Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

Notice of Proposed Rulemaking:	)	
	)	**WC Docket No. 04-36**
In the Matter of	)	
IP-Enabled Services	)	

COMMENTS OF THE NEW JERSEY DIVISION OF THE RATEPAYER ADVOCATE

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On the Comments

May 28, 2004

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I. INTRODUCTION AND EXECUTIVE SUMMARY

The New Jersey Division of the Ratepayer Advocate[1] ("Ratepayer Advocate") submits these comments in response to the Notice of Proposed Rulemaking ("NPRM") issued by the Federal Communications Commission ("Commission") on March 10, 2004 in the above-captioned proceeding.[2] The NPRM seeks comments on a multitude of issues relating to services and applications that make use of the Internet Protocol ("IP"), including but not limited to voice over IP ("VoIP").[3] Specifically, the Commission seeks comment on the appropriate jurisdictional and regulatory treatment of IP-based services in addition to the implications for

[1] The New Jersey Division of the Ratepayer Advocate has the statutory duty to represent and protect the interests of all classes of consumers in the state of New Jersey, including residential, small business and industrial customers, in an effort to advance the interests of all New Jersey ratepayers.

[2] *In the Matter of IP-Enabled Services*, WC Docket No. 04-36, Notice of Proposed Rulemaking, FCC 04-28 (rel. March 10, 2004) ("*NPRM*").

[3] VoIP is defined as a technology developed to enable voice communication over networks, including the public Internet, that utilize the Internet Protocol. VoIP converts analog voice signals into digital packets, which are routed as data over an IP network without having to rely on the circuit-switched network. By not relying on circuit switched networks, voice communications does not tie up a dedicated path or channel. Whereas with traditional circuit switching, a dedicated circuit is required and this circuit remains open until the phone call is terminated. Packets consisting of voice communications can be sent over the same path as other data or voice packets. Due to the efficiencies of multiplexing inherent in an IP network, a common infrastructure can carry multiple services including Vo IP-based telephone, along with data and video.

social objectives, such as public safety, emergency 911, consumer protections and disability access if communications migrate to Internet-enabled services.

The Ratepayer Advocate makes the following recommendations to the Commission:

- While the Ratepayer Advocate recommends the Commission refrain from imposing economic regulation on VoIP providers, we maintain that select VoIP services should be subject to Title II regulation as it pertains to consumer protection and public safety concerns. The Commission should employ the criteria set forth in the Stevens Report in determining whether a particular service would be subjected to Title II regulation.

- VoIP providers that market themselves as offering voice and facsimile services, do not require overly specialized CPE to place a telephone or facsimile call, allows calls according to the North America Numbering Plan Administration ("NANPA"), and transmits customer information without net change should be regulated under Title II.

- VoIP providers who offer blended services, i.e. telecommunications and information services, should be treated as telecommunications services subject to Title II regulation.

- The Commission cannot deprive states of their authority to regulate intrastate VoIP services under Section 2(b) of the Act. State regulation of VoIP services is crucial because states are obligated to ensure that consumers have ready and able access to telecommunications services and that these services meet certain quality standards.

- VoIP providers who are also providers of interexchange, local exchange, and cable services should be subject to separate affiliate requirements to discourage anti-competitive conduct and protect the public interest.

- The Commission must require VoIP providers to offer 911/E911 access to their customers to ensure that emergency services are protected as telecommunications transition from a circuit –switched network to an integrated-services packet switched network. The Commission must also make certain that VoIP providers are technologically and operationally capable of complying with basic 911 services rules that ensure calls are directed to the appropriate PSAP as well as being capable of enhanced 911 functions such as delivering call-back and location information, and the Commission should also set a deadline for the achievement of these necessary functions.

- The Commission must ensure that VoIP services and the IP networks are capable of providing access to people with disabilities by subjecting VoIP providers to the directives of Sections 255 and 251 of the Act and also of the Disability Access Order.

- VoIP services that meet the criteria of telecommunications services and depend on the PSTN should be subject to access charges and therefore VoIP providers must contribute in an equitable manner to the maintenance of the network.

- VoIP providers must contribute to the Universal Service Fund to ensure affordable access to telecommunications service to all Americans. Unless universal service obligations are imposed on VoIP, the revenues upon which universal service relies will be severely affected.

- VoIP providers should be subject to the Commission's rules restricting the use of customer proprietary network information ("CPNI") as well as rules that afford consumer protections in the areas related to privacy, accuracy and clarity in billing, prohibitions on slamming, protections against discrimination, and the ability to file complaints with regulatory bodies.

- States should not be stripped of their right to impose taxes on VoIP services that rely on the PSTN because such an outcome would drastically reduce the revenue base that states and localities use to fund critical education, health care, and public safety services.

The Ratepayer Advocate's recommendations will preserve the state's role in regulating VoIP services to the extent they are offered within the state as well as protect the interests of consumers by making sure VoIP providers adhere to traditional social obligations such as 911 access, universal service, and access for people with disabilities. It would be prudent of the Commission to adopt the Ratepayer Advocate's recommendations.

II. TITLE II REGULATION SHOULD APPLY TO SELECT VoIP SERVICES THAT ARE OFFERED TO THE PUBLIC FOR A FEE

Regulation remains necessary and its removal would lead to an adverse impact on realizing the goals of the Federal Telecommunications Act of 1996[4] (the "Act"). Stated differently, regulation must be balanced and may be reduced when customer benefits, protections, and supports offered by a truly competitive market exists. The purpose of the Act is to Apromote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of

[4] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 ("1996 Act"). The 1996 Act amended the Communications Act of 1934. Hereinafter, the Communications Act of 1934, as amended by the 1996 Act, will be referred to as "the Act," and all citations to the Act will be to the Act as it is codified in the United States Code.

new telecommunications technologies."[5] Somewhat counter-intuitively, however, regulation must be effected in order to reach a stage at which less regulation is appropriate. The emergence of VoIP, and especially those types that touch the public switched telephone network ("PSTN") and are indistinguishable from standard telephone service, raises issues related not only to consumer safety and convenience, but also larger issues that relate to access revenues and universal service support. The Ratepayer Advocate proposes that any regulation of VoIP must begin with the clear definitions of the Act and an accurate description and understanding of VoIP services. It is possible that certain VoIP services should be regulated under Title II, while others will remain outside the scope of such regulation such as the Commission's ruling in the Pulver case declaring its Free World Dialup offering an unregulated information service.[6] The extent of any VoIP regulation, however, should not be to encourage or discourage VoIP specifically, or to support or neglect the impact that burgeoning VoIP may have on universal service. Rather, it is an academic approach and straightforward exercise to examine what types of VoIP services are "telecommunications service"[7] and what types are "information service"[8] and whether a mixture of telecommunications service and information services should be regulated as a telecommunications service.

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5 Preamble, Act

6 *See Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, WC Docket NO. 03-45, Memorandum Opinion and Order, FCC 04-27 (rel. Feb. 19, 2004) ("*Pulver Declaratory Ruling*").

7 The Act defines "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 47 U.S.C. § 153 (43).

8 The Act defines "Information service" is defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 47 U.S.C. § 153 (46).

The Ratepayer Advocate submits that certain VoIP services can, and should, be regulated under Title II. This regulation should include consumer protection and public safety issues, but the Ratepayer Advocate submits that the Commission need not adopt economic regulation at this time in order to permit VoIP industry growth and technical innovation. However, appropriate safeguards must be implemented as the *quid pro quo* for not adopting economic regulations at this time.

Title II regulation is premised on the classification of VoIP as a telecommunications, rather than an information, service. The Ratepayer Advocate notes that at this juncture, classification and consequent regulation of discrete services will depend upon their respective technical functionality and capabilities. The Ratepayer Advocate therefore urges the Commission to continue the application of appropriate consumer protection and public safety regulation currently associated with telephone services. This can be achieved by invoking prior Commission determinations that are based upon the differences or similarities of Internet-based services to telephone service.[9]

Accordingly, the Ratepayer Advocate recommends that the Commission incorporate into its rules the following criteria which the Ratepayer Advocate views as consumer-oriented, and use these criteria as benchmarks for determining whether a particular service will be subject to Title II regulation:

1. Does the service offer Aphone-to-phone" telephony?
2. Does the service originate or terminate calls on the PSTN?
3. Does the service utilize NANPA patterns?
4. Does the service hold itself out to be a voice-communications or facsimile service?

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[9] *See, generally, Pulver Declaratory Ruling*; *I/M/O Petition for Declaratory Ruling the AT&T's Phone-to-Phone IP Telephone Services are Exempt from Access Charges: Order,* WC Docket No. 02-361, FCC 04-97 (rel. Apr. 21, 2004) ("*AT&T Order*"); *and I/M/O Federal-State Joint Board on Universal Service,* CC Docket No. 96-45 Report to Congress, 13 FCC Rcd 11501 (1998) ("*Stevens Report*").

