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COMMENTS

THE DIGITAL DILEMMA: REQUIRING PRIVATE CARRIER ASSISTANCE TO REACH OUT AND TAP SOMEONE IN THE INFORMATION AGE—AN ANALYSIS OF THE DIGITAL TELEPHONY ACT

"In countries where liberty is most esteemed, there are laws by which a single person is deprived of it, in order to preserve it for the whole community." 1

I. INTRODUCTION

Nearly two hundred-fifty years ago, the political philosopher Montesquieu theorized that, in a free society, individuals must forfeit some liberties to further the liberty of society as a whole.² Similar reasoning, and a desire to develop careful guidelines governing the curtailment of individual liberties, lay behind the establishment of federal wiretapping³ statutes in the late 1960s.⁴ Yet, as technology evolves, the need often arises for laws governing technology and society to evolve as well.⁵

^{1.} Baron De Montesquieu, The Spirit of the Laws 199 (Thomas Nugent trans., Franz Neumann ed., Hafner Press 1949) (1748).

^{2.} Id. Similar thinking is reflected in the writings of Rousseau: "[E]ach person alienates, by the social compact, only that portion of his power, his goods, and liberty whose use is of consequence to the community." Jean-Jacques Rousseau, The Social Contract, in The Basic Political Writings 157, 158 (Donald A. Cress ed. & trans., Oxford University Press 1987).

^{3.} For the purposes of this comment, wiretapping is defined as "[i]nterception... made by a connection with a telephone" without the attachment of a separate device to the telephone itself. Berger v. New York, 388 U.S. 41, 46 (1967).

^{4.} See infra text accompanying notes 47-70.

^{5.} This comment focuses on the effort to coordinate current law with current technology in the wiretap area. For a more general discussion of the need to coordinate current law with current technology, see Anne W. Branscomb, Who Owns Information? (1994). According to Professor Branscomb, "[t]he law will lumber along like an unwieldy dinosaur wending its way to extinction if it

The Digital Telephony Act of 1994⁶ ("DTA") exemplifies such an evolution in federal wiretap law. Technological advances making it easier than ever for individuals to "reach out and touch someone," often hinder law enforcement's ability to covertly do the same.⁷ The DTA aims to resolve the dilemma posed by criminal activity conducted over telecommunication systems that law enforcement is unable to access via traditional, legally cognizable wiretap techniques.⁸ In the process, the DTA exemplifies the continuing struggle to maintain the delicate balance between public and private liberties⁹ in an era of rapidly advancing technology.

The DTA requires telephone companies to install equipment enabling law enforcement to maintain the same ability to conduct wiretaps that existed before recent telecommunication advances made traditional wiretapping techniques obsolete. Nevertheless, the DTA's sponsors champion the Act as a breakthrough for both law enforcement and privacy advocates. Many civil liberties advocates disagree, main-

cannot keep up with the pace of change in this new interactive, information-intense environment." *Id.* at 5.

^{6. 18} U.S.C. §§ 2601-08 (1994). The statute is formally entitled: Telecommunication Carrier Assistance to the Government Act [hereinafter DTA]. H.R. Rep. No. 827, 103d Cong., 2d Sess., pt.1, at 1 (1994) [hereinafter 1994 House Report]. The bill won congressional approval without debate on October 7, 1994 and was quickly signed into law by President Clinton. Benjamin Wittes, A (Nearly) Lawless Frontier, Recorder, Jan. 3, 1995, at 1.

^{7.} See discussion infra part II.B.2.

^{8. 1994} House Report, supra note 6, at 13. For purposes of this comment, "telecommunication systems" is defined as common carrier equipment transmitting oral conversations between parties. Examples include traditional telephone services provided by carriers such as AT&T, MCI, Sprint, and local Bell operators. Cellular and wireless communications available to the general public also fall within this general definition. "Telecommunications carrier means a person or entity engaged in the transmission or switching of wire or electronic communications as a common carrier for hire." 18 U.S.C. § 2601(a) (1994).

^{9. &}quot;Liberty" is a somewhat nebulous and malleable term, briefly defined as "[f]reedom from all restraints except such as are justly imposed by law." BLACK'S LAW DICTIONARY 918 (6th ed. 1990). For the purposes of this comment, in discussing wiretap law, the "private" side of liberty refers to the concepts of privacy, freedom of expression, and property interests. The "public" side of liberty refers to the rights and duties lawfully assigned to the government.

^{10.} See infra part II.C.1.

^{11.} See Memorandum from Don Edwards, Chairman, Subcommittee on Civil and Constitutional Rights re Digital Telephony Legislation (Sept. 27, 1994) (on file with author) [hereinafter Memorandum from Don Edwards]. In addition to enhancing the government's ability to implement court authorized wiretaps, the legislation contains several privacy provisions absent from the wiretapping statutes it amends. See discussion infra part II.C.2. The new pro-

taining the law sets a poor precedent for the burgeoning information age. ¹³ These groups feel the DTA uses technology to diminish, rather than further, personal privacy and forces private telephone carrier involvement in what is traditionally a governmental activity. ¹⁴

The telephone industry¹⁵ and the technology privacy group Electronic Frontier Foundation ("EFF"),¹⁶ although eventually acquiescing in the Act, argue that the legislation is both unnecessary and legally suspect.¹⁷ Within the telephone industry in particular, there is concern that the DTA will unduly burden technological development and may constitute a government taking of private property without compensation.¹⁸

visions, largely designed to protect the privacy of telecommunications not authorized to be intercepted, makes the Act a double-edged sword to some privacy advocates. See Mitch Betts, Privacy Protection Gives Wiretap Bill Double Edge, Computerworld, Oct. 24, 1994, at 63. Nevertheless, opponents of the Act, such as the American Civil Liberties Union, remain steadfast in their opposition. See Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, Daily Report for Executives, Oct. 12, 1994, available in LEXIS, News Library, CURNWS File.

- 12. Civil liberties groups active throughout the digital telephony debate included the ACLU, the Electronic Frontier Foundation, and the Electronic Privacy Information Center ("EPIC"). See Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, supra note 11.
- 13. For instance, the EPIC states that it has "lingering questions concerning the need for such an unprecedented and far-reaching change in the law," adding that the DTA sets a bad precedent for the National Information Infrastructure. Betts, supra note 11. See also Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, supra note 11 (noting that the ACLU believes the DTA "creates a dangerous presumption that government has the power to intercept private communications and to require private parties to create special access.").
- 14. See Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, supra note 11.
- 15. The industry speaks through its trade organization, the United States Telephone Association [hereinafter USTA]. See Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, supra note 11.
- 16. The EFF, often referred to as the "ACLU of Cyberspace," is a group dedicated to protecting civil liberties relating to emerging telecommunication technologies. Marianne Lavell, Next Rights Battle is Going Online, NATIONAL LAW JOURNAL, July 25, 1994, at A1. During hearings regarding the DTA, the EFF acknowledged that the Act is "substantially less intrusive" than previous proposals and included a number of significant privacy advances. See Congress Passes Wiretap Legislation; Senate Approves by Unanimous Consent, supra note 11.
 - 17. Id. See also infra notes 196-201 and accompanying text.
 - 18. See discussion infra parts II.C.4.b, IV.D.

This comment puts the DTA in its proper legal context by reviewing the history and construction of the wiretap laws it amends. ¹⁹ Following an examination of the current state of telecommunication technology and resulting impediments to wiretapping capabilities, ²⁰ the comment looks at the history and construction of the Act itself. ²¹ Next, the comment reviews relevant judicial decisions that detractors claim undermine the DTA. ²² The comment proceeds to identify the core legal problems posed by the DTA, evaluating whether the Act hampers, maintains, or improves the dynamic legal balance between legitimate law enforcement interests and the tenets of personal privacy. ²³

Concluding that overall the DTA maintains and in many ways improves the balance between public and private liberty in light of technological change,²⁴ several solutions to the potential legal infirmities of the Act are proposed.²⁵ Finally, the comment suggests that future efforts to draft legislation aligning law and technology apply several key lessons discernible from the Digital Telephony debate.²⁶

II. BACKGROUND

A. Wiretap Law Prior to the DTA: Legislative and Judicial History of Title III of the Omnibus Crime Control and Safe Streets Act of 1968

Prior to 1968, electronic surveillance and the privacy of telephonic communications²⁷ were largely unregulated

^{19.} See infra part II.A.

^{20.} See infra part II.B.2.

^{21.} See infra part II.C.

^{22.} See infra part II.C.4.

See infra parts III, IV.

^{24.} See infra part IV.B.3.

^{25.} See infra part V.

^{26.} See infra part VI.

^{27. &}quot;Electronic surveillance" and "electronic eavesdropping" are broad terms encompassing both wiretapping and recording through electronic devices commonly known as "bugs." See Herman Schwartz, The Legitimation of Electronic Eavesdropping: The Politics of "Law and Order," 67 Mich. L. Rev. 455, 457 n.12 (1969). See also Berger v. New York, 388 U.S. 41, 46-47 (1967). Bugs are separate devices in and of themselves capable of use in a variety of situations, while wiretaps merely intercept telephonic communications. Id. For the purposes of this comment, the term "telephonic communications" includes all oral conversations conducted through a common carrier such as a telephone company. This would include conventional telephone services as well as more recent cellular and wireless modes of communication. See supra note 8. While

fields.²⁸ Both law enforcement and private individuals engaged in wiretapping with little legal oversight.²⁹ This permissive atmosphere was fostered in part by the United States Supreme Court's 1928 decision in Olmstead v. United States.³⁰ Stating that conversations passing over telephone lines did not fall within the Fourth Amendment's enumeration of "houses, persons, papers, and effects," the Olmstead Court held that wiretapping did not violate the Fourth Amendment unless it involved an unlawful entry into a physical premises.³²

Although Congress made federally obtained wiretap evidence inadmissible at trial by passing § 605 of the Federal Communications Act³³ in 1934, this inadmissibility did not prevent the use of wiretaps for other purposes.³⁴ Additionally, relying on the Supreme Court's *Olmstead* ruling, several states passed laws permitting the use of *state* obtained wiretap evidence at trial.³⁵ An even greater number of states had little or no law whatsoever governing wiretaps.³⁶

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

- U.S. Const. amend. IV.
 - 32. 277 U.S. at 465.
 - 33. 47 U.S.C. § 605 (1958).

this comment occasionally refers to electronic surveillance or electronic eavesdropping generally, the focus is on the wiretapping portion of the definition.

^{28.} See infra text accompanying notes 30-39.

^{29.} President's Commission on Law Enforcement and Administration of Justice, The Challenge of Crime in a Free Society (1967), at 127-28 reprinted in Berger v. New York, 388 U.S. 41, app. 126-28 (1967) (White, J., dissenting) [hereinafter 1967 Commission Report]. See also Berger, 388 U.S. at 48-49 (stating that while federal law prohibits wiretaps, there is nevertheless permissive use of wiretapping by law enforcement in some states, and that other forms of electronic eavesdropping are even more prevalent).

^{30. 277} U.S. 438 (1928), overruled by Katz v. United States, 389 U.S. 347 (1967).

