
INTERNET TELEPHONY REGULATORY SHOWDOWN:

*Treatment of VoIP Services and Implications
for Providers, Consumers, Competitors and Regulators*

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TABLE OF CONTENTS

Executive Summary.....	i
I. Introduction.....	1
II. What is VoIP?	1
III. Action by Federal Authorities	2
A. 1998 Report to Congress	2
B. VoIP Petitions for Rulemaking	3
1. <i>AT&T Petition</i>	3
2. <i>pulver.com Petition</i>	4
3. <i>Vonage Petition</i>	4
C. Upcoming FCC VoIP Rulemaking.....	5
IV. Action by State Authorities.....	5
A. Alabama.....	5
B. California	6
C. Colorado	6
D. Florida.....	6
E. Minnesota.....	6
F. Missouri.....	7
G. New York.....	7
H. North Carolina.....	7
I. North Dakota.....	7
J. Ohio.....	7
K. Pennsylvania.....	8
L. Texas	8
M. Washington	8
N. Wisconsin	8
V. The Key Regulatory Issues Facing VoIP Providers.....	8
A. Jurisdiction	9
B. Universal Service Obligations & Rights	10
C. 911 Public Safety Requirements & Immunity	10
D. Access Charges/Intercarrier Compensation	11
E. Consumer Protection Laws.....	11
F. Law Enforcement and Reliability Concerns.....	11
G. Numbering Resources.....	12
VI. Conclusion	12

EXECUTIVE SUMMARY

Voice-over-Internet Protocol telephony - VoIP or Internet telephony, as it is often called - is suddenly everywhere. Virtually every major telecommunications company has announced commercial deployments in an effort to gain ground in this fertile new market. Recent state action and court rulings have addressed the implications of VoIP services and how they intersect with the existing telecommunications regulatory paradigm. FCC Chairman Powell recently announced the formation of an Internet Policy Working Group to identify, evaluate, and address VoIP, among other Internet issues, and has promised a comprehensive proceeding in 2004. No longer relegated to arcane trade press, VoIP services are touted in the popular press as a shining example of the brave new world of technology and the promise of broadband Internet services, with revenues expected to skyrocket. This White Paper reviews state and federal regulatory actions involving VoIP services and provides an overview of the critical issues facing regulators, VoIP service providers, consumers and competitors.

While the treatment of VoIP services is now unquestionably a front burner issue for regulators, in reality, the issues have been debated for years. The FCC first sought comment on how to regulate VoIP services in 1996 when the agency was petitioned for guidance on Internet telephony and where it fit in the regulatory scheme. Yet, the FCC's only direction to date has been in its 1998 *Report to Congress*, a proceeding that was launched in response to concerns from Congress that VoIP might be getting a "free ride" from regulatory obligations. While the FCC indicated that if VoIP looked and operated like traditional telephony it should be treated like telephony, it stopped short of making any final pronouncements, instead offering a general framework for specific decisions yet to come. In the last year, the FCC has been confronted by petitions from AT&T, pulver.com and Vonage, asking for rulings on VoIP and a holding that traditional regulation does not apply to their services. Commenting parties have used these petitions to stake the positions they will likely argue in the comprehensive proceeding expected out in 2004. At the same time, over a dozen states have acted, with some urging traditional regulation for VoIP services and others taking a more measured approach. Action by some states in the VoIP area may well continue, especially if the FCC does not occupy the field with affirmative policies.

A host of issues face regulators and lawmakers considering the appropriate treatment of VoIP services, including fundamental questions regarding state and federal jurisdiction as well as jurisdiction over VoIP as a telecommunications service; the impact of VoIP on universal service rights and obligations; public safety requirements and immunity (e.g., 911); obligations regarding the payment of access charges and other intercarrier compensation; application of consumer protection laws; law enforcement and reliability concerns; and issues regarding the use of numbering resources. While the answers are not clear, what is certain is that VoIP decisions are likely to be made by reference to practical, social, and political concerns as well as legal considerations. Whatever the final paradigm is for VoIP, it is sure to have consequences for consumers, providers and telecommunications competition generally.

