

STRETCH BEFORE EXERCISE: THE FCC'S OVERBROAD INTERPRETATION OF CALEA AND THE D.C. CIRCUIT'S DEFERENTIAL REVIEW

By Kamilla Mamedova

As communications technology evolved in the late twentieth century, Congress had to balance two competing goals: providing law enforcement with sufficient access to telecommunications for surveillance purposes while preserving individual privacy.¹ The advent of new technologies, including the internet in the late twentieth century, introduced yet another goal: avoiding a potentially detrimental restriction on information service providers that could hinder innovation beneficial to society.² This third goal promises to rise in importance in the twenty-first century. Nonetheless, the Federal Communications Commission (FCC) has interpreted the Communications Assistance for Law Enforcement Act (CALEA)³ in a way that impedes the continued progress of broadband providers by including them under the Act's definition of telecommunications carriers.⁴

Fitness experts often recommend that we stretch before exercising to avoid serious physical injury. Ironically, the FCC applied this advice to its interpretation of CALEA⁵ and in 2005 ordered broadband and Voice over Internet Protocol ("VoIP") providers to comply with the Act by May

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1. See H.R. REP. NO. 103-827, 104th Cong., at 13 (1994).

2. See *id.* at 14.

3. Communications Assistance for Law Enforcement Act, Pub. L. No. 103-414, 108 Stat. 4279 (codified at 47 U.S.C. §§ 1001-1021 (1994)).

4. The FCC has itself specifically excluded information service providers from the definition of a telecommunications carrier in its interpretation of the Telecommunications Act of 1996. *Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs.*, 125 S. Ct. 2688, 2695 (2005). Since VoIP is provided through broadband, the FCC would not be able to assert its authority or control over VoIP communications if they were to remain classified as information services under CALEA. No administrative body at this time is specifically entrusted with regulation of internet communications.

5. Interestingly, the FCC commissioner Michael J. Copps himself admitted that "The statute is undeniably *stretched* to recognize new service technologies and pushed very hard to accommodate new and emerging telecommunications platforms." *In re Commc'ns Assistance for Law Enforcement Act & Broadband Access & Servs.*, 20 F.C.C.R. 14989, 15042 (2005) (Copps, Comm'r., concurring) (emphasis added). Furthermore, Commissioner Kathleen Q. Abernathy stated that, "Our decision today must not, however, lead to complacency regarding the need for legislative action clarifying CALEA's reach," recognizing that the FCC's actions stand without support from the statute. *Id.* at 15041 (Abernathy, Comm'r., concurring).

2007.⁶ The American Council on Education (“ACE”), supported by numerous other organizations, filed a petition for review with the D.C. Circuit challenging the FCC’s determination that CALEA applies to information service providers, as Congress had specifically excluded “information services” from compliance with CALEA when drafting the statute.⁷ Applying the deferential *Chevron*⁸ standard, the D.C. Circuit affirmed the order. The court found that by inserting the “substantial replacement provision” (“SRP”) into CALEA’s definition of a “telecommunications carrier,” Congress left that term ambiguous, thereby instilling the FCC with the authority to reasonably interpret the statute if and when it was called on to do so.⁹

This Note discusses the FCC’s order to include broadband providers under the substantial replacement provision of CALEA’s definition of a telecommunications carrier and the D.C. Circuit’s subsequent deferential review. The Note analyzes problems inherent in the application of CALEA to VoIP, including the threat to the ultimate balance that Congress sought to achieve through its surveillance regulatory legislation, threats to privacy and innovation, and exorbitant costs that will be passed on to consumers while telecommunications carriers attempt to comply with the Act.

Part I provides technical background on the Public Switched Telephone Network (“PSTN”) and VoIP as well as historical and statutory background on the FCC’s order. Part II discusses the FCC’s order and the D.C. Circuit’s subsequent review. Part III argues that due to the architectural differences between the PSTN and VoIP, and because the legislative history of CALEA does not support the FCC’s interpretation, the FCC’s order and the D.C. Circuit’s decision affirming it were not properly reached. This Note concludes that although law enforcement deserves all necessary and appropriate access to voice communications, the FCC cannot impose

6. *See id.* ¶ 3.

7. *See* Corrected Petition for Rehearing En Banc, *Am. Council on Educ. v. FCC*, 451 F.3d 226 (D.C. Cir. 2005) (No. 05-1404) [hereinafter *Petition for Rehearing*]. American Council on Education (“ACE”) is a coordinating body for all of the nation’s higher education institutions. (For more information, please visit www.acenet.edu). ACE filed the petition with the D.C. Circuit supported by groups such as the Electronic Frontier Foundation (EFF), American Civil Liberties Union (ACLU), and the Center for Technology and Democracy.

8. *See Chevron v. Nat’l Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984) (creating a judicial standard of review for administrative agency’s legislative interpretation). For a general discussion of the *Chevron* standard and its application in subsequent cases, see Susan K. Goplen, *Judicial Deference to Administrative Agencies’ Legal Interpretations After Lechmere, Inc. v. NLRB*, 68 WASH. L. REV. 207 (1993).

9. *ACE*, 451 F.3d at 231.

this requirement by stretching CALEA so far as to invent distinctions that Congress never intended to include in the legislation. Most of the problems created by the FCC's order can only be alleviated by appropriate legislative amendment and provisions counteracting the negative implications of the decision.

I. BACKGROUND

A. Technical Background: PSTN and VoIP

The PSTN and VoIP are two very different systems. The architectural differences make implementation of surveillance on VoIP substantially more difficult than on the PSTN. The PSTN is a circuit-switched network.¹⁰ It operates by establishing a circuit between two users for the duration of the call, such that if neither user is speaking, the communication line remains open.¹¹ In the early days of telephony, an operator was required to route calls between two users by completing the circuit.¹² Eventually, automatic switching systems replaced the operator and with that the need for human presence in the middle when a call takes place between two users.¹³

Thus, as illustrated in Figure 1 below, most of the intelligence in the PSTN is at the center of the communication. This is why wiretapping regular phone lines is as easy as finding the copper wires that comprise them.¹⁴ Because the PSTN is centralized and geographically dependent, however, any change to the way it operates must be introduced into its infrastructure which is extremely difficult to accomplish.¹⁵ The architecture of the PSTN is probably the most important reason why the telephony network has not changed very much since its inception in the nineteenth century.¹⁶

10. For a more thorough discussion on how the PSTN operates, see Susan P. Crawford, *The Ambulance, the Squad Car, & the Internet*, 21 BERKELEY TECH. L.J. 873, 891 (2006).

