balance.⁸ Yet U.S. policymaking in this important sector has often become, in the words of Stuart Brotman, now Chair of the American Bar Association Section of International Law and Practice Communications Committee, an "endless policy loop."⁹

Consider cable television. The FCC has pursued an unbelievable array of conflicting and contradictory policies with regard to cable. At first the

in Transition, 36 VAND. L. REV. 985, 989 (1983) (discussing the growth and indispensability of information services).

⁷ Patrick Harverson, *Disney's Dow Debut No Cartoon Fantasy*, FIN. TIMES, May 4, 1991, § I, at 24; *Walt Disney's Stock to Replace Mobil in Amex's Major Market Index*, SEC. WK., Dec. 23, 1991, at 7. USX was formerly Andrew Carnegie's U.S. Steel, the nation's first billion dollar company. Gerald Parkinson, *Steelmaking Renaissance: Technology is Revitalizing the Steelmaking Industry*, CHEMICAL ENGINEERING, May 1991, at 31.

⁸ Fred H. Cate, *The European Broadcasting Directive*, 1990 A.B.A. SEC. INT'L L. & PRAC. COMM. COMMITTEE MONOGRAPH SERIES 7 (Apr. 1990). Exports of U.S. television programming and films alone returned over \$2.5 billion to the United States during 1988. *Id.* The "information and communication" sector accounts for 9.2% of the U.S. Gross Domestic Product, while the historically important construction industry accounts for only 7.2%. Patrick Bloomfield, *"New" Economy Beckons Investors*, FIN. POST, Mar. 3, 1992, § 2, at 18.

Information is similarly important in the European economy. Estimates published in the *Financial Times* in 1992 indicate that telecommunications alone will account for 6% of the European Economic Community's Gross Domestic Product by the turn of the century and that more than half of all EC jobs already "depend on information and communication technology." Hilary Clarke, *Total Deregulation is still a long way off: Resistance in Europe*, FIN. TIMES, Oct. 15, 1992, § III.

⁹ A typical policy path involves outside parties presenting adversarial arguments to the FCC in either trial-type or notice-and-comment proceedings. The staff resources and time required to complete such a proceeding, accompanied by the likelihood of an even more time-consuming judicial appeal, frequently represent a formidable barrier to meaningful policy formulation under either type of proceeding.

The result, all too often, is a chain of decision-appeal-reversal-remand-decision; a process that can be characterized as an endless policy loop. Stuart N. Brotman, *The Curious Case of the Must-Carry Rules: Breaking the Endless Policy Loop Through Negotiated Rulemaking*, 40 FED. COMM. L.J. 399, 405 (1988). See generally Cate, *Communications Policy Making*, *supra* note *, at 666-69 (giving illustrations of the "endless policy loop").

Commission eschewed jurisdiction over cable.¹⁰ In 1965, the FCC promulgated must-carry and nonduplication rules for cable signals transmitted by microwave,¹¹ which it extended to all cable systems in 1966.¹² The Commission also required new cable operators in the top 100 markets to obtain a waiver in order to import distant signals,¹³ but it rarely issued those waivers,¹⁴ and in 1972 modified,¹⁵ and then in 1980 virtually eliminated,¹⁶ distant signal carriage rules. In 1968, the Commission recommended retransmission consent as a condition of distant signal carriage,¹⁷ but Congress refused to adopt it, and in 1971 the Commission abandoned the concept.¹⁸ In 1970, the FCC considered allowing cable operators in the top 100 markets to import four distant signals from independent broadcasters,¹⁹ but then rejected this approach the following year.²⁰ In 1972, the Commission enacted syndicated exclusivity, modified distant signal carriage, and “anti-leapfrogging” rules.²¹ The FCC

¹⁰ Impact of Community Antenna Systems, TV Translators, TV “Satellite” Stations, and TV “Repeaters” on the Orderly Development of Television Broadcasting, 26 F.C.C. 403, 426-31 (1959) (report and order).

¹¹ Amendment of Subpart L, Part 11, 38 F.C.C. 683 (1965) (first report and order) (subsequent to the institution of proceedings, Part 11 was redesignated Part 91). The rules required cable operators “upon request, to carry the signals of all local television stations, without material degradation in quality, and to refrain from duplicating the programs of local commercial stations, either simultaneously or within 15 days before or after local broadcast.” *Id.* at 683.

¹² Amendment of Subpart L, Part 91, 2 F.C.C.2d 725, 746 (1966) (second report and order).

¹³ *Id.* at 781-88.

¹⁴ Leslie A. Swackhamer, *Cable-Copyright: The Corruption of Consensus*, 6 COMM/ENT 283, 288 (1983).

¹⁵ Amendment of Part 74, Subpart K, 36 F.C.C.2d 143 (1972) (report and order).

¹⁶ Cable Television Syndicated Program Exclusivity Rules, 79 F.C.C.2d 663 (1980) (report and order), *aff’d sub nom. Malrite T.V. of New York v. FCC*, 652 F.2d 1140 (2d Cir. 1981), *cert. denied*, 454 U.S. 1143 (1982).

¹⁷ Amendment of Part 74, Subpart K, 15 F.C.C.2d 417, 432 (1968) (notice of proposed rulemaking and inquiry).

¹⁸ Commission Proposals for Regulation of Cable Television, 31 F.C.C.2d 115, 117 (1971) (letter from FCC to Senate Communications Subcommittee).

¹⁹ Amendment of Part 74, Subpart K, 24 F.C.C.2d 580, 582 (1970) (second further notice of proposed rulemaking).

²⁰ *Commission Proposals for Regulation of Cable Television*, 31 F.C.C.2d at 117.

²¹ Amendment of Part 74, Subpart K, 36 F.C.C.2d 143, 165-68 (1972) (report and order). The syndicated exclusivity rules prohibited cable systems in large markets from carrying distant signals containing programs to which a local station had acquired exclusive local rights. *See id.* The anti-leapfrogging rules required a cable operator who wished to import distant signals to choose those that originated nearest to operator. *Id.*

eliminated the anti-leapfrogging rules in 1975²² and repealed its syndicated exclusivity and distant signal carriage rules in 1980.²³

The U.S. Court of Appeals for the District of Columbia rejected the Commission's must-carry rules in 1985.²⁴ The FCC responded to intense Congressional and broadcast industry pressure and promulgated revised must-carry rules, which the court struck down in 1987.²⁵ The following year, the FCC reimposed syndicated exclusivity rules.²⁶ It is little wonder that the Court of Appeals, upholding those rules, referred to "the checkered history of the regulation of cable television by the Federal Communications Commission."²⁷ Henry Geller, former General Counsel of the Commission, has written that the "FCC's main contribution to cable TV's development was inadvertent."²⁸

In 1992, the battle over cable returned to Congress. After three years of unsuccessfully trying to pass a cable bill, the House and Senate finally agreed on a bill.²⁹ The accomplishment of more than three years of unremitting legislative activity: Congress kicked the toughest issue—rate regulation—back to the FCC to determine what constitutes "unreasonable" rates.³⁰ The law also requires cable conglomerates to sell their programming to competing services,³¹ a notable policy reversal from the FCC's 1969 rule requiring cable companies to generate original programming.³² The third significant provision of the bill—retransmission

²² Amendment of Subpart D of Part 76, 57 F.C.C.2d 625, 645 (1975) (report and order).

²³ Cable Television Syndicated Program Exclusivity Rules, 79 F.C.C.2d 663, 664-65 (1980) (report and order).

²⁴ *Quincy Cable TV, Inc. v. FCC*, 768 F.2d 1434, 1454 (D.C. Cir. 1985), *cert. denied*, 476 U.S. 1169 (1986).

²⁵ *Century Communications Corp. v. FCC*, 835 F.2d 292, 293 (D.C. Cir. 1987), *cert. denied*, 486 U.S. 1032 (1988). Still further revised rules were finally upheld by the court in 1993. *Turner Broadcasting Sys., Inc. v. FCC*, 819 F. Supp. 32, 40 (D.D.C. 1993).

²⁶ Amendment of Parts 73 and 76 of the Commission's Rules Relating to Program Exclusivity in the Cable and Broadcast Industries, 3 F.C.C.R. 5299, 5300 (1988) (report and order).

²⁷ *United Video, Inc. v. FCC*, 890 F.2d 1173, 1176 (D.C. Cir. 1989).

²⁸ Henry Geller, *Communications Law—A Half Century Later*, 37 FED. COMM. L.J. 73, 79 (1985). See generally Fred H. Cate, *Cable Television and the Compulsory Copyright License*, 42 FED. COMM. L.J. 191, 195-202, 215-19 (1990) (tracing the history of the FCC's regulation of the cable industry).

²⁹ Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460 (1992) (codified as amended at 47 U.S.C.A. § 521 (West Supp. 1993)).

³⁰ *Id.* § 532(c)(4)(A).

³¹ *Id.* § 533(f)(2).