^{31. 277} U.S. at 465. The Fourth Amendment states:

^{34.} Although § 605 appeared to impose a complete ban on the interception and disclosure of wire communications, "[t]he Department of Justice . . . interpreted this section to permit interception so long as no disclosure of the content outside the [d]epartment . . . [was] made." (e.g. wiretapping was permissible by a federal agent but could not be used in court). 1967 Commission Report, supra note 29, at 126-28.

^{35.} Berger v. New York, 388 U.S. 41, 112 (1967) (White, J., dissenting).

^{36.} Id. (White, J., dissenting).

Despite § 605's prohibition on the admission of wiretap evidence gathered through federal assistance, a 1967 Presidential Commission on Law Enforcement and Administration of Justice ("Commission") found no indication that state officers were ever prosecuted for using such evidence.³⁷ The Commission further noted that "the Federal prohibition . . . (had) no effect on interception, and the lack of prosecutive [sic] action . . . substantially reduced respect for the law."³⁸ Section 605's infirmities meant that private parties and law enforcement were "invading the privacy of many citizens without control from the courts and (without) reasonable legislative standards."³⁹

Concerned that § 605 inadequately protected personal privacy, while simultaneously impeding legitimate law enforcement interests,⁴⁰ the Commission stated:

The present status of the law with respect to wiretapping and bugging is intolerable. It serves the interests neither of privacy nor law enforcement

All members of the Commission agree on the difficulty of striking the balance between law enforcement benefits from the use of electronic surveillance and the threat to privacy its use may entail.⁴¹

The Commission concluded that "legislation should be enacted granting carefully circumscribed authority for electronic surveillance to law enforcement officers . . . [and that] the availability of such specific authority would significantly

^{37. 1967} Commission Report, supra note 29 at 128.

^{38.} Id.

^{39.} Id. See also discussion supra note 34.

^{40.} In the 1960s, law enforcement became increasingly concerned that restrictions on wiretaps were unduly hampering criminal prosecutions, particularly with respect to organized crime. 1967 Commission Report, *supra* note 29 at 128. The Commission Report stated law enforcement's concern:

[[]T]he evidence necessary to bring criminal sanctions to bear consistently on the higher echelons of organized crime will not be obtained without the aid of electronic surveillance techniques.

Members of the underworld, who have legitimate reason to fear that their meetings might be bugged or their telephones tapped, have continued to meet and make relatively free use of the telephone—for communication is essential to the operation of any business enterprise.

Id. at 122-23.

^{41.} Id. at 128.

reduce the incentive for, and the incidence of, improper electronic surveillance."42

The Commission recommended that congressional action on the surveillance issue be postponed, pending the U.S. Supreme Court's resolution of an important surveillance question on its 1967 docket.⁴³ The case, Berger v. New York,⁴⁴ presented the question of whether a New York statute permitting electronic eavesdropping violated the Fourth and Fourteenth Amendments.⁴⁵ Concerned with the exponential proliferation of telephonic communications and monitoring thereof,⁴⁶ the Supreme Court used Berger to limit its Olmstead decision.⁴⁷

In Berger, the Court expressly found that "conversation" fell within the Fourth Amendment's protections. ⁴⁸ Additionally, the Court ruled that the use of electronic devices to capture such conversations constituted a "search" within the meaning of the Fourth Amendment. ⁴⁹ With those portions of Olmstead to the contrary now implicitly overruled, ⁵⁰ the Court next examined whether the New York statute met the Fourth Amendment's requirements. ⁵¹ Noting that the statute did not adequately require a showing of probable cause; ⁵² that it failed to require a description of the particular conversation(s) sought; ⁵³ and that it possessed an insufficient warrant procedure, ⁵⁴ the Court held the New York statute unconstitutional. ⁵⁵

^{42.} Id.

^{43.} Id.

^{44. 388} U.S. 41 (1967). Berger was convicted on two counts of conspiracy to bribe the Chairman of the New York State Liquor Authority. *Id.* at 44. Evidence supporting the conviction was gathered through recording devices pursuant to a court order. *Id.* at 44-45. The order was issued in accordance with a New York statute permitting the use of such devices under specified conditions. *Id.* Berger appealed the conviction, claiming, *inter alia*, that the State statute was unconstitutional. *Id.* at 43-44. The trial court upheld the statute, as did both the Appellate Division and the New York Court of Appeals. *Id.* at 44.

^{45.} Id. at 41.

^{46.} Id. at 46-49.

^{47.} Id. at 50-52.

^{48.} Id. at 51.

^{49.} Berger, 388 U.S. at 51.

^{50.} Id. at 50-64.

^{51.} Id. at 54-64.

^{52.} Id. at 55.

^{53.} Id. at 56.

^{54.} Berger, 388 U.S. at 60.

^{55.} Id. at 64.

The following term, before Congress could react to the Berger decision, the Court took the next logical step and formally overruled Olmstead. ⁵⁶In Katz v. United States, ⁵⁷ the petitioner was convicted of violating a federal statute prohibiting the telephonic transmission of wagering information across state lines. ⁵⁸ Tapes of petitioner's incriminating telephone conversations, obtained by FBI agents through a recording device placed outside a telephone booth, were used in obtaining the conviction. ⁵⁹ The petitioner, arguing that the recordings were obtained in violation of his Fourth Amendment rights, appealed. ⁶⁰

In overturning the conviction, the Court dismissed the "trespass" doctrine articulated in *Olmstead*,⁶¹ holding that "search and seizure" was not dependent upon a physical intrusion.⁶² Having recognized a Fourth Amendment right to a reasonable expectation of privacy in telephone conversations,⁶³ the Court found the FBI's surveillance constitutionally deficient because it was not conducted pursuant to a warrant.⁶⁴

Congress quickly responded to the Berger and Katz decisions. Seizing upon the wiretap recommendations of the 1967 Presidential Committee Report on Law Enforcement, ⁶⁵ Congress enacted Title III of the Omnibus Crime Control and Safe Streets Act of 1968⁶⁶ ("Title III"). Mindful of the Supreme Court's extension of constitutional protection to all forms of electronic eavesdropping, Congress defined Title III's dual purpose as: "(1) protecting the privacy of wire and oral communications and (2) delineating on a uniform basis the circumstances and conditions under which the interception of wire and oral communications may be authorized."⁶⁷

^{56.} Katz v. United States, 389 U.S. 347, 353 (1967).

^{57. 389} U.S. 347 (1967).

^{58.} Id. at 348.

^{59.} Id.

^{60.} Id. at 348-50.

^{61.} Olmstead v. United States, 277 U.S. 438, 457, 464, 466 (1928).

^{62.} Katz v. United States, 389 U.S. 347, 351, 353 (1967).

^{63.} Id. at 353.

^{64.} Id. at 354-59.

^{65.} See supra text accompanying note 42.

^{66. 18} U.S.C. §§ 2510-20; Pub. L. No. 90-351, 82 Stat. 212 (1968) (codified as amended at 18 U.S.C. §§ 2510-20 (1988)).

^{67.} S. Rep. No. 1097, 90th Cong., 2d Sess. 67 (1968).

In accordance with both the Commission's recommendations and the Supreme Court's 1967 decisions, Title III simultaneously forbade electronic surveillance by private parties⁶⁸ and authorized its narrow, regulated use by law enforcement in specified criminal investigations.⁶⁹ To assure comportment with the Fourth Amendment's protections against unreasonable searches and seizures, Title III carefully delineated the permissible situations and methods for conducting wiretaps.⁷⁰

1. Legal and Technical Implementation of Title III

Title III authorizes law enforcement agencies to install wiretaps only after a judge makes an ex parte determination that probable cause exists and that other investigative techniques were or would be unavailing.⁷¹ The courts have ultimately rejected all constitutional challenges to Title III's surveillance criteria,⁷² indicating that the legislation

Id.

^{68. 18} U.S.C. § 2511(1)(a) (1988).

^{69. 18} U.S.C. § 2516 (1988). Offenses covered by Title III and delineated in this section include: Extortion, corruption, interstate gambling, counterfeiting, narcotics, unlawful use of explosives, and civil disorder. *Id.* Title III specifically addressed Federal law and did not generally affect state law, although states were encouraged to enact similar statutes. *See* Philip H. Pennypacker, *Reach Out and Bug Someone: California's New Wiretap Law*, 29 Santa Clara L. Rev. 275, 279 & n.31 (1988).

^{70.} See discussion infra part II.A.1.

^{71. 18} U.S.C. § 2518(3) (1988). Specifically, the judge must determine whether:

⁽a) There is probable cause for belief that an individual is committing, has committed, or is about to commit a particular offense enumerated in section 2516 of this chapter;

⁽b) There is probable cause for belief that particular communications concerning that offense will be obtained through such interception;

⁽c) Normal investigative procedures have been tried and have failed or reasonably appear to be unlikely to succeed if tried or be too dangerous;

⁽d) There is probable cause for belief that the facilities from which, or the place where, the wire or oral communications are to be intercepted are being used, in connection with the commission of such offense, or are leased to, listed in the name of, or commonly used by such person.

^{72.} See, e.g., United States v. Donovan, 429 U.S. 413 (1977); United States v. Cafero, 473 F.2d 489 (3d Cir. 1973). But see United States v. Whittaker, 343 F. Supp. 358 (E.D. Pa. 1972), overruled by United States v. Cafero, 473 F.2d 489 (3d Cir. 1973). See generally Pennypacker, supra note 69, at 280-99 (discussing constitutional challenges to Title III).

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successfully meets the requirements imposed by Berger and its progeny.⁷³

Addressing technological compliance was a comparatively simple task. In 1968 the telecommunications industry was a highly regulated field,⁷⁴ with AT&T and its subsidiaries possessing a virtual monopoly on common carrier telephone service.⁷⁵ Wiretaps were easily implemented on the basis of existing technology.⁷⁶ System design was not an issue because "intrinsic elements of wire lined networks presented access points where law enforcement, with minimum [sic] assistance from telephone companies," could execute wiretaps.⁷⁷ When law enforcement did require telephone company assistance, the issue was usually handled on an ad hoc basis through private negotiation between the local monopoly service provider and law enforcement.⁷⁸

2. Initial Amendment of Title III

Notwithstanding the relative ease of all facets of wiretapping under Title III, questions inevitably arose regarding the degree of cooperation required between law enforcement and telephone carriers. Specifically, Title III as originally enacted provided no direct guidance regarding what responsibility telecommunication carriers had to assist law enforcement in executing authorized interceptions. When the United States Court of Appeals for the Ninth Circuit held in 1970 that, absent carrier consent, law enforcement agencies were not entitled to telephone carrier assistance in their wiretapping endeavors, Congress returned to Title III.

^{73.} See supra text accompanying notes 48-64.

^{74.} See United States v. New York Tel. Co., 434 U.S. 159, 174 (1977).

^{75.} See Eric J. Lerner, Telecommunications Industry, in Compton's Living Encyclopedia, 1996, available in America Online, Reference File.

^{76.} See infra notes 111-12.

^{77. 1994} HOUSE REPORT, supra note 6, at 13-14.

^{78.} Id. at 14 (noting that such agreements had the disadvantage of being concluded without public knowledge or legislative oversight).

^{79.} See In re United States, 427 F.2d 639 (9th Cir. 1970). This case is discussed infra note 81 and accompanying text.

^{80. 1994} HOUSE REPORT, supra note 6, at 17.