11. *Id.* at 889.

12. *Id.*

13. *Id.*

14. *ACE*, 451 F.3d at 227.

15. Crawford, *supra* note 10, at 892; see also Susan Landau, *Digital Age Communications Law Reform: National Security on the Line*, 4 J. TELECOMM. & HIGH TECH. L. 409, 427 (2006).

16. See Crawford, *supra* note 10, at 892; Landau *supra* note 15, at 427.

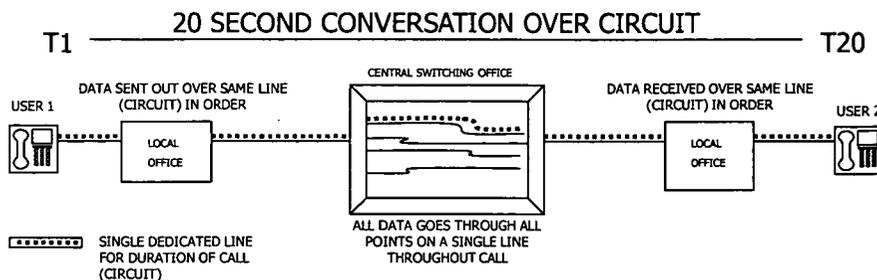


Figure 1: PSTN – 20 Second Conversation Between User 1 and User 2¹⁷

Unlike the PSTN, the internet is a packet-switched network.¹⁸ As illustrated in Figures 2 and 3 below, VoIP operates by breaking up information into packets that are subsequently sent over available paths.¹⁹ A single message can be broken up into any number of packets, sent over different available paths, and eventually put back together at the other end. In fact, multiple packets can be sent over the same path without interfering with each other.²⁰ Furthermore, in a packet switched network, there is no need to occupy the same path for the entire duration of a communication.²¹

17. This diagram is based on text and figures from ANDREW S. TANENBAUM, *COMPUTER NETWORKS* 118-51 (4th ed. 2003).

18. Crawford, *supra* note 10, at 891.

19. See Crawford *supra* note 10, at 889; see also Landau, *supra* note 15, at 427; STEVEN BELLOVIN, ET AL., SECURITY IMPLICATIONS OF APPLYING THE COMMUNICATIONS ASSISTANCE FOR LAW ENFORCEMENT ACT TO VOICE OVER IP 2-5 (2006), available at <http://www.ita.org/news/docs/CALEAVOIPreport.pdf>.

20. See Crawford, *supra* note 10, at 891.

21. *Id.*

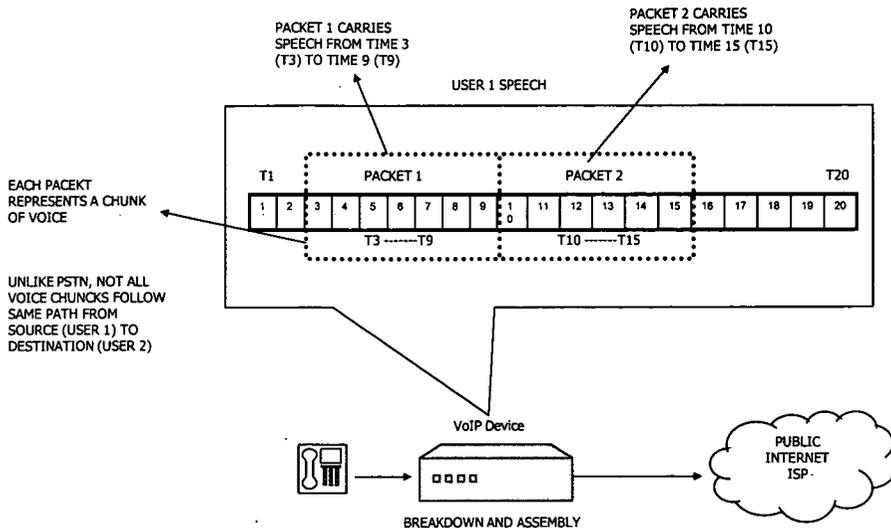


Figure 2: VoIP - 20 Second Conversation between User 1 and User 2²²

In contrast to the PSTN, the intelligence required to administer VoIP communication is at the sending and receiving ends.²³ The internet, unlike the PSTN, has evolved substantially since its inception because its architecture allows for individual control and innovation at the end points and there are practically no barriers to access.²⁴ Thus, in effect, what makes surveillance problematic is exactly what makes the internet so user-friendly—easy individual access to the infrastructure. As explained in Part III, these architectural differences make application of CALEA to VoIP extremely problematic. The following Section provides the history of CALEA and the tension created by the statute's substantial replacement provision in today's technologically advanced world of communication.

22. This diagram is based on text and figures from ANDREW S. TANENBAUM, *COMPUTER NETWORKS* 343-73, 685-69 (4th ed. 2003).