5. Can the service be accessed via the same telephone or facsimile CPE as is used in traditional landline telephone service?
6. Does the service transmit customer information without net change in form or content?[10]

III. SERVICE QUALITY AND CONSUMER-BASED CRITERIA SHOULD UNDERLY THE CLASSIFICATION OF VoIP AS A TELECOMMUNICATIONS SERVICE

A. History of Regulating Non-Traditional Telecommunications Services

Confusion should not exist in the classification of VoIP as a Atelecommunications@ service, even though the offering uses the Internet as a means of transporting its voice communications through the use of packet-switching. Furthermore, the Commission in the Stevens Report stated that, A "telecommunications" and Ainformation" services are mutually exclusive terms within the Act.[11] The Commission, at that time, deferred Adefinitive pronouncements@ until a more complete record was established.[12]

The starting point for a determination is the *Computer II* decision, which established a regulatory split between Abasic@ and Aenhanced@ services.[13] A basic service was defined as Apure transmission capacity for the movement of information."[14] An enhanced service was defined as Aany offering over the telecommunications network which is more than a basic transmission

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10 These standards are consistent with parameters described in the Stevens Report. *Stevens Report*, para. 88.

11 *Stevens Report* at para.13.

12 *Id*.

13 *I/M/O Amendment of Section 64.702 of the Commission=s Rules and Regulations: Tentative Decision and Further Notice of Inquiry and Rulemaking*, 72 FCC 2d 358 (1979) (ATentative Decision@), 77 FCC 2d 384 (1980) (AFinal Decision@), *recon*. 84 FCC 2d 50 (1980) (AOrder on Reconsideration@), *further recon*., 88 FCC 2d 512 (1981) (AFurther Reconsideration Order@), *affirmed sub nom. Computer and Communications Industry Association v. FCC*, 693 F.2d 198 (DC Cir. 1982), *cert. denied*, 461 US 938 (1983) (collectively, A*Computer II*@).

14 *Computer II Final Decision* at para. 93.

service."[15] The Commission concluded that Aenhanced@ services would be defined as Acomputer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber=s transmitted information; provide the subscriber additional, different, restructured information; or involve subscriber interaction with stored information."[16] Enhanced services were not regulated under Title II but are subject to Title I regulation. The distinction between telecommunications service and information service underlie the debate of how VoIP should be classified.

1. The Effect of the 1996 Act on the Regulation of Non-Traditional Telecommunications Services, and the Stevens Report

The 1996 Act set forth two new definitions: Atelecommunications@ and Ainformation service.@ A telecommunications service is Athe transmission between or among points specified by the user, of information of the user=s choosing, without change in the form or content of the information as sent or received."[17] A telecommunications service is defined by the Act as Athe offering of telecommunications, for a fee directly to the public, or to such classes of users as to be effectively available to the public, *regardless of the facilities used*."[18] A Atelecommunications carrier@ is defined as Aany provider of telecommunications services, except that such term does not include aggregators of telecommunications services.[19]

By contrast, an information service is defined as:

> the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available

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15 *Computer II Final Decision* at para. 94.

16 47 CFR ' 64.702(a).

17 47 U.S.C. ' 153(43).

18 47 U.S.C. ' 153(46) (emphasis added).

19 47 U.S.C. § 153(44).

> information via telecommunications, and [such term] includes electronic publishing, but does not include any use of any such capability for the management, control or operation of a telecommunications system or the management of a telecommunications service.[20]

Of particular import, however, was Congress= redefinition of Atelephone exchange service to include not only, "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers interconnecting service of the character ordinarily furnished by a single exchange," but also Acomparable service provided through a system of switches, transmission equipment, *or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service*."[21] Additionally, the Act provides that a Alocal exchange carrier@ is Aany person that is engaged in the provision of telephone exchange service or exchange access,@ excluding only and specifically Acommercial mobile radio service."[22] In 1998, the Commission described a Afunctional approach@ that could categorize services on the Anature of the service being offered to customers," rather than the Atype of facilities used. [23] The Stevens Report also clarified that the bundling of informational services with a telecommunications service would not transform the entire offering into an information service, explaining that, A[i]t is plain, for example, that an incumbent local exchange carrier cannot escape Title II regulation of its residential local exchange service simply by packaging that service with voice mail."[24] The

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[20] 47 U.S.C. ' 153(20).

[21] 47 U.S.C. ' 153(47) (emphasis added).

[22] 47 U.S.C. ' 153(26).

[23] *Stevens Report* at para.59.

[24] *Stevens Report*, *supra* n.7, at para.60.

Commission's recent ruling requiring AT&T to pay access charges for its phone-to-phone VoIP services is consistent with this approach.[25] In its AT&T Order, the Commission limited its decision, noting that the interexchange service at issue: A(1) uses ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originates and terminates on the public switched telephone network (PSTN); and (3) undergoes no net protocol conversion and provides no enhanced functionality to end users due to the provider=s use of IP technology.[26]

The Commission looked to the statute when it determined that Aan entity should be deemed to provide telecommunications, defined as the >transmission, between or among points specified by the user, of information of the user=s choosing, without change in the form and content of information,= only when the entity provides a transparent transmission path, and does >change . . . the form and content of the information."[27] Indeed, it is this Atransparency@ that is the linchpin of the Ratepayer Advocate=s recommendations: consumer expectation when purchasing a product should give rise to regulatory protections as that product is used as a substitute for another offering for which protections are provided. The Commission has previously stated that A[t]he protocol processing that takes place incident to phone-to-phone IP telephony does not affect the service=s classification, under the Commission=s current approach, *because it results in no net protocol conversion to the end-user*."[28] The Commission concluded, A[a] telecommunications service is a telecommunications service regardless of whether it is

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25 *AT&T Order*, *supra* n.7.

26 *AT&T Order* at para. 1.

27 47 U.S.C. § 153(43); *see also Stevens Report* at para. 41.

28 *Stevens Report* at para. 52 (emphasis added).

provided using wireline, wireless, cable, satellite, or some other infrastructure. *Its classification depends rather on the nature of the service being offered to the customers.*"[29]

The Ratepayer Advocate expects that comments in the instant proceeding will elucidate the technological differences between Acomputer-to-computer@ and Aphone-to-phone@ VoIP. As described previously by the Commission, Acomputer-to-computer" services utilize IP software applications that are run entirely over the Internet with no contact with the PSTN, while Aphone-to-phone@ services are where the provider holds itself out as a voice or facsimile services provider, does not require CPE different than that ordinarily employed to place a telephone or facsimile call, allows calls according to the North America Numbering Plan Administration ("NANPA"), and transmits customer information without net change.[30] These latter services should be regulated under Title II.

The recent AT&T Order was narrowly construed by the Commission to apply to the particular service offered by AT&T.[31] That approach is consistent with both the Stevens Report, which emphasized the functionality-based approach that the Commission took in determining whether a service is a telecommunications or an information service. The Ratepayer Advocate submits that the Commission advance through the instant rulemaking proceeding with similar process. The question of Ablended services,@ i.e., those that combine both telecommunications and information, has already been addressed by the Commission when it stated that Aan incumbent local exchange carrier cannot escape Title II regulation of its residential local

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29 *Stevens Report* at para. 59. (emphasis added)

30 *Stevens Report* at para. 88.

31 *See AT&T Order* at para. 1.

exchange service simply by packaging that service with voice mail."[32] The Ratepayer Advocate submits that blended services and bundled services (which include telecommunications and information services) should be treated as a telecommunications services subject to Title II regulation.

IV. PUBLIC SAFETY AND SERVICE QUALITY CONSIDERATIONS SUPPORT STATE REGULATION OF NON-ECONOMIC ASPECTS OF INTRASTATE VoIP SERVICE UNDER SECTION 2(b) OF THE ACT

The Ratepayer Advocate submits that states have authority to regulate VoIP in a manner similar to and consistent with Federal regulation to the extent that a VoIP call begins and terminates within the state. The Ratepayer Advocate also submits that critical state issues, including access to 911, intrastate universal service, service quality, and general economic health of the telecommunications marketplace are issues in which state regulators have an interest. The Ratepayer Advocate asserts that each state should have the right to fully regulate VoIP to the extent that it currently regulates intrastate telecommunications services.