^{81.} In re United States, 427 F.2d 639 (9th Cir. 1970). In In re United States, the FBI had asked a local telephone company to assist in effectuating an authorized wiretap by providing leased lines and connecting bridges. Id. at 641 n.1. The telephone company refused and the FBI brought suit. Id.

^{82. 18} U.S.C. § 2518(4) (1988).

Two months after the Ninth Circuit's decision, Congress added a new provision to Title III addressing the required carrier assistance question.⁸³ The amendment mandated that upon an applicant's request, orders authorizing wiretapping direct the carrier to provide all information, facilities and technical assistance necessary to accomplish the order.⁸⁴ In return, the provision requires that the applicant (a government entity) compensate the provider for reasonable expenses incurred in providing such assistance.⁸⁵

The United States Supreme Court addressed the 1970 amendment to Title III in *United States v. New York Telephone Co.*⁸⁶ The Court held the New York Telephone Company bound by a district court order requiring the company to provide the FBI with technical assistance in executing a trace on two telephones suspected of use in illegal gambling.⁸⁷ Noting that trace orders were not governed by Title III,⁸⁸ the Supreme Court refused to base its decision on the 1970 amendment, relying instead on the inherent power provided by the All Writs Act.⁸⁹ Nevertheless, the Court interpreted

An order authorizing or approving the interception of a wire, oral, or electronic communication under this chapter shall, upon request of the applicant, direct that a provider of wire or electronic communication service, landlord, custodian, or other person shall furnish the applicant forthwith all information, facilities, and technical assistance necessary to accomplish the interception unobtrusively and with a minimum of interference with the services that such service provider, landlord, custodian, or person is according the person whose communications are to be intercepted. Any provider of wire or electronic communication service, landlord, custodian, or other person shall be compensated therefor by the applicant for reasonable expenses incurred in providing such facilities or assistance.

Id.

^{83.} Id.

^{84.} The provision reads in full:

^{85.} *Id*.

^{86. 434} U.S. 159, 176-77 & n.25 (1977).

^{87.} Id. at 177-78.

^{88.} Id. at 168. The Court stated: "It is clear that Congress did not view (tracing devices) as posing a threat to privacy of the same dimension as the interception of oral communications and did not intend to impose Title III restrictions upon their use." Id. The Court elsewhere explained that trace devices did not pose as great a threat to privacy because they disclose "only the telephone numbers that have been dialed" and "do not accomplish the 'aural acquisition' of anything." Id. at 167.

^{89.} Id. at 172. The All Writs Act states: "The Supreme Court and all courts established by Act of Congress may issue all writs necessary or appropriate in aid of their respective jurisdictions and agreeable to the usage's and principles of law." 28 U.S.C. § 1651(a) (1988). The Court noted that it had consistently

the amendment as commanding federal courts "to compel, upon request, any assistance necessary to accomplish an electronic interception." The Court thus concluded that even if Title III had applied, the 1970 amendment would lead to the same result the Court reached under the All Writs Act: The telephone company must cooperate in the investigation. 91

The Supreme Court's reasoning in New York Telephone endorsed the validity and scope of the 1970 congressional amendment to Title III.⁹² In so doing, the Court acknowledged that private third parties, "who, though not parties to the original action or engaged in wrongdoing, are in a position to frustrate the implementation of a court order or the proper administration of justice," may be required to provide affirmative, compensated assistance to law enforcement wiretap efforts. ⁹⁴

The strong deference accorded Title III in New York Telephone was a natural outgrowth of the earlier praise the Court bestowed upon Title III for striking a proper balance between legitimate law enforcement interests and the privacy rights of individuals.⁹⁵ By the end of the 1970s it was clear that

applied the Act flexibly, in conformity with the principle that "[u]nless appropriately confined by Congress, a federal court may avail itself of all auxiliary writs as aids in the performance of its duties, when the use of such historic aids is calculated in its sound judgment to achieve the ends of justice entrusted to it." United States v. New York Tel. Co., 434 U.S. 159, 172-73 (1977) (citation omitted). See also In re United States, 610 F.2d 1148 (3d Cir. 1979) (applying the All Writs Act to several separate telephone companies to require their assistance in non-wiretap law enforcement surveillance in exchange for reasonable compensation).

^{90.} New York Tel. Co., 434 U.S. at 176-77.

^{91.} Id. at 177 n.25.

^{92.} *Id.* at 176-77. The Court further buttressed its acceptance of the 1970 Title III amendment by suggesting that the Ninth Circuit opinion (refusing to compel telephone carrier assistance in the absence of specific statutory language) that prompted the congressional amendment might have been wrongly decided. *Id.* at 177 n.25. In essence, the Supreme Court acknowledged that Title III might always have carried with it the authority to compel such assistance, even without the 1970 amendment. *See id.*

^{93.} Id. at 174.

^{94.} *Id.* The decision was silent, however, regarding whether telephone companies had a duty to *install* equipment solely to assist law enforcement wiretap efforts. *See* 1994 HOUSE REPORT, *supra* note 6, at 13.

^{95.} United States v. Kahn, 415 U.S. 143, 151 (1974). But cf. Schwartz, supra note 27, at 480-86 (criticizing Title III as overly broad); see Pennypacker, supra note 69, at 281 (implying that praise for Title III found in cases such as Kahn is unfounded).

Title III represented an entrenched, judicially accepted law enforcement tool.

B. Reform Takes Root: Between Title III and the DTA

1. The Electronic Communications Privacy Act of 1986

Technology did not stand still following the passage of Title III in 1968. Fa communications technology continued its rapid growth into the 1980's, Congress recognized a need for further legislative action. Feeling compelled to preserve fair balance between the privacy expectations of citizens and the legitimate needs of law enforcement in the face of rapid technological change, Congress passed the Electronic Communications Privacy Act of 1986 (ECPA).

The ECPA amended Title III's protections against private party eavesdropping and its law enforcement surveillance provisions to encompass new and emerging technologies, such as electronic mail, cellular telephones, paging devices and fiber optics. The new act thus largely served

^{96.} See infra text accompanying notes 99, 105-21.

^{97.} Patrick J. Leahy, New Laws for New Technologies: Current Issues Facing the Subcommittee on Technology and the Law, 5 Harv. J.L. & Tech. 1, 11 (1992).

^{98.} House Comm. on the Judiciary, Electronic Communications Privacy Act of 1986, H.R. Rep. No. 647, 99th Cong., 2d Sess. 19 (1986).

^{99. 18} U.S.C. §§ 2510-21 (1988).

^{100. 1994} HOUSE REPORT, supra note 6, at 12. See also S. REP. No. 541, 99th Cong., 2d Sess. 14 (1986) ("As a general rule, a communication is an electronic communication protected by [this law] if it is not carried by sound waves and cannot fairly be characterized as containing the human voice. . . . This term also includes electronic mail, digitized transmissions, and video teleconferencing.").

Title III and the ECPA only apply to transmissions affecting interstate commerce. 18 U.S.C. § 2510 (1988). However, transmissions affecting interstate commerce have long been held to incorporates nearly all transmissions through normal common carrier lines. See, e.g., Ratterman v. Western Union Tel. Co., 127 U.S. 411 (1888); Western Union Tel. Co. v. Texas, 105 U.S. 460 (1880). Nevertheless, the interstate commerce requirement may exclude some transmissions carried solely within one state or one building (e.g. corporate email) from federal law. See Michael W. Droke, Private, Legislative, and Judicial Options for Clarification of Employee Rights to the Contents of their Electronic Mail Systems, 32 SANTA CLARA L. REV. 173 (1992). This difference has very little implication on the topic of this comment since only the Federal legality of the Digital Telephony Act is reviewed. The difference might affect state interpretations of the DTA, and it has implications on other privacy matters. See generally Robert E. Smith, Compilation of Federal and State Privacy LAWS (1988). For an analysis of the privacy implications of corporate e-mail policies see Droke, supra, at 167.

as a stop gap measure,¹⁰¹ extending Title III's existing legal provisions to new technologies without considering how these technological changes might require different legal responses.¹⁰² It soon became evident that the ECPA's extension of existing law had not kept pace with new challenges created by technological change.¹⁰³

2. The Effect of Changing Telephone Technology on Wiretap Capabilities

When AT&T introduced its first cellular phones in the 1980s it predicted there would be 900,000 cellular phones in the United States by the year 2000.¹⁰⁴ By 1993, the actual figure was already 13,000,000, with 60,000,000 projected by the year 2000.¹⁰⁵ The exponential boom in cellular technology mirrors the expansion of telecommunications technology generally, exemplified by services such as call forwarding, speed-dialing and digital fiber optic cable.¹⁰⁶

Such technology provides amazing new telecommunication speed, quality, convenience, and privacy, 107 but it also impedes law enforcement's ability to gain access through con-

^{101.} Although the goal of the ECPA was to keep Title III current, subsequent events proved the Act woefully inadequate in this regard. See discussion infra parts II.B.2-B.4.

^{102.} See infra parts II.B.2-B.4.

^{103.} See discussion infra part II.B.2.

^{104.} Transcript of Remarks by Vice President Gore at the National Press Club, U.S. Newswire, Dec. 21, 1993, available in LEXIS, News Library, CURNWS File.

^{105.} Id.

^{106.} In this comment, the term "digital fiber optics" refers to the glass cables that transmit digital transmissions. Capabilities such as call waiting, that allows customers to have two or more calls on the same line at once, and call forwarding, that allows customers to automatically forward their calls to another location, are available on both analog and digital systems, having become increasingly prevalent in recent years. See generally 1994 HOUSE REPORT, supra note 6, at 12 (noting that the difficulty in intercepting modern telecommunications is not limited to the inability to decode digital transmissions, but is also related to increased telecommunications traffic and services utilizing both digital and analog systems, which limits the ability to isolate particular conversations).

^{107.} Privacy is increased through digital transmissions which are much more difficult to intercept than traditional analog transmissions. See infra text accompanying notes 111-20. Privacy is also increased by improved encryption techniques that are made possible through digital technology. See discussion infra notes 159-60.

ventional wiretapping techniques.¹⁰⁸ As noted above, although the ECPA expanded the ambit of Title III to cover many of these emerging technologies, it did nothing to change how law enforcement obtains access to these transmissions.¹⁰⁹ To understand why accessing the new mediums is difficult using the conventional wiretaps implemented under Title III,¹¹⁰ it is useful to review the technology involved.

Conventional wiretapping involves intercepting a transmission by connecting to a source point anywhere along the transmission path. ¹¹¹ By simply donning a set of earphones and attaching a pair of alligator clips to a telephone line, a "tapper" is able to listen directly into selected conversations. ¹¹² Digital transmissions, using computer code to transfer conversations, rather than the electric pulses used in analog systems, ¹¹³ makes this traditional wiretapping technique ineffective. ¹¹⁴ A wiretapper using alligator clips on a digital system would hear only the binary hiss of thousands of jumbled conversations. ¹¹⁵

^{108.} One survey compiled by the FBI found 183 incidents where law enforcement's wiretap efforts failed due to technological constraints. 1994 HOUSE REPORT, supra note 6, at 15 (identifying, among others: 54 incidents due to lack of cellular port capacity, 33 incidents where audio could not be captured contemporaneous with the digits dialed, and 42 incidents of problems involving Call Back, inability to isolate a particular digital transmission, and other problems).