23. Landau, *supra* note 15, at 427.

24. *Id.*

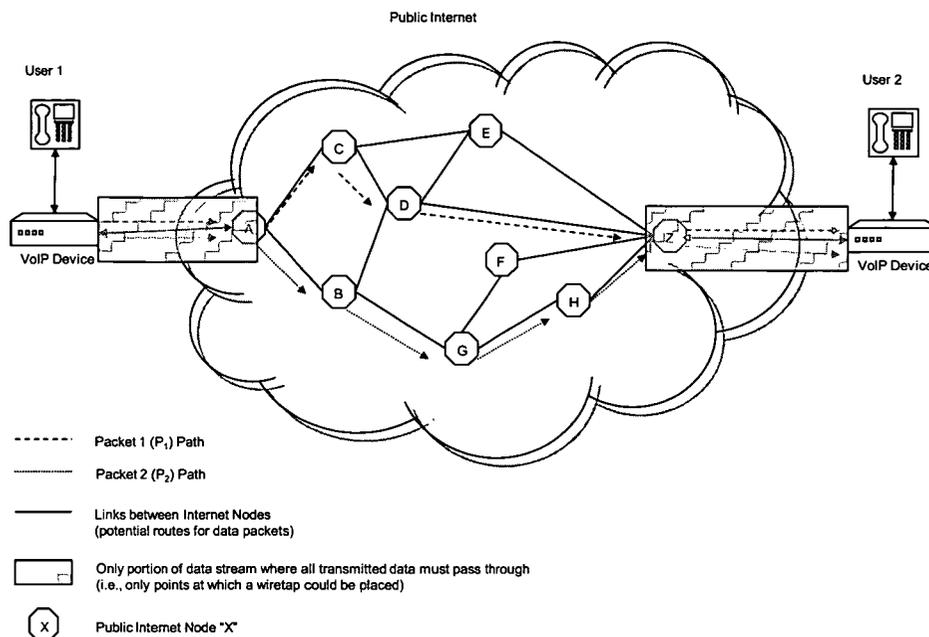


Figure 3: How the Packet From Figure 2 Will Travel From User 1 to User 2²⁵

B. Statutory Background

1. History of the Act

Congress has long attempted to find a balance between law enforcement's need to conduct authorized surveillance and the public's need for privacy.²⁶ In 1968, Congress passed Title III of the Omnibus Crime Control and Safe Streets Act.²⁷ The purpose behind Title III was to allow authorized surveillance while preserving the public's privacy.²⁸ In 1986, Title III was amended by the Electronic Communications Privacy Act (ECPA),²⁹ which includes three acts that broaden the application of the

25. This diagram is based on text and figures from ANDREW S. TANENBAUM, *COMPUTER NETWORKS* 343-473 (4th ed. 2003).

26. See H.R. REP. NO. 103-827, 104th Cong., at 13 (1994).

27. See *id.*; Omnibus Crime Control & Safe Street Act, Pub. L. No. 90-351, 82 Stat. 197 (codified at 42 U.S.C. § 3711 (1968)). For a brief discussion of Title III, see DANIEL J. SOLOVE, MARC ROTENBERG & PAUL M. SCHWARTZ, *INFORMATION PRIVACY LAW* 263-72 (2d ed. 2006).

28. H.R. REP. NO. 103-827, 104th Cong., at 13 (1994); SOLOVE ET AL., *supra* note 27, at 265.

29. Pub. L. 99-508, 100 Stat. 1848 (codified at 18 U.S.C. §§ 2510-2522 (1986)).

federal electronic surveillance laws.³⁰ ECPA extended law enforcement authority and privacy protection to newly developed technologies, such as e-mail and wireless telephones.³¹

Technology and telecommunications rapidly evolved in the 1990s, especially with the growth of the internet. In 1990, Senator Patrick Leahy, then chairman of the Senate Judiciary Committee, assembled a Privacy and Technology Task Force.³² Its mission was to assess the current state of the law as it relates to telecommunications and provide Congress with the requisite amount of information on what changes were required at the time.³³ The Task Force issued its final report in 1991, in which it concluded that ECPA protections must be extended to new forms of wireless data communications and cordless phones.³⁴ The Task Force also found that new legislation was necessary to continue to preserve the balance sought by previous acts.³⁵ In addition, it suggested that a third concern must be added to this balance: the continued ability of the telecommunications industry to evolve and develop the revolutionizing technology that benefits our society.³⁶

In 1994, CALEA was passed to help define common carriers³⁷ compliance responsibilities while preserving the three key policies:

30. H.R. REP. NO. 103-827, at 13; SOLOVE ET AL., *supra* note 27, at 265. ECPA includes the Wiretap Act, the Stored Communications Act, and the Pen Register Act. Each is codified under different sections of Title 18 and applies to different types of communication. *Id.* The Wiretap Act applies to interception of communications in flight and provides the most stringent protection for communications because it requires the highest level of suspicion out of the three acts to obtain a court order. SOLOVE ET AL., *supra* note 27, at 265. The Stored Communications Act applies to communications stored in electronic storage and is somewhat less demanding on law enforcement because it requires a slightly lower level of suspicion than the Wiretap Act to obtain a court order. *Id.* Finally, the Pen Register Act applies to installation of pen registers and trap and trace devices and is the least stringent on law enforcement out of the three acts because it requires the lowest level of suspicion for a court order. *Id.*

31. *See* H.R. REP. NO. 103-827. It is worth noting that most of these laws were prompted by advances in technology that posed serious threats to privacy because they made authorized as well as unauthorized surveillance easier than before.

32. *Id.*

33. *Id.*

34. *Id.* at 15.

35. *See supra* text accompanying note 1.

36. H.R. REP. NO. 103-827, at 15.

37. CALEA defines "common carrier" or "carrier" as:

[A]ny person engaged as a common carrier for hire, in interstate or foreign communication by wire or radio or in interstate or foreign radio transmission of energy, except where reference is made to common carriers not subject to this Act; but a person engaged in radio broadcasting

(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.*³⁸

As noted earlier, at the time CALEA was enacted, wiretapping phone lines was as easy as finding the copper wires that comprised them. Due to emerging technology in the late 1990's and early twenty-first century, however, surveillance of certain communications became problematic or impossible in some cases.³⁹ Although Congress never manifested an intention to amend CALEA, the FCC interpreted the statute in a way that undermines at least two of the above-mentioned policies while attempting to allow law enforcement surveillance access to new technologies.