I. INTRODUCTION¹

The question of how to regulate Voice-over-Internet Protocol telephony services (“VoIP”) has long promised to vex federal and state regulators, legislators, policymakers and service providers. Should VoIP providers be subject to traditional common carrier regulation, either in whole or in part? Where do VoIP services fit in the federal and state universal service frameworks? Will VoIP offer vital public safety features such as 911 access and otherwise meet law enforcement concerns? What about the payment of access charges and other intercarrier compensation arrangements now required of telephone companies? Critically, the “boundary-less” nature of VoIP services means that it isn’t even yet clear who decides these issues – when a VoIP service connects two end-users within a state are state regulators the decision makers, or is this inherently an interstate service subject to the Federal Communications Commission’s (“FCC”) exclusive jurisdiction? As the VoIP market grows and consumers are able to adopt the services more readily, there is a growing urgency to answer these and other questions, especially if investment is to follow the emerging promise.

While no consensus solution has arisen so far, the FCC has recently announced plans to initiate a comprehensive proceeding in the coming months to consider these issues. At a minimum, the FCC promises to ask many of the hard questions. Yet, while the upcoming proceeding may be new, both the FCC and the states have taken action on VoIP, including initiating proceedings, for several years. This White Paper provides an overview of the major state and federal regulatory actions that have considered VoIP services and delineates key issues that face industry participants. While VoIP unquestionably promises to challenge regulatory classifications for the near term and could well force compromises and changes to the regulatory *status quo* in a number of areas, it is most important to recognize that regulatory action (even a decision to refrain from action) will directly affect key VoIP business, legal, and marketing decisions as well as service deployment.

II. WHAT IS VOIP?

VoIP is a service that manages the delivery of voice information across data networks, including the Internet, using the Internet Protocol (“IP”). Rather than sending voice information across the traditional circuits on the Public Switched Telephone Network (“PSTN”), VoIP sends voice in digital form via discrete data packets that are routed in the same manner as other data packets. VoIP services can be computer-to-computer, phone-to-phone, computer-to-phone, and phone-to-computer. With some VoIP services, end-users make a PSTN local call to a VoIP gateway server where analog voice signals are converted to IP packets, transmitted over the Internet backbone or other IP networks to a receiving server near the called party, which then re-formats the call to an analog signal and sends it to the called parties’ PSTN circuit switch to terminate the call. Other VoIP services ride on broadband connections that consumers may otherwise have. A separate protocol, ENUM, can be used to translate

¹ We would like to afford special acknowledgement and appreciation to Jennifer L. Phurrough for her enormous efforts and assistance in preparing this White Paper. The information contained herein should not be construed as legal advice or legal opinion on any specific facts or circumstances. The contents are intended for general informational purposes only and should not be relied upon as a substitute for obtaining legal advice applicable to your situation.

between PSTN telephone numbers and Internet domain names as a means of routing calls between locations on the Internet and PSTN networks.²

III. ACTION BY FEDERAL AUTHORITIES

The FCC first sought comment on how to regulate VoIP services in 1996 when the FCC was petitioned for guidance on Internet telephony and where it fits in the regulatory scheme. Yet, as explained below, the FCC's first and only tentative response to date has been its 1998 *Report to Congress*, which generally discussed potential regulation of VoIP providers and services.³ Of course, the growing use of VoIP has caused the FCC to note its impact in several decisions and it has several times requested comment on potential regulation of VoIP providers. In the meanwhile, VoIP services have continued to grow and we now stand on the cusp of widespread commercial deployment. What do the myriad federal proceedings, pending petitions and related actions tell us about how VoIP services are to be treated? The following describes the seminal *Report to Congress* and newly pending FCC dockets, which are sure to form the basis of the forthcoming rulemaking, as well as state actions on VoIP.

A. 1998 *Report to Congress*

The FCC first addressed the regulatory classification of VoIP services in the 1998 *Report to Congress* in response to concerns from Congress that VoIP might be getting a "free ride" from Universal Service Fund ("USF") payment obligations and other regulations. In a nutshell, the *Report to Congress* generally concluded that it was not necessarily appropriate to subject VoIP services to federal telecommunications regulation at that time and confirmed the FCC's prior statutory interpretation that "telecommunications services" and "information services" are mutually exclusive terms under the Communications Act. While the FCC indicated that if VoIP looked and operated like traditional telephony it should be treated like telephony, the FCC stopped short of making any final pronouncement about VoIP services. Rather than offer any answers about particular services, the *Report to Congress* offered a general framework for specific decisions yet to come.