^{109.} See supra part II.B.1.

^{110.} Title III, by not placing any design requirements on carrier's equipment, essentially requires law enforcement to rely on traditional methods of tapping. See infra text accompanying notes 112-21. The only way to gain access to some digital and other high-tech transmissions, or to isolate a particular call on a network handling thousands of calls simultaneously, is through adaptation of the actual receiving equipment owned and operated by the telephone companies. 1994 HOUSE REPORT, supra note 6, at 12.

^{111.} Berger v. New York, 388 U.S. 41, 46 (1967).

^{112.} Nightline: FBI, Pushing for Enhanced Wiretap Powers (ABC television broadcast, May 22, 1992), available in LEXIS, News Library, SCRIPT File [hereinafter Nightline].

^{113.} The term "digital transmissions" can be described as transmissions consisting of electronic information converted into streams of digital bits. Jaleen Nelson, Comment, Sledge Hammers and Scalpels: The FBI Digital Wiretap Bill and Its Effect on Free Flow of Information and Privacy, 41 UCLA L. Rev. 1139 n.1 (1994). Bits (short for binary digits) are on-off conditions representing the digits "0" and "1" as read by computers. Id. Using this binary system, digital fiber optic cable enables telecommunication equipment to carry thousands of conversations (translated into binary computer code) over a single cable. Nightline, supra note 112.

^{114.} See Nightline, supra note 112.

^{115.} Id.

This "digitized chatter" arises because digital transmissions are not reconstructed into recognizable sounds until just before the call reaches the receiver's ear. 116 By way of contrast, traditional analog networks utilize electronic pulses mimicking natural sound waves rather than converting those sounds into computer code. 117 While analog transmissions are amplified by the user's own telephone without requiring any decoding, digital transmissions must pass through complex decoding equipment at the carrier's central office before they become intelligible to the human ear. 118 As a result, digital transmissions present no convenient area for interception other than at the carrier's central office. 119 Law enforcement's concern is that unless its members are provided access to carrier central offices equipped with decoders capable of isolating individual conversations, the ability to conduct wiretaps as provided by Title III will disappear. 120

3. The Telecommunications Task Force

In 1990, while law enforcement worried about its powers under Title III and the ECPA becoming obsolete, privacy advocates simultaneously worried that Title III and the ECPA failed to recognize key emerging privacy interests. ¹²¹ The ECPA, passed only four years earlier, was already becoming dated. ¹²² The newly formed congressional Subcommittee on Technology and the Law organized a task force to reexamine the ECPA's privacy protections in light of emerging technologies. ¹²³

^{116.} Id.

^{117.} Nelson, supra note 113, at 27. Additionally, because analog sound uses more space and requires greater amounts of electricity, the capacity of analog systems is much less than the newer digital systems; as capacity increases, isolating calls to meet the "particularity" requirement of the Fourth Amendment becomes much more difficult. Id. See also infra text accompanying note 31.

^{118.} Nightline, supra note 112.

^{119.} Id.

^{120.} Id. See infra text accompanying note 251-56.

^{121.} See infra text accompanying note 125.

^{122.} See supra part II.B.2. See also infra text accompanying note 125.

^{123. 1994} HOUSE REPORT, supra note 6, at 12. Titled "The Privacy and Technology Task Force," it was formed by Senator Patrick Leahy, chairman of the Senate Judiciary Subcommittee on Technology and the Law. Id. This task force, comprised of experts from business, consumer advocacy groups, law, and civil liberties groups, was created "to examine current developments in communication technology and the extent to which the law in general, and ECPA, spe-

The task force noted that while the ECPA brought many types of electronic communications within the ambit of Title III, the ECPA failed to anticipate several important technological developments. ¹²⁴ For example, the legal protections of the ECPA did not extend to certain wireless data communication devices such as cellular laptop computers, wireless local area networks (commonly referred to as LANs), and cordless phones. ¹²⁵ In the spring of 1991, the task force recommended incorporating these emerging wireless technologies into the privacy protections of the ECPA. ¹²⁶ Despite the Task Force's recommendations and the ongoing concerns of law enforcement, Congress took no immediate action.

4. FBI Involvement

a. Covert FBI Action

Concerned that increasing access difficulties¹²⁷ would thwart criminal investigations dependent upon court-approved wiretaps, the FBI felt it could no longer wait for a congressional response.¹²⁸ From 1991 through 1992, the FBI embarked on a secret campaign designed to maintain the level of wiretap access it deemed essential to fulfilling its law enforcement duties.¹²⁹ Code-named "Operation Root Canal," the FBI campaign sought to improve digital wiretap access through a cooperative, private alliance between law enforcement and telecommunication carriers.¹³¹

By explaining to telecommunication carriers the difficulty involved in executing court-approved wiretaps on digital communications, the FBI hoped to induce the carriers' vol-

cifically, protected, or failed adequately to protect, personal and corporate privacy." Id.

^{124. 1994} HOUSE REPORT, supra note 6, at 12-13.

^{125.} Id. at 12.

^{126.} Id.

^{127.} See supra note 108 for FBI-gathered statistics on technology-based impediments to wiretapping encountered by law enforcement agencies.

^{128.} See Nelson, supra note 113, at 1141.

^{129.} *Id.* The FBI has continuously maintained that guaranteed access to all telephonic communications subject to Title III is essential for it to effectively combat organized crime and sophisticated drug dealers. *Nightline*, *supra* note 112.

^{130.} See FBI's Digital Telephony Bill Was Result of Failed 2-Year Behind-Scenes Campaign, COMMON CARRIER WEEK (Warren Publishing, Inc.), Nov. 29, 1993 [hereinafter Behind-Scenes Campaign].

^{131.} Behind-Scenes Campaign, supra note 130.

untarily cooperation.¹³² Specifically, the FBI requested law enforcement access to the carriers' central office switches.¹³³ As an inducement, the FBI identified potential weaknesses to the network security of the telephone companies that would be difficult for the FBI to prevent without wiretap access.¹³⁴ The FBI also provided a cost-benefit study, detailing the financial impact of digital wiretap access on the industry.¹³⁵

Telecommunication carriers, mindful of the industry's recent escape from a long history of government regulation, ¹³⁶ eventually preferred the silent, cooperative agreement proposed by the FBI over a legislative solution. ¹³⁷ Additionally, carriers feared offending the FBI because of the FBI's relationship with the Justice Department, which exercised considerable control over telecommunication carriers as part of the industry's deregulation. ¹³⁸

As when Title III was first enacted, the telephone companies envisioned a silent partnership with law enforcement that avoided close public and governmental scrutiny as well as costly court battles. ¹³⁹ Unlike the late 1960's through the 1970's, however, the telephone companies were no longer divided into monopolistic local service providers with complete control over their individual markets. ¹⁴⁰ Competitive realities led the carriers to fear that unless universal compliance was somehow assured, competitors would not follow the terms of any agreement, leaving those that did at a disadvantage. ¹⁴¹ Additionally, one senior industry official confided that carriers worried that the FBI scheme would cost them millions of dollars with no commensurate benefit, leaving the FBI as the only true beneficiary. ¹⁴²

Thus, although later opposed to legislation, the carriers' previous opposition to cooperating with the FBI was an acknowledgement that legislation may be the only way for the

^{132.} Id.

^{133.} Id.

^{134.} Id.

^{135.} Id. While the FBI denied the existence of such a study, FBI documents obtained through the Freedom of Information Act indicated its existence. Id.

^{136.} See supra notes 74-75 and accompanying text.

^{137.} Behind-Scenes Campaign, supra note 130.

^{138.} Id.

^{139.} Id. See also supra text accompanying note 78.

^{140.} See supra notes 74-75 and accompanying text.

^{141.} Behind-Scenes Campaign, supra note 130.

^{142.} Id.

FBI to attain industry-wide compliance with its access requirements. Discussions dragged on, but no resolution acceptable to both sides was forthcoming. 144

b. Introduction and Rejection of FBI Legislative Initiatives

When private lobbying of the industry failed to produce increased wiretap access, FBI director William Sessions, and later his successor, Louis Freeh, turned to legislation. The FBI began lobbying congressional leaders with law enforcement concerns, and a bill addressing the digital wiretapping issue was first proposed by the FBI in the fall of 1992. However, even with support from the Bush Administration and high priority from Director Sessions, the FBI legislation immediately encountered widespread criticism and opposition. In the fall of 1992 and 1990 opposition.

Groups opposed to the legislation banded together to express their disapproval. Trade associations, such as the USTA; major companies, including AT&T, IBM, GTE, and Microsoft; and civil liberties organizations like the ACLU, sent a letter to Senate Commerce Committee Chairman Ernest Hollings, stating that no legislation was necessary because they were willing to work voluntarily with law enforcement officials to reach a satisfactory solution. However, the groups' disparate rationales for opposing the legislation seemed to foreclose any hope that a cooperative, non-legislative approach would resolve the dilemma. 151

^{143.} Id.

^{144.} Id.

^{145.} Id.

^{146.} Sessions and Attorney General William Barr met with Senate Commerce Committee Chairman Ernest Hollings (D-SC) to urge his support of the proposed legislation in May of 1992. Simson L. Garfinkle, New Phones Stymie FBI Wiretaps, Christian Sci. Monitor, Apr. 29, 1992, at 12. In April of 1992, Sessions appeared before the House Judiciary Subcommittee to explain the government's position on the proposed Bill. Threat of Foreign Economic Espionage to U.S. Corporations: Hearing Before the Subcomm. on Economic and Commercial Law of the House Judiciary Comm., 102d Cong., 2d Sess. 34 (1992).

^{147.} Garfinkle, supra note 146, at 12.

^{148.} Nightline, supra note 112.

^{149.} Id.

^{150.} Garfinkle, supra note 146, at 12.

^{151.} As previously noted, the FBI had already sought and failed to reach a private solution with the telephone industry. See supra part II.B.4.a. Therefore, the subsequent proposals to solve the problem through private cooperation

The FBI legislation, throughout its various incarnations, even attracted the ire of eventual proponents of the DTA. ¹⁵² The House sponsor of the DTA, Representative Don Edwards of California, described the FBI legislation as "both a civil liberties nightmare and a drag on development of new technologies and services." ¹⁵³ Despite continuous and renewed lobbying efforts by new FBI Director Louis Freeh and the Clinton Administration, ¹⁵⁴ criticism against the FBI legislation remained steadfast throughout 1993 and into 1994. ¹⁵⁵

The first drafts of the bill raised intense opposition and, failing to gain a congressional sponsor, were quietly withdrawn. The Among the most contentious provisions of the FBI legislation were requirements that no new communications technologies be introduced that were not wiretap accessible, That all telecommunication transmissions be wiretap accessible without exception, including electronic mail, on-line services such as Prodigy, and private branch extensions ("PBXs"). Indications that under the FBI proposals citizens would not be allowed to encrypt their conversations to circumvent interception, The proposition of the guaranteed that right, further fueled opposition.

rather than legislation, appeared at best futile, if not disingenuous. The disparate interests of those opposed to a legislative solution spanned from the corporate interest in avoiding bottom-line financial implications, to civil liberties groups concerned with the threat of increased governmental intrusion into individual privacy. See infra notes 196-201 and accompanying text.