2. *Irreconcilable Tension*

CALEA was not originally intended to apply to broadband and VoIP providers. In fact, the Act specifically excluded information services from its definition of telecommunications carriers who were required to comply with CALEA. CALEA's definition of a telecommunications carrier is straightforward:

a person or entity engaged in the transmission or switching of wire or electronic communications as a common carrier for hire; and includes a person or entity engaged in providing wire or electronic communications switching or transmission service to the extent that the Commission finds that such service is a replacement for a substantial portion of the local telephone exchange service and that it is in the public interest to deem such a person or entity to be a telecommunications carrier for purposes of this subchapter; but *does not include persons or entities insofar as they are engaged in providing information services.*⁴⁰

The language stating that an entity is "a replacement for a substantial portion of the local telephone exchange service and that it is in the public in-

shall not, insofar as such person is so engaged, be deemed a common carrier.

47 U.S.C. § 153(10) (1996). CALEA adopts the definition of a common carrier from the Communications Act of 1934, Pub. L. No. 416, 48 Stat. 1064 (codified as amended by the Telecommunications Act of 1996, 47 U.S.C. § 151). *See* H.R. REP. NO. 103-827, at 21.

38. H.R. REP. NO. 103-827, at 15 (emphasis added).

39. *Am. Council on Educ. v. FCC*, 451 F.3d 226, 227-28 (D.C. Cir. 2005).

40. 47 U.S.C. § 1001(8)(A)-(C)(i) (emphasis added).

terest to deem such a person or entity to be a telecommunications carrier" is commonly referred to as the "substantial replacement provision" ("SRP").⁴¹

Since broadband and VoIP providers have started to substantially replace ordinary telephonic communications,⁴² merely finding copper wires no longer serves law enforcement objectives. The manner in which VoIP services are provided, however, is inextricably intertwined with broadband technology (i.e., information services). Consequently, because CALEA's definition of a telecommunications carrier expressly excludes information services, the substantial replacement provision creates an irreconcilable tension within CALEA: VoIP providers fall under both the SRP and the section excluding information services from compliance with the Act.

Part III elaborates on the statutory inconsistency of CALEA as it is applied to VoIP, and offers legislative history to buttress the assertion that Congress never intended for the Act to apply to broadband providers. The next Section discusses the FCC order itself and the D.C. Circuit's deferential review.

II. THE FCC ORDER AND THE D.C. CIRCUIT'S DEFERENTIAL REVIEW

A. The Order

In 2004, a number of federal law enforcement agencies, including the FBI and the Drug Enforcement Administration, filed a joint petition for expedited rulemaking with the FCC seeking an expansion of CALEA's

41. *ACE*, 451 F.3d at 228.

42. *See* Crawford, *supra* note 10, at 878 (discussing the recent growth of VoIP and wireless technology as the predominant method of telecommunication). "Telecommunications companies are losing local wireline (traditional) telephone customers to VoIP and wireless services at a rate of about 5% of their basic phone subscribers each year." *Id.* (citing Leslie Cauley, *BellSouth Likes To Go It Alone*, USA TODAY, Nov. 1, 2005, available at http://www.usatoday.com/tech/news/techpolicy/business/2005-10-31-bellsouth-mergers_x.htm).

These Baby Bell difficulties relate to the growth of VoIP usage in the U.S. Although the idea of offering voice services online is not new, the availability of broadband access and special VoIP equipment has made these services truly attractive to consumers. The uptick in VoIP usage began in 2002, when 50-employee Vonage Holdings Corp. offered a much cheaper internet-based voice service that worked through telephone-like handsets connected to adapters that could packetize voice. Consumers no longer needed to talk into their PCs.

Id. at 878.

definition of a telecommunications carrier to apply to interconnected broadband and VoIP providers.⁴³ The FCC immediately took action by issuing its Notice of Proposed Rulemaking and Declaratory Ruling in August of 2004.⁴⁴ After receiving numerous comments, holding hearings, and discussing its view of the state of the law, the FCC concluded that the SRP of CALEA's definition of a telecommunications carrier effectively encompassed interconnected broadband and VoIP providers.⁴⁵ As a result, the FCC reasoned, these providers must comply with CALEA.⁴⁶

In its subsequent order issued in August 2005, the FCC elaborated on its decision to treat broadband and VoIP providers as telecommunications carriers.⁴⁷ The FCC concluded that CALEA's definitions of a telecommunications carrier and an information service provider created three distinct categories of services: (1) pure information services, which were clearly outside of CALEA; (2) pure telecommunications, which were completely within CALEA; and (3) hybrid telecommunications-information services which partially fell within CALEA.⁴⁸ According to the FCC, interconnected broadband and VoIP providers are hybrid telecommunications-information services.⁴⁹

The FCC decided that broadband and VoIP providers are subject to CALEA only insofar as their services satisfy the three prongs of the SRP.⁵⁰ First, providers of both broadband and VoIP services must perform

43. *ACE*, 451 F.3d at 228-29; Crawford, *supra* note 10, at 886.

44. See Notice of Proposed Rulemaking and Declaratory Ruling, Commc'ns Assistance for Law Enforcement Act & Broadband Access & Services, 19 F.C.C.R. 15676 (Aug. 9, 2004) (No. 04-295).

45. *Id.* ¶ 1.

46. *Id.*

47. See *In re* Commc'ns Assistance for Law Enforcement Act & Broadband Access & Servs., 20 F.C.C.R. 14989, ¶¶ 9-37 (2005).

48. *ACE*, 451 F.3d at 229 (citing *In re* Commc'ns Assistance for Law Enforcement Act & Broadband Access & Servs., 20 F.C.C.R. 14989, ¶¶ 9-37 (2005)).

49. *Id.*; *In re* Commc'ns Assistance for Law Enforcement Act & Broadband Access & Servs., 20 F.C.C.R. 14989, ¶ 21 (2005).

We therefore understand the legislative history of CALEA to show that when a single service comprises an information service component and a telecommunications component, Congress intended CALEA to apply to the telecommunications component. It follows, therefore, that because Congress intended CALEA to cover the transmission of information services, it must have intended that CALEA would continue to reach such services even when they are provided by new technologies.

Id.