³² Amendment of Part 74, Subpart K, 20 F.C.C.2d 201, 208 (1969) (first report and order).

consent³³—had been rejected by Congress and by the FCC in 1971 as unworkable³⁴ and is directly contrary to the FCC's must-carry rules³⁵ that Congress was still pushing as recently as 1987.³⁶ President Bush promptly vetoed the bill,³⁷ and Congress responded by handing the President the first override of his administration.³⁸

The FCC, under the first Democratic presidential administration in twelve years, immediately set to work implementing the mandate to reregulate cable that it had strongly resisted for the previous decade. In the eighteen months since the bill became law, the Commission has issued more than two dozen notices of inquiry and notices of proposed rulemaking.³⁹ In fact, with regard to the pressing issue of rate regulation,

³³ 47 U.S.C.A. § 548(c)(3) (West Supp. 1993).

³⁴ Commission Proposals for Regulation of Cable Television, 31 F.C.C.2d 115 (1971) (letter from FCC to Senate Communications Subcommittee).

³⁵ Amendment of Subpart L, Part 91, 2 F.C.C.2d 725 (1966) (second report and order).

³⁶ See *Century Communications Corp. v. FCC*, 835 F.2d 292, 293 (D.C. Cir. 1987), *cert. denied*, 486 U.S. 1032 (1988).

³⁷ 138 CONG. REC. S16,666 (daily ed. Oct. 5, 1992).

³⁸ 138 CONG. REC. H11,477-88 (daily ed. Oct. 5, 1992); 138 CONG. REC. S16,652-77 (daily ed. Oct. 5, 1992).

³⁹ See, e.g., Implementation of Cable Television Consumer Protection and Competition Act of 1992, Cable Home Wiring, 7 F.C.C.R. 7349 (1992) (notice of proposed rulemaking); Indecent Programming and Other Types of Materials on Cable Access Channels, 7 F.C.C.R. 7709 (1992) (notice of proposed rulemaking); Broadcast Signal Carriage Issues, 7 F.C.C.R. 8055 (1992) (notice of proposed rulemaking); Tier Buy-Through Prohibitions, 7 F.C.C.R. 8672 (1992) (notice of proposed rulemaking); Consumer Protection and Customer Service, 7 F.C.C.R. 8641 (1992) (notice of proposed rulemaking); Rate Regulation, 8 F.C.C.R. 510 (1992) (notice of proposed rulemaking); Development of Competition and Diversity in Video Programming Distribution and Carriage, 8 F.C.C.R. 194 (1992) (notice of proposed rulemaking); Horizontal and Vertical Ownership Limits, Cross-Ownership Limitations and Anti-trafficking Provisions, 8 F.C.C.R. 210 (1992) (notice of proposed rulemaking and notice of inquiry); Equal Employment Opportunities, 8 F.C.C.R. 266 (1993) (notice of proposed rulemaking); Home Shopping Station Issues, 8 F.C.C.R. 660 (1993) (notice of proposed rulemaking); Compatibility Between Cable Systems and Consumer Electronics Equipment, 8 F.C.C.R. 725 (1993) (notice of inquiry); Cable Home Wiring, 8 F.C.C.R. 1435 (1993) (report and order); Inquiry into Sports Programming Migration, 8 F.C.C.R. 1492 (1993) (notice of inquiry); Horizontal and Vertical Ownership Limits, Cross-Ownership Limitations and Anti-trafficking Provisions, 8 F.C.C.R. 1696 (1993) (order); Direct Broadcast Satellite Public Service Obligations, 8 F.C.C.R. 1589 (1993) (notice of proposed rulemaking); Buy-Through Prohibition, 8 F.C.C.R. 2274 (1993) (report and order); Rate Regulation, 8 F.C.C.R. 2921 (1993) (order); Indecent Programming and Other Types of Materials on Cable Access Channels, 8 F.C.C.R. 2638 (1993) (second report and order); Home Shopping Station Issues, 8 F.C.C.R. 2656 (1993) (order); Development of Competition and Diversity in Video Programming Distribution and Carriage, 8 F.C.C.R. 3359 (1993) (first report and order); Rate Regulation (12 parts), 8 F.C.C.R. 5631 (1993) (report and

the Commission recently adopted its *Second Order on Reconsideration, Fourth Report and Order, and Fifth Notice of Proposed Rulemaking*.⁴⁰ It remains to be seen whether the cable and broadcast television industries, much less the American public, will have gained anything in this most recent regulatory round robin.

This endless policy loop presents far greater risks in the face of the challenges posed by the very technologies that have driven the rapid expansion of communications industries. Keeping up has proven difficult, but just keeping up is not enough; our policymakers must get ahead of the technology curve. As Stuart Brotman has noted, "action and not reaction is needed in this area."⁴¹

If the Federal Government is going to undertake to develop and enforce communications policies, then America's communications policymakers and regulators—not to mention the industries themselves—must develop a far broader perspective about the wide range of issues that affect, and are affected by, those policies. That new perspective will be influenced by, and must of necessity reflect, five interrelated features of communications in the twenty-first century.

III. THE NEW POLICY

A. *Information Policymaking*

First, U.S. communications policymaking for the next century will be dramatically influenced by, and will certainly reflect, a shift in focus from communications to information, from conduit to content. Already, beginning with the break-up of AT&T, federal regulators have begun to expand dramatically the focus of "communications" policy from the means by which information is delivered to the content and format of that information itself. For example, today's telecommunications companies

order and further notice of proposed rulemaking); Rate Regulation (12 Parts), 58 Fed. Reg. 33,560 (June 18, 1993) (order); Cost of Service, 58 Fed. Reg. 40,762 (July 30, 1993) (notice of inquiry); Rate Regulation 8 F.C.C.R. 5585 (1993) (order and further notice of proposed rulemaking); Rate Regulation, 58 Fed. Reg. 46,737 (Sept. 2, 1993) (report and order and further notice of proposed rulemaking); Rate Regulation, 58 Fed. Reg. 60,141 (Nov. 15, 1993) (order); Rate Regulation, 8 F.C.C.R. 8444 (1993) (third report and order); Rate Regulation, 59 Fed. Reg. 6901 (Feb. 8, 1994) (order); Rate Regulation, 1994 FCC LEXIS 770 (Feb. 23, 1994) (report and order and further notice of proposed rulemaking).

⁴⁰ Implementation of Sections of Cable Television Consumer Protection and Competition Act of 1992, Rate Regulation, 1994 FCC LEXIS 770 (Feb. 23, 1994) (report and order and further notice of proposed rulemaking).

⁴¹ Stuart N. Brotman, *Executive Branch Communications Policymaking: Reconciling Function and Form with the Council of Communications Advisers*, 42 FED. COMM. L.J. 51, 52 (1989).

digitally manipulate a wide variety of information ranging from voice to computer traffic. This manipulation may change, or add value to, the content—e.g., by providing information as to the identity of the caller or the number from which she or he is calling.

In the past, regulators have sought to distinguish between “structural”—i.e., ownership—versus “behavioral”—i.e., indecency—regulations.⁴² While these distinctions have always been somewhat specious, they are even less supportable in a multichannel, multitechnology marketplace. Regulating the “structure” of broadcasters may have had some effect on the ultimate product when the industry consisted of three powerful networks, but it is ineffective and, in fact, counterproductive when viewers can choose from video programming delivered by cable, over-the-air broadcast television, video cassette or disc, or even floppy disk or dial-up database.

As the telephone companies and mainframe computer giants have discovered to their chagrin, the money is to be made in software, not hardware, in storing and processing data, not merely transmission, in information, not just communications. “Communications” policymakers must recognize that reality and the challenges it poses to defining effective regulation of a far more diverse information marketplace and to determining whether such regulations will be constitutional or desirable. These and other ramifications of the expansion from communications to information are addressed in greater detail in the other four features discussed below.

B. The Global Characteristics of Information

The new information policy must explicitly recognize that information is inherently global—it respects no boundaries. Anne Branscomb, head of the American Bar Association Science and Technology Section Project on International Information Networks, has written: “The very existence of information technology is threatening to nation states.”⁴³ According to Professor Joseph N. Pelton:

We are not talking about a modest proposition here. Telepower in its various forms—telecommunications, electronic entertainment, computer and information services,

⁴² See, e.g., DOUGLAS H. GINSBURG ET AL., REGULATION OF THE ELECTRONIC MASS MEDIA 157 (2d ed. 1991).