- 152. See supra note 153.
- 153. Edwards Announces Compromise on "Digital Telephony" Legislation, Congressman Don Edwards News Release, Aug. 9, 1994 (on file with author) [hereinafter Edwards Announces Compromise].
 - 154. See Nelson, supra note 113, at 1142-43.
- 155. See, e.g., FBI's Digital Wiretap Bill assailed in GSA Internal Documents, COMMON CARRIER WEEK, Jan. 25, 1993, at 4; Nelson, supra note 113, at 1178-79.
 - 156. See Nelson, supra note 113, at 1142.
 - 157. Id. at 1141-42.
- 158. ELECTRONIC FRONTIER FOUNDATION, AN ANALYSIS OF THE FBI DIGITAL TELEPHONE PROPOSAL 3, at 2-3 (1992). See also Nelson, supra note 113, at 1178-79 & n.213.
- 159. Encryption would not prevent interception, but could significantly impede the usefulness of any encrypted conversations intercepted. See Ira D. Moskatel, Protecting Electronic Communications, L.A. Law., June 1993, at 31-51.
- 160. Nelson, supra note 113, at 1139-41. This concern relates to the "Clipper Chip" or "Key Escrow Program" encryption standards as promulgated by the Clinton Administration. See id. (discussing generally the "Clipper Chip" proposal). These encryption proposals are beyond the scope of this comment and do

Opponents uniformly criticized the FBI's provisions as over-broad. Industry representatives forcefully argued that forbidding the introduction of technology that is not wiretap accessible would severely hinder competitiveness and impede technological development. The telecommunications and information services industries comprise the fastest growing sectors of the United States economy, accounting for over twelve percent of the Gross Domestic Product. Whether founded or not, the fear that the flow of new technologies fueling this sector of the economy may be reduced by the FBI's requirements, increased the opposition to the FBI proposals. 164

On the civil liberties side, opponents of the FBI legislation argued that requiring all forms of telecommunications to be wiretap accessible amounted to an undue (and unconstitutional) restriction on privacy.¹⁶⁵ In essence, opponents from all sides argued that the broadness of the FBI proposals offended every vestige of Title III's original dual purpose: protecting privacy and carefully delineating the circumstances and conditions under which such privacy could be abridged.¹⁶⁶

C. The Digital Telephony Act

The DTA was the end product of over two years of intense debate following the FBI's initial digital wiretap access proposals. As such, the DTA's House sponsor touts the Act as a compromise among civil liberties organizations, privacy

not affect the DTA, which specifically guarantees the right to use encryption. See Memorandum from Don Edwards, supra note 11. See also infra note 183.

For an excellent discussion of encryption generally, see Moskatel, supra note 159. For a more technical description of encryption techniques and a critique of the Clipper Chip proposal see Martin E. Hellman, Implications of Encryption Policy on the National Information Infrastructure, 11 Computer Law., Feb. 1994, at 28.

^{161.} See Nelson, supra note 113, at 1160-61.

^{162.} Id.

^{163.} Transcript of Remarks by Vice President Gore at the National Press Club, supra note 104.

^{164.} See Nelson, supra note 113, at 1160-61.

^{165. 1994} HOUSE REPORT, supra note 6, at 23. Most of these networks had either never posed a problem for law enforcement in the past or, as in the case of financial networks, are already subject to disclosure through other mechanisms, such as federal banking laws. *Id*.

^{166.} See supra note 67.

^{167.} Memorandum from Don Edwards, supra note 11.

advocates, law enforcement agencies, as well as congressional and industrial leaders during the preceding two years. However, at least one telephone industry representative takes issue with that statement, claiming the DTA "does not represent a consensus of opinion between industry, business and the government." 169

Wherever the truth lies, the 1994 House Report on the DTA does identify three key interests which the Digital Telephony Act seeks to balance: "(1) to preserve a narrowly focused capability for law enforcement agencies to carry out properly authorized intercepts; (2) to protect privacy in the face of increasingly powerful and personally revealing technologies; and (3) to avoid impeding the development of new communications services and technologies." By any standard, this is a more diverse set of interests than encompassed by earlier FBI proposals. These interests are addressed by a number of statutory provisions within the Act, as discussed below.

1. Preserving Wiretap Capabilities in Light of Changing Technology

To preserve law enforcement wiretap capability, the Act requires telecommunication carriers to ensure their systems have the capability to:

- (1) Isolate expeditiously the content of targeted communications within the carrier's service area;
- (2) Isolate expeditiously information identifying the origination and destination numbers of targeted communications, but not their physical location;
- (3) Provide intercepted communications and call identifying information in a format so they may be transmitted over lines leased by law enforcement away from the carrier's premises; and

^{168.} Edwards Announces Compromise, *supra* note 153. Specifically, House Sponsor Don Edwards described the DTA as a compromise between the FBI, the United States Telephone Association, the Electronic Frontier Foundation, and the Digital Telephony Working Group. *Id*.

^{169.} Senate Panel Amends Wiretap Bill to Address Industry Concerns, Daily Report for Executives, Sept. 29, 1994, available in LEXIS, News Library, CURNWS File.

^{170. 1994} HOUSE REPORT, supra note 6, at 13.

^{171.} See supra part II.B.4.b.

^{172.} See infra text accompanying notes 173, 186.

(4) Carry out intercepts unobtrusively. 173

These requirements are designed to assure that the DTA comports with the Fourth Amendment particularity standards set forth in *Berger* and *Katz*, as well as the original Title III requirements.¹⁷⁴ The 1994 House Report specifically recognizes that only telecommunication carriers are required to meet the design requirements of the Act.¹⁷⁵

Thus, unlike the FBI's proposals, the DTA does not require providers of on-line services or the Internet to assure their systems are designed to allow law enforcement wiretap access. Also exempted from the Act's system requirements are PBXs and any other closed networks (such as automatic teller machines). Agreeing that previously proposed FBI legislation was over-broad and impractical in this area, the 1994 House Report acknowledged that a more expansive approach was not justified by any current law enforcement need. 178

2. Privacy Provisions

Several sections of the DTA specifically address privacy, the second enumerated interest in the 1994 House Report. Among the more important provisions is one securing greater

^{173.} See 18 U.S.C. § 2602(a)(1)-(4) (1994). Note that provision (2) also provides an increased privacy right by forbidding law enforcement from obtaining tracking or location information aside from the phone number itself without specific court approval as described in Title III. 18 U.S.C. § 2602 (a)(2). Currently, location information in some cellular systems may be obtained through transactional data revealed by trace devices. See 1994 HOUSE REPORT, supranote 6, at 17. Since not "wiretaps," such traces could be conducted through the use of subpoenas, a notably lower threshold than the ex parte court approval required under Title III. See id. See also United States v. New York Tel. Co., 434 U.S. 159, 165-68 (1977) (holding that pen registers, the devices used to trace calls, do not fall within the ambit of Title III).

^{174.} See supra parts II.A.1, II.A.1.a. The assistance requirements are specifically designed to preserve the status-quo as it existed previously under Title III. 1994 HOUSE REPORT, supra note 6, at 22.

^{175. 1994} HOUSE REPORT, supra note 6, at 18. See also 18 U.S.C. § 2601 (1994).

^{176. 1994} HOUSE REPORT, supra note 6, at 18. Of course, these systems are still subject to wiretapping in accordance with Title III, but the carriers do not have to meet any system design requirements. The intent is to essentially limit the design modification requirements to common carrier voice-call networks. Id.

^{177.} Id.

^{178.} Id.

^{179.} See supra text accompanying note 170.

privacy for transactional electronic communications (e.g., electronic mail), by requiring a court order before law enforcement can intercept such transmissions. Title III required only a subpoena to tap into transactional data. The DTA also extends the privacy provisions of the ECPA to cordless telephones and certain data transmitted by radio. Finally, unlike the FBI's initiatives, the Act explicitly does not limit the right for subscribers to use encryption.

3. Competitiveness and Funding: Regulatory Provisions

In addition to the new privacy protections, a third key interest incorporated into the legislation pertains to the telecommunications industry competitiveness and the Act's funding requirements.¹⁸⁴ One of the major industry objections to the preceding FBI initiatives was that the proposed legislative requirements placed too high of a financial and competitive burden on the telecommunication industry.¹⁸⁵ The DTA addresses these concerns by:

- (1) Providing funds over a four year period for carriers to retrofit equipment so as to comply with the law:
- (2) Excusing any equipment from compliance that was installed at the time of enactment but which the government did not provide funds for bringing within the Act's requirements;
- (3) Allowing the industry to set its own standards regarding how to meet the wiretap access requirements, with oversight by the FCC; and
- (4) Not restricting any new technologies/equipment that are not reasonably capable of being made wiretap accessible. 186

^{180.} See 18 U.S.C. § 2703 (1994).

^{181. 1994} HOUSE REPORT, supra note 6, at 17-18.

^{182.} Id.

^{183. 18} U.S.C. § 2602(b)(3) (1994). Cf. supra text accompanying notes 159-60 (indicating that FBI proposals would not protect encryption rights).

^{184.} See supra text accompanying note 170.

^{185.} See supra text accompanying notes 161-64.

^{186.} See 18 U.S.C. §§ 2606, 2608 (1994).

Although the statute appears to place the determination of standards in the hands of the industry, ¹⁸⁷ the statute goes on to state that any "government agency" (e.g., the FBI) or "person" may petition the FCC to establish binding technical standards if the industries' standards are deemed "deficient" in light of the DTA's goals. ¹⁸⁸

Under the terms of the Act, the government has earmarked \$500 million over the first four years of the Act for the industry to retrofit existing equipment in compliance with the law. 189 After the initial four year transition period, carriers themselves must bear the cost of ensuring that any new equipment and services installed for the carrier's own business needs comply with the design requirements. 190 However, this "mandatory" compliance is only required to the extent it is "reasonable." 191

In determining reasonableness, "the cost to the carrier of compliance compared to the carrier's overall cost of developing or acquiring . . . the feature . . . in question" is one factor to be considered. Paparently, the aim is to guarantee that the cost of compliance imposed on the carrier is de minimis in order to avoid a finding of an unconstitutional government taking of private property under the Fifth Amendment. Paparently requests rather than legitimate business needs will be paid by the government, even after the initial four year period.

The government argues that any additional cost imposed on carriers in meeting the Act's requirements will be *de minimis* because the requirement that all carriers comply with the law will bring down the cost of manufacturing complying components. ¹⁹⁵ The telephone companies argue that

^{187.} See text accompanying note 185. See also 18 U.S.C. § 2606(a) (1994).

^{188. 18} U.S.C. § 2606(b) (1994).

^{189. 18} U.S.C. § 2608 (1994).

^{190. 18} U.S.C. § 2608(b) (1994).

^{191.} Id. The section states that in considering if capability requirements are reasonably achievable, "consideration shall be given to the time when the equipment . . . was installed or deployed." 18 U.S.C. § 2608(b)-2 (1994).

^{192. 1994} House Report, supra note 6, at 19.

^{193.} See discussion infra parts II.C.4.b, IV.C-D. The Fifth Amendment states, in relevant part, "nor shall private property be taken for public use, without just compensation." U.S. Const. amend. V.

