

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Developing a Unified Intercarrier)	CC Docket No. 01-92
Compensation Regime)	
)	

REPLY COMMENTS OF THE VOICE ON THE NET COALITION

The Voice on the Net Coalition (“VON”)¹ hereby files these reply comments in the above-captioned proceeding, in which the Commission has solicited comments on various proposals for comprehensive reform of the existing intercarrier compensation regime.² VON urges the Commission to seize this opportunity to create a regulatory environment that will accelerate the transition to a nationwide IP framework and the realization of the benefits to consumers, businesses and government stemming from such a transition. Toward this end, VON respectfully requests that any new intercarrier compensation regime (i) be competitively, technologically, and geographically neutral; (ii) adopt bill-and-keep or establish rates that are uniform and cost-based for all traffic connected to the public switched telephone network (“PSTN”), precluding origination charges, and (iii) encourage voluntary interconnection between service providers.

¹ The VON Coalition consists of companies that are developing and offering voice products and services for use on the Internet and IP networks, including Acceris Communications, Accessline Communications, AT&T, BMX, BT Americas, CallSmart, Convedia, Covad, EarthLink, iBasis, Intel, Intrado, Level 3, MCI, Microsoft, Mobilepro, Multi-Link, New Global Telecom, PointOne, pulver.com, Skype, Switch Business Solutions, T-Mobile USA, USA DataNet, and VocalData. Largely through the efforts of VON Coalition members, packet-switched voice services are emerging as an exciting new technology benefiting consumers throughout the world. More information about the VON Coalition can be obtained at <http://www.von.org>.

² *Developing a Unified Intercarrier Compensation Regime*, Further Notice of Proposed Rulemaking, CC Docket No. 01-92, FCC 05-33, at ¶ 4 (Feb. 10, 2005) (“*FNPRM*”).

Background on Voice over Internet Protocol (“VoIP”) Services

Voice over Internet Protocol (“VoIP”) services are having a profound and beneficial impact on the United States and the world. Use of VoIP is drastically reducing the cost of communications and creating a foundation and demand for broadband communications that have much greater capacity and functionality than that offered by traditional telephony.

TeleGeography projects that VoIP residential subscribers will grow from 1.8 million in the first quarter of 2005 to 17.5 million by 2010, with annual revenues exceeding \$5 billion.³ The benefits of VoIP are not limited to residential households. About one-third of large businesses, and a significant number of small and medium-sized businesses, currently rely on VoIP services to fulfill critical needs, and enterprise use is expected to increase significantly in the next few years.⁴ VoIP services are also rapidly being adopted for government use; one survey shows that transitioning to VoIP over the next 12 months is a top priority for over half of U.S. government organizations.⁵ In the near term, access to VoIP services is limited by the fact that only about

³ See *TeleGeography U.S. VoIP Report* at 13, available at http://www.telegeography.com/ee/free_resources/pdf/voip2005_exec_sum.pdf (March 2005).

⁴ See Matthias Machowinski, *Enterprise VoIP: To adopt or not to adopt?*, TELEPHONY ONLINE, at http://telephonyonline.com/voip/commentary/voip_ip_voice_062005/ (June 20, 2005) (noting that businesses are increasingly adopting VoIP solutions due to the “ease of use/manageability, flexibility and operational cost” associated with the technology).

⁵ See *VoIP is Top Priority for Government Organizations in 2005, According to New Network General Survey*, VOIP NEWS (May 17, 2005), at <http://www.voip-news.com/art/8a.html>.

12.8% of Americans currently subscribe to broadband.⁶ In the long run, however, VoIP is one application that can drive greater broadband adoption, which benefits the entire economy.⁷

Discussion

The United States is in the midst of a great digital transition that will forever change how we work, learn, and communicate. The growing pervasiveness of the Internet and IP communications could have revolutionary consequences as profound as the rise of the automobile, the airplane, and the microchip. Even though our lives and our economy have already been transformed by the Internet, we are experiencing only the initial stages of a “Big Bang” of consumer and economic benefits. Ubiquitous IP networks would not only bring an estimated \$500 billion in economic growth and deliver an estimated 1.2 million high-wage jobs, but would also help to unleash entire new industries and a host of breakthroughs we can’t even imagine today.⁸ VoIP can help to accelerate this transition, and the realization of the many benefits that will stem from it.⁹

⁶ See *OECD Broadband Statistics: December 2004* (last visited July 15, 2005), available at http://www.oecd.org/document/60/0,2340,en_2649_34225_2496764_1_1_1_1,00.html. U.S. broadband penetration relative to other industrialized nations has actually fallen over the past four years. While the U.S. had the fourth-highest penetration rate in 2001, it is currently in 12th place, ranking behind South Korea, Japan, and many European nations.