⁴³ Branscomb, *supra* note 6, at 987-88. See generally Cate, *Global Information Policymaking*, *supra* note * (discussing the global nature of information and the need for countries to establish compatible legal regimes).

robotics, artificial intelligence, and expert systems—is already reshaping the global economy, internationalizing labor, and shifting jobs in space, time, and concept. Some would argue it is rendering the nation state obsolete.⁴⁴

Whether in a wire or optical fiber, or beamed from a satellite or microwave dish, information—particularly electronic information—is ubiquitous. Unlike a truckload of steel or a freight train of coal, television and radio signals, telephone, facsimile, and modem communications are difficult to pinpoint and almost impossible to block, through either legal or technological means. “[D]igital information flowing in cables or moving through space will be, in effect, a single, homogenous stream . . . [I]t will become increasingly impossible to maintain any of the traditional distinctions between transmissions carrying news, entertainment, financial data, or even personal phone calls.”⁴⁵

As a result of its inherently pervasive, transnational character, information has been the subject of some of the earliest multinational agreements, treaties, and organizations. Binational postal treaties were concluded as early as 1601 between France and Spain and 1670 between France and England.⁴⁶ In 1874, the Postal Congress of Berne established a multinational postal regime—administered today by the Universal Postal Union (“UPU”)—74 years before the General Agreement on Tariffs and Trade (“GATT”) was opened for signature.⁴⁷ This global framework is so comprehensive, and the practical difficulty of separating domestic and international mail so great, that UPU regulations today set the terms for domestic, as well as international, service.⁴⁸

Electronically transmitted information also sparked multinational agreements almost immediately upon its commercial deployment. The telegraph was first employed commercially in the early 1840s, and by 1849, bilateral and multinational agreements were in place to facilitate and regulate its transnational use.⁴⁹ In 1865, Napoleon III called an interna-

⁴⁴ Joseph N. Pelton, *The Globalization of Universal Telecommunications Services*, in INSTITUTE FOR INFO. STUDIES, *UNIVERSAL TELEPHONE SERVICE: READY FOR THE 21ST CENTURY?* 141, 143 (1991) [hereinafter *UNIVERSAL TELEPHONE SERVICE*].

⁴⁵ W. Sparks, Address at the Annenberg School of Communication Conference on World Communications (May 1980), *quoted in* Branscomb, *supra* note 6, at 1006.

⁴⁶ Ludwig Weber, *Postal Communications, International Regulation*, in 5 *ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW* 238 (1983).

⁴⁷ *Id.* at 238-39; General Agreement on Tariffs and Trade, *opened for signature* Jan. 1, 1948, 61 Stat. (5), (6), T.I.A.S. No. 1700, 55 U.N.T.S. 188.

⁴⁸ Weber, *supra* note 46, at 241.

⁴⁹ Alfons Noll, *International Telecommunication Union*, in 5 *ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW* 177 (1983); Peter Malanczuk, *Telecommunications, International Regulation*, in 9 *ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW* 367 (1986).

tional conference in Paris to address technical standards, codes, and tariffs for the telegraph.⁵⁰ The twenty countries attending negotiated the first International Telegraph Union, which later combined with the Radiotelegraph Conference to form the International Telecommunications Union ("ITU").⁵¹ In short, by the time the telephone appeared on the scene in 1876, there already existed an eleven-year-old structure for dealing with multinational electronic communication.

The United States, however, has not acted consistently in concert with its trading partners with regard to information policy. While the United States Government has been an active participant and, in many cases, a leader in intergovernmental agencies dealing with technical aspects of information and communication—such as spectrum allocation—it has often resisted participation in multinational policy-level agreements.

U.S. communications laws and policies might be best described as schizophrenic. The inherently global characteristics of information and its economic importance magnify the importance of U.S. participation in global information policymaking and institutions. Yet these same characteristics are increasingly perceived as threats to U.S. leadership in the information economy, heightening U.S. concern over protecting that dominance. James Buckley, Under Secretary of State for Security, Assistance, Science, and Technology during the Reagan Administration, testified in 1982 about the United States' concern about UNESCO commission's report on the New World Information Order. "For the United States," Secretary Buckley said, "communications and information technologies represent a leading edge of U.S. strength. Policy and practice in international communications and information activities must actively enhance the overall well-being of the United States, the lives of its people, and its system of government."⁵²

U.S. communications industries and policymakers have not lost sight of the fact that one important tool for maintaining that "leading edge" is trade law.⁵³ The United States has applied a variety of trade statutes—including the Omnibus Trade and Competition Act of 1988,⁵⁴ the

⁵⁰ T. BARTON CARTER ET AL., *THE FIRST AMENDMENT AND THE FIFTH ESTATE* 38 (2d ed. 1989).

⁵¹ *Id.*

⁵² James L. Buckley, *International Communications and Information Objectives*, DEP'T ST. BULL., June 1982, at 79.

⁵³ See generally Fred H. Cate, *United States Laws Regulating International Telecommunications Products and Services*, in FEDERAL COMMUNICATIONS BAR ASS'N, 1993 INTERNATIONAL COMMUNICATIONS PRACTICE HANDBOOK (forthcoming) (discussing trade protection measures available under United States trade laws).

⁵⁴ U.S. Omnibus Trade and Competition Act, Pub. L. No. 93-618, 88 Stat. 1978, 2041, amended by Pub. L. No. 98-573, § 304, 98 Stat. 2948, 3002, and Pub. L. No. 100-418,

Telecommunications Trade Act of 1988,⁵⁵ the Export Administration Act of 1979,⁵⁶ and the International Security Assistance and Arms Export Control Act of 1976⁵⁷—to information services and products.

The broad language of Section 301 of the Omnibus Trade and Competitiveness Act of 1988⁵⁸ has been invoked against nations or groups

§ 1301 (codified at 19 U.S.C. § 2411 (1988)). See generally Steven R. Phillips, *The New Section 301 of the Omnibus Trade and Competitiveness Act of 1988: Trade Wars or Open Markets?*, 22 VAND. J. TRANSNAT'L L. 491 (1989) (detailing the history of the Act and the changes which occurred in United States trade policy following its enactment); Brian L. Ross, "I Love Lucy," *But the European Community Doesn't: Apparent Protectionism in the European Community's Broadcast Market*, 16 BROOK. J. INT'L L. 529 (1990) (describing the Act as an effective means by which the United States can seek to eliminate any unfair trade practices of foreign nations).

⁵⁵ Telecommunications Trade Act of 1988, Pub. L. No. 100-418, 102 Stat. 1217, §§ 1371-1382 (codified at 19 U.S.C. §§ 3101-3111 (1988)).

⁵⁶ Export Administration Act of 1979, Pub. L. No. 96-72, 93 Stat. 503 (extended by Export Administration Authorization for Fiscal Year 1993-94, Pub. L. No. 103-10, 107 Stat. 40 (1993)) (codified at 50 U.S.C. App. §§ 2401-2419 (Supp. III 1991)). The Act authorizes export controls

(1) [t]o protect the domestic economy from the excessive drain of scarce materials and to reduce the serious inflationary impact of foreign demand; (2) [t]o further significantly the foreign policy of the United States and to fulfill its international responsibilities; and (3) [t]o exercise the necessary vigilance over exports from the standpoint of their significance to the national security of the United States.

15 C.F.R. § 770.1(a) (1993). The Act is administered by the Bureau of Export Administration in the Department of Commerce, according to the Export Administration Regulations. *Id.* § 768.1 (1993). Under the regulations, exporters must determine in which of a complicated series of classification categories the products to be exported fit, and then comply with the licensing requirements or restrictions applicable to that category. The regulations are very broad; the range of "commodities" covered, for example, includes "technical data." *Id.* § 770.2. Although the original Act has expired, its provisions have been extended temporarily by the Export Administration Authorization for Fiscal Year 1993-94, Pub. L. No. 103-10, 107 Stat. 40 (1993), pending complete revision by Congress. See generally Branscomb, *supra* note 6.

⁵⁷ International Security Assistance and Arms Export Control Act of 1976, Pub. L. No. 94-329, 90 Stat. 729 (1976) (codified at 22 U.S.C. § 2751 (1988 & Supp. IV 1992)). The Act is administered by the Department of State under the International Traffic in Arms Regulations. 22 C.F.R. § 120.1(a) (1993). The regulations require the maintenance of a list—the United States Munitions List—containing "defense articles" and "defense services," the export and import of which are restricted or prohibited. *Id.* § 121.1. Exports or imports of communications products, including technical data, with potential military applications are likely to require a license from the State Department's Office of Munitions Control.