The *Report to Congress* distinguished between two types of services: computer-to-computer VoIP and phone-to-phone VoIP. The FCC described computer-to-computer VoIP communications as instances where "individuals use software and hardware at their premises to place calls between two computers connected to the Internet. The IP telephony software is an application that the subscriber runs, using access provided by its Internet service provider [ISP]."⁴ The FCC concluded that this form of VoIP more closely resembles an unregulated "information service," since the Internet Service Provider ("ISP") may be unaware of the customer's particular use of the Internet access and the ISP does not provide or offer "telecommunications" in that

² See, Lampert & O'Connor, P.C., "ENUM: The Internet Numbers Game," (Oct. 2001), *found at*, www.l-olaw.com/Publications/ENUM.pdf.

³ *Federal-State Joint Board on Universal Service*, Report to Congress, CC Dkt. No. 96-45, 11 FCC Rcd. 11501 (Apr. 10, 1998) ("hereinafter *Report to Congress*").

⁴ *Id.* at ¶ 87.

case. As such, the FCC indicated telecommunications regulation would likely be inappropriate. Likewise, the FCC also found that companies that only provide software and hardware installed at the customer premises and that are not involved in the transmission of information resemble equipment providers, which are not regulated as telecommunications carriers. By contrast, the FCC tentatively defined a provider of “phone-to-phone” VoIP as an entity that: “(1) holds itself out as providing voice telephony or facsimile transmission service; (2) does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) transmits customer information without net change in form or content.”⁵ The FCC concluded that these phone-to-phone services are gateways for voice callers and bear the characteristics of “telecommunications services” since users of these services obtain only voice transmission. Notably, the FCC declined to reach any final regulatory classifications for either computer-to-computer or phone-to-phone VoIP, pending the development of a more fully developed record that would be focused on individual service offerings. Since the *Report to Congress*, the FCC has reached no final determinations on the statutory classification of VoIP services as either (unregulated) “information services” or (regulated) “telecommunications services,” although the question has been laid at its doorstep more than once.

B. VoIP Petitions for Rulemaking

Within the last year or so, the FCC has opened three dockets on petitions that request the FCC to make declaratory rulings regarding VoIP. In these proceedings, each petitioner essentially requests the FCC to declare that the petitioner’s particular VoIP service is not a regulated “telecommunications service.”

As expected, interested parties from all sides of the VoIP debate – including state regulators, incumbent local exchange carriers (“ILECs”), competitive local exchange carriers (“CLECs”), equipment manufacturers, cable operators, wireless providers, and VoIP companies – have taken a range of positions in these proceedings. All parties appear to conclude, however, that the proper classification and treatment of VoIP services is among the critical regulatory questions now facing the FCC.

1. AT&T Petition

In October 2002, AT&T petitioned the FCC for a declaratory ruling that AT&T’s VoIP service is exempt from federal and state carrier access charges, seeking to resolve conflicts with ILECs over the imposition of such charges for its VoIP services.⁶ AT&T asserted that its service is transmitted over the same Internet backbone facilities as all

⁵ *Id.* at ¶ 88.

⁶ *Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, Dkt. No. 02-361 (filed Oct. 18, 2002); Public Notice, *Wireline Competition Bureau Seeks Comment on AT&T’s Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services are Exempt from Access Charges*, WT Dkt. No. 02-361 (Nov. 18, 2002) (Comments due Dec. 18, 2002; Reply comments due Jan. 7, 2003).

other Internet traffic. AT&T also argued that the application of access charges to AT&T's services would be contrary to the *Report to Congress* and the mandate in Section 230 of the Communications Act to preserve "the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." Comments and replies were filed in December 2002 and January 2003 and no action has been taken to date.