⁷ As one study has noted, “accelerating the adoption rate of current generation broadband technologies could increase the present discounted value of consumer benefits by as much as \$500 billion.” See Robert W. Crandall, Charles L. Jackson, and Hal J. Singer, *The Effect of Ubiquitous Broadband Adoption on Investment, Jobs, and the U.S. Economy* (Sep. 2003), available at http://newmillenniumresearch.org/archive/bbstudyreport_091703.pdf.

⁸ The Brookings Institution estimates that universally available broadband could add \$500 billion to the economy by 2010. Likewise a TechNet sponsored study found it could create an additional 1.2 million jobs.

⁹ Other nations are increasingly relying on VoIP to provide a bridge between yesterday’s PSTN network and tomorrow’s IP network; Japan, for instance, has four times the VoIP penetration of the U.S.

As Metcalfe's law states, the power of any network is increased by the square of the number of people connected to it. Thus, a regulatory framework that encourages both the development of IP networks and the interconnection of those networks with the legacy PSTN can geometrically increase the value of our communications networks, so that we can realize the benefits of the future today. In particular, the Commission's intercarrier compensation policies should encourage such interconnection, while recognizing the uniqueness of the IP world, in which distance and time have far different implications than in the legacy PSTN world.

In light of these objectives, VON applauds the Commission's decision to reevaluate the existing regulatory regime governing intercarrier compensation rates and structures. That regime is, in a word, broken. The Commission's legacy regulations have outlived their usefulness, and serve only to frustrate competition and innovation to the detriment of consumers and the larger public interest. As the Commission notes in the *FNPRM*, “[g]iven the rapid changes in telecommunications technology, it is imperative that new rules accommodate continuing change in the marketplace and do not distort the opportunity for carriers using different and novel technologies to compete for customers.”¹⁰ The Commission should seize upon this proceeding as an opportunity to establish a new intercarrier compensation regime that fosters competition and innovation without creating artificial opportunities for regulatory arbitrage.

In order to truly accommodate the needs of today's telecommunications marketplace, the Commission should undertake a wholesale reevaluation of its existing regulatory regime. As a first step, the Commission should establish a set of foundational principles to guide the

¹⁰ *FNPRM* at ¶ 33.

development of a new, forward-looking intercarrier compensation regime.¹¹ Extending a legacy regime adopted for a 100 year old telephone network – along with the buried assumptions and implicit value judgments upon which that regime was founded – to new technologies such as VoIP would merely replicate the deficiencies of the existing regime without ensuring that the Commission is pursuing the correct regulatory objectives.¹²

VON supports many of the guiding principles enunciated by NARUC, and concurs that any compensation reform that is not based on the key principle of economic soundness will ultimately fail.¹³ More specifically, however, VON believes that any economically sound regime, at a bare minimum, should (i) be competitively, technologically, and geographically neutral; (ii) adopt bill-and-keep or establish rates that are uniform and cost-based for all traffic connected to the PSTN, precluding origination charges, and (iii) encourage voluntary interconnection between service providers.

¹¹ *See also, e.g.*, Comments of Ionary Consulting at 2-3 (May 23, 2005) (noting that “the principles behind the current rules have largely been forgotten” and that “the appropriate first principles for today are quite different.”); Comments of CompTel/ALTS at 4 (May 23, 2005).

¹² For example, several commenters have suggested that switched access charges should be imposed on VoIP service providers. As an initial matter, intercarrier compensation charges should only apply to carriers. The existing system is broken and should not be applied to new services. Any intercarrier compensation charges applied to new services should be based either on cost or on a bill and keep approach. Furthermore, VON notes that incumbent phone companies are already fully compensated for their costs when Internet phone calls are terminated on their networks. Lastly, VON notes that the application of access charges to VoIP providers would merely encourage the growth of VoIP traffic that entirely bypasses the PSTN, for example, using Free World Dialup or Skype, eliminating the benefits of network interconnection. *See* Comments of Ionary Consulting at 8.

¹³ *See The National Association of Regulatory Utility Commissioners Study Committee on Intercarrier Compensation – Goals for a New Intercarrier Compensation System* (May 5, 2004).