In addition to the expressed right to regulate intrastate services, states have a particular interest in ensuring that consumers have ready and able access to reliable telecommunications services. Most recently, the New York Public Service Commission ("NYPSC") issued an order declaring Vonage a telephone company subject to state regulation.[33] The NYPSC's Chairman, William Flynn explained that "[t]elecommunications services are a critical component of this state's economy, and our decision seeks to maximize the benefits of the emerging technology, while minimizing the risks to the public interest, including safety and economic interests . . . the

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[32] *Stevens Report* at para. 60.

[33] New York Public Service Commission, *Complaint of Frontier Telephone of Rochester, Inc. Against Vonage Holdings Corporation Concerning Provision of Local Exchange and Interexchange Telephone Service in New York State in Violation of the Public Service Law*, 03-C-1285, Order Establishing Balanced Regulatory Framework for Vonage Holdings Corporation , May 21, 2004.

events of September 11, 2001, emphatically attest to the state's vital interest in maintaining reliable telecommunications networks, and to the extent that New Yorkers come to rely on VoIP-enabled service to access those services, we need to establish such access."[34]

The Ratepayer Advocate submits that even if data packets are routed beyond the state, the actual origination and termination points of a call is the determining factor in whether a call is either intrastate or interstate. Technical information submitted in the instant proceeding should reveal providers' ability to track calls, in order to determine the actual origination and termination points of the call. A call that is determined to be a "local" call under this process should be within the regulatory jurisdiction of the relevant state commission.

The Ratepayer Advocate urges the Commission to take a consumer-oriented approach to regulatory policy that maintains state commissions' exclusive authority to regulate intrastate services. Where a VoIP service is marketed and sold as a substitute for traditional telephone service, consumers may have expectations that basic benefits of telephone service, such as rapid access to emergency services via 911 or access by law enforcement, will be provided. State regulatory commissions have historically ensured that the public is provided access to essential utility services at just and reasonable rates, and at fair terms and conditions.

These concerns are not limited to public safety issues such as 911 or law enforcement access, but include all issues such as service quality and performance. States must retain the right to regulate intrastate services and the terms and conditions of such services. Regulatory parity in this regard is essential to ensure that competitive telecommunications marketplaces evolve efficiently and without great disruption or inconvenience to consumers. The introduction of new

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[34] *See "PSC Says Vonage is a Telephone Corporation, Should be Regulated,"* Telecommunications Reports: State Regulation Watch (May 20, 2004).

and novel services may well be the harbinger for a day in which widespread competition produces market-forces that greatly decrease the need for regulatory involvement. However, until that time, it is essential that states continue to monitor, regulate, and review the performance of newcomers to the marketplace in the same manner as they do for traditional telephone companies.

For example, a VoIP provider should be required to provide full disclosure as to the operational differences between the VoIP service and landline service, including, but not limited to, disruptions during loss of electricity. Consumers should be aware of whether "back-up" batteries are necessary for system use during a blackout; whether an operator can execute an emergency break-in for a call; whether an operator can discern from a remote location whether a busy signal imparts actual use of the phone, or a phone that has been left off a hook; whether home security systems offered via telephone lines will work on the VoIP system, and whether that system is more secure or more vulnerable than a standard landline-based device.

1. Appropriate State and Federal Regulation Will Not Stifle VoIP's Growth

Many federal legislators and industry representatives have claimed that state and federal regulation could easily prevent VoIP from delivering on its promise of cost savings, versatility, and innovation for consumers. The Ratepayer Advocate asserts that state and federal regulation, if applied appropriately, will enhance the future of VoIP, not adversely affect its future . There are numerous examples of industries that have thrived while being subject to state and federal regulations. The wireless industry has enjoyed huge successes while under dual regulation. Other industries that have enjoyed similar success include banking, environmental, financial markets, insurance, and many more. On the other hand, the relaxation of regulation has led to

disastrous consequences for some industries. One such tragedy involved the deregulation of the airline industry, wherein the airlines took responsibility for airline security, and hired poorly-paid workers to handle this important task. Needless to say, airline security, is once again a federal responsibility. Another example of failed deregulation occurred in the energy industry which led to the energy crisis in California and the Enron debacle. Enron, in many respects, reflects the deadly convergence of financial and energy deregulation. Reduced regulation and oversight in the financial industry also contributed to the many accounting scandals involving companies such as Adelphia Cable, Tyco, and MCI Worldcom.

As articulated by the National Association of Regulatory Utility Commissioner ("NARUC") in its press release dated April 2, 2004, "[s]tate commissions have worked hard to find the right balance of consumer protection and flexibility to open doors for new technologies and new competitors."[35] Therefore, States have no desire to impose regulations that will stifle innovation, but they are required to ensure that the public interest will not suffer at the hands of emerging technologies like VoIP.

2. VoIP Providers Must Be Subject To Separate Affiliate Requirements To Protect The Public Interest

The Ratepayer Advocate asks that if the Commission deems any part of VoIP services interstate in nature then they must subject VoIP providers of multiple service offerings to appropriate non-structural safeguards to prevent these VoIP providers from engaging in anti-competitive conduct. The Commission in the past has imposed separate affiliate requirements on other providers of interstate telecommunications services, and VoIP providers of multiple services should be no different. VoIP providers should be required to: (1) maintain separate

[35] NARUC Press Release, April 2, 2004. www.naruc.org

books of account, (2) not jointly own transmission or switching facilities with its affiliated exchange telephone company; and (3) acquire any services from its affiliated exchange telephone company at tariffed rates, terms, and conditions.[36]

The Ratepayer Advocate urges the Commission to enforce separate affiliate requirements in order to regulate VoIP providers who are also providers of interexchange, local exchange, and cable services in lieu of imposing economic regulation.

V. PUBLIC SAFETY DEMANDS THAT VoIP PROVIDERS OFFER ENHANCED 911 ACCESS TO ITS CUSTOMERS

During emergencies, telecommunications is one of the most important tools to speed response and minimize loss of life and property. Communications systems can help in three different roles: emergency calling, emergency communications, and emergency alerting. States as well as federal regulators require that telephone providers offer end-users 911 call routing to a Public Safety Answering Point ("PSAP"). [37] A PSAP is a facility equipped and staffed with emergency personnel to receive 911 calls and location and call-back data for emergency assistance.[38] Such 911 requirements are usually imposed on all providers of local exchange service, regardless of the technology used to provide that service, and one of the questions posed by this NPRM is whether VoIP providers should be subject to these same requirements.[39] The Ratepayer Advocate submits that providers of VoIP services must also be required to offer

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[36] *See Policy and Rules Concerning rates for Competitive Carrier Services and Facilities Authorizations Therefor: Fifth Report and Order*, CC Docket No. 79-252, 98 FCC2d 1191, (1984). ("*Competitive Carrier Fifth Report and Order*").

[37] *See* 47 C.F.R. § 64.3001.

[38] Dale N. Hatfield, *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services, prepared for the Federa; Communications Commission* (2002), p.3. ("*Hatfield Report*")

[39] *NPRM*, para. 53.

enhanced 911 access to its customers because as telecommunications transition from a telephony-focused, circuit switched network to an integrated-services packet-switched infrastructure, we must ensure that emergency services are protected for the benefit of consumers and our national security.

As stated in its NPRM, the Commission is vested with the statutory authority under Sections 1, 4(i), and 251(e)(3) of the 1996 Act to determine what entities should be subject to its 911 and E911 rules.[40] The Ratepayer Advocate submits that the Commission exercise its statutory authority and subject VoIP service providers to 911/E911 regulation because VOIP customers deserve and require reliable access to emergency services.[41] In fact the Commission determined in its E911 Scope Order that E911 requirements would be imposed on services and technologies based on whether they satisfied four criteria: (1) the service or device offers real-time, two-way service that is interconnected to a Public Switched Telephone Network ("PSTN"); (2) the customers using the service have a reasonable expectation of access to 911 services; (3) the service competes with traditional mobile wireless or local wireline telephone services; and (4) it is technically and operationally feasible for the service or device to support E911 capabilities.[42] These criteria serve as an excellent starting point for determining whether and to what extent VoIP services should fall within the scope of the Commission's 911 and E911 regulatory framework.

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40 *Id*.

41 According to a recent Harris Poll, the American consumer is generally satisfied with the current level of service when dialing 911 and have grown to have certain expectations regarding E911 services. See Hatfield Report at p.42.