2. *pulver.com* Petition

In February 2003, *pulver.com* also petitioned the FCC for a declaratory ruling that its Free World Dialup ("FWD") service is neither "telecommunications" nor a "telecommunications service."⁷ The company stated that it provides a point-to-point broadband IP voice communication service, which is a free community service that allows broadband users to talk to other FWD users worldwide over the Internet. Pulver argued that FWD is different from traditional telephone service and VoIP service because it does not offer service over the PSTN or any cellular network, members are not given telephone numbers, and connections are only made with other FWD members also on-line. Additionally, *pulver.com* stated the FWD service is not "telecommunications" because it does not provide members with a "simple, transparent transmission path." Comments and replies were filed March and April 2003 and again, no further action has been taken.

3. *Vonage* Petition

Finally, in September 2003, Vonage Holdings Corporation ("Vonage") filed a Petition seeking a declaratory ruling in response to a decision by the Minnesota Public Utilities Commission ("PUC") holding that Vonage offers a "telephone service" under state law, and is therefore required to comply with state requirements for intrastate telecommunications carriers, such as filing tariffs and E911 obligations.⁸ Vonage urged that its service is an interstate "information service" and is therefore not subject to state regulation as a telecommunications carrier. Vonage has requested that the FCC preempt the Minnesota PUC order and conclude that an interstate call over the Internet would not be subject to state regulations. According to its Petition, Vonage's service differs in some ways from the FWD and the AT&T offerings. Vonage explained that its service provides a "net protocol conversion service" that connects incompatible transmission formats of the Internet and the PSTN. As described in its Petition, Vonage customers make calls over a high-speed Internet connection and purchase specialized equipment, and Vonage provides customers with ten-digit telephone numbers that it obtains from telephone companies. According to public documents, Vonage does not assign telephone numbers according to the customer's physical

⁷ *Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications nor a Telecommunications Service*, Dkt. No. 03-45 (filed Feb. 5, 2003) (hereinafter *pulver.com Petition for Declaratory Ruling*); Public Notice, *Pleading Cycle Established for Comments on pulver.com Petition for Declaratory Ruling*, WC Dkt. No. 03-45 (Feb. 14, 2003) (Comment due Mar. 14, 2003, Reply comments due Apr. 2, 2003).

⁸ *Vonage Holding Corporation's Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, Dkt. No. 03-211 (filed Sept. 22, 2003), at 2; Public Notice, *Pleading Cycle Established for Comments on Vonage Petition for Declaratory Ruling*, WC Dkt. No. 03-211 (Sept. 26, 2003) (Comments due Oct. 27, 2003, Reply Comments due Nov. 24, 2003).

location (as are PSTN numbers) but rather with the customer's computer. Comments and replies were filed in October and November 2003. No action has yet been taken on this petition.

C. Upcoming FCC VoIP Rulemaking

As indicated, the FCC has recently stated its intent to begin a VoIP Rulemaking in the coming months. Some in Congress have also signaled that they are ready for the FCC to undertake this task. To begin the process, the FCC convened a day-long forum on VoIP services to address business, technical, service feature and policy issues, on December 1, 2003. At the forum, Chairman Powell announced the formation of an Internet Policy Working Group to assist the Commission in "identifying, evaluating and addressing policy issues that will arise as telecommunications services move to Internet-based platforms."⁹ While it is too early to know what the FCC will propose as a regulatory paradigm for VoIP, the range of alternatives certainly will be broad, including some degree of forbearance and flexibility that has not been experienced in voice communications services before. It is also apparent that the FCC's great interest in this proceeding is a direct result of actions taken by state regulators to assert jurisdiction over VoIP providers, and the FCC's concern that the states may improperly impose too much regulatory control over VoIP.

IV. ACTION BY STATE AUTHORITIES

In the meanwhile, many states have examined or have initiated proceedings to examine the regulatory status of VoIP. Other states are taking a "wait-and-see" approach, declining to create any general VoIP policy until the FCC has made a decision regarding the regulatory classification of VoIP. NARUC, the national association of state regulators, recently adopted a resolution calling on the FCC to consider carefully use of its Title I jurisdiction, which could "mean a loss of consumer protections applicable to telecommunications services under Title II" and a "[l]oss of state and local authority over emergency dialing services,"¹⁰ highlighting the difficult jurisdictional issues at stake. More than a dozen states have acted on or are reviewing questions of the regulatory classification and regulatory obligations of VoIP providers. Action by some states in the VoIP area can reasonably be expected to continue and result in *ad hoc* state regulation, especially if the FCC does not occupy the field with affirmative federal policies. The following is a summary of relevant state proceedings and actions concerning VoIP.