50. *ACE*, 451 F.3d at 229.

switching and transport.⁵¹ Second, both technologies must serve as replacement for substantial telephonic functionality.⁵² Finally, the Commission found that there is a public interest in applying CALEA to these providers.⁵³ Since broadband and VoIP providers satisfied all three prongs, they inevitably fell within the substantial replacement provision of CALEA's definition of a telecommunications carrier.⁵⁴

B. The Opinion: *ACE v. FCC*

In 2005, ACE and a number of other interested parties filed a petition for review of the order with the D.C. Circuit, alleging that the FCC's interpretation of CALEA as applicable to broadband and VoIP providers was unlawful.⁵⁵ ACE first argued that broadband internet access is an "information service" for purposes of CALEA and, as such, is expressly excluded from the definition of a "telecommunications carrier" and thus exempt from compliance with the Act.⁵⁶ Second, ACE argued that since VoIP is provided through broadband, it qualifies as an information service and need not comply with CALEA. ACE finally argued that the Commission unlawfully applied the Act to "private networks."⁵⁷

ACE argued that the FCC had already determined that broadband providers are information services under the Telecommunications Act and thus cannot now redefine their designation under CALEA.⁵⁸ Furthermore, ACE argued that because information services by their very nature are provided through telecommunications, the FCC's decision completely undermines the statutory language. If the telecommunications aspect of an "information service" is removed, the definition of the latter becomes a nullity.⁵⁹ The D.C. Circuit did not share ACE's view on these issues and affirmed the FCC's interpretation of the statute.⁶⁰

51. *Id.* at 227 (citing *In re Commc'ns Assistance for Law Enforcement Act & Broadband & Access Servs.*, 20 F.C.C.R. 14989, ¶ 35 (2005)).

52. *Id.* The FCC found that broadband replaces the transmission function previously used to reach dial-up Internet Service Providers (ISPs) and that VoIP replaces traditional telephonic voice communication capabilities. *Id.*

53. *Id.* at 229 (citing *In re Commc'ns Assistance for Law Enforcement Act & Broadband Access & Servs.*, 20 F.C.C.R. 14989, ¶ 37 (2005)).

54. *Id.* at 229.

55. *Id.*

56. *Id.* at 227, 229, 231.

57. This Note concerns only the first two arguments.

58. *ACE*, 451 F.3d at 232.

59. *Id.* at 234.

60. *Id.* at 231.

The D.C. Circuit analyzed the FCC order under the *Chevron* standard, which consists of two steps.⁶¹ First, the court must decide whether Congress' intent was clear.⁶² If it is, then that is the end of the inquiry and the court as well as the agency must fulfill the unambiguously expressed intent of Congress.⁶³ If the court decides that the statute is silent or ambiguous with respect to the specific question at issue, however, it must determine whether the agency's construction is permissible given the objectives of the statute.⁶⁴ If the interpretation reasonably serves the objectives of the statute, then it qualifies as a permissible construction.⁶⁵ If the interpretation is capricious, arbitrary or manifestly contrary to the statute's objectives, on the other hand, it may not be a permissible construction.⁶⁶

In *ACE*, the D.C. Circuit operated on a presumption that Congress left a gap in the statute and the FCC was now entrusted with the ultimate authority to fill it.⁶⁷ The court reasoned that under the *Chevron* standard, the FCC acted within the scope of its designated authority to reasonably interpret statutory language that Congress left "silent or ambiguous."⁶⁸ The court explained that the FCC has express authority to reasonably interpret any ambiguous language within CALEA, and, as long as its interpretation satisfies the statute's objectives, the construction was permissible.⁶⁹

The D.C. Circuit's opinion, however, was not unanimous. One judge from the three judge panel, Senior Circuit Judge Edwards, offered harsh criticism of the majority opinion. Judge Edwards, whose dissent will be discussed later in the Note, stated that prior to the order, the FCC had consistently held that broadband internet services are "information services" and as such were not subject to CALEA.⁷⁰ In fact, as recently as in 2005, the Supreme Court affirmed the FCC's decision that broadband providers are "information services" for purposes of the Telecommunications Act of

61. *Id.* (citing *Chevron v. Nat'l Res. Def. Council, Inc.*, 467 U.S. 837, 843-45 (1984)).

62. *Id.*

63. *Id.*

64. *Id.*

65. *Id.*

66. *Id.* at 231-32 (citing *Chevron*, 467 U.S. at 843-45).

67. *See ACE*, 451 F.3d at 232 (referring to the SRP, the court stated: "where as here, 'Congress has explicitly left a gap for the agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation. Such legislative regulations are given controlling weight,' so long as they reflect 'reasonable policy choices.'").

68. *ACE*, 451 F.3d at 231.

69. *Id.*

70. *See ACE*, 451 F.3d at 237 (Edwards, J., dissenting).

1996 in *National Cable & Telecommunications Association v. Brand X Internet Services*.⁷¹ The issue presented in *Brand X* was whether Title II of the Communications Act of 1934 as amended by the Telecommunications Act of 1996 subjects all providers of telecommunications services to mandatory common-carrier regulation.⁷² The FCC issued a declaratory ruling concluding that broadband internet service providers do not provide 'telecommunications services' as the Communications Act defines the term, and as a result they are exempt from mandatory common-carrier regulation.⁷³ The Supreme Court found that the FCC's interpretation of the Telecommunications Act's definitions of information services and telecommunications carriers was reasonable and deferred to the conclusion that broadband internet service providers are information services for purposes of the Act.⁷⁴ At the same time, the Supreme Court left the FCC with the authority to interpret or define telecommunications and information services and impose additional rules on information service providers even if they seem to be contrary to the Act's substantive requirements.⁷⁵

Picking up on the *Brand X* reasoning, ACE argued that the definition of a telecommunications carrier adopted by Congress in the Telecommunications Act of 1996 should be instructive on the intent behind the definition of a telecommunications carrier in CALEA.⁷⁶ The argument was based on the fact that information services are by their very definition delivered via telecommunications under both acts.⁷⁷ Because this clause makes tele-

71. See *Nat'l Cable & Telecomm. Ass'n v. Brand X Internet Servs.*, 125 S. Ct. 2688, 2695 (2005).

72. *Id.* The Telecommunications Act of 1996 was enacted two years after CALEA. Although it offers a slightly different definition of a telecommunications carrier than CALEA, "information services" are defined identically. See *infra* note 77.