42 See *NPRM*, para. 55.

Given the recent announcements by major companies in the telecommunications and cable TV industries that they have begun offering Internet-based voice telephone service in some of their areas or plan to roll it out regionally or nationally in the next 6-18 months,[43] there is an immediate need for the Commission to adopt mandatory requirements that VoIP providers offer 911/E911 to all of their customers. According to the Association of Public Safety Communications Officials International ("APCO") in its press release dated April 13, 2004, "absent certain protections, the rapid deployment of VoIP service will have a serious, negative impact on the provision of 911 emergency communications across the nation."[44]

The public has an expectation that telephone services will provide 911 and E911 capability, regardless of whether the telephone operates on the public switched telephone network, wireless networks, or the Internet. Yet, at present there is a very real likelihood that a 911 call from a VoIP telephone will be lost, delayed or misrouted. This is because there is currently no standard method in place for connecting VoIP calls to PSAPs that were designed to

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[43] *See* Almour Latour, *BellSouth Plans Corporate Service for Internet Calls*, WALL ST. J., May 13, 2004 (announcing that BellSouth plans to launch an Internet-based calling services for corporate customers in its nine state territory); See Ben Charny, *Verizon Details Internet Phone Plans*, CNETNEws.com, November 18, 2003 (reporting that onNovember 17, 2003, Verizon announced that by end of March 2004 it would offer unlimited, flat fee VoIP telephone service to its high-speed digital subscriber line (DSL) customers).; Almar Latour, *SBC Telcom Plan Is Set to Take on Regional Bells*, WALL ST. J., November 20, 2003 (reporting that on November 20, 2003, SBC began offering VoIP phone service to mid-size businesses in 18 cities and announced plans to offer it to most metropolitan areas in the U.S. by the end of 2004); Margaret Kane and Scott Ard, *AT&T to Offer Internet Calling*, CNET News.com, December 11, 2003 (reporting that AT&T announced plans to begin offering VoIP to cable and DSL subscribers in the 100 largest metropolitan areas in the U.S. by the end of the first quarter of 2004.); See Peter Grant and Shawn Young, *Time Warner Cable Expands Net-Phone Plan*, WALL ST. J., December 9, 2003 (reporting that on December 8, 2003, Sprint and MCI announced that they had signed contracts with Time Warner Cable to provide VoIP service to that company's high-speed Internet access subscribers in 27 states by the end of 2004.) Ben Charny, *Cox Communications Dives into VoIP*, CNETnews.com, December 15, 2003 (reporting that on December 15, 2003, Cox Communications launched a trial of VoIP telephone service for residential customers in Roanake, Virginia).

[44] Press Release of Association of Public Safety Communications Officials (APCO) International dated April 13, 2004.

work with legacy, circuit-switched networks.[45] As a result, most 911 services from VoIP providers direct emergency calls to a PSAP's administrative office instead of connecting directly to a 911 dispatcher.[46] This patch creates potentially costly time delays in responding to a caller in crisis. Another potential problem with VoIP's ability to offer reliable 911 services is due to its mobility. The fact that a VoIP phone can be used anywhere there is a broadband connection, the phone number associated with the device cannot be used to determine the nearest PSAP to call or the caller's location. [47] The Hatfield Report highlighted the fact that given VoIP's "end station mobility and location independence" it would face challenges in the provision of emergency services to consumers. A recent example of a 911 glitch resulting from VoIP's mobile nature took place in Texas when an Air Trans pilot requested police assistance when his flight landed at Dallas/Fort Worth airport. The gate agent for Air Tran called 911 using a VoIP phone service and the call was routed to the PSAP in Anne Arundel County, Maryland instead of to the local PSAP.[48]

Yet another problem facing VoIP is the fact that packet switched networks do not have the same built-in power source that circuit switched networks do, and thus are far more likely to be subject to service outages.[49] To address similar concerns, many states currently require cable operators that provide telecommunications services to provide a backup power source or a

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[45] Donny Jackson, *Nortel Proposes VoIp 911 Solution*, TelephonyOnline, April 19, 2004 (visited May 17, 2004) <http://www.telephonyonline.com/microsites/magazinearticle.asp>

[46] See Donny Jackson, *VoIP Recognition*, TelephonyOnline, January 26, 2004 (visited May 17, 2004) <http://www.telephonyonline.com/microsites/magazinearticle.asp> For example, Vonage a leading provider of VoIP services is faced with this same problem and is currently working with the National Emergency Number Association to rectify the situation and plans to provide enhanced 911 services within two years.

[47] *See supra* fn. 42.

[48] *Texas Official Warns FCC of 911 VoIP Glitch*, TR Daily, April 2, 2004..

[49] *See* David Wallace, *Using the Internet to Cut Phone Calls Down to Size*, N.Y. TIMES, July 19, 2001, at G5.

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"network reliability unit."[50] The Ratepayer Advocate submits that IP telephony providers should be subject to similar backup power requirements as they become more prevalent substitutes for circuit-switched services.

The Ratepayer Advocate agrees that VoIP is a promising new technology that could lead to major improvements in telecommunications capabilities, including those of public safety agencies. However, the risk to consumers if proper emergency calling and other public safety measures are not put in place for VoIP providers far outweighs the supposed "risk that regulation could slow technical and market development."[51] Given the problems that plague VoIP's reliable provision of essential 911 services to its customers, it is critical that the Commission take the necessary steps to ensure that VoIP providers are technologically and operationally capable of complying with basic 911 services rules to ensure that calls are directed to the appropriate PSAP as well as being capable of enhanced 911 functions such as delivering call-back and location information.[52]

The Ratepayer Advocate submits that the public safety implications of VoIP's failed 911 service offering compels direct regulation by the Commission and state commissions in achieving its public policy goal of maintaining access to emergency services for all consumers. The Ratepayer Advocate commends the voluntary efforts of the National Emergency Number Association ("NENA") and the Voice on the Net ("VON") Coalition to provide VoIP subscribers with basic 911 service and enhanced 911 functionality.[53] However, enforceable regulation is

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50 *See, e.g., DPUC Investigation into CoxCom, Inc. D/B/A Cox Communications Connecticut's Installation of Ground-Mounted Back-Up Generators*, Decision in Dkt. NO. 00-03-09 (Conn. D.P.U.C. Feb. 7, 2001).

51 *NPRM* at para. 53.

52 *Id*. at paras. 53-54.

53 *Id*. at para.55.

essential to ensure that solutions are sufficient to satisfy the public interest and apply to all VoIP providers. While, the NENA/VON agreement promises to work toward permanent solutions to the VoIP 911 problem, the interim solution proposes to route 911 calls to ten-digit emergency numbers within three to six months. This interim proposal according to APCO is an unacceptable approach because "it takes a 21st century technology (IP telephony) and shoves it into a 1960's method of reporting life threatening emergencies."[54] The Commission simply cannot rely on the non-binding nature of these voluntary agreements to spur deployment of IP-enabled E911 services. The Ratepayer Advocate recommends the Commission impose mandatory 911 requirements even if they determine that application of full Title II regulation is not required. After all the Commission should not tolerate the possibility that the inability to reach an emergency service provider over an IP line could lead to death or serious injury.

The Ratepayer Advocate also recommends that the Commission set a firm deadline for VoIP carriers who provide telecommunications services to comply with 911/E911 regulatory requirements. As more consumers opt for VoIP because of its lower cost, the Commission must ensure that VoIP provides 911 functionality to its consumers in an expeditious manner.

As the public reaches for faster, more affordable information transfer and communication, our nation's 911 system and local emergency response networks need 21st Century capabilities. From the inception of new technology, to the detail and complexity of public policy, the safety and security of the public must be of paramount importance.

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[54] *See* Adam Raney, *The Three-Digit Hurdle*, Voxilla.com,, December 12, 2003 (last visited May 17, 2004) <http://www.voxilla.com>

VI. THE COMMISSION SHOULD TAKE AN ACTIVE ROLE IN REGULATING VOIP PROVIDERS THROUGH THE APPLICATION OF THE MANDATES AND DIRECTIVES OF THE DISABILITY ACCESS ORDER AND SECTIONS 255, 251 OF THE ACT

A. Introduction and Background

The last decade has unquestionably seen great strides and technological advancements in the field of telecommunications. As consumers, we have experienced the advent of the information highway and have observed it grow in leaps and bounds. We have watched as our children become proficient at on-line research and installation of computer software. As a society, we have embraced and immersed ourselves in a technology that has become second nature and a staple in the majority of our homes and offices. However, and unfortunately, technological advancements have not reached all sectors of our society with equal speed. Currently, a large number of individuals in the United States are disabled and access to new technologies in telecommunications has been slow and limited for these individuals.

The adoption of VoIP as a mainstream telecommunication technology has "boomed" over the last few months with industry providers starting to market telephone services (digital phone service) with number portability and other mainstream features delivered over the internet.[55] At the moment, there are approximately 56 million people in the United States with disabilities and this number is increasing as our population grows older.[56] The Commission is cognizant of this fact, having found that the percentage of persons affected by functional limitations increases with age, that 34.2% of those aged 55-64 experience some functional

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55 *Cut-Rate Calling By Way of the Net*, NY TIMES, April 8, 2004, at Circuits Page 1.