A. Alabama

In July 2001, the Alabama Local Exchange Carriers ("LECs") filed a Petition for a Declaratory Order with the Alabama Public Service Commission ("PSC") requesting that VoIP providers be classified the same as traditional telephony providers, and subject to

⁹ FCC Chairman Michael K. Powell Announces Formation of Internet Policy Working Group, Public Notice (Dec. 1, 2003).

¹⁰ At its November 2003 annual meeting, the National Association of Regulatory Utility Commissioners ("NARUC") reiterated a February 2003 resolution that phone-to-phone VoIP should be regulated as a telecommunications service and also urged the FCC to consider carefully its "information services" actions to avoid risks to "consumer protections," "public safety," and the "[l]oss of state and local authority over emergency dialing services." "Resolution on Information Services," NARUC, November 2003.

intrastate access charges and the filing of tariffs. The LECs state that these determinations are needed to ensure a level playing field for all voice telephony providers. In August 2003, the Alabama PSC initiated a proceeding to investigate and make a determination regarding the issues raised by the LECs. Comments were filed October 31, 2003. Reply comments were due December 2, 2003.

B. California

Without issuing a public order or finding, the California Public Utilities Commission ("PUC") determined that VoIP providers are subject to the same regulations as other telephone service providers and requested six VoIP providers in California to apply for a license by October 22, 2003 to operate as telecommunications carriers. In response to this request, all six providers sent letters to the PUC arguing that their VoIP services are exempt from state phone regulations, because they provide interstate information services that are not subject to the PUC's jurisdiction. The PUC has yet to announce next steps in this proceeding.

C. Colorado

In August 2000, the Colorado PUC determined that not subjecting VoIP to switched access charges better replicates the agreement that would be reached in a competitive marketplace and better satisfies § 251 of the Communications Act. In April 2003, the PUC began an investigation to determine the appropriate regulatory treatment of VoIP and served audit requests on various entities, including public telephone companies, to gather information necessary for its VoIP determinations. Based on resistance from some entities to the production of requested documents, the PUC released a May 2003 order to compel the production of the documents, such as contracts and agreements regarding E911 services. The PUC has not taken further action in this proceeding.

D. Florida

Enacted in May 2003, a Florida statute prevents the Florida PSC from regulating VoIP. The legislature found that VoIP should be free of unnecessary regulation in order best to serve the public interest. Florida law specifically excludes VoIP from the state's statutory definition of "service" subject to regulation. The legislature, however, did not settle the issue of whether VoIP providers must pay intrastate access charges, and the law provides that issues concerning a VoIP exemption from access charges are to be resolved by further action on the part of the PSC or the FCC.

E. Minnesota

In September 2003, the Minnesota PUC determined that Vonage VoIP service was functionally the same as a telephone service as defined by state law and therefore could not operate unless complied with state law within 30 days of the order. The PUC ordered Vonage to act in accord with all of the Minnesota telephony statutes and rules, including E911 and tariffing obligations, as well as to remit 911 fees. On October 16, 2003, however, the United States District Court, District of Minnesota issued an order permanently enjoining the Minnesota PUC from enforcement of its order, finding that Vonage's service is an "information service" under the federal Communications Act

and that the Minnesota PUC order was preempted by federal law including the FCC's *Report to Congress*.¹¹ On October 30, 2003, the PUC requested that the district court reconsider its findings. As indicated, Vonage has also filed a petition with the FCC seeking federal preemption.

F. Missouri

In September 2003, the Missouri PSC granted applications filed by a number of telecommunications service providers to intervene in the Time Warner Information Services application to provide VoIP services. On November 24, 2003, the PSC staff recommended that the application be granted without holding a hearing. Responses to the staff recommendation were due December 12, 2003.

G. New York

In May 2002, the New York PSC determined that a provider of IP telephony services, U.S. DataNet, was offering a "telecommunications service" as a phone-to-phone VoIP provider as defined in the *1998 Report to Congress* and, as such, was subject to pay the ILEC's carrier access charges. In October 2003, the NY PSC sought public comment on a complaint filed by Frontier Telephone against Vonage alleging that Vonage is providing VoIP services but fails to comply with the state telephone law and regulations. While the U.S. DataNet case is likely to be critical precedent for the PSC, the PSC is currently reviewing the comments in response to the Frontier complaint.