⁵⁸ Under § 301 of the Omnibus Trade and Competitiveness Act, action by the President or the U.S. Trade Representative is required whenever the Trade Representative determines that

of nations discriminating against U.S. telecommunications products or services. For example, the Bush Administration threatened action against the European Economic Community ("EC") if it sought to enforce its controversial *EC Council Directive Concerning the Pursuit of Television Broadcasting Activities*,⁵⁹ which, in part, calls on member states to ensure that a majority of broadcast programming is of European origin.⁶⁰ Bush Administration Trade Representative Carla Hills took the first step toward beginning a Section 301 investigation on April 26, 1991, when she placed the EC on a Section 301 "priority watch list" because of the Broadcasting Directive.⁶¹ If the EC subsequently is designated a "priority foreign country," the Trade Representative then has thirty days to begin formal negotiations designed to remedy the trade grievance and six months to determine whether retaliatory action is necessary.⁶² In placing the EC on the so-called "watch list"—a largely symbolic measure since the designation invokes no statutory authority or time limits—the Trade Representative noted that the EC had met some, but not all, of the criteria for priority designation.⁶³

the rights of the United States under any trade agreement are being denied; . . . an act, policy, or practice of a foreign country . . . violates, or is inconsistent with, the provisions of, or otherwise denies benefits to the United States under, any trade agreement, or . . . is unjustifiable and burdens or restricts United States commerce

Pub. L. No. 100-418, § 1301(a) (codified at 19 U.S.C. § 2411(a)(1) (1988)). If the Trade Representative makes such a determination, she or he is required to take all "appropriate and feasible action . . . to obtain the elimination of such act, policy, or practice," including, *but not limited to*, action to "suspend, withdraw, or prevent the application of, benefits of trade agreement concessions; . . . impose duties or other import restrictions on the goods of, and, notwithstanding any other provision of law, fees or restrictions on the services of, such foreign country; . . . enter into binding agreements with such foreign country" *Id.* § 1301(a)(1)(B)(ii), (c)(1) (codified at 19 U.S.C. § 2411(a)(1), (c)(1) (1988)).

⁵⁹ Council Directive 89/552, 1989 O.J. (L298) 23 [hereinafter *Broadcasting Directive*]. See generally Fred H. Cate, *The Continuing Battle Over the EC Broadcasting Directive*, 1991 A.B.A. SEC. INT'L L. & PRAC. COMM. COMMITTEE MONOGRAPH SERIES (Nov. 1991); Cate, *The European Broadcasting Directive*, *supra* note 8.

⁶⁰ The Broadcasting Directive requires member states to ensure that "where practicable and by appropriate means," a majority of broadcast transmission time, excluding time occupied by news, sports, games, advertising, and teletext, is reserved for "European works." *Broadcasting Directive*, *supra* note 59, art. 4.

⁶¹ *USTR Designates China, India, and Thailand Most Egregious Violators Under Special 301*, 8 Int'l Trade Rep. (BNA) 643 (May 1, 1991).

⁶² 19 U.S.C. § 2415(a) (1988).

⁶³ *USTR Designates China, India, and Thailand Most Egregious Violators Under Special 301*, *supra* note 61, at 643.

Section 1377 of the Telecommunications Trade Act of 1988⁶⁴ has proven somewhat narrow as applied, because the United States currently has telecommunications products or services agreements with only three countries: Canada, Japan, and Korea.⁶⁵ Nonetheless, it has prompted changes in the behavior of at least one of those countries. Korea responded recently to the threat of trade sanctions, following the U.S. Trade Representative's report that Korea had not abided by a 1992 agreement to institute a "completely transparent and nondiscriminatory" procurement system for Korea Telecom, by making public all procurement regulations and assuring the U.S. Government that no other regulations were in force.⁶⁶ Only one year earlier, the United States had threatened sanctions against Japan for failing to comply with its telecommunications agreements.⁶⁷

U.S. retaliatory trade sanctions against the EC are once again on the table in response to the 1990 *Council Directive on the Procurement Procedures of Entities Operating in the Water, Energy, Transport and Telecommunications Sectors*,⁶⁸ which requires European telecommunications companies to accept EC bids if they are not more than three percent over non-EC bids.⁶⁹ U.S. Trade Representative Mickey Kantor announced on February 1, 1993, that the United States would retaliate by barring European companies from bidding on federal utility and service contracts beginning March 22, 1993.⁷⁰ On April 21, 1993, Trade Representative Kantor announced an agreement with Sir Leon Brittan, EC Commissioner for External Affairs, covering all but the telecommunications sectors, but promised \$25 million in trade sanctions against the EC

⁶⁴ Under § 1377 of the Telecommunications Trade Act, the U.S. Trade Representative must annually review the "operation and effectiveness" of "every . . . trade agreement regarding telecommunications products or services that is in force with respect to the United States"; in each review, the Trade Representative must determine whether "any act, policy, or practice" of the participating country or countries other than the United States is "not in compliance with the terms of such agreement or . . . otherwise denies, within the context of the terms of such agreement, to telecommunications products and services of United States firms mutually advantageous market opportunities in that foreign country." Pub. L. No. 100-418, § 1377, 102 Stat. 1217, (codified at 19 U.S.C. § 3106 (1988)).

⁶⁵ *Korea Publishes Phone Regulations Following U.S. Retaliation Threat*, 10 Int'l Trade Rep. (BNA) 574 (Apr. 7, 1993).

⁶⁶ *Id.*

⁶⁷ *U.S. Delays Retaliation Against Japan Over Telecommunications Pending Talks*, 8 Int'l Trade Rep. (BNA) 497 (Apr. 3, 1991).

⁶⁸ Council Directive 90/531, 1990 O.J. (L297) 1.

⁶⁹ *Id.* art. 29.

⁷⁰ Keith Bradsher, *U.S. Fights a European Trade Move*, N.Y. TIMES, Feb. 2, 1993, at D6; John M. Broder & Joel Havemann, *U.S. Puts New Barriers on European Business*, L.A. TIMES, Feb. 2, 1993, at A1.

unless the dispute over telecommunications equipment procurement was resolved.⁷¹ Similarly, the Clinton Administration's celebration over the successful completion of the Uruguay Round of the GATT negotiations was marred only by the fact that the United States had failed to reach agreement with the EC over audiovisual services which were omitted from the final agreement.⁷² Trade Representative Kantor warned ominously that Section 301 and other U.S. trade laws remained viable tools for dealing with trade disputes unilaterally.⁷³ Congress' apparent approval of trade sanctions as a negotiating tool was signalled by Representative Edward J. Markey (D-Mass.), Chair of the House Commerce Subcommittee on Telecommunications and Finance, who endorsed the Trade Representative's decision to go ahead with sanctions: "By imposing sanctions, the United States is levelling the negotiating field."⁷⁴

U.S. lawmakers and policymakers face an urgent challenge to recognize that there is something different about information. The power, scope, and reach of information, as well as its inherently global nature, raise the stakes of going it alone. The long-term price of information trade barriers, sanctions, and information-related laws that are incompatible with those of other nations exceeds any short-term benefits resulting from such protectionist policies. The new information policy must recognize the importance of information in multinational trade while removing it from the vagaries of trade rhetoric and tit-for-tat trade sanctions.

C. *Non-Traditional Information Industries*

The third reality which must be reflected by the new information policy is that efficient, rapid, reliable communications are essential to the operation of the Government and national and multinational businesses. Anne Branscomb writes: "Information is the lifeblood that sustains political, social, and business decisions. . . . Transborder data flow has become indispensable to the very existence of transnational enterprise and to the currently flourishing global marketplace."⁷⁵ This significance of information was forcefully recognized in the Clinton Administration's recent *National Information Infrastructure Agenda for Action*:

⁷¹ Ana Puga, *US to Slap EC With Trade Sanctions*, BOSTON GLOBE, Apr. 22, 1993, at 45; *Last-minute Deal Cools Trade Dispute With EC*, CHI. TRIB., Apr. 22, 1993, at N1.

⁷² See *USTR Kantor Says Section 301 Not Affected by GATT Accord*, 1993 Daily Report for Executives (BNA) A-7 (Dec. 21, 1993).

⁷³ *Id.*

⁷⁴ Peter Behr, *U.S., Europe Reach Partial Settlement*, WASH. POST, Apr. 22, 1993, at B11.

⁷⁵ Branscomb, *supra* note 6, at 987, 989.

Information is one of the nation's most critical economic resources By one estimate, two-thirds of U.S. workers are in information-related jobs, and the rest are in industries that rely heavily on information. In an era of global markets and global competition, the technologies to create, manipulate, manage and use information are of strategic importance for the United States.⁷⁶

Business Week reported as early as 1988 that corporations are "racing to expand their private [telecommunications] networks."⁷⁷ Westinghouse, Digital Equipment, General Motors, Hewlett-Packard, Toyota, IBM, and hundreds of other multinational corporations are investing heavily in global information systems.⁷⁸ During the 1980s, for example, U.S. business alone invested \$1 trillion in information technology.⁷⁹ According to Merrill Lynch's vice-president for information and telecommunications: "This is becoming a worldwide trading environment. Instantaneous communications is [sic] vital."⁸⁰ The business of managing and transporting information was estimated in 1988 to generate \$560 billion in revenue in 1991.⁸¹ Some economists predict that new information services will create almost 1.5 million new jobs and add \$110 billion to the Gross Domestic Product by the end of the century.⁸²

Consider, for example, the growing market for financial services—banking, securities and commodities trading, letters of credit, currency conversions, and loan guarantees. Approximately 5% of U.S. services exports are in financial services;⁸³ as of mid-1992, the United States held 66.3% of the world market for financial services, far ahead of the United Kingdom with 17% and Japan with 5.1%.⁸⁴ What is a global financial system, in the words of Charles Goldfinger, but a "network of informa-

⁷⁶ RONALD H. BROWN, INFORMATION INFRASTRUCTURE TASK FORCE, NATIONAL INFORMATION INFRASTRUCTURE AGENDA FOR ACTION 5 (1993).