56 U.S. Department of Commerce, Bureau of Census :(Years 1990-2050).

limitation and that by the year 2050, 35% of our population will be over the age of 55.[57] As our society moves from PSTN phone technologies to VoIP phone technologies, there is an increasing danger that, if accessibility regulations are not carried forward to the new technology, people with disabilities and those who are older will lose access to telecommunications.

It was for the protection of this growing sector of society that the Americans With Disabilities Act ("ADA") was enacted.[58] The ADA expressly recognized that our society has tended to isolate and segregate individuals with disabilities by discriminating against them in such critical areas as public accommodations, employment, access to public services and communications. To date, individuals with disabilities continue to encounter various forms of discrimination including the discriminatory effects of communication barriers.

Cognizant of this fact and in furtherance of the ADA, Congress enacted Sections 255 and 251 of the 1996 Act. Like the ADA, the purpose of these sections is to "assure equality of opportunity, full participation, independent living, and economic self-sufficiency" for individuals with disabilities.[59]

In 1999, the Commission, after reviewing the recommendations of the Access Board Guidelines ("Board") and with minor exceptions to the Board's guidelines, adopted rules in connection with information services.[60] The Commission's Disability Access Order defines, *inter alia* such topic areas as: "disability," "readily achievable," information" and "information services," "telecommunications" and "telecommunication services," as well as, but not limited

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57 *Implementation of Section 255 of the Telecommunications Act of 1996, Access to Telecommunications Services, Telecommunications Equipment, and Customer Premises Equipment By Persons With Disabilities*, WT Docket No. 96-198, Order, 16 FCC Rcd 6417 (1999) ("*Disability Access Order*").

58 American With Disabilities Act of 1990; 42 U.S.C. § 12101; Pub. L. No. 101-336, 104 Stat. 327.

59 ADA Section 12101(a)(8); Telecommunications Act of 1996, 47 U.S.C. §§ 255, 251(a)(2).

60 *Disability Access Order*, 16 FCC Rcd at pp 6429-6450.

to, establishing guidelines for: "accessible to" and "usable by," "compatibility," "network fibers" or "compatibilities," to ensure that service providers and product manufacturers consider the special needs of individuals with disabilities.[61] The Commission correctly applied and enforced Sections 255[62] and 251[63] under Title I of the Act, insofar as a service is addressed as an "information service."

The Ratepayer Advocate opines that the standards and requirements contained in the Commission's Disability Access Order are applicable to VoIP and IP-enabled services. Accordingly, these standards must be applied to these technologies to ensure the continued access of these technological advancements by those sectors of our society that would unquestionably benefit the most from its development and usage.

As previously stated, the Ratepayer Advocate is of the view that VoIP should not solely be considered an information service, and the Commission should refrain from such general classification. VoIP involves the ability to place a phone call., and therefore the Commission must ensure that disabled customers are able to utilize VoIP services for that purpose. Conversations using text such as TTYs, IP Relay and Video Relay Service (VRS) are forms of TRS which have been protected by Federal regulation. The goals of Section 255 have been implemented to ensure that interstate and intrastate [TRS] are readily available, in the most efficient manner, to hearing-impaired and speech-impaired individuals in the United States. Therefore, regardless of the label placed on VoIP, we should conclude that it includes

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61 *Id.* at 6428-6439.

62 Section 255 requires manufacturers of telecommunications equipment and providers of telecommunications service to ensure that such equipment and services are accessible to persons with disabilities, if readily achievable.

63 Section 251(a) (2) provides that each telecommunications carrier has the duty not to install network features, functions or capabilities that conflict with the guidelines and standards established pursuant to Section 255 and the Order.

conversations that are carried out using speech, sound, text and any other modality used for carrying out a conversation. There already exist services where an individual can talk into a standard plain old telephone service ("POTS") telephone on one end and the recipient can view the conversation in text, and respond in text, which is then converted back to speech. In light of continuing technological advancements all forms of conversation over a device or service which permits phone calls to a phone number (or its future equivalent) should be subject to Section 255 and 251 of the Act and thereby covered under Title II.[64]

Technology has the immense potential to improve the lives of people with disabilities. However, technology can empower people with disabilities only if they are able to use the technology. People with vision loss cannot use products that rely only on visual displays. People with hearing loss cannot use products or services that provide only auditory cues. Many people who have disabilities that limit their mobility or dexterity cannot use products that require users to manipulate intricate controls. Many people with speech, motor or cognitive disabilities cannot use services because they "time out" too quickly. Some will argue that natural market forces will address problems faced by individuals with disabilities. However as Dr. Vanderheiden of the Trace R&D Center ("Trace Center") noted, hearing aid compatibility disappeared when a new speaker technology came along.[65] He observed that Congress then passed the Hearing Aid Compatibility Act but left an exception for cell phones.[66] Thereafter, when the market exploded,

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[64] This analysis is in keeping with the conclusions drawn in the Stevens Report, which stated that phone to phone VoIP may be treated as a telecommunication service if: 1) the provider holds itself out as providing voice telephony service; 2) CPE is the same CPE used to place calls over the PSTN; 3) the customer can dial numbers assigned under the NANP; and 4) the service transmits customer information without net change in form or content.

[65] Gregg C. Vanderheiden, Professor of Industrial Engineering, University of Wisconsin and Director, Trace R&D Center, Madison, Wisconsin, *Access to voice-over-internet protocol ("VoIP"),* (2003) ("*Trace Report*").

[66] Gregg C. Vanderheiden, "The Future of Internet Phone Calling: Regulatory Imperatives to Protect the Promise of VoIP for Industry and Consumers." New Millennium Research Council, Washington, D.C. (2003).

hearing aid compatibility was not provided (since it was not required) and those who used hearing aids lost out on the use of cell phones. Similarly, it is only now after eight years of the law's existence, that cell phones accessible to the blind are beginning to come out in the market. However, Trace Center data reveals that the marketing of such products is not a priority and the vast majority of those who are blind still have no access to even basic cell phone functionality beyond dialing by feel. They cannot tell if they have a signal, if the battery is low, have no access to the phone menus. In addition, Trace Center data also reveals that people who are older, have lower vision, are hard of hearing, and or have physical disabilities, are all having problems with cell phones.[67] These problems could have been more timely and effectively addressed through a more vigorous enforcement of Sections 255 and 251 of the Act.

The Trace Center has determined that the same pattern is appearing in the VoIP technologies. Dr. Vanderheiden explains that the IP transmission format and the types of telecommunication technologies used to implement it make it easier to implement accessibility than in past technologies.[68] The Trace Center has information that Avaya has just released a phone program that doesn't require any change to the phones and when loaded onto the phone server, immediately allows much of the phone functionality on all of the phones to be accessible to individuals who are blind.[69] Similarly the Trace Center and Gallaudet University in Washington, D.C., are working with Cisco Systems Inc. on a technique that would allow every phone within the a network organization to be instantly capable of text communication simply by

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67 *Id*. at 12.

68 *See Trace Report* at p.2.

69 *See supra* n. 67. *AVAYA* is a global leader in communication systems, applications and services company that designs, builds, deploys and manages networks for enterprises and agencies.

installing a software program on the call manager server. [70] A deaf person would be able to communicate in text or text and voice without the need of any special equipment from any phone within the network.

The Trace Center has already heard from those in the industry that they cannot move forward with VoIP access implementations until it is clear that their companies either have some advantage, or at the very least will not be at a disadvantage by implementing access capabilities while competitors are doing something else.[71]

The regulatory obligations enumerated in the ADA and Sections 255 and 251 of the Act were created to be broadly applied and provide a mandate for the elimination of discrimination and barriers against individuals with disabilities. Courts have stated that "[I]t is a familiar canon of statutory construction that remedial legislation should be construed broadly to effectuate its purposes."[72] Unfortunately, it is apparent that market forces and a *laissez-faire* approach alone are not enough and will not address the issue of access technology to VoIP for people with disabilities. Regulation can correct these errors. It is both important and necessary to carry disability access forward into VoIP. The studies conducted by the Trace Center in conjunction with Gallaudet University demonstrate that it is both technologically and commercially feasible, and eminently practical to implement VoIP technologies, which will greatly benefit those individuals with disabilities and those who are older.

The Ratepayer Advocate submits that given the rapid pace of technological advancement, the Commission needs to ensure that new services and networks are developed and designed in a

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70 *Id*. Cisco Systems, Inc. is a worldwide leader providing Internet Protocol-based (IP) networking solutions to business and agencies.