H. North Carolina

In July 2003, the North Carolina Utilities Commission ("NCUC") granted a certificate of public convenience and necessity to Time Warner Cable Information Services to provide local exchange and exchange access telecommunications services using VoIP. BellSouth and the Alliance of North Carolina Independent Telephone Companies commented that VoIP should be classified as a telecommunications service, rather than an enhanced service. BellSouth argued that VoIP issues are better addressed in an industry forum rather than through the certification order. The NCUC disagreed with the need for a generic state proceeding on VoIP, and granted the Time Warner Cable application.

I. North Dakota

In December 2003, a group of local exchange carriers filed a lawsuit with the North Dakota PSC, alleging that a VoIP provider, SmartNET, had unlawfully avoided paying carrier access charges on VoIP calls and that it had failed to register with the state as a licensed telecommunications carrier.

J. Ohio

In April 2003, the Public Utilities Commission of Ohio ("PUCO") released a public notice initiating an investigation into the provision of voice services in the state

¹¹ *Vonage v. Minnesota Public Utilities Commission*, Civil No. 03-5287 2003 U.S. Dist. LEXIS 18451 (U.S. Dis. MN).

through the use of VoIP. Possibly tipping PUCO's hand somewhat, the notice characterizes VoIP as "telecommunications services" and notes that voice services "traditionally carried over the public telephone network are now being offered on the Internet at a growing rate." The PUCO has taken no further action in this proceeding.

K. Pennsylvania

In May 2003, the Pennsylvania PUC opened a proceeding to determine whether the PUC has jurisdiction to regulate VoIP services. A bill has also been introduced in the Pennsylvania legislature that would prevent state regulation of VoIP.

L. Texas

While the regulatory classification of a VoIP provider was not addressed directly, the PUC of Texas issued a decision in February 2003 that implies that VoIP may be a "telecommunications service." In this decision, the PUC clarified what services should be reported as an "access line" for purpose of local rights-of-way compensation. The PUC determined that a VoIP service arrangement is an "access line" under Texas law only if the service meets the eight criteria of a basic local telecommunications service. Thus, this decision could be interpreted to mean that state certification and regulation is mandatory for VoIP providers whose services meet the eight criteria.

M. Washington

The Washington Exchange Carrier Association ("WECA") brought a federal lawsuit against LocalDial Corporation, a VoIP provider, alleging that LocalDial must pay carrier access charges to WECA members for the origination and termination of intrastate long distance telephone calls. Subsequently, the federal district court issued a stay of all aspects of the case and referred it to the Washington State Utilities and Transportation Commission ("UTC"), asking it to resolve whether WECA's state access charge tariffs apply to LocalDial's VoIP telephone calls, and, if so, to what extent the Commission should regulate VoIP. While the Washington UTC has declined to open a formal proceeding over the general classification of VoIP services, it has stated its intention to address the remanded issues as applied to LocalDial.

N. Wisconsin

In September 2003, the Wisconsin PSC informed three VoIP providers that their services were subject to the same state telecommunications rules as traditional telephone companies. The PSC sent its standard letter to the companies stating that they could not provide a telecommunications service without the PSC's certification and that their bills for voice calls are void. Responses were filed from companies who received the letter in October 2003. The PSC is reviewing the responses.

V. THE KEY REGULATORY ISSUES FACING VOIP PROVIDERS

A host of issues face regulators and lawmakers considering the proper response to the rise of VoIP services in the marketplace. Below is a brief synopsis of some of the significant issues to be resolved. It is, of course, important to bear in mind that

permanent VoIP decisions are unlikely to be made by reference to just a single set of principles or concerns and are likely to reflect political as well as legal considerations. Further, practical considerations will also affect the final paradigm, including potential costs of regulation (or non-regulation), the consequences for consumers, and the consequences for telecommunications competition. At a minimum, a thorough evaluation of what is at stake will assist in paving the way for a viable outcome.