73. *Brand X*, 125 S. Ct. at 2695.

74. *Id.* at 2706-08. For a more thorough discussion of the *Brand X* opinion, see Susan P. Crawford, *Responsibility and Liability on the Internet: Shortness of Vision: Regulatory Ambition in the Digital Age*, 74 *FORDHAM L. REV.* 695 (2005); Steven Aronowitz, Note, *Brand X Internet Services v. FCC: The Case of the Missing Policy Argument*, 20 *BERKELEY TECH. L.J.* 887 (2005); Anna J. Zichter, Note, *Developments in Regulating High-Speed Internet Access: Cable Modems, DSL, & Citywide WI-FI*, 21 *BERKELEY TECH. L.J.* 593, 602-606 (2006).

75. See *Brand X*, 125 S. Ct. at 2696-2705; see also Crawford, *supra* note 74, at n.211.

76. ACE, 451 F.3d at 232.

77. CALEA's definition of information services: "The term 'information services' means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information *via telecommunications*." CALEA, 47 U.S.C. § 1001 (6)(A) (1994) (emphasis added). Telecommunications Act definition of information service: "The term 'information service' means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving,

communications and information services inseparable, excluding the telecommunications component from the definition of information services will make the latter a nullity.⁷⁸ Consequently, ACE suggested that CALEA creates two mutually exclusive categories: telecommunications services and information services. Hence, the manufacture of this new “hybrid” service by the FCC is incongruous with the rest of the statute.⁷⁹

ACE also attempted to analogize to *Brand X*, arguing that since the Supreme Court agreed with the FCC’s construction that broadband services are information services under the Telecommunications Act, the FCC may not now apply a different interpretation to the same term in CALEA.⁸⁰ The D.C. Circuit distinguished the *Brand X* opinion because it was decided under a different statute with different goals.⁸¹ The court went on to list and describe the differences between the definition of a telecommunications carrier in the Telecommunications Act and the definition of a telecommunications carrier in CALEA, as well as the difference between the purposes of the two statutes.⁸² It concluded that CALEA is a law enforcement statute and its purpose is very different than that of the Telecommunications Act. That purpose allows for a different, albeit reasonable, construction, and the FCC’s interpretation reflects a reasonable policy choice.⁸³

Judge Edwards, however, started out his dissent by offering this quote: “Regardless of how serious the problem an administrative agency seeks to address . . . it may not exercise its authority in a manner that is inconsistent with the administrative structure that Congress enacted into law.”⁸⁴ He alluded to the fact that the FCC was stretching the language of CALEA to exercise its authority where no authority existed.⁸⁵ He described the FCC as attempting to “squeeze authority from a statute” that the FCC did not have.⁸⁶ Judge Edwards noted that “the most troubling aspect of the

utilizing, or making available information *via telecommunications*.” Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, 47 U.S.C. § 153(20) (emphasis added). These definitions are identical.

78. *ACE*, 451 F.3d at 234.

79. *Id.*

80. *Id.* at 232.

81. *Id.*

82. *Id.*

83. *Id.*

84. *Id.* at 236 (2006) (Edwards, J., dissenting) (quoting *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 125 (2000)).

85. *ACE*, 451 F.3d at 237.

86. *Id.*

FCC's interpretation is that it is directly at odds with the statutory language."⁸⁷

In July 2006, ACE, with support from other advocacy groups such as the EFF, filed a petition for a rehearing en banc with the D.C. Circuit. ACE, echoing Judge Edwards, once again argued that there was no ambiguity in the statute and that the FCC did not have a right to interpret CALEA in a manner inconsistent with legislative intent.⁸⁸ The D.C. Circuit denied the petition, once again declining to consider the issues brought up by ACE and the *amici* briefs.⁸⁹ The following Section analyzes the D.C. Circuit decision and sheds light on the inconsistency behind the FCC's order with legislative intent of Congress. It also attempts to explain why applying CALEA to broadband and VoIP providers is detrimental to the structure of the internet as we know it.

III. ANALYSIS

A. What Makes Application of CALEA to VoIP Problematic

1. Architectural Differences

As shown earlier there are dramatic architectural differences between the PSTN and VoIP. The intelligence needed to initiate communication via the PSTN is located in the middle or between the two users. Furthermore, the entire conversation takes place over a single designated circuit. Thus, wiretapping is easy because law enforcement need only access the central switching station to gain access to a user's conversation. VoIP, on the other hand, is provided through a packet-switched network and the intelligence required to initialize communication resides at the end points. Any surveillance must thus find its way into a user's station (for example, a computer or a VoIP telephone) and somehow differentiate between what is actually required and what is outside of the warrant or the order when intercepting information. Since this has proven too complicated a task for law enforcement, the remaining solution is to alter the architecture of broadband and VoIP to make it more surveillance-friendly.

Imposing wiretapping capabilities into the internet infrastructure, however, will be detrimental to its progress.⁹⁰ By requiring internet providers to introduce fundamental structural changes to the infrastructure to comply with CALEA, the FCC has threatened basic innovation: the internet will

87. *Id.*

88. See Petition for Rehearing, *supra* note 7.

89. Thus far no petition for certiorari has been filed with the Supreme Court.

90. Landau, *supra* note 15, at 428.

no longer be as easily accessible or malleable. In addition, since the order encompasses internet service providers within the definition of a telecommunications carrier, the FBI can now set standards and determine if providers are in compliance. The following Section discusses why this ultimate shift in an internet regulatory scheme may not be socially viable from a privacy standpoint.

2. *Security at the Cost of Privacy*

CALEA was the first piece of legislation in which Congress attempted to influence the way in which telecommunications networks should be structured.⁹¹ The FBI is now entrusted with the task of imposing design requirements on new technologies, a role traditionally undertaken by telephone companies.⁹² From a market perspective, there are a number of problems that plague this new designation. Telephone companies have to balance two very important goals in order to stay in business.⁹³ First, they must assure that customers retain privacy in their communications. Second, they must provide law enforcement with the necessary accessibility to conduct surveillance.⁹⁴ If the companies start to tread away from either objective, their place in the market is inevitably compromised by others who can deliver better services.