71 *Trace Report* at 2.

72 *Arnold v. United States Parcel Service*, 136 F. 3rd 854 (1st Cir. 1998).

manner that they will provide access to persons with disabilities. Section 255(f) explicitly gives the Commission jurisdiction to "enforce any requirement of this section *or any regulation thereunder."* The time for the Commission to act is now, at the dawn of a new technology, by implementing the mandates and directives of Sections 255, 251 and of the Disability Access Order to VoIP and IP-enabled services and service providers. The Commission should and must take an active role in regulating this very important and essential telecommunications service and ensure a level playing field were technology may flourish and be accessible by all.

VII. VoIP SERVICES THAT ARE DEEMED TELECOMMUNICATIONS SERVICES SHOULD BE REQUIRED TO PAY ACCESS CHARGES AND CONTRIBUTE TO UNIVERSAL SERVICE MECHANISMS.

The Commission has already recognized the impact of new technologies on universal service support mechanisms. As described in the Stevens Report:

> We recognize that we are in the midst of a transition from an outmoded system of universal service support that will be undermined by the emergence of local competition to one that is compatible with competitive local markets. We underscore that during and after this transition, it is our duty and intention to ensure that financial support for federal universal service support mechanisms is maintained. In carrying out those responsibilities, we must think ahead, so that our policies are right not just for the present but for the future as well. Our rules should not create anomalies and loopholes that can be exploited by those seeking to avoid universal service obligations.[73]

The Ratepayer Advocate submits that two important principles can be gleaned from this statement: (1) that the evolution toward competitive markets contemplates a transition phase during which some regulation will be necessary to guide markets appropriately, and (2) Commission rules should ensure that Aanomalies and loopholes@ do not exist to the detriment of important public policy considerations. In light of this, the Ratepayer Advocate submits that

[73] *Stevens Report* at para.4.

regulation of VoIP in a manner similar to standard telephone service is appropriate in a not-yet-fully competitive telephone marketplace, and that rules based on a service-type, rather than protocol-type, approach are appropriate to ensure that consumer expectations are preserved and protected.

One area in which perhaps unspoken consumer expectations must be addressed is the issue of access charges. The Ratepayer Advocate supports the Commission's

> belie[f] that any service provided that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways.[74]

VoIP ultimately runs on the PSTN. Even certain wireless-based VoIP applications may depend upon the PSTN network for part of the call; that will become clearer as industry participants file technical performance information. The Ratepayer Advocate submits that continued maintenance of the PSTN with funding generated by those entities that rely upon the network is crucial to rapidly deploying to the Nation new telecommunications technologies.

Telecommunications technologies that may seem far removed from the traditional PSTN, i.e., cellular or PCS, still rely upon the PSTN in order to interconnect with literally millions of end-users who represent the vast majority of telecommunications consumers, be they residential, government, or business. A mass migration of traditional landline users, whose providers pay access fees, compared to VoIP providers who might not pay access fees, could jeopardize maintenance of the PSTN and universal service funding. VoIP services that meet the criteria of telecommunications services should similarly be required to pay access fees.

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[74] *NPRM* at para. 33.

The Commission recently addressed the weighty issue of access charges in the AT&T Order, and did so logically. The preservation of access charges is important in order to ensure the continued health and maintenance of the PSTN and the services that rely upon it. Access charges should be required of VoIP services that are classified as telecommunications services, since telecommunications services are required to pay access charges. This discussion does not enter into great philosophical debate invoking the relative interests of free markets and regulation, nor does it invoke the tensions of the MTS/WATS era, in which the Commission exempted ESP providers from access charges in order to, in part, protect the nascent market.[75] The AT&T Order devoted itself to discussing why the AT&T service at issue met the criteria of a telecommunications service. A comparatively small portion of the Order dealt with why, once classified as a telecommunications service, access charges were required: AAT&T obtains the same circuit-switched interstate access for its specific service as obtained by other interexchange carriers, and, therefore, AT&T=s specific service imposes the same burdens on the local exchange as do circuit-switched interexchange calls."[76] The Ratepayer Advocate submits that this analytical framework should apply to all VoIP services that meet the criteria of a telecommunications service. Although the Commission may decide to reform its intercarrier compensation regime in the near future, any and all telecommunications service until that time are required to pay access charges, consistent with the existing policy of advancing and

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[75] *See I/M/O MTS and WATS Market Structure*, Memorandum Opinion and Order, CC Docket No. 78-72, Phase I, 97 FCC 2d 682, para 83 (1983); *I/M/O Amendments of Part 69 of the Commission=s Rules Relating to Enhanced Service Providers*, Order, CC Docket No. 87-215, 3 FCC Rcd 2631, para. 17 (1988).

[76] *AT&T Order* at para. 15.

preserving universal service. Indeed, VoIP providers have stated that they are not adverse to the idea of paying access charges.[77]

The Ratepayer Advocate further submits that the Commission itself has recognized that the telecommunications landscape is transitioning from a POTS-based environment to a new frontier. [78] End-user switched interstate telecommunications revenues, which serve as a basis for access charge contributions, are declining. Yet, demand for telecommunications services, as evidenced even most basically by the pressing need for area code relief in many regions, is growing. Regardless of whether these new technologies utilize the PSTN, access charge revenue to the PSTN is shrinking. If the new services rely upon the PSTN, then they should be required to contribute toward its maintenance and upkeep. If the new services are found to not rely upon the PSTN, or otherwise exempt from access, then the Commission must undertake to determine the best method by which the health of the PSTN can be maintained. National goals of universal service have propelled the access by many to the Nation's rich and diverse telecommunications network. The Ratepayer Advocate urges the Commission to ensure that evolving technological applications do not undermine the principles envisioned by universal service goals. Indeed, the General Accounting Office reported, "As the deployment of IP telephony technologies moves forward, and more businesses and consumers begin to substitute IP telephony for traditional telephone service, the question arises as to whether a decline in the funding for universal service

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77 A spokesman for a VoIP industry group stated, "[t]he VoIP industry hasn't claimed that we shouldn't pay intercarrier compensation." *See* "VON Ends with Note of Exuberance with Sector Ready for Breakthrough," Telecommunications Reports v.70, n.8, at 5 (Apr. 15, 2004).

78 *See I/M/O Federal-State Joint Board on Universal Service, et. al: Further Notice of Proposed Rulemkaking*, CC Docket No. 96-45, et. al., 17 FCC Rcd 3756, at para. 8 (2002).

could result." [79] The Commission, too, has recognized this possibility, stating that VoIP "threatens to erode access revenues for LECs because it is exempt from the access charges that traditional long-distance carriers must pay."[80] The Ratepayer Advocate urges the Commission to apply access charges to VoIP.

VIII. THE COMMISSION MUST REQUIRE VoIP PROVIDERS TO CONTRIBUTE TO THE UNIVERSAL SERVICE FUND ("USF")

The Universal Service Fund ("USF") enables federal and state regulators to support significant programs to reduce the cost of telecommunications access for people living in rural, high-cost areas and for low-income individuals, as well as reduce costs to schools, libraries and rural health care providers.[81] Under the federal USF requirements, telecommunications carriers pay a percentage (currently ranging from 8% to 10%) of revenues attributable to interstate telecommunications services. However, as more consumers switch from traditional telecommunications services to IP-based services, the USF and the telecommunications revenues upon which the USF relies will be adversely affected. Therefore, the Ratepayer Advocate recommends that the Commission require VoIP providers to contribute to universal service pursuant to its mandatory authority.[82]

The Commission has long considered the impact of IP-enabled services on the funding for USF programs. In particular, the Commission's 1998 Universal Service Report to Congress addressed phone-to-phone Internet telephony's resemblance to traditional carriers by noting that

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79 *Federal and State Universal Service Programs and Challenges to Funding,* Report to Ranking Minority Member, Subcommittee on Telecommunications and the Internet, Committee on Energy and Commerce, House of Representatives, General Accounting Office, at 21-22 (rel. Feb. 2002).

80 NPRM at para. 30, *internal citation omitted.*

81 47 U.S.C. § 254 (2000).

82 47 USC § 254(d).