A. Jurisdiction

Perhaps most crucial is the issue of jurisdiction: Who regulates and who decides? At the outset, federal and state regulators must grapple with the question of their jurisdiction to regulate VoIP. The answer depends, in turn, on at least two related questions. First, jurisdiction is determined by whether the service offers intrastate or interstate communications, or a combination of both, that would support jurisdiction of either federal or state regulators or dual jurisdiction. For example, jurisdiction may be determined by examining whether VoIP traffic connects two users located within a single state and, if so, whether such traffic can be feasibly divided between intrastate and interstate aspects. Various precedents confirm that such an analysis offers a useful tool to determining jurisdiction. Second, a regulator must consider whether the service is a traditional *telecommunications service*, to which obligations generally apply as a matter of federal or state law, or an *information service*, to which telecommunications law generally does not apply.

The classification of the VoIP service will also likely define the scope of the regulators' jurisdiction and the degree of overall regulatory action. Traditionally, the FCC has declined to regulate information services, but it has repeatedly affirmed its right to do so. State regulators, as well, generally do not regulate information services, but VoIP may present a different case.

Ultimately, more than one solution may evolve. Since VoIP services, in fact, are a collection of some very different services and applications, the statutory and regulatory fit may vary depending on the nature of the service in question. Issues of market power by some entities — including concerns about anticompetitive conduct by incumbent facilities-owners and cross-subsidization by regulated services — may also justify different results on the issue of jurisdiction.

Closely related to the exercise of jurisdiction is the question of regulatory forbearance if jurisdiction is found by classifying VoIP as a “telecommunications service.” The FCC, for example, has statutory authority to decline to regulate and to forbear from applying sections of the Communications Act, subject to specific standards.¹² The critical issue may be one of striking the correct balance, *i.e.*, determining what public obligations should apply to VoIP and which ones should be dropped to encourage growth of the service and also protect other valid public interests. Given the potential for VoIP use to increase enormously, these issues are at the core of the future of voice service regulation.

¹² 47 U.S.C. § 160.

B. Universal Service Obligations & Rights

State and federal regulators 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 to reduce costs to schools, libraries and rural health care providers (the Universal Service Fund (“USF”) programs). The USF issue is typically framed in terms of whether the VoIP provider should have an obligation to pay into the USF funds on the same basis as traditional telecommunications carriers. Under the federal USF requirements, telecommunications carriers pay a percentage (currently ranging from 8% to 10%) of revenues attributable to interstate telecommunications services, but proposals to reform the federal USF charging mechanism – such as charging on a per-connection or a per-telephone number basis – could affect the USF debate significantly for VoIP providers. Whether VoIP providers avoid direct USF obligations is an important policy issue because a permanent avoidance of the USF obligation would provide VoIP a significant cost advantage relative to traditional carriers (including IXCs, ILECs, wireless carriers, etc.). Moreover, permitting VoIP providers to avoid USF raises concerns that the base of telecommunications revenues actually funding the USF system would seriously shrink at a time when the costs of the social programs required under the Communications Act are rising. The issue of whether VoIP providers may receive USF funding for the provision of eligible telecommunications services will also be important, especially if VoIP relies on a more efficient, lower-cost operation than traditional PSTN service.

C. 911 Public Safety Requirements & Immunity

State as well as federal regulators require that telephony providers offer end-users 911 call routing to emergency personnel and location and call-back data for emergency assistance,¹³ and thus there is a question as to whether VoIP providers should be subject to these same requirements. In December 2002, the FCC released a *Further Notice of Proposed Rulemaking* to reevaluate the scope of communications services that should provide access to emergency services¹⁴ and asked for comments regarding whether IP-based systems should be required to deliver call-back and location information. In November 2003, the Commission addressed its Enhanced 911 (“E911”) rules, clarifying that some technologies and services are required to transmit E911 location information to public safety answering points.¹⁵ While the November decision does not address VoIP directly, the FCC determined that E911 requirements would be imposed on services and technologies based on whether they met four criteria: (1) the service or device offers real-time, two-way service that is interconnected to a 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. These criteria presumably will apply to VoIP.

¹³ See, e.g., 47 C.F.R. § 64.3001

¹⁴ *Revision of the Commission’s Rules to Ensure Compatibility with Enhance 911 Emergency Calling Systems*, CC Dkt. No. 94-102, Further Notice of Proposed Rulemaking, 17 FCC Rcd 25576, ¶ 2, (2002).