The FBI does not operate under these market forces and, unlike the telephone companies does not have to maintain the balance between law enforcement and privacy. Its goal is to enforce the law. As a result, individual privacy might be compromised when the FBI is allowed to dictate the infrastructure or the architectural design to service providers.⁹⁵ A federal law enforcement agency will not be as concerned with individual privacy as a public company. In addition, its understanding of the changes it now seeks is probably limited and uninformed by larger market objectives. Allowing the FBI to dictate the future of the telecommunications industry may not be so beneficial in the long run. In addition, as discussed below, the FBI does not have the necessary understanding of telecommunications policy to make decisions beneficial to both telecommunications providers and their customers.⁹⁶ The following Section explains why the FCC's decision contradicts Congress' intent in drafting CALEA.

91. *Id.* at 417.

92. *Id.* at 410.

93. *Id.*

94. *Id.*

95. *Id.* at 417-18.

96. *See infra* note 104.

B. Departure from Legislative Intent

1. *Departure from Congress' Policy Goals*

One of CALEA's objectives was to assure that technological innovation would not be hampered by the requirements of the statute. So, even if the court's determination that the SRP makes the definition of a telecommunications carrier "silent or ambiguous" is correct, the FCC still went outside of its authority when interpreting CALEA. The legislative history lends a rather clear view of what Congress intended by the SRP as well as what should be classified as a telecommunications carrier. The House Report clearly states that Congress' objectives were to help maintain individual privacy while providing law enforcement with sufficient access to telecommunications *and* to assure that the latter concern would not come in conflict with innovation or impede new technology.⁹⁷

The FCC's interpretation of CALEA is thus a serious stretch. First, the new interpretation undoubtedly comes into conflict with the express language of the statute. As argued earlier, CALEA's definition of a telecommunications carrier clearly calls for information service providers to be excluded. Second, the legislative history is completely at odds with the FCC's interpretation. Congress' objectives—as evidenced by the House Report—were to assure that new technologies and innovation would not be impeded by CALEA's requirements. As a result, even though Congress understood that information service providers utilize telecommunications, it expressly intended to exclude them from compliance with CALEA. Imposing CALEA on VoIP will inevitably require drastic changes to the internet and its infrastructure, thus threatening an important and recognized policy goal—innovation.

2. *Departure from Legislative History*

Congress had the legislative foresight to include the SRP within CALEA's definition of a telecommunications carrier. It also foresaw that information service providers might some day fall into this provision.⁹⁸ The

97. See *supra* text accompanying note 1.

98. Congress anticipated that information services would not remain the same and stated that the intent is to encompass all subsequent inventions within the definition:

The term "information services" includes messaging services offered through software such as groupware and enterprise or personal messaging software, that is, services based on products (including but not limited to multimedia software) of which Lotus Notes (and Lotus Network Notes), Microsoft Exchange Server, Novell Netware, CC: Mail, MCI Mail, Microsoft Mail, Microsoft Exchange Server, and AT&T Easylink (and their associated services) are both examples and precursors.

fact that Congress specifically omitted information services from the definition of a telecommunications carrier and the SRP indicates that it did not intend to include broadband and VoIP providers in the definition at the time the statute was enacted. Stretching the definition to suit specific purposes that Congress did not anticipate is an exercise of power beyond that granted to the FCC.

In *ACE*, the D.C. Circuit concluded, citing to the order, that “the application of CALEA will not impede competition or innovation” and “the overwhelming importance of the Act’s assistance capability requirements to law enforcement efforts to safeguard homeland security and combat crime weighs heavily in favor of applying CALEA *broadly*.”⁹⁹ However, the legislative history behind CALEA directly conflicts with these findings. The House Report specifically states that CALEA’s definition of a telecommunications carrier was intended to have a *narrow* scope:

It is also important from a privacy standpoint to recognize that the scope of the legislation has been greatly narrowed. The only entities required to comply with the functional requirements are telecommunications common carriers, *the components of the public switched network where law enforcement agencies have always served most of their surveillance orders. . . . Also excluded from coverage are all information services, such as Internet service providers or services such as Prodigy and America-On-Line.*¹⁰⁰

Furthermore, the House Report provides the following in its definition of a telecommunications carrier:

The definition of telecommunications carrier does not include persons or entities to the extent they are engaged in providing information services, such as electronic mail providers, on-line

It is the Committee’s intention not to limit the definition of “information services” to such current services, but rather to anticipate the rapid development of advanced software and to include such software services in the definition of “information services.” By including such software-based electronic messaging services within the definition of information services, they are excluded from compliance with the requirements of the bill.

H.R. REP. NO. 103-827, 104th Cong., at 23 (1994) (emphasis added).

99. Am. Council on Educ. v. FCC, 451 F.3d 226, 229 (D.C. Cir. 2005).

100. H.R. REP. NO. 103-827, at 18 (emphasis added).

service providers, such as CompuServe, Prodigy, America-On-Line or Mead Data, or Internet service providers.¹⁰¹

If Congress intended for CALEA to apply to broadband and VoIP providers, it would not have excluded all information services, and especially not internet service providers, when it adopted the Act. The idea of voice traveling over the internet was not completely far-fetched in 1994. Quite to the contrary, although Congress' knowledge at the time was limited, it was already aware of the differences between packet and circuit-switched networks.¹⁰²

Yet, nowhere in the opinion does the D.C. Circuit cite this important bit of information from the legislative history of the Act.¹⁰³ Even if the court is correct in its assessment that Congress intentionally left the SRP ambiguous so that the FCC could interpret and apply it to new technologies not known to the legislature at the time of enactment, it is still not permissible for the FCC to interpret the clause in a manner directly contradictory to Congress' intent. Not only has the FCC gone against the definitions of CALEA, it has completely ignored the intent behind the statute. The *Chevron* standard requires a "permissible" interpretation. A permissible interpretation reflects a reasonable policy choice that does not go against the objectives of the statute. It is difficult to see how including internet service providers within CALEA's definition of a telecommunications carrier could seem like a reasonable policy choice, when the objectives of the statute were to promote innovation by *not* including internet service providers in that same definition.