"it creates a virtual transmission path between points on the public switched telephone network."[83] In a NPRM addressing the streamlining of the universal service system, the Commission reiterated its view that certain forms of phone-to-phone IP telephony bear the resemblance to telecommunications services, which could subject those services to mandatory universal service obligations.[84] The Commission sought further comment on the issue stating that "the accelerating development of new technologies like 'voice over Internet' increases the strain on regulatory distinctions such as interstate/intrastate and telecommunications/non-telecommunications, and may reduce the overall amount of assessable revenue reported under the current system."[85] In its recent decision in AT&T's Petition for Declaratory Ruling, the Commission set forth the following criteria for classifying AT&T's VoIP interexchange service as a telecommunications services: (1) use ordinary customer premises equipment (CPE) with no enhanced functionality; (2) originate and terminate on the PSTN; and (3) undergoes no net protocol conversion and provides no enhanced functionality to end users due to the provider's use of IP technology.[86] The Ratepayer Advocate applauds the Commission's commitment to ensuring that financial support for federal universal service support mechanisms is maintained

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83 1998 Universal Service Report to Congress, 13 FCC Rcd. At 11,543, paras. 86,87 (citing 47 USC § 153(51)) ("Universal Service Report")

84 I*/M/O Federal –State Joint Board on Universal Service*, Notice of Proposed Rulemaking , 16 FCC Rcd. 9892, para. 13, n.44 (2001).

85 *In re Federal-State Joint Board on Universal Service; 1998 Biennial Regulatory Review-Streamlines Contributor Reporting Requirements Associated with Administration of Telecommunication Relay Service, North American Numbering Plan, Local Number Portability, and Universal Service Support Mechanisms; Telecommunications Services for Individuals with Hearing and Speech Disabilities, and the Americans with Disabilities Act of 1990; Administration of the North American Numbering Plan and North American Numbering Plan Cost Recovery Contributor Factor and Fund Size; Number Resource Optimization; Telephone Number Portability; Truth-in-Billing Format*, Further Notice of Proposed Rulemaking and Order, 17 FCC Rcd 3752, para. 13 (2002).

86 AT&T Order at para. 1.

and asserts that the time has come for the Commission to require all VoIP services that make use of the PSTN or NANPA resources to contribute to federal and state universal service programs.[87]

The question of whether IP telephony providers should contribute to the USF has also drawn tremendous attention from members of Congress because they realize that the telecommunication-based universal support subsidies may soon experience severe cuts as common carriers begin offering IP telephony services to compete with existing "information services." Congressman John Dingell articulated his concern that "[I]nternet telephony may evade the responsibility of contributing to support the Universal Service Fund, a fund that ensures that all Americans have access to affordable telephone service."[88] Senators Conrad Burns (R-MT), John Rockefeller (D-WV), Olympia Snowe (R-ME) and Ted Stevens (R-AK) have also lent their support to arguing for treatment of IP telephony providers as a "telecommunications carrier" in order to secure contributions to the USF.[89]

It is therefore incumbent on the Commission, in furtherance of the public interest, to require VoIP providers who provide telecommunications services to contribute to universal service because failure to do so would provide VoIP carriers with a significant cost advantage relative to the traditional carriers – e.g. interexchange carriers ("IXCs"), incumbent local exchange carriers ("ILECs"), and wireless carriers who are required to contribute to the USF. For example, Internet-based telephony services are able to offer reduced rates for long distance by avoiding the heavily regulated circuit-switched networks that require payment of mandatory universal service fees imposed by the Commission. This is tantamount to regulatory arbitrage

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87 *Universal Service Report* at para. 4

88 See 147 Cong. Rec. H3059 (2000) (statement of Rep. Dingell).

89 *Universal Service Report* at para. 85.

and this practice of avoidance should not be allowed to continue. As previously stated, the direct consequence of VoIP providers not contributing their fair share to universal service will be a steady decline in revenues earmarked to fund social programs at a time when these costs continue to rise.

Moreover, the Commission should not permit the entry of VoIP services to frustrate the basic public policy goal of universal service which is to provide basic telephone service to all Americans at affordable rates. As the Commission is no doubt aware, consumers living in sparsely populated areas depend on universal service subsidies to avoid high telecommunications costs. The USF support mechanisms enable carriers to serve unprofitable, low-density areas and without USF support, carriers would likely concentrate their business in highly populated and extremely profitable urban centers. Therefore, both the urban and rural poor urgently need universal support subsidies in order to have affordable standard telephone access.

It is therefore appropriate and sound public policy that VoIP providers that are found to offer telecommunications services must help fund universal service programs. If the VoIP service is a mix of interstate and intrastate, then the interstate revenues should be assessed for federal and state universal service support. Any other outcome would do an injustice to funding for universal service and its needy recipients.

IX. THE COMMISSION SHOULD EXTEND CPNI REQUIREMENTS AND OTHER CONSUMER PROTECTIONS TO SUBSCRIBERS OF VOIP SERVICES

The majority of the provisions of the Act sought to primarily open all telecommunications markets to competition, and mandated competitive access to facilities and services. Congress however, recognized that the new competitive market forces and technology ushered in by the Act had the potential to threaten consumer privacy interests. Congress,

therefore, enacted consumer protection provisions such as Sections 214, 222, 226 and 258 of the Act to prevent abuses and safeguard privacy protections and consumer rights from being inadvertently swept away along with the prior limits on competition.[90]

Section 222 of the Act is perhaps one of the most important, if not, the most important Section of the Act, in terms of affording consumer protection. Over the last several years technology has enabled us as consumers to shop on-line and pay bills on-line at the "click" of a mouse. However, and unfortunately, we are ever more aware of news stories covering one of our nation's most serious problems, *i.e.*, identity theft.

Through Section 222, Congress expressly directs a balance of both competitive and consumer privacy interests with respect to customer proprietary network information ("CPNI"). Congress' balance and privacy concern are evidenced by the comprehensive statutory design, which expressly recognizes the duty of all carriers to protect customer information, and embodies the principle that customers must be able to control information they view as sensitive and personal from use, disclosure, and access by other carriers.

Where information is not sensitive, or where the customer so directs, the statute permits the free flow or dissemination of information beyond the existing customer-carrier relationship. Indeed, in the provisions governing use of aggregate customer and subscriber list information, sections 222(c)(3) and 222(e)[91] respectively, where privacy of sensitive information is by definition not at stake, Congress expressly required carriers to provide such information to third parties on nondiscriminatory terms and conditions. Thus, although privacy and competitive

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90 47 U.S.C. §§ 214, 222, 226 and 258.

91 47 U.S.C. § 222(f)(3). "The term 'subscriber list information' means any information (A) identifying the listed names of subscribers of a carrier and such subscribers' telephone numbers, addresses or primary advertising classifications (as such classifications are assigned at the time of the establishment of such service), or any combination of such listed names, numbers, addresses, or classifications; and (B) that the carrier or an affiliate has published, caused to be published, or accepted for publication in any directory format."

concerns can be at odds, the balance struck by Congress aligns these interests for the benefit of the consumer. This is due to the fact that where customer information is not sensitive, the customer's interest rests more in choosing service with respect to a variety of competitors, thus necessitating competitive access to the information, rather than in prohibiting the sharing of information.[92]

CPNI is defined as "(A) information that relates to the quantity, technical configuration, type, destination, location, and amount of use of a telecommunications service subscribed to by any customer of a telecommunications carrier, and that is made available to the carrier by the customer solely by virtue of the carrier customer relationship; and (B) information contained in the bills pertaining to telephone exchange service or telephone toll service received by a customer of a carrier."[93] Practically speaking, CPNI includes personal information such as the phone numbers called by a consumer, the length of phone calls, and services purchased by the consumer, such as call waiting.

Section 222(c)(1) prohibits the use of CPNI only where it is derived from the provision of a telecommunications service. Consequently, we find that information that is not received by a carrier in connection with its provision of telecommunications service can be used by the carrier without customer approval, regardless of whether such information is contained in a bill generated by the carrier. Therefore, if customer information is derived from information services that are held not to be telecommunications services the information may be used, even if the

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92 *In the Matter of Implementation of the Telecommunications Act of 1996 Telecommunications Carriers' Use of Customer Proprietary Network Information and Other Customer Information*; CC Docket No. 96-115, CC Docket No. 96-149, CC Docket No. 00 257, Third Report and Order and Third Further Notice of Proposed Rulemaking (July 25, 2002).

93 47 U.S.C. § 222(f)(1) and 47 U.S.C. § 222(h)(1)(A) (The 911 Act amended the definition of CPNI at section 222(h) to include "location" among a customer's information that carriers are required to protect under the privacy provisions of Section 222.).

telephone bill covers charges for such information services.

The Ratepayer Advocate has previously stated, for reasons heretofore discussed, that VoIP services are "telecommunications service" and therefore, VoIP providers should be categorized as telecommunications carriers, as defined under the Act, and subject to the Act's provisions.