¹⁵ *FCC Expands E911 Rules*, Public Notice, Nov.13, 2003 available at www.fcc.gov.

It should also be noted that state or federal legislators would likely need to address the issue of VoIP providers' immunity from liability for 911 services offered. Even if VoIP providers avoid 911 regulations, they could possibly face tort litigation if VoIP services sold as a substitute for PSTN service lack the 911 access capabilities or if a 911 error occurs. If required to offer 911 and/or E911 services, VoIP providers will no doubt seek to be afforded the same liability protection under state law as is enjoyed by local exchange carriers and wireless providers.

D. Access Charges/Intercarrier Compensation

Long-distance providers typically pay local exchange carriers per-minute fees to originate and terminate voice calls, while information service providers and end-users do not pay such fees for Internet communications. Whether VoIP providers should be subject to access charges or should come under another mechanism will affect directly the economics of VoIP as well as telecommunications competition generally. Notably, in the FCC's pending Intercarrier Compensation proceeding,¹⁶ the FCC is considering a mechanism to compensate LECs terminating VoIP calls and, more generally, the level of regulation that should apply when two carriers exchange voice traffic, whether the traffic is local or interstate. Indeed, one key proposal in this pending proceeding is "bill and keep," which would require no payments between carriers for termination of traffic.

E. Consumer Protection Laws

Telecommunications carriers are subject to federal and state regulations governing consumer complaints, truth-in-billing regulations, service quality, rate regulations, protection of customer privacy, anti-"slamming" and anti-"cramming" laws, and other consumer laws. Should all, some, or none of these laws apply to VoIP services? Without question, compliance with consumer regulations can be expensive and may limit the services that the VoIP provider may offer. While effective protection of consumers has traditionally been of central concern for both state and federal regulators, what, if any, of these protections are necessary for emerging VoIP services, or will the marketplace sufficiently discipline the conduct of VoIP providers toward consumers in the absence of regulation?

F. Law Enforcement and Reliability Concerns

The ability of law enforcement to intercept communications of criminals, especially terrorists, is a key security issue facing regulators. Currently, it is unsettled whether VoIP providers are subject to CALEA obligations, and a regulatory classification as "information service" would likely mean that VoIP providers are not subject to CALEA compliance. This is a significant concern of law enforcement. A separate security concern is a possible terrorist strike on VoIP provider networks causing harm to the public safety and the national economy. What regulation, if any, is necessary to protect the public safety and the reliability of communications in the post-September 11th context? Is the introduction of VoIP as a widespread alternative to

¹⁶ *In re Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rulemaking, CC Dkt. No. 01-92, 16 FCC Rcd. 9610 (2001).

the PSTN itself the creation of a redundant network that ensures reliability without the need for regulation?

G. Numbering Resources

Telephone numbers are considered resources of the North American Numbering Plan (“NANP”) and fall under the exclusive jurisdiction of the FCC. While numbering resources were typically geographically defined according to wireline carrier central offices, VoIP providers have typically obtained numbers and distributed them in a manner that does not reflect the geographic location of the end-user. Indeed, in some cases, VoIP users may obtain a telephone number in order to appear to be local to a PSTN user, when long distance charges would otherwise apply. The use of numbering resources by VoIP providers, at a time when the NANP is facing numbering exhaust, area code splits and overlay pressure, adds to the concern that VoIP will adversely affect the current numbering system. Further, it should be noted that the use of ENUM identifiers would possibly reduce the need for actual NANP numbers by VoIP providers, but may give rise to consumer confusion as calls are routed across both the PSTN and IP networks.

VI. CONCLUSION

The mass market may finally be ready for VoIP services to deliver the promised new era of voice services. At the same time, regulators must address the difficult issues that VoIP presents and be mindful of how those decisions will impact providers, consumers and competitors, balancing sometimes competing interests. While it is too early to predict how these balances will be struck, it is certain that VoIP decisions are likely to be made by reference to practical, social, and political concerns as well as legal considerations. Whatever the final paradigm is for VoIP, it is sure to have significant consequences for consumers and telecommunications competition generally.