⁷⁷ John J. Keller et al., *A Scramble for Global Networks*, BUS. WK., Mar. 21, 1988, at 140.

⁷⁸ *See id.* at 141-42.

⁷⁹ Howard Gleckman et al., *The Technology Payoff*, BUS. WK., June 14, 1993, at 57, 58.

⁸⁰ Keller, *supra* note 77, at 140 (quoting DeWayne J. Peterson).

⁸¹ *Id.* at 141.

⁸² *RBOCs Still Anticipate Hatching Information Services' Golden Egg*, TELEPHONE NEWS, July 27, 1992, at 1.

⁸³ U.S. CONGRESS, OFFICE OF TECHNOLOGY ASSESSMENT, U.S. BANKS AND INTERNATIONAL TELECOMMUNICATIONS 4 (1992).

⁸⁴ Peter Marsh, *Financial Sector Wins 17% of Market*, FIN. TIMES, Aug. 25, 1992, at 7.

tion."⁸⁵ As a result, banks in the United States and elsewhere are investing heavily in information technologies; Hong Kong's giant Hongkong & Shanghai Banking Corporation, for example, has a \$1 billion information technology budget.⁸⁶

Information is equally significant for the activities of the Government. Vice President Gore's *Report of the National Performance Review* notes that the "[f]ailure to adapt to the information age threatens many aspects of government."⁸⁷ According to the report, \$5.4 billion could be saved over the next six years by "reengineering through information technology."⁸⁸ The report contains eleven recommendations for the improved use of information technology, including the creation of a Government Information Technology Services Working Group to develop a "strategic vision" for the Federal Government's use of information technologies.⁸⁹ Similarly, in the face of the Clinton Administration's health care reform proposals, some analysts have predicted that the "'widespread use' of telecommunications and information technology applications will reduce annual health-care costs alone by more than \$36 million."⁹⁰ The importance of information is not limited to broadcasters and telephone companies; it is indeed the "lifeblood" of the global economy.

D. Data Protection and Privacy

The new information policy must take into account growing international and domestic concern about the negative, intrusive aspect of communications and information technologies. While in the past the United States focused on the perceived role of the First Amendment in forbidding restrictions on information flows, other constitutional and otherwise significant concerns may argue for restrictions. The American public is concerned. According to the 1990 Equifax survey by Louis Harris & Associates and privacy scholar Alan F. Westin, 71% of Americans report feeling that they have lost control over personal information about themselves, and 79% are concerned about threats to personal privacy.⁹¹ The

⁸⁵ CHARLES GOLDFINGER, *LA GÉOFINANCE* 401 (1986) (translated from original in French).

⁸⁶ Pete Engardio et al., *Global Banker*, *BUS. WK.*, May 24, 1993, at 50, 52.

⁸⁷ AL GORE, *NATIONAL PERFORMANCE REVIEW, FROM RED TAPE TO RESULTS: CREATING A GOVERNMENT THAT WORKS BETTER AND COSTS LESS* 113 (1993).

⁸⁸ *Id.* at 157.

⁸⁹ *Id.* at 84.

⁹⁰ *RBOCs Still Anticipate Hatching Information Services' Golden Egg*, *supra* note 82, at 1.

⁹¹ LOUIS HARRIS & ASSOCS. & ALAN F. WESTIN, *THE EQUIFAX REPORT ON CONSUMERS IN THE INFORMATION AGE* 1, 10 (1993). See generally Joel R. Reidenberg, *Privacy in the*

proliferation of digital technologies has sparked growing concern over personal privacy and heightened interest in data protection and privacy law.

While European countries have afforded significant, detailed, practical protection to individual privacy rights, particularly in the context of electronically stored and processed information, the United States affords virtually none. For example, Austria, France, Germany, Ireland, Luxembourg, Sweden, and the United Kingdom have broad statutes that provide a general set of privacy rights applicable to both public and private sectors.⁹² Soon, under the European Commission's amended proposal for a *Council Directive on the Protection of Individuals With Regard to the Processing of Personal Data and on the Free Movement of Such Data*,⁹³ all European countries will be required to enact laws protecting personal privacy and prohibiting the transmission of personal information to countries perceived as ignoring privacy concerns, such as the United States.⁹⁴

Under the still-pending directive, every EC member state would have to enact laws ensuring, among other things, that personal data—defined broadly by the directive as “any information relating to an identified or identifiable natural person”⁹⁵—must be accurate, relevant, not excessive, and used only for the legitimate purposes for which it was collected.⁹⁶ Personal data may be processed—which is defined by the directive as any operation performed upon the data, whether or not automated⁹⁷—only with the consent of the data subject.⁹⁸ The collection and processing of data revealing “racial or ethnic origin, political opinions, religious beliefs, philosophical or ethical persuasion . . . [or] concerning health or sexual life” is severely restricted.⁹⁹ The data subject must be informed and

Information Economy: A Fortress or Frontier for Individual Rights?, 44 FED. COMM. L.J. 195 (1991).

⁹² See generally DAVID H. FLAHERTY, *PROTECTING PRIVACY IN SURVEILLANCE SOCIETIES* (1989).

⁹³ COM(92)422 final SYN 287 (Oct. 15, 1992) [hereinafter *Data Processing Directive*]. See generally Fred H. Cate, *The EC Data Protection Directive and U.S. Business and Law*, 1994 A.B.A. SEC. INT'L L. & PRAC. COMM. COMMITTEE MONOGRAPH SERIES (forthcoming).

⁹⁴ *Data Processing Directive*, *supra* note 93, art. 26 (“Member States shall provide that the transfer, whether temporary or permanent, to a third country of personal data which are undergoing processing or which have been collected with a view to processing may take place only if the third country in questions ensures an adequate level of protection.”).

⁹⁵ *Id.* art. 2(a).

⁹⁶ *Id.* art. 6.

⁹⁷ *Id.* art. 2(b).

⁹⁸ *Id.* art. 7(a).

⁹⁹ *Id.* art. 8.

provided with certain mandatory disclosures if data is to be collected, processed, or distributed to a third party,¹⁰⁰ and he or she must have access to the data and the opportunity to object to its collection, processing, or disclosure and to correct any factual errors.¹⁰¹

The United States and many other countries arguably have no comparable system of data protection. Although the United States Supreme Court in *Whalen v. Roe*¹⁰² claimed to recognize a constitutional interest "in avoiding disclosure of personal matters,"¹⁰³ no Court decision has ever reversed a legislative or administrative action violating that supposed right. Moreover, such a constitutional right—even if ever vindicated by a court—would apply only against governmental action. Federal statutes addressing private actions touching on personal privacy, although numerous, offer little if any effective protection to individuals.¹⁰⁴

As a result, American businesses with interests in personal data collected, stored, or processed in Europe, and particularly American businesses with operations in Europe, fear that they will be unable to move that data legally—even if they own it—to the United States. U.S. businesses have good reason to be worried. Already, France, acting under French domestic law,¹⁰⁵ has prohibited the French subsidiary of an Italian parent company from transferring data to Italy because Italy did not have an omnibus data protection law.¹⁰⁶ The French Commission nationale de l'informatique et des libertés has required that identifying information be

¹⁰⁰ *Id.* arts. 10-12.

¹⁰¹ *Id.* arts. 13-15.

¹⁰² 429 U.S. 589 (1977).

¹⁰³ *Id.* at 599.

¹⁰⁴ See, e.g., Fair Credit Billing Act of 1974, 15 U.S.C. § 1666 (1988); Fair Credit Reporting Act of 1970, 15 U.S.C. §§ 1681-1681t (1988 & Supp. IV 1992); Fair Debt Collection Practices Act of 1977, 15 U.S.C. §§ 1692b(2), 1692c(b) (1988); Equal Credit Opportunity Act of 1974, 15 U.S.C. §§ 1692b(2), 1692c(b) (1988); Electronic Funds Transfer Act of 1978, 15 U.S.C. §§ 1693-1693r (1988 & Supp. IV 1992); Electronic Communications Privacy Act of 1986, 18 U.S.C. §§ 2510-2520, 2701-2709 (1988 & Supp. IV 1992); Video Privacy Protection Act of 1988, 18 U.S.C. §§ 2710-2711 (1988); Family Education Rights and Privacy Act of 1974, 20 U.S.C. § 1232g(b)(1) (1988 & Supp. IV 1992); Employee Polygraph Protection Act of 1988, 29 U.S.C. §§ 2001-2009 (1988).