^{194. 18} U.S.C. § 2608 (1994). See also 1994 House Report, supra note 6, at 17.

^{195. 1994} HOUSE REPORT, supra note 6, at 49.

the government should reimburse telecommunications providers for all "reasonable" costs of compliance, no matter how or when they are incurred. Argues one telecommunications spokesman, "In addition to the costs associated with retrofitting existing equipment, there are costs involved with building surveillance capability into new equipment. Contrary to statements made by the FBI, it is not clear that such costs would be de minimis." 197

4. Constitutional Issues

The core legal debate between supporters and opponents of the DTA focuses on the Act's constitutional implications. Opponents claim that despite the privacy provisions included in the Act, the legislation is anathema to established privacy rights. Specifically, these opponents argue that the Act: (1) impermissibly makes private entities (the telephone carriers) agents of law enforcement, and (2) impermissibly mandates that a means of communication be designed to facilitate government interception. Furthermore, some in the telephone industry question the legality of the funding provisions included within the legislation. Neel, President and CEO of an industry trade organization, believes these funding provisions might constitute an uncompensated taking of private property in violation of the Fifth Amendment. On

a. Individual Privacy: Fourth Amendment Issues

Under the Bank Secrecy Act of 1970,²⁰² banks are required to maintain records of their customers' banking activi-

^{196.} Cost of Wiretap Bill Examined at House Subcommittee Hearing, DAILY REPORT FOR EXECUTIVES, Sept. 14, 1994, available in LEXIS, News Library, CURNWS File.

^{197.} Id. The industry argues that since the DTA is solely a tool for law enforcement, "if they want it, they should pay for it." Senate Panel Amends Wiretap Bill to Address Industry Concerns, Daily Report for Executives, Sept. 29, 1994, available in LEXIS, News Library, CURNWS File. Especially disturbing to the industry is the notion of "being forced to incur additional costs for something in which there is no market value." Id.

^{198.} Electronic Lobbying on Digital Telephony, Newsbytes News Network, Aug. 30, 1994, available in LEXIS, News Library, CURNWS File.

^{199.} Id.

^{200.} Digital Telephony (Wiretap) Bill Clears Congress, Comm. Daily, Oct. 12, 1994, at 2.

^{201.} *Id.* 202. 12 U.S.C. **§§** 1730d. 1829b. 1951-59 (

^{202. 12} U.S.C. §§ 1730d, 1829b, 1951-59 (1986) and 31 U.S.C. §§ 1051-62, 1081-83, 1101-05, 1121-22 (1986).

ties and make such records available to the government upon proper legal request.²⁰³ In *California Bankers Ass'n v. Shultz*,²⁰⁴ the Supreme Court addressed the constitutionality of the Bank Secrecy Act's requirements. The Court found no Fourth Amendment infirmities in the law.²⁰⁵ Noting that Congress was within its power to regulate the important problem of crime in interstate commerce, the Court held that the mere requirement that banks maintain records was also within Congress' power since the government could only secure access to such records by following proper legal procedures.²⁰⁶ The Court additionally held that the cost of compliance with the Act was not unreasonable, and therefore no abrogation of Fifth Amendment rights occurred.²⁰⁷ The Court concluded:

We do not think it is strange or irrational that Congress, having its attention called to what appeared to be serious and organized efforts to avoid detection of criminal activity, should have legislated to rectify the situation. We have no doubt that Congress, in the sphere of its legislative authority, may just as properly address itself to the effective enforcement of criminal laws which it has previously enacted as to the enactment of those laws in the first instance. ²⁰⁸

One argument distinguishing the requirements of the DTA from those at issue in the Bank Secrecy Act is that the technology necessary for banks to comply with the Act in question was already possessed by the banks.²⁰⁹ The banks were only required to supply information that was already maintained in the scope of business.²¹⁰ Unlike telephone carriers under the DTA, banks were not required under the Bank Secrecy Act to install any new equipment solely to comply with the Act.²¹¹ Accordingly, opponents of the DTA would argue that any reliance by the DTA's supporters on the

^{203.} California Bankers Ass'n v. Shultz, 416 U.S. 21, 26-27 (1974).

^{204.} Id. at 25.

^{205.} Id. at 52, 77.

^{206.} Id. at 52-54.

^{207.} Id. at 50.

^{208.} California Bankers Ass'n, 416 U.S. at 77.

^{209.} Id. at 50 n.22.

^{210.} Id. at 52-54.

^{211.} Id. at 49 n.21.

Shultz Court's finding of no Fifth Amendment (takings) violation is misplaced.²¹²

In a dissenting opinion in Shultz, 213 Justice Douglas compared the Act to a hypothetical law requiring telephone companies "to record and retain all telephone calls and make them available to any federal agency on request." Justice Douglas had no trouble concluding that such a law would violate the Fourth Amendment. Believing the Bank Secrecy Act sufficiently analogous to his hypothetical, Douglas argued that the Act should be struck down. 216

b. The Takings Question: Fifth Amendment Issues

Several U.S. Supreme Court decisions provide an overview of the Fifth Amendment issues applicable to the DTA debate, which are beyond the peripheral discussion provided in Shultz.²¹⁷ In Loretto v. Teleprompter Manhattan CATV Corp.,²¹⁸ a New York law required landlords to allow the installation of cable television on their premises without any form of government compensation.²¹⁹ Holding that the New York law constituted a regulatory taking,²²⁰ the U.S. Supreme Court established the principle that a regulatory law amounting to any form of permanent physical occupation was a per se taking requiring compensation.²²¹ The Court further stressed that this was true no matter how strong the government's countervailing interest.²²²

Exactly what constitutes a permanent physical occupation under the *Loretto* test is uncertain.²²³ In *Loretto*, the

^{212.} See discussion infra part IV.D.

^{213.} California Bankers Ass'n, 416 U.S. at 79-91 (Douglas, J., dissenting).

^{214.} Id. (Douglas, J., dissenting).

^{215.} Id. at 89-90 (Douglas, J. dissenting).

^{216.} Id. at 90-91 (Douglas, J., dissenting).

^{217.} See infra notes 218-41 and accompanying text.

^{218. 458} U.S. 419 (1982).

^{219.} Id. at 420.

^{220.} See id. at 432, 441.

^{221.} Id. at 432.

^{222.} Id. at 434-35.

^{223.} See Nathaniel S. Lawrence, Property Rights: Are There Any Left?, in REGULATORY TAKING: THE LIMIT OF LAND USE CONTROLS, 203, 203-04 (G. Richard Hill ed., 1990). Historically (prior to the permanent physical occupation test announced in Loretto), the Court viewed alleged takings fitting into one of two categories: (1) harm prevention, which was never a taking, and (2) benefit acquisition, which was always a taking. See Mugler v. Kansas, 123 U.S. 623, 668-69 (1887).

Court narrowly characterized requiring fixed structures on real property as an acquisition amounting to permanent physical occupation.²²⁴ However, the Court has since expanded the notion of permanent physical occupation.²²⁵

In Nollan v. California Coastal Commission, ²²⁶ the Court found that conditioning the issuance of a building permit on the owners' granting a public easement amounted to a permanent physical occupation. ²²⁷ The Court emphasized that although no single individual could stay on such an easement for long, the fact that the property might continually have members of the public on it constituted a per se physical occupation amounting to a taking. ²²⁸

Nevertheless, the Court indicated that a permanent physical occupation of the sort found in *Nollan* might *not* require compensation if the condition furthers the same governmental interest advanced for prohibiting the use itself.²²⁹ Under the *Nollan* facts, the Court did not find a sufficiently direct nexus between the Nollans' building plans and the need for public access to justify an uncompensated taking.²³⁰

When the government institutes a regulation not involving a permanent physical occupation, the Court applies a two-prong test developed in $Agins\ v.\ City\ of\ Tiburon^{231}$ to de-

^{224.} Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 437 (1982).

^{225.} See discussion infra accompanying notes 226-30. But see FCC v. Florida Power Corp., 480 U.S. 245 (1987). In Florida Power, the U.S. Supreme Court overruled a lower court finding of a per se Loretto occupation. Id. at 250. Specifically, the Court found that a decision by the FCC to lower the rates utilities charged cable television stations for running cables on utility company poles was not a taking, since nothing prevented the utilities from excluding the cable companies from use of the poles entirely. Id. at 251. Thus, the absence of required acquiescence defeated the utilities claims. Id. at 252.

^{226. 483} U.S. 825 (1987).

^{227.} See Id. at 832. Nollan involved a couple who wished to rebuild their ocean front home. Id. at 827-28. The California Coastal Commission refused to issue the required permits unless the Nollans agreed to grant a public access easement across their property. Id. at 828. The California Court of Appeal upheld the easement requirement and the Nollans appealed to the U.S. Supreme Court. Id. at 830-31.

^{228.} Id. at 832.

^{229.} Id. at 836-38.

^{230.} See id. at 831-37. Moreover, the Nollan Court emphasized that the proposed easement was not required to protect the interests espoused by the State. Id. at 838-40.

^{231. 447} U.S. 255 (1980). In *Agins*, petitioner argued that a local zoning ordinance would effect a taking, since he could no longer use the property as contemplated when purchased. *Id.* at 260.

termine whether the regulation is a compensable taking. In order for a regulation that is not a permanent physical occupation to avoid categorization as a taking, the regulation: (1) must "substantially advance legitimate state interests," or (2) must not "den[y] an owner economically viable use of his land."

The government's interest in controlling crime and apprehending criminals has continually been recognized as significant, ²³³ but the deprivation of economic use is a less distinct issue. In determining whether an owner's property expectations are impaired, courts have analyzed, among other factors: (1) the past regulatory history of the property; ²³⁴ (2) whether existing uses were permitted to continue; ²³⁵ (3) the general power of the government to regulate; ²³⁶ and(4) the harshness of the local regulatory and legal climate. ²³⁷

Although interference with a landowner's "reasonable investment-backed expectations" can constitute a taking, ²³⁸ deprivation of property rights alone is insufficient to meet the "heavy burden" of establishing a regulatory taking. ²³⁹ Furthermore, the investment-backed expectations test has been interpreted very strictly. ²⁴⁰ Accordingly, in the absence of physical occupation, to successfully challenge a land-use reg-

^{232.} Id. at 260. The Court later expanded the notion of "economically viable use" to include profit. Williamson County Regional Planning Comm'n v. Hamilton Bank, 473 U.S. 172, 200 (1985) (noting that whether a regulation constitutes a taking depends in significant part on the regulation's effect on the private entities' "profit-backed expectations.").

^{233.} See, e.g., Atlantic Coast Line R.R. v. City of Goldsboro, 232 U.S. 548, 558, 562 (1914); Calhoun v. Massie, 253 U.S. 170, 175 (1920). Similar power has been recognized as applying to the Federal Government as a "necessary and proper" exercise of congressional power under the Commerce Clause. See, e.g., Perez v. United States, 402 U.S. 146 (1971).

^{234.} See Levy v. City of Cherry Hills Village, 666 F. Supp. 201, 203 (D. Colo. 1987).

^{235.} Macleod v. County of Santa Clara, 749 F.2d 541, 547 (9th Cir. 1984), cert. denied, 472 U.S. 1009 (1985).