In addition to Section 222, the Ratepayer Advocate urges the Commission to apply equally to VoIP and IP-enabled services those Sections (heretofore mentioned) of the Act that afford consumers protections in the areas including but not limited to: "Universal Service," "Telemarketing/"Slamming," "Truth in Billing," "E911," and "TOCSIA"[94]

Similarly, the Ratepayer Advocate maintains that the Commission should not and must not disregard these important consumer protections and rights. The Commission must focus on prevalent consumer privacy violations such as identity theft and respond in-kind by affording the public with adequate protections as VoIP and IP-enabled technologies and services are developed and mass marketed to the public. The Ratepayer Advocate notes that in the absence of FCC guidelines, some state utility regulators have felt compelled to attempt to draft their own policies in an effort to afford some consumer protection. The California Public Utilities Commission has most recently approved telecommunications consumer protection rules governing telephone and wireless markets and would assure that consumers have the right to:

- Disclosure: Consumers have a right to receive clear and complete information about rates, terms and conditions for available products and services, and to be charged only according to the rates, terms and conditions they have agreed to.

[94] 47 U.S.C. §§ 201, 214, 258 and 226 the "Telephone Operator Consumer Services Improvement Act" (TOCSIA).

- Choice: Consumers have a right to select their services and vendors, and to have those choices respected by industry.
- Privacy: Consumers have a right to personal privacy, to have protection from unauthorized use of their records and personal information, and to reject intrusive communications and technology.
- Public Participation and Enforcement: Consumers have a right to participate in public policy proceedings, to be informed of their rights and what agencies enforce those rights, and to have effective recourse if their rights are violated.
- Accurate Bills and Redress: Consumers have a right to accurate and understandable bills for products and services they authorize, and to fair, prompt and courteous redress for problems they encounter.
- Non-Discrimination: Every consumer has the right to be treated equally to all other similarly situated consumers, free of prejudice or disadvantage.
- Safety: Consumers have a right to safety and security of their persons and property.[95]

Telecommunications companies are jumping into VoIP and IP-enabled services with both feet – even though, in terms of regulation, they don't know precisely where those feet will land. However, one thing remains certain, consumer protection legislation and regulation remains necessary. The need for a national standard in the area of VoIP and IP-enabled services is here. The Ratepayer Advocate submits that the Commission has the tools and the Congressional mandate to apply all of the consumer protections delineated in the Act to VoIP and IP-enabled services, and strongly urges the Commission to apply these provisions and protections.

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95 California Public Utilities Commission, *Order Instituting Rulemaking on the Commission's Own Motion to Establish Consumer Rights and Protections Rules Applicable to All Telecommunications Utilities*, Docket No. R.00-02-004, (Feb. 3, 2000). The California Public Utilities Commission approved the consumer protection rules on May 27, 2004.

X. STATES MUST BE PERMITTED TO TAX VOIP SERVICES OR RISK SERIOUS EROSION TO STATE AND LOCAL TELEPHONE REVENUE AS PHONE CALLS MIGRATE TO THE INTERNET

Historically, state and local governments have shared the responsibility in the regulation of the telephone industry. This shared responsibility has given states a major say in how service is provided in their states, the provision of emergency services, and the provision of services to low income and rural customers. Currently, VoIP companies are not required to pay taxes and serve low-income customers. The Ratepayer Advocate is concerned that the rapid growth of VoIP telephone service is bound to adversely impact state and local revenues as consumers switch from PSTN to VoIP services. This reduction in revenues will not decrease the need for services such as 911, universal service, and access for the handicapped, all of which is funded by the states.

Proponents of exempting VoIP services from state taxation assert that VoIP adoption would drive investment and expansion of broadband services, because most VoIP service is available only over broadband. There seems however to be no justification for the preferential treatment of VoIP and broadband since broadband services are currently undergoing rapid expansion without assistance from government subsidies. The latest poll by the Pew Internet Project shows that 48 million Americans already have access to high-speed internet connections at home, and that number has grown 60% from a year ago.[96] There is simply no need for the subsidies proposed by members of Congress, nor is there a need for the tax-haven status that President Bush and many in Congress favor.[97] According to Senator Lamar Alexander, there are

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[96] See John B. Horrigan, Ph.D., Senior Research Specialist, Pew Internet & American Life Project Memo, p. 1., April 2004.

[97] *See*, Declan McCullagh, *Bush: Broadband for the people by 2007*, CNETnews.com, April 26, 2004.

alternate means of encouraging broadband access such as giving customers of broadband Internet service a sales tax exemption on the first $25 of their monthly broadband bill.[98] While the sales tax exemption might cost $2 billion a year, exempting VoIP from taxes could eventually cost states and local government more than $10 billion a year.[99] The Ratepayer Advocate submits that the argument that States' taxing of VoIP services will somehow stall the deployment of broadband is flawed because states are currently collecting telecommunications taxes with no deleterious effects on broadband deployment in their respective states. Furthermore, States are not proposing to impose new telecommunications taxes on VoIP services, they are only interested in preserving the taxes and fees they are currently collecting from telephone providers who rely on the PSTN to provide their services. Therefore, VoIP providers who fit into this category should not be exempt from state taxation.

The vast majority of VoIP transmissions originate on the Internet and then move through the PSTN. Vonage, Net2Phone, and AT&T, as well as numerous cable companies are now offering this type of VoIP service. [100] The Commission has stated and the Ratepayer Advocate agrees that the "cost of the PSTN should be borne equitably among those that use it in similar ways."[101] However, the "Internet Tax Nondiscrimination Act of 2003," Senate Bill 150 seeks to make permanent the federally imposed "moratorium" on state and local taxation of "Internet

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http://www.zdnet.com.com/2100-1104-5200196.html/

98 Grant Gross, *Senator, others call for VOIP regulation*, IDG News Service, February 24, 2004. http://thestandard.com/article.php?story20040224220816812.

99 *Id*.

100 Alex Salkever, *These Phone Calls Aren't Phone Calls*, Business Week Online, February 13, 2004. http://www.businessweek.com:/print/technology/content/feb2004/tc20040213_1268_tc024

101 *NPRM* at para. 33.

access" services.[102] This Bill would essentially exempt VoIP telephone services from state taxation, thereby limiting the ability of state and local governments to raise revenue by taxing the receipts of Internet and telecommunications companies. Another Senate Bill introduced by Senator John Sununu (R-NH) and Rep. Charles Pickering Jr. (R-Miss) referred to as the "VOIP Regulatory Freedom Act of 2004" also aims to shield VoIP from state taxation.[103]

According to the Congressional Budget Office ("CBO") in a November 5, 2003 letter to Senator Lamar Alexander, "state and local governments currently collect more than $20 billion annually from taxes on telecommunications services."[104] Substantial revenue losses could result from the inability of state and local governments to collect transactions taxes which include gross receipts taxes, sales and use taxes, 911 fess, state universal service fund fees, and other taxes that are levied on telecommunications transactions.[105] State lawmakers in Florida recognize the potential for loss of tax revenue from telecommunications services and are poised to enforce a state statute that would permit them to begin taxing VoIP service providers and businesses that use local area networks ("LANs") to transmit voice calls.[106]

The Ratepayer Advocate urges the Commission to consider the serious implications arising from asymmetrical tax policies as applied to telecommunications services versus VoIP and cable modem services. There should be a level playing field for competing technologies so

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102 S. 150, 108th Cong. (2003).

103 S. ___, 108th Cong. (2004). The Bill states that "[n]o State or political subdivision shall impose any tax, fee, surcharge, or other charge for the purpose of generating revenues for governmental purposes on the offering or provision of a VOIP application."

104 Letter from CBO Director Douglas Holtz-Eakin to Senator Lamar Alexander (Feb. 13, 2004).

105 *Id*.

106 Marguerite Reardon , *VoIP: To tax or not to tax* , CNET News.com, April 28, 2004. (last visited May 17, 2004) http://www.news.com.com/2100-7352-5201671.html

real competition can develop. If VoIP services that utilize the PSTN are allowed to escape state taxation they will erode the revenue base that states and localities use to fund critical education, health care, and public safety services.

XI. CONCLUSION

While the Ratepayer Advocate agrees that VoIP and other emerging technologies offer exciting new possibilities to expand the way Americans communicate, we urge the Commission to recognize that states have a role in the regulation of VoIP services in order to protect the public interest. Consistent with state regulation of other voice services, VoIP carriers must contribute to federal and state universal service funds and intrastate access, and must meet state disability access, E911, and other public safety obligations. In particular, states must ensure that consumer protections apply equally to all providers of voice communications, regardless of technology.

Therefore, as telecommunications evolves into end-to-end IP networks integrating voice, video, and data, the Commission must take preemptive steps and develop a regulatory framework that, at a minimum, ensures that all carriers of voice service contribute to the traditional social obligations of telecommunications carriers.

Respectfully Submitted,

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