¹⁰⁵ Loi No 78-17 du 6 janvier 1978 relative à l'informatique, aux fichiers et aux libertés [Law No. 78-17 of Jan. 6, 1978, concerning data processing, records and freedom], reprinted in A.C.M. NUGTER, TRANSBORDER FLOW OF PERSONAL DATA WITHIN THE EC 353-63 (1990).

¹⁰⁶ Délibération No. 89-78 du 11 juillet 1989, reprinted in Commission nationale de l'informatique et des libertés, 10e Rapport 32-34 (1989).

removed from patient records before they could be transferred to Belgium,¹⁰⁷ Switzerland,¹⁰⁸ and the United States.¹⁰⁹ Similarly, the first prohibition on transnational data transfer by the British Data Protection Registrar under national law¹¹⁰ forbade a proposed sale of a British mailing list to a United States direct mail organization.¹¹¹ The threat to U.S. business is quite real and is only exacerbated by the pending EC *Data Processing Directive's* provision requiring European states to enact laws forbidding the transfer of personal data to countries without adequate legal data protection.¹¹²

This situation is further complicated for multinational companies by the diversity of national regulatory structures in place for protecting personal privacy. For Citicorp, the United States' largest bank and operator of the Citicorp Global Information Network in ninety-three countries,¹¹³ the variety of legal standards with which the network must comply threatens the existence of the network and its ability to offer services such as automated currency conversion. The new information policy must seek to facilitate a uniform, multinational standard for protecting private information. The absence of such a standard will stymie innovative activities by multinational companies.

E. Economics and Intellectual Property

The fifth and final feature that greatly influences, and must be addressed by, the new information policy is how the creation, manipulation, and transmission of information is to be financed. At heart, this issue is largely one of intellectual property, because it is copyright, trademark, patent, trade secret, and unfair competition laws that create much of the incentive for creating and using both new information and new technologies and it is largely through those mechanisms that rights holders are compensated for these activities.

¹⁰⁷ Délibération No. 89-98 du 26 septembre 1989, *reprinted in* Commission nationale de l'informatique et des libertés, 10e Rapport d'activité 35-37 (1990).

¹⁰⁸ Joel R. Reidenberg, *The Privacy Obstacle Course: Hurdling Barriers to Transnational Financial Services*, 60 *FORDHAM L. REV.* S137, S163 (1992) (citing interview with Ariane Mole, Attachée Relations internationales, Direction juridique de la Commission nationale de l'informatique et des libertés, Paris, France (June 6, 1991)).

¹⁰⁹ *Id.*

¹¹⁰ U.K. Data Protection Act of 1984, *reprinted in* NUGTER, *supra* note 105, at 365-95.

¹¹¹ THE DATA PROTECTION REGISTRAR, SEVENTH REPORT OF THE DATA PROTECTION REGISTRAR 33-34 (1991).

¹¹² Data Processing Directive, *supra* note 93, art. 26.

¹¹³ Thomas Hoffman, *Citicorp Reaps Net Benefits*, *COMPUTERWORLD*, Mar. 15, 1993, at 6.

U.S. intellectual property law was designed for a world in which copying was difficult, economically impractical, and relatively easy to regulate by focusing on the physical manifestation—i.e., the film or book—and the centralized “copying centers”—i.e., film duplication studios or reprographic services. Today, when an increasing amount of information is digital, and the technologies to copy digital and even non-digital information are far more affordable and widespread in the society, U.S. intellectual property law is outmoded. Most offices and many homes—with computers, page scanners, facsimiles, video cassette and video disc recorders, digital audio cassette recorders, and so forth—are havens for illegal and uncompensated uses of copyrighted material. And the danger to creative industries grows with the spread of affordable digital technologies. The danger is not insignificant. Copyrighted programming of all forms accounted in 1989 for over \$173 billion in revenues and over \$22 billion in exports.¹¹⁴ Compared with imports, exports of U.S. television programming, films, and music generated a trade surplus of \$8 billion during 1991.¹¹⁵

Given the inherently international characteristics of information discussed earlier, the domestic focus of U.S. intellectual property law is of equal concern. For more than a century the United States resisted participating in any multinational copyright structure. The nation was, in the words of David Nimmer, an “island, its jurisprudence having evolved in isolation from developments elsewhere.”¹¹⁶ In fact, until 1891, copying a non-U.S. work was not even a crime in the United States.¹¹⁷ Then, in 1952, the United States joined the Universal Copyright Convention (“UCC”),¹¹⁸ while refusing to participate in the older, more powerful and comprehensive 1886 Berne Convention for the Protection of Literary and Artistic Works.¹¹⁹

In 1988, Congress finally enacted those basic changes necessary for the United States to accede to the Berne Convention, and the United States

¹¹⁴ *Draft Final Text of the Results of the Uruguay Round of Multilateral Trade Negotiations: Hearing Before the House Comm. on Ways and Means, Subcomm. on Trade*, 102d Cong., 2d Sess. 102 (1992) [hereinafter *Uruguay Round*] (statement of Eric H. Smith).

¹¹⁵ Noreene Janus, *Hollywood Meets the NAFTA*, BUS. MEX., May 1992, at 36.

¹¹⁶ David Nimmer, *Nation, Duration, Violation, Harmonization: An International Copyright Proposal for the United States*, 55 LAW & CONTEMP. PROBS. 211, 211 (1992).

¹¹⁷ 1891 saw passage of the International Copyright Act of 1891, commonly known as the Chace Act, ch. 565, 26 Stat 1106 (1891).

¹¹⁸ Sept. 6, 1952, 6 U.S.T. 2731, revised July 24, 1971, 25 U.S.T. 1341, 93 U.N.T.S. 178.

¹¹⁹ Sept. 9, 1886, revised July 24, 1971, 25 U.S.T. 1341, 828 U.N.T.S. 221.

joined eighty other countries which were signatories of the Berne Convention.¹²⁰ Much of the impetus for this move came from U.S. intellectual property owners who desired the broad multinational protection afforded by membership in Berne. Losses to U.S. copyright holders by piracy abroad were estimated by the U.S. International Trade Commission to be \$6.2 billion in 1986, up from \$1.5 billion only four years earlier.¹²¹ The twenty-four countries that had ratified Berne but not the UCC and had no bilateral copyright agreements with the United States were under no legal obligation to protect the rights of U.S. copyright holders.¹²² Moreover, U.S. efforts to encourage compliance with international copyright agreements by countries that provided safe havens to copyright pirates, such as Thailand, were hindered by the United States' own refusal to join Berne.¹²³ In 1988, the U.S. Trade Representatives testified before Congress: "[I]t is often hard to convince other countries to provide strong copyright protection when we do not belong to the premier international treaty in the area of copyright."¹²⁴ In short, if the interests of U.S. creative industries were to be protected, adherence to the global copyright regime reflected in the Berne Convention was essential.

Those costs, however, will pale by comparison if the United States is similarly slow to confront the copyright issues posed by digital technology, massive data bases, high speed data transmission, and undetectable visual and auditory image manipulation. Professor Paul Goldstein has written about a "celestial jukebox."¹²⁵ Rather than owning individual phonorecords, compact discs, cassette tapes, video cassettes, or even computer software, future generations would simply dial up their desired programming from a digital master database. The programming would then be delivered by satellite or optical fiber. As a result, rather than the high up-front cost and ecologically unsound practice of buying individual copies of media, each user would pay a far smaller per use fee to cover the opera-

¹²⁰ Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853 (codified as amended at 17 U.S.C. §§ 101-119 (1988 & Supp. IV 1992)).

¹²¹ U.S. INT'L TRADE COMM'N, FOREIGN PROTECTION OF INTELLECTUAL PROPERTY RIGHTS AND THE EFFECT ON U.S. INDUSTRY AND TRADE 4-6, 4-8 (Feb. 1988).

¹²² BERNE CONVENTION IMPLEMENTATION ACT OF 1988, H.R. REP. NO. 100-609, 100th Cong., 2d Sess. 7 (1988).

¹²³ *Berne Convention Implementation Act of 1987: Hearings on H.R. 1623 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Judiciary Comm.*, 100th Cong., 1st Sess. 239, 626-27 (1987) (statement of Peter Nolan of the Motion Picture Association of America).

¹²⁴ 134 CONG. REC. H3082 (daily ed. May 10, 1988) (letter of U.S. Trade Representative Clayton Yeutter included in statement of Representative Robert W. Kastenmeier).

¹²⁵ Paul Goldstein, *Copyright in the Information Age*, STAN. LAW., Fall 1991, at 4, 8.

tion of the master database and to pay the creators of the requested programming.

Professor Goldstein's fanciful idea is in many ways near reality today, but the legal structures for recognizing and compensating authors and producers lag far behind. Currently, U.S. negotiators are arguing with their European counterparts about whether to apply "national treatment" or "reciprocity" in the stalled Trade-Related Intellectual Property in Services talks.¹²⁶ By the time they work that one out, the basic practice that posed the issue—distinguishing among the nationality of creators in the payment of royalties—will be moot.