^{236.} Pace Resources, Inc. v. Shrewsbury Township, 808 F.2d 1023, 1033 (3d Cir. 1987), cert. denied, 482 U.S. 906 (1987), reh'g denied, 483 U.S. 1040 (1987). 237. See Oceanic California, Inc. v. City of San Jose, 497 F. Supp. 962, 974 (N.D. Cal. 1980).

^{238.} Penn Central Transp. Co. v. City of New York, 438 U.S. 104, 123 (1978), reh'g denied, 482 U.S. 906 (1979).

^{239.} Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 493 (1987).

^{240.} See infra text accompanying note 241.

ulation as a regulatory taking, it now appears that a plaintiff must show both: "(1) it is not merely difficult, but impossible to make a profit on the land as restricted; and (2) the regulation does not serve a legitimate, general, and substantial public interest."²⁴¹

III. IDENTIFICATION OF THE PROBLEM

The enactment of Title III nearly thirty years ago was prompted by a desire to balance the legitimate needs of law enforcement with the privacy rights of individuals.242 As the Ninth Circuit Court of Appeals noted in United States v. Kalustian. 243 "[t]he restraint with which such authority was created reflects the legitimate fears with which a free society entertains the use of electronic surveillance."244 The ECPA amended Title III in an effort to maintain the balance between rapidly developing technology and the laws governing its use.²⁴⁵ In the eight years following the ECPA, technology continued its headlong advance, prompting Congress to pass the DTA in 1994.246 The congressional effort through the DTA "to make sure American law keeps pace . . . and is responsive to the special characteristics [of new technologiesl."247 raises important questions regarding the legality and method of such efforts.

Critics worry that the DTA goes too far in allowing law enforcement access to private conversations at the expense of privacy and property rights guaranteed by the Fourth and Fifth Amendments.²⁴⁸ These issues have yet to be addressed by the courts. Their resolution will have important implications regarding the ability for law to keep pace with and remain responsive to changes in technology.²⁴⁹ Moreover, the status of DTA's legality may well affect the process by which

^{241.} Lawrence, supra note 223, at 272.

^{242.} See supra text accompanying note 67.

^{243. 529} F.2d 585 (9th Cir. 1976).

^{244.} Id. at 588.

^{245.} See discussion supra part II.B.1.

^{246.} See discussion supra parts II.B.2, II.B.3, II.C.

^{247.} Leahy, supra note 97, at 1.

^{248.} See discussion infra parts IV.C-IV.D.

^{249.} See generally, Branscomb, supra note 5 (stating that the law will eventually become extinct if it does not adapt to the changing technological environment).

future attempts to reconcile societal needs with technological change are implemented. 250

IV. Analysis

A. Weighing the Alternatives: Resolving the Dichotomy Between Technological Development and the Resulting Obsolescence of Wiretap Law

Just as the rise in organized crime prompted Congress to pass Title III in 1968,²⁵¹ the 1990s are characterized by an impending rise in criminal use of sophisticated technology.²⁵² Says ABC News' Dave Marash: "[W]hen the FBI looks into the future, it sees trouble. It sees criminals like John Gotti becoming able to shield their incriminating conversation from surveillance and thereby becoming able to defeat law enforcement's best evidence."²⁵³

The potential for such criminal evasion is enhanced by technological advances hindering law enforcement's ability to exercise its right to intercept communications under Title III's strict guidelines.²⁵⁴ The resulting dichotomy could be ignored and Title III left untouched, gradually fading away as a curious relic of the days when law enforcement was allowed to conduct limited wiretaps to combat crime.²⁵⁵ Given the infeasibility of such an approach, two other options are available: Attempt to resolve the dilemma through legislation, or allow law enforcement and telephone carriers to reach their own, private solution.²⁵⁶

B. A Legislative Approach as the Proper Solution

1. The Failure of the FBI's Non-Legislative Approach

While "private discussions" regarding surveillance capability between the FBI and private telephone companies seem quite covert, novel, and perhaps even subversive of the democratic legal process, such closed-door discussions are nothing new.²⁵⁷ Indeed, the FBI and telephone companies seemed

^{250.} See infra part IV.C.

^{251.} See discussion supra part II.A.1.

^{252.} See infra text accompanying note 253.

^{253.} Nightline, supra note 112; see discussion supra part II.B.2.

^{254.} See discussion supra parts II.A.1.a, II.B.2.

^{255.} See discussion supra note 5.

^{256.} See discussion infra part IV.B.

^{257.} See supra text accompanying note 78.

predisposed to resolve the digital dilemma in this manner.²⁵⁸ Only the competitive realities of a non-monopolistic marketplace prevented the implementation of a non-legislative solution.²⁵⁹

Such a non-legislative approach would necessarily be short-term, only delaying and complicating inevitable public scrutiny of the digital wiretap dilemma. The issue of government monitoring of private conversations is too important to evade public discussion for long. Eventually any "cooperative agreement" would be exposed, likely with negative repercussions to the FBI's accessibility goals following the inevitable public outcry. As the 1994 House Report indicates, "[f]rom a public policy perspective, such (non-legislative) arrangements would have the disadvantage of being concluded without public knowledge or legislative oversight." Thus, a legislative solution should, far from being objectionable, be preferable to the covert alternative.

2. Past Amendments to Title III Set a Strong Precedent

To resolve any doubt that a legislative approach was the proper method by which to resolve the digital wiretap access question, one need look no further than the history of Title III generally.²⁶³ In 1970, Congress first amended Title III²⁶⁴ as a means of legislatively overturning a United States Court of Appeals judgment that carriers could not be required to assist law enforcement's wiretapping efforts.²⁶⁵ The Supreme Court in *United States v. New York Telephone Co.*,²⁶⁶ noted the Congressional amendment with approval, even while

^{258.} See discussion infra part II.B.4.a.

^{259.} See discussion infra part II.B.4.a.

^{260.} See supra text accompanying note 244.

^{261.} Albeit exaggerated examples, note the eventual public disclosure of Watergate and Iran-Contra. Once uncovered, one led to the resignation of a President, and the other to the effective end of aid to the Nicaraguan rebels. See, e.g., J. Anthony Lukas, Nightmare: The Underside of the Nixon Years (1988) (discussing the Nixon presidency, including Watergate); Bob Scheiffer & Gary P. Gates, The Acting President (1989) (providing a television reporter's view of the eight Reagan years, including the Iran-Contra scandal).

^{262. 1994} HOUSE REPORT, supra note 6, at 14.

^{263.} See discussion supra part II.A.

^{264.} See discussion supra part II.A.2.

^{265.} See United States v. New York Tel. Co., 434 U.S. 159, 177 n.25 (1977).

^{266. 434} U.S. 159 (1977).

questioning whether the aim of the amendment was not already contained within the original Title III wording.²⁶⁷

Congress' continuing dedication to assure that Title III remained responsive to modern technological realities was further reflected in the comprehensive, if short-sighted, 1986 ECPA amendment.²⁶⁸ The organization of a task force in 1987 to further evaluate possible changes to Title III demonstrates that even after the ECPA was passed, Congress envisioned future legislative action sooner rather than later.²⁶⁹ The consistent nature of amendment throughout Title III's existence attests to Congress' desire and willingness to tackle the difficult questions posed by wiretap law directly and in a public manner, through legislative rather than private action.

3. Free and Open Debate: Drafting the DTA

While the wiretap reform effort culminating in the DTA was the object of strong criticism, the legislation that resulted was not formulated behind closed doors with one eye closed to justice and the legislative process.²⁷⁰ Throughout its gestation, the legislation was subject to close scrutiny; the product of over two years of vigorous, open debate and compromise among a variety of stake holders with often conflicting interests.²⁷¹

Although not everyone, and perhaps no one, is completely satisfied in all respects with the DTA, this is indicative of agreements reached by consensus rather than imposed by force. All the participants in the Digital Telephony debate had their say and received part of what they wanted.²⁷² The FBI obtained its primary goal of wiretap access to digital telephone transmissions;²⁷³ the EFF successfully carved cyber-

^{267.} Id. at 183.

^{268.} See discussion supra part II.B.1.

^{269.} See discussion supra part II.B.3.

^{270.} See Memorandum from Don Edwards, House Judiciary Committee, to Persons Interested in the Digital Telephony "Wiretap" Bill (Oct. 7, 1994) (on file with author) (discussing how the legislative process helps insure public access to the debate).

^{271.} See supra note 167 and accompanying text. But see supra notes 165, 195-96 and accompanying text (discussing telecommunications industry concerns that the DTA is unfair and not the product of consensus).

^{272.} But see supra note 272.

^{273.} See supra text accompanying note 128.

space²⁷⁴ out of the Act by obtaining an exception for computer networks, the Internet, and all other information services;²⁷⁵ and the telephone industry obtained an important guarantee that the Act would never be imposed so as to limit technological development.²⁷⁶

Far from a harbinger of lost freedom emerging under the guise of "technological advancement," the DTA was drafted in a fashion that maintains and perhaps enhances an already legally cognizable status quo.²⁷⁷

C. The Digital Telephony Act Addresses the Major Privacy Challenges of its Critics

Simply put, the privacy concerns of the DTA's opponents are unfounded given the careful, narrow statutory construction of the Act. The DTA applies the balance struck by prior wiretap legislation to current technological realities, without imposing undue restrictions on new technological development.²⁷⁸ While concern regarding law enforcement utilization of private, corporate premises in carrying out law enforcement duties is legitimate, any legal challenge to the DTA on this basis is without merit.²⁷⁹

In New York Telephone, the Court addressed the telephone company's argument that "it is extraordinary to expect citizens to directly involve themselves in the law enforcement process." In rejecting the company's claim, the Court pointed out that it was the company's own property that was being used for unlawful purposes. For further support, the Court cited an opinion by Justice Cardozo maintaining that any citizen may be called on to enforce the justice of the state. 282

^{274. &}quot;Cyberspace" can be defined as "the burgeoning global, electronic-information infrastructure of the present." Dan Burk, *Patents in Cyberspace*, 68 Tul. L. Rev. 1, 3 n.9 (1993).

^{275.} See supra text accompanying notes 176-77.

^{276.} See supra text accompanying note 186.

^{277.} See 1994 HOUSE REPORT, supra note 6 at 17 (explaining that the new bill includes enhanced privacy protections while not expanding the authority to conduct wiretaps).

^{278.} See discussion supra part II.C.3.

^{279.} See infra text accompanying notes 281-87.

^{280.} United States v. New York Tel. Co., 434 U.S. 159, 175 n.24 (1977).

^{281.} Id. at 174.

^{282.} Id. at 175 n.24. See supra text accompanying note 94.