3. *Exorbitant Costs and Further Threats to Innovation*

Finally, because the order was issued by an administrative agency and not by the legislature, other important problems arise. If the legislature decided to amend CALEA so as to include broadband providers within the definition of telecommunications carriers, it could further provide for subsidies to offset the costs of compliance incurred by these providers. According to an audit report issued by the Department of Justice's Office of Inspector General, it will cost VoIP providers millions of dollars to effectively bring their systems into compliance with CALEA.¹⁰⁴

101. *Id.* at 22.

102. Crawford, *supra* note 74, at 721.

103. Am. Council on Educ. v. FCC, 451 F.3d 226 (D.C. Cir. 2005).

104. See U.S. DEPARTMENT OF JUSTICE, OFFICE OF THE INSPECTOR GENERAL, AUDIT DIVISION, AUDIT REPORT 06-13: THE IMPLEMENTATION OF THE COMMUNICATIONS ASSISTANCE FOR LAW ENFORCEMENT ACT 54 (2006). In another interview, a carrier suggested that:

The audit report, issued after the order, provided data obtained by the Department of Justice when it interviewed ten carrier officials that were actively engaged in or deploying CALEA compliance on their networks.¹⁰⁵ These officials reported that there are significant costs associated with this process.¹⁰⁶ One VoIP provider contracted a Trusted Third Party ("TTP") at about \$100,000 to develop its CALEA solution.¹⁰⁷ The TTP will also charge this provider a monthly fee of \$14,000 to \$15,000 in addition to \$2,000 for each individual intercept.¹⁰⁸ These amounts do not include the costs of labor associated with writing the code into the software to make it compatible with CALEA.¹⁰⁹ Furthermore, providers are incurring significant opportunity costs because programmers who are working on developing CALEA solutions are not developing new features for customers.¹¹⁰ Providers also worry that having to ensure that each new feature is CALEA-compliant before release puts them at a disadvantage in comparison to non-U.S. based providers who do not have to comply with CALEA.¹¹¹

Few carriers can afford to spend this much on compliance. When the Act was originally passed in 1994, the legislature provided \$500 million to offset the costs incurred by telecommunications carriers to comply by 1995. Since the FCC imposed CALEA on VoIP providers without any legislative amendment behind it, no provisions have been made to subsidize them for their compliance associated expenses. As a result, these costs will either have to be passed onto consumers or providers will simply go out of business altogether. This is exactly why such a drastic decision must be made by Congress, which has within its control the financial resources to

[L]aw enforcement is frustrated by the new communications technology, but does not fully understand the total cost and complexity of obtaining CALEA wiretaps in a wireline and wireless environment. The representative also said that the costs and complexity involved will be exponentially greater with packet mode technology. He further stated that law enforcement wants the CALEA functionality but is largely unaware of the expense and technical impediments to full implementation. This official believed that the problems for law enforcement must be solved before CALEA is implemented on a larger scale.

Id. at 55.

105. *Id.* at 54-55.

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

110. *Id.*

111. *Id.*

offset market demands, and not by the FCC, which does not have those resources.

The irreconcilable tension within CALEA created by the substantial replacement provision is a testament to the fact that Congress never intended to apply CALEA to VoIP. It also shows that CALEA is extremely ill-suited to information service providers. The application of CALEA to VoIP is further complicated by the fundamental architectural differences between VoIP and the PSTN. The threats to privacy and innovation created by the new designation of broadband providers as telecommunications carriers highlight the problematic nature of the FCC's interpretation. The following Section offers some alternatives to the FCC decision.

C. Reconciling the Irreconcilable

Many national governments now recognize that some form of CALEA for internet communications is necessary.¹¹² Administrative agencies, however, cannot make laws. The Constitution has specifically delegated that power to Congress. If a law is no longer internally consistent or, as in CALEA's case, if there is an irreconcilable tension due to innovation, the legislature must find a way to fix this problem. The FCC may offer its input as to how the law can be amended, but it may not take lawmaking into its own hands.

The Department of Justice has already drafted a potential amendment to CALEA.¹¹³ The proposed changes will codify the FCC ruling and hopefully provide the necessary legislative support to carriers. Although the "irreconcilable tension" within CALEA will be resolved by an amendment, other concerns will not go away so easily. The greatest challenge to law enforcement and VoIP providers will be in figuring out how to maintain the balance between surveillance and privacy while at the same time retaining the essential structure of the internet. As mentioned earlier, broadband infrastructure differs significantly from that of the PSTN, and as a result, will require a careful and thorough approach. Furthermore, threats to privacy will have to be seriously addressed and an independent forum created to ensure that the FBI is not abusing its surveillance authority.

Legislative provisions in CALEA can help reduce the threats to innovation that the FCC created by requiring broadband and VoIP providers to

112. Mark C. Del Bianco, *Voices Past: The Present and Future of VoIP Regulation*, 14 *COMMLAW CONSPPECTUS* 365, 377-84 (2006) (noting new regulations in Canada and the EU that would facilitate wiretapping).

113. U.S. Department of Justice, Proposed Amendment to CALEA, proposed July 2006, available at www.eff.org/Privacy/Surveillance/CALEA/CALEA_amend_redline.pdf (last visited Mar. 21, 2007).

comply with the Act. Congress may choose to subsidize innovation in structural design that offers additional security, provides law enforcement with sufficient access, while retaining the essential features of the internet—accessibility and flexibility. Congress may also make necessary provisions for ISPs who will have to spend enormous amounts of money on compliance, just as it did with the PSTN providers in 1995.

IV. CONCLUSION

The FCC stretched CALEA in order to encompass broadband and VoIP providers within the Act's definition of a telecommunications carrier. The decision is problematic due to architectural differences between the two systems, the fact that the FBI is now entrusted with overseeing compliance by providers, and most importantly, because the legislative history does not support such a far-reaching interpretation of the Act. ACE seems to have exhausted its litigation alternatives, and Congress remains the only arbiter in this debate. Unfortunately, it is not clear whether Congress will amend CALEA in the near future to resolve these tensions.