IV. REASSESSING THE PURPOSE AND LIMITS OF POLICYMAKING

A. *The Public Interest Standard*

Given the importance of the influences on, and features of, the new information policy identified above—the focus on information, not merely communications, the inherently global characteristics of information; the centrality of information to all business and government activities, including those of non-traditional communications companies; the importance of protecting privacy and of assuring accuracy, security, and reliability; and the need to revise intellectual property law to take account of digital technologies and multinational issues—policymakers must re-examine the purpose and the pragmatic and constitutional limits of policymaking in the information arena.

Congress, the Commission, and courts have interpreted "public convenience, interest, or necessity" to mean the universal provision of basic communications services at a minimum price. The phrase "universal service" was reportedly first coined by Theodore Vail, President of AT&T, in 1910.¹²⁷ Universal service is at the heart of Congress' mandate to the FCC in the Communications Act of 1934.¹²⁸ In the context of

¹²⁶ See, e.g., *Uruguay Round*, *supra* note 114, at 104 (statement of Eric H. Smith); *International Developments Discussed at Conference*, Copyright L. Rep. (CCH) ¶ 20,703 (1992) (quoting U.S. Registrar of Copyrights Ralph Oman: "We may be seeing the beginning of the end of Berne as an effective International Treaty . . ."); see also *Intellectual Property and International Issues: Hearings of the House Comm. on the Judiciary Before the Subcomm. on Intellectual Property and Judicial Administration*, 102d Cong., 1st Sess. 1 (1991).

¹²⁷ Kenneth Gordon & John Haring, *The Effects of Higher Telephone Prices on Universal Service*, 10 FCC OFF. PLANS & POL'Y WORKING PAPER SERIES, at 2 (Mar. 1984).

¹²⁸ 47 U.S.C. § 151 (1988). See generally UNIVERSAL TELEPHONE SERVICE, *supra* note 44 (collecting articles pertaining to the future of universal service in telecommunications).

broadcast television and radio, universal service has resulted in a system that provides entertainment and information to the American public without direct charge. Anyone with a television or a radio can raise an aerial and bring in whatever signals there are to receive. Further, the Commission has identified as its primary criteria in granting broadcast licenses that every geographic location in the United States have access to radio and television signals.¹²⁹

In the context of telephone service, universal service is reflected in the goal of at least one telephone with private line service in every home in America.¹³⁰ The FCC has identified “[t]he preservation of universal service” as “a basic goal of this Commission.”¹³¹ The primary regulatory vehicle for implementing universal service is a federal assistance program, “Link-Up America,” designed to encourage low-income households, which are not on the telephone network, to subscribe to local exchange service by reducing initial service and installation charges.¹³²

Policymakers and regulators must examine the broader range of components that “public convenience, interest, or necessity” might include. For example, the public interest standard might be defined to include technological innovation. “Public interest” might also be expanded to include quality programming and service. In the case of programming, while Congress and the Commission have stressed the importance of every American having access to “free” over-the-air broadcast television, they have taken few steps to ensure or even encourage quality and diversity of programming. “Public interest” might also be defined to include access to the communications media and the provision of new, innovative services—perhaps, for example, pay-per-view television, news and information services, hand-held telephones, and caller identification and other telephone services. Each of these potential components of a new definition of “public interest” raises serious issues: What is the cost of regulation? Will new services and technologies be made available to the public irrespective of ability to pay? If so, who will pay? Is personal privacy compromised? Are vital first amendment rights of free expression implicated?

¹²⁹ Amendment of Section 3.606, 41 F.C.C. 148, 167 (1952) (report and order).

¹³⁰ March 1986 U.S. Census Bureau data show a national telephone penetration rate of 92.2%. U.S. DEP'T OF COMMERCE, STATISTICAL ABSTRACT OF THE UNITED STATES 561 (113th ed. 1993); *see also* 47 U.S.C. § 201 (1988) (It is the “duty of every common carrier engaged in interstate or foreign communication by wire or radio to furnish such communication service upon reasonable request therefor” and “[a]ll charges, practices, classifications, and regulations for and in connection with such communication service, shall be just and reasonable.”).

¹³¹ MTS and WATS Market Structure, 4 F.C.C.R. 3634, 3634 (1989) (decision and order).

¹³² *Id.* at 3634 & n.1.

The resolution of these and other issues substantially affects the way in which “public convenience, interest, or necessity” is defined. In fact, a frank appraisal of what the public interest standard means in an age of rapidly advancing technology may lead to the conclusion that the concept itself is overextended or outmoded.

B. *The First Amendment*

Information policymakers must also reconsider the constitutionality of a wide array of regulations in light of changing technology, a new definition of “public interest,” and the First Amendment. Despite its absolute language—“Congress shall make no law . . . abridging the freedom of speech, or of the press”¹³³—the First Amendment has never been interpreted to afford absolute protection to communications.¹³⁴ Nonetheless, the Supreme Court has repeatedly asserted that the First Amendment “was fashioned to assure unfettered interchange of ideas for the bringing about of political and social changes desired by the people.”¹³⁵ The Court has stressed the importance of not allowing government to interfere with that interchange: “The freedom of speech and of the press guaranteed by the Constitution embraces at least the liberty to discuss publicly and truthfully all matters of public concern without previous restraint or fear of subsequent punishment.”¹³⁶ Often characterized as a “marketplace of ideas,” this central first amendment tenet requires that “[d]iscussion must be kept open no matter how certainly true an accepted opinion may seem to be; many of the most widely acknowledged truths have turned out to be erroneous.”¹³⁷

Under the First Amendment, government regulations affecting the content of speech, outside of the broadcast context¹³⁸ and so-called “commercial speech,”¹³⁹ are subject to “strict scrutiny” by

¹³³ U.S. CONST. amend. I.

¹³⁴ JOHN E. NOWAK & RONALD D. ROTUNDA, CONSTITUTIONAL LAW § 16.26 (4th ed. 1991).

¹³⁵ *New York Times Co. v. Sullivan*, 376 U.S. 254, 269 (1964) (quoting *Roth v. United States*, 354 U.S. 476, 484 (1957)).

¹³⁶ *FCC v. League of Women Voters of Cal.*, 468 U.S. 364, 381-82 (1984) (quoting *Thornhill v. Alabama*, 310 U.S. 88, 101-02 (1940)).

¹³⁷ THOMAS EMERSON, THE SYSTEM OF FREEDOM OF EXPRESSION 7 (1970).

¹³⁸ See *infra* notes 147-58 and accompanying text.

¹³⁹ Until 1976, the Court declined to extend first amendment protection to commercial speech, which the Supreme Court has vaguely defined as expression related solely to the economic interests of the speaker and its audience. In *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748 (1976), the Supreme Court emphasized the importance of commercial information, in this case information on

courts.¹⁴⁰ As a general principle, the Supreme Court has asserted that “[r]egulations which permit the Government to discriminate on the basis of the content of the message cannot be tolerated under the First Amendment.”¹⁴¹ Even presenting the public with a diverse selection of viewpoints, which the Court has also identified as an essential first amendment principle,¹⁴² cannot be enforced by government regulation outside of the broadcast context. For example, the Court held unconstitutional a Florida statute that compelled a newspaper to print the response of a political candidate to an editorial attacking the candidate or endorsing his or her opponent.¹⁴³ Florida had claimed that the “government has an obligation to ensure that a wide variety of views reach the public.”¹⁴⁴ The Court concluded that a right-of-reply statute was “governmental coercion” and contravened “the express provisions of the First Amendment and the judicial gloss on that Amendment developed over the years,”¹⁴⁵ and that a “[g]overnment-enforced right of access inescapably ‘dampens the vigor and limits the variety of public debate.’”¹⁴⁶

pharmaceutical prices, for intelligent consumer decisionmaking and held that such speech was protected by the First Amendment. *Id.* at 765. The Court noted, however, that the “greater objectivity and hardiness” of commercial speech warranted a lesser standard of protection than for other forms of expression. *Id.* at 772.

Four years later, in *Central Hudson Gas & Electric Corp. v. Public Service Commission*, 447 U.S. 557 (1980), the Court set forth a four-part test for determining exactly what that standard of protection should be. Under the *Central Hudson* test: (1) the commercial speech must concern a lawful activity and not be misleading; (2) the government must assert a substantial interest for its regulation; (3) the regulation must directly advance that interest; and (4) the regulation must be no more extensive than necessary to serve the government interest. *Id.* at 566. In 1989, the Court altered the fourth prong to require that the regulation merely be “narrowly tailored” to serve the governmental interest. *Board of Trustees of the State Univ. of N.Y. v. Fox*, 492 U.S. 469, 475-81 (1989).

In *Posadas de Puerto Rico Assocs. v. Tourism Co. of Puerto Rico*, 478 U.S. 328 (1986), the Court, considering a Puerto Rico law prohibiting local advertising of casino gambling aimed at residents of Puerto Rico, reasoned that if the government can constitutionally regulate an activity, it may also regulate speech promoting that activity. *Id.* at 340-47.