The U.S. Supreme Court's decision in Shultz²⁸³ lays to rest any Fourth Amendment argument against the DTA. The Bank Secrecy Act at issue in that case was in many ways analogous to the Digital Telephony Act. The Court held that imposing regulatory monitoring requirements on companies engaged in businesses susceptible to criminal use, did not violate Fourth Amendment principles so long as established court procedures were followed when the government sought to obtain the monitored material.²⁸⁴

Justice Douglas' dissent in *Shultz*, expressing concern that some day the *Shultz* decision might lead the government to require that telephone companies record and turn over all conversations to the government,²⁸⁵ is misplaced when applied to the DTA. Unlike Douglas' hypothetical, under the DTA, no recording can occur until a judicial wiretap order is approved.²⁸⁶ Moreover, to assure that law enforcement may only access digital communications for which a warrant has been issued, the DTA requires that the manual process of tapping into such communications be performed by carrier personnel rather than by law enforcement.²⁸⁷

Thus, the privacy objections to the DTA appear unavailing. Rather than provide the government greater power or individuals less freedom, the DTA merely enables law enforcement agencies to fulfill the roles they were established to perform, within the current high-tech framework of our society. While an astute eye must be maintained to protect against the "slippery slope" of new governmental powers being granted at the expense of cherished liberties, on the privacy side, the DTA provides an example of how changes to our laws can and should be made in relation to rapid technological development.

^{283.} California Bankers Ass'n v. Shultz, 416 U.S. 21 (1974). See discussion supra part II.C.4.a.

^{284. 416} U.S. at 53-54, 77.

^{285.} Id. at 89-90 (Douglas, J., dissenting).

^{286. 18} U.S.C. § 2604 (1994).

^{287.} Id.

^{288.} See 1994 HOUSE REPORT, supra note 6, at 22-23 (explaining that the DTA aims to preserve the status quo, rather than increase or diminish law enforcement power).

D. To Take or Not to Take: The Real Issue

Accepting that no privacy rights are violated by the DTA, the real issue becomes whether the DTA's system design requirements amount to a governmental taking that must be compensated under the Fifth Amendment.²⁸⁹ The requirement that carriers immediately install equipment enabling law enforcement to conduct wiretaps²⁹⁰ clearly falls under the per se taking criteria established in *Loretto*.²⁹¹ Such a requirement constitutes a permanent physical occupation since by its very nature it forces carriers to install fixed physical equipment on their property.²⁹² Yet, even the DTA's critics must concede that this is an irrelevant basis for overturning the Act since the government has agreed to fully compensate carriers for any such equipment.²⁹³

A more difficult question is presented when carriers upgrade their equipment in the future. Under the DTA's terms, the carrier itself must absorb any additional cost of making such equipment wiretap accessible.²⁹⁴ Whether this requirement amounts to a taking under the Fifth Amendment depends on how the issue is framed. For instance, the government would likely argue that no "permanent physical occupation" takes place, since the government is not forcing the carriers to upgrade their equipment. In other words, the carriers voluntarily bring the requirement upon themselves by deciding to upgrade in the first place.

FCC v. Florida Power Corp.²⁹⁵ offers some support for this argument. In Florida Power, the utility claimed the FCC's lowering of the rental rates paid by cable companies to rent Florida Power's poles amounted to a physical occupation of its property.²⁹⁶ The U.S. Supreme Court held that where there is no "required acquiescence" to a regulation, there can be no per se taking.²⁹⁷ Since Florida Power could decide not

^{289.} See discussion supra part II.C.4.b.

^{290.} See supra text accompanying note 189.

^{291.} See supra text accompanying notes 220-22.

^{292.} See supra note 224 and accompanying text. 293. See supra text accompanying note 186.

^{294.} At least so far as the new equipment is installed for the carrier's own business purposes and not due to *unreasonable* capacity increases requested by law enforcement. Supra text accompanying notes 190-91.

^{295. 480} U.S. 245 (1987). See also discussion supra note 225.

^{296. 480} U.S. at 252.

^{297.} Id.

to rent its poles at all rather than accept the lower rental set by the FCC, the element of required acquiescence was not present.²⁹⁸

In case of the DTA, the government would similarly argue that since the telephone companies could decide not to upgrade their equipment at all rather than comply with the regulation, no forced physical occupation occurs. The telephone carriers could respond that, unlike renting power poles, upgrading telephone equipment eventually becomes a competitive, if not technological necessity. Thus, the carriers would argue that they will eventually be forced either to stop business or upgrade and pay to assure wiretap accessibility. Under this scenario, the DTA's requirement could be viewed as required acquiescence, invoking the per se taking doctrine.

The U.S Supreme Court's holding in Nollan v. California Coastal Commission²⁹⁹ could also be used by the carriers to counter any reliance by the government on Florida Power. In Nollan, a property owner was not permitted to build unless he provided public access along his beach front.³⁰⁰ Since the government conditioned the building permit upon the grant of access, it could be argued that required acquiescence was not present. The owner could have avoided the regulation by deciding not to build at all. Thus, if the reasoning in Florida Power applied in Nollan, the Court should have concluded that no per se taking existed.

Instead, the *Nollan* Court relied on the theory that since a member of the public could at all times be on the Nollan's property due to the access requirement, the requirement amounted to a permanent physical occupation.³⁰¹ Telephone carriers might similarly argue that since, theoretically, law enforcement can at all times access the carriers' equipment,³⁰² such access amounts to a permanent occupation requiring compensation.

If the carriers are unsuccessful in establishing a per se *Loretto* taking, they could still invoke the *Agins* analysis, ³⁰³

^{298.} Id.

^{299. 483} U.S. 825 (1987). See also discussion supra notes 226-30 and accompanying text.

^{300.} Id. at 828-30.

^{301.} Id. at 832.

^{302.} Provided, of course, they had secured the appropriate warrants. 18 U.S.C. § 2607 (1994).

^{303.} Supra text accompanying note 232.

and thus attempt to establish a regulatory taking without showing permanent physical occupation. However, non-physical occupation regulatory takings are extremely difficult to establish, 304 and the telephone industry would be unlikely to satisfy both prongs of the Agins test. The DTA would probably avoid characterization as a taking under the first prong of Agins since it substantially advances the prevention of crime carried out through interstate commerce. 305

Even if the DTA's requirements were deemed not to advance a substantial state interest, telephone carriers would still have difficulty demonstrating that the DTA denies them viable economic use—Agins' second prong. This is especially true in light of the DTA's requirement that carriers must only make future equipment wiretap compatible if the cost of doing so is reasonable. In sum, the Agins balancing test firmly favors a finding that no taking occurs under the DTA.

It therefore appears that if the carriers are to succeed in challenging the DTA as a taking, they must convince the court that the DTA requirements amount to a permanent physical occupation. As noted above, both sides have strong arguments on this issue. Nevertheless, the issue would not be ripe for adjudication until future upgrades covered by the DTA begin taking place. Congress should take advantage of this window to resolve the issue before adjudication, mindful that, if a taking were found it would not necessarily invalidate the DTA, but it could lessen the Act's effectiveness.

^{304.} See supra text accompanying notes 233-41.

^{305.} See supra note 233 and accompanying text.

^{306.} Supra note 232 and accompanying text.

^{307.} Supra note 191 and accompanying text.

^{308.} Courts generally refuse to decide Fifth Amendment taking cases where there is only the alleged possibility of a future taking occurring, especially where the harm that may be suffered is uncertain. This is based on the concept of ripeness. See, e.g., Laird v. Tatum, 408 U.S. 1 (1972) (discussing ripeness doctrine).

^{309.} At least so long as the government agreed to compensate the carriers for the cost of the physical occupation (i.e. the cost of making equipment wiretap accessible).

V. PROPOSAL

As we enter the era of the "information superhighway,"³¹⁰ the current controversy over digital wiretapping is but the latest struggle in the battle to determine the legal standards of cyberspace. The deluge of new technology comprising the information age has in many ways outstripped laws formulated at a time when the widespread digital technologies now available seemed no closer than the latest science fiction and espionage thrillers.³¹¹ The manner in which high-tech legal debates, such as that surrounding digital wiretapping, are resolved, will impact how legal standards arising in the information age will be established. In the specific context of the DTA, the following two considerations should be applied.

First, efforts to resolve broad ranging legal issues quietly and behind closed doors, as exemplified by the FBI's initial attempt to reform wiretap law, 312 are unacceptable and should be prohibited by law. Although such privately imposed standards often appear more cost-effective and less burdensome to the parties directly involved, they would lack enforceability and would rightly be perceived as illegitimate. As the DTA experience demonstrates, public debate and compromise is necessary if laws affecting technology and society are to adequately balance competing interests. 313

The second consideration regards Congress' approach towards the DTA's opponents concerns. As previously noted, it appears that the only legally questionable aspect of the DTA's validity is whether some portions of the Act constitute a Fifth Amendment taking. Rather than take a "see you in court" attitude, Congress should act in consultation with the major interested parties to resolve the uncertainty surrounding this issue. Through such a proactive stance, Congress can engender a cooperative atmosphere that will not only lead to easier

^{310.} Information superhighways have been described as "computer networks formed by a sets of computers linked together by means of communication media." Burk, *supra* note 275, at 7.

^{311.} See discussion supra parts II.B.2., II.B.3. See generally Branscomb, supra note 5.

^{312.} See discussion infra part II.B.4.b.

^{313.} Compare the privacy protections encompassed by the DTA with what would have resulted if the FBI's covert attempt, or even its ram-rod legislative initiative, had been successful. See supra parts II.B.4, II.B.C-C.3.

^{314.} See discussion supra part IV.D.

implementation of the DTA, but also aid in the drafting of future legislation addressing similar technological issues.

Accordingly, Congress should accept that the concerns of the telecommunications industry regarding future costs of compliance are legitimate. Rather than dismissing future costs as inevitably *de minimis*,³¹⁵ a commission should be established to evaluate telephone carriers concerns. In the process, a least-cost solution, possibly in the form of a federal "communications tax" imposed on consumers' telephone calls, could be arranged.

A tax would resolve the concerns of the parties without the need to adjudicate the takings issue. Congress would avoid the need to appropriate additional funds, and the telephone industry would avoid expenditures serving no legitimate business function. Although apparently not proposed during the DTA debate, such a tax is not an unreasonable proposal. Properly administered, the tax could result in significant savings to telecommunication carriers and consumers alike.

Such a tax would have several additional attributes. First, without a tax it is likely that carriers would merely pass any additional system design costs onto customers in the form of higher rates. At least with a tax, customers will know that any rate increase is unrelated to the DTA, rather than having to rely on their carrier's word.

Second, if the tax proceeds were distributed by the government on an ad hoc basis determined through consultation with law enforcement, the need to guarantee that all systems across the board are wiretap accessible might decrease. For example, law enforcement may decide some carrier central offices in rural areas need not maintain wiretap accessible facilities, thereby decreasing the expense of the entire program.

Finally, a tax would assure an even playing field among telecommunication carriers. If costs of complying with the DTA are indeed as substantial as the telecommunications industry fears, 316 smaller carriers will not face a competitive disadvantage when upgrading their systems.

^{315.} See supra text accompanying notes 193-97.

^{316.} See supra note 195 and accompanying text.

VI. CONCLUSION

Over two-hundred years of American jurisprudence have borne-out the truth that the fundamental concepts embodied in the Constitution are in many ways impervious to time and technological change. The concepts of liberty and freedom survived the industrial revolution, and they can survive the information revolution as well. Just as technological innovation is a dynamic process, so is the legal balance between public and private liberties.

However, the adaptation of law and technology must be conducted within the established legal framework. By passing through this framework, including substantial debate and revision, the DTA emerged as legislation addressing the major concerns of stakeholders and meeting the constitutional tests of the law. The balancing of interests incorporated in the DTA offers a template for how law can be reconciled with modern technology in the information age.

Andrew R. Hull