¹⁴⁰ *Consolidated Edison Co. v. Public Serv. Comm’n*, 447 U.S. 530, 540 (1980) (“precisely drawn means of serving a compelling state interest”); *Pacific Gas & Elec. Co. v. Public Util. Comm’n*, 475 U.S. 1, 19 (1986) (“narrowly tailored means of serving a compelling state interest”).

¹⁴¹ *Regan v. Time, Inc.*, 468 U.S. 641, 648-49 (1984).

¹⁴² *Associated Press v. United States*, 326 U.S. 1, 20 (1945).

¹⁴³ *Miami Herald Pub. Co. v. Tornillo*, 418 U.S. 241, 256 (1974).

¹⁴⁴ *Id.* at 248 (footnote omitted).

¹⁴⁵ *Id.* at 254.

¹⁴⁶ *Id.* at 257 (quoting *New York Times Co. v. Sullivan*, 376 U.S. 254, 279 (1964)).

Of all communications media, only over-the-air broadcasting has been subject to government regulation of content as “public convenience, interest, or necessity” may require.¹⁴⁷ That regulation is premised upon the physical scarcity of the electromagnetic spectrum, which permits the operation of only a finite number of broadcast stations; in 1943 the Supreme Court concluded: “Freedom of utterance is abridged to many who wish to use the limited facilities of radio *Because it cannot be used by all, some who wish to use it must be denied.*”¹⁴⁸

The rationale used by the Court has become known as the scarcity rationale: because there is insufficient electromagnetic spectrum for everyone to broadcast, the Government may legitimately deny some people’s free expression rights. Twenty-six years later, the Court reiterated and reaffirmed its scarcity argument in *Red Lion Broadcasting Co. v. FCC*,¹⁴⁹ a case involving a FCC regulation providing that stations broadcasting programs which attack a person’s character during a discussion of a controversial issue of public importance must inform the person and offer him or her an opportunity to rebut the attack.¹⁵⁰ As a result of electromagnetic scarcity, the Court concluded that the Government should be permitted to ensure that the public received “suitable access to social, political, esthetic, moral, and other ideas and experiences.”¹⁵¹ Only five years later, the Court would strike down Florida’s effort to enforce a right-of-reply obligation on a newspaper.¹⁵² In *Red Lion*, however, the Supreme Court applied a lower standard of review to restrictions on broadcast speech than to restrictions on other forms of expression.¹⁵³ Rather than “strict scrutiny,” the Court today generally requires only that the regulation be “narrowly tailored” to achieve a “substantial government interest.”¹⁵⁴

However, the very proliferation of media technologies that argues so forcefully for a re-examination of the public interest standard may undermine the scarcity justification for permitting content-based regulation of broadcast programming. Spectrum scarcity has been widely challenged

¹⁴⁷ *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 377 (1969).

¹⁴⁸ *National Broadcasting Co. v. United States*, 319 U.S. 190, 226 (1943) (emphasis added).

¹⁴⁹ 395 U.S. at 396-400.

¹⁵⁰ 47 C.F.R. § 73.1920(a)(3) (1992).

¹⁵¹ *Red Lion*, 395 U.S. at 390.

¹⁵² *Miami Herald Pub. Co.*, 418 U.S. at 241.

¹⁵³ *See Red Lion*, 395 U.S. at 390.

¹⁵⁴ *FCC v. League of Women Voters of Cal.*, 468 U.S. 364, 380 (1984). The lower, “substantial government interest” standard is traditionally reserved for *content-neutral* regulation such as that of the print media. *See id.* at 377.

by Supreme Court Justices,¹⁵⁵ the U.S. Court of Appeals for the District of Columbia,¹⁵⁶ the FCC,¹⁵⁷ and many commentators.¹⁵⁸ Each of these critics has called for the elimination of the notion that scarcity in the broadcast spectrum warrants a lower level of constitutional protection for broadcast expression or justifies a higher level of intrusion into the operation of America's electronic communications industries.

Scarcity no longer affords a principled justification for treating electronic and print media differently. The public now has access to a multiplicity of new communications outlets, such as cable, video tapes and disks, satellite receivers, and computer bulletin boards. In the face of rapidly advancing communications technologies and the varied sources of information and entertainment programming they make possible, the Government has little role, if any, in guaranteeing for the public "suitable access to social, political, esthetic, moral, and other ideas and experiences."

¹⁵⁵ See, e.g., *League of Women Voters*, 468 U.S. at 376 n.11; *Columbia Broadcasting Sys., Inc. v. Democratic Nat'l Comm.*, 412 U.S. 94, 144 (1973) (Stewart, J., concurring); *id.* at 149 (Douglas, J., concurring).

¹⁵⁶ See, e.g., *Telecommunications Research & Action Ctr. v. FCC*, 801 F.2d 501, 508 (D.C. Cir. 1986), *petition for reh'g en banc denied*, 806 F.2d 1115 (D.C. Cir. 1986), *cert. denied*, 482 U.S. 919 (1987); *Branch v. FCC*, 824 F.2d 37, 49 (D.C. Cir. 1987), *cert. denied*, 485 U.S. 959 (1988); *Meredith Corp. v. FCC*, 809 F.2d 863, 866-67 (D.C. Cir. 1987).

It is certainly true that broadcast frequencies are scarce but it is unclear why that fact justifies content regulation of broadcasting in a way that would be intolerable if applied to the editorial process of the print media. All economic goods are scarce, not least the newsprint, ink, delivery trucks, computers, and other resources that go into the production and dissemination of print journalism. Not everyone who wishes to publish a newspaper, or even a pamphlet, may do so. Since scarcity is a universal fact, it can hardly explain regulation in one context and not another.

Telecommunications Research & Action Ctr., 801 F.2d at 508 (footnote omitted).

¹⁵⁷ See, e.g., *Complaint of Syracuse Peace Council against Television Station WTVH Syracuse, N.Y.*, 2 F.C.C.R. 5043 (1987) (memorandum opinion and order). "[T]he extraordinary technological advances that have been made in the electronic media since the 1969 *Red Lion* decision, together with a consideration of fundamental First Amendment principles, provide an ample basis for the Supreme Court to reconsider the premise or approach of its decision in *Red Lion*." *Id.* at 5048. The Commission noted the explosive growth in radio and television since *Red Lion* was decided in 1969: a 48% increase in radio stations and 44% increase in television stations. *Id.* at 5051. In addition, with the development of UHF television, cable television, and new video delivery technologies (including low power television, video cassettes, and home satellite dish antennae) the number of information outlets had increased and the structure of the industry had become far more competitive than in 1969. *Id.*

¹⁵⁸ See, e.g., Mark S. Fowler & Daniel L. Brenner, *A Marketplace Approach to Broadcast Regulation*, 60 TEX. L. REV. 207, 221-26 (1981-82); David L. Bazelon, *FCC Regulation of the Telecommunications Press*, 1975 DUKE L.J. 213, 223.

Scarcity has little relevance in the tidal wave of information services and products. Congress and the Commission, subject to oversight by the courts, must consider what "public interest" might mean today and whether it should—or, in view of the First Amendment, can—guide the Government's treatment of information and communications providers. The challenge for policymakers and regulators, then, is not merely to avoid propagating endless policy loops and not simply to take into account the distinctive features of the new information marketplace, although both of these are important objectives. There must also be a frank assessment of the impact of these features on the meaning of "public convenience, interest, or necessity," its relevance, if any, to legislative and regulatory initiatives, and its constitutionality in light of such dramatic technological, economic, and political changes.

V. CONCLUSION

Communications policymaking in the United States has increasingly become an "endless policy loop." Rather than identifying and pursuing the "public interest," as required by the Communications Act of 1934, policymakers have instead become enamored with regulating relations among competing industries—for example, between broadcasters and cable operators, and cable operators and telephone companies. The cost of this lack of vision—measured in opportunities and money wasted—is considerable.

U.S. hesitancy to embrace a rational *information* policy in the face of advancing technology will pose increasingly higher costs for the Government, businesses, and economy of the United States. Furthermore, those costs will grow exponentially the longer the United States waits to address the broad array of pressing issues posed by digital technology, massive data bases, high speed data transmission, and undetectable visual and auditory image manipulation.

Information policy for the next century is already being greatly influenced by and must recognize: (1) the importance of information; (2) its inherently global characteristics; (3) its significance for all business and government activities; (4) the importance of protecting privacy and of assuring accuracy, security, and reliability; and (5) the role of intellectual property law as the engine of the information economy. Each of these dynamic features presents pressing, vexing issues that must be addressed by the new information policy. These features also require policymakers and regulators to re-examine the meaning and application of the longstanding touchstone of communications policy—public interest—and the constitutionality of pursuing the public interest standard in a new, more diverse, global market.