A. Intercarrier compensation rates should be competitively, technologically, and geographically neutral

The Commission should ensure that any intercarrier compensation regime does not distort market competition, or derail the development of innovative, nationwide service offerings. As the Commission recognized in the *FNPRM*, the current system gives rise to artificial incentives that encourage regulatory arbitrage at the expense of healthy competition and innovation.¹⁴ In order to create the type of regulatory environment in which innovative services such as VoIP can flourish, the Commission should establish an intercarrier compensation regime that is geographically, technologically, and competitively neutral. Any new intercarrier compensation regime should apply only to carriers. VOIP providers who are not carriers should not be subject directly to intercarrier compensation since they pay intercarrier compensation indirectly in the rates they pay carriers to carry their traffic. No carrier should be permitted to discriminate on the basis of (i) the classification of the requesting carrier;¹⁵ (ii) the classification of the requesting carrier's customers; (iii) the location of the requesting carrier's customers; (iv) the geographic location of any of the end-users who are parties to the communication;¹⁶ or (v) the architecture or protocols of the requested carrier's network or equipment. Such a regime will

¹⁴ *FNPRM* at ¶ 15.

¹⁵ While the ICF plan appears to be competitively neutral once it reaches its end rate, rate changes during the planned transition will have differential impacts depending on a provider's regulatory classification. For example, the ICF plan does not address the rates for termination of VoIP traffic during the transition period. The VON Coalition opposes the imposition of the current access regime to VoIP traffic, and recommends that the Commission permit existing arrangements to remain in place during any transition period. Current arrangements permit VoIP providers to originate and terminate traffic as a business end user, or through the use of local carriers, paying reciprocal compensation rates, pursuant to Section 251(b)(5).

¹⁶ The CBICC, ARIC and Rural Alliance proposals are problematic, as they allow the imposition of origination charges that distinguish between local and toll traffic.

ensure that the benefits of innovative VoIP services are fully realized, without being hampered by inefficient and outdated legacy regulatory regimes.

B. Intercarrier compensation rates should be uniform and no higher than cost-based for all traffic connected to the PSTN

VON believes that any reform adopted in this proceeding should establish a single, nationwide compensation regime for the exchange of all communications traffic over and through the PSTN.¹⁷ The Commission should preempt the existing patchwork of state regulations, while consolidating its own regulations into a single, unified regime. This unified regime should be designed to compensate requested carriers for their *actual* interconnection costs, but should not allow requested carriers to realize a windfall. Compensation rates should either be (1) no higher than the terminating carrier's incremental cost of termination, or (ii) a "bill-and-keep" system.¹⁸ The Commission should eliminate all origination compensation, harmonizing all compensation with 47 C.F.R 51.703(b). Commission regulations should not provide implicit subsidies to one class of providers at the expense of others, particularly when subsidies flow to incumbents that already enjoy significant advantages. Rather, the Commission should establish a regulatory environment in which providers compete based on the merits of their service offerings.

Moreover, the Commission should not apply access charges to traffic that does not connect to the PSTN, such as IP-to-IP traffic, as ARIC suggests in its plan. As noted by Cox

¹⁷ If the Commission determines that rural and rate of return carriers must be subject to a different compensation scheme, VON urges the Commission to, at a minimum, ensure that the rates rural providers are permitted to charge (i) do not include origination charges; (ii) are geographically neutral; and (iii) are no higher than cost.

¹⁸ The ARIC, Rural Alliance, and NARUC proposals are problematic, insofar as they would permit origination and termination access rates based on non-cost-based rates. At this time, VON is not taking a position on the relative merits of adopting bill-and-keep as opposed to cost-based rates for termination.

Communications, IP-to-IP traffic is exchanged through private arrangements, such as peering and transiting, without any regulatory involvement.¹⁹ Unless problems arise, these arrangements should not be disturbed.

C. Any intercarrier compensation regime should encourage voluntary interconnection between service providers

The continued growth of VoIP and other innovative telecommunications services requires that carriers and service providers are able to interconnect with each other when such interconnection makes economic and technical sense. Accordingly, any new intercarrier compensation regime should facilitate interconnection by creating explicit interconnection rights and duties for all entities subject to intercarrier compensation charges, including VoIP providers.²⁰ At a minimum, to the extent that any plan imposes “carrier-type” payment obligations on VoIP providers, these providers should also be afforded interconnection rights.

Further, any intercarrier compensation regime should encourage carriers to enter into rational, voluntary business arrangements to replace the Commission’s default rules. As the Commission recognized in the *FNPRM*, “[a]n approach requiring minimal regulatory intervention and enforcement is consistent with the procompetitive deregulatory environment envisioned by the 1996 Act. Consequently, proposals that rely on negotiated agreements between carriers might be preferable to regimes requiring detailed rules and regulation.”²¹

¹⁹ Comments of Cox Communications at 22-23 (May 23, 2005). *See also* Comments of Qwest Communications at 14 (May 23, 2005).

²⁰ The ICF, CBICC and NARUC plans fail to specifically address the interconnection rights of VoIP providers, while the ARIC and Rural Alliance plans permit VoIP providers to interconnect by treating them as “carriers.” None of the plans provides an explicit interconnection right for non-carrier VoIP *service providers*, however. The regulatory classification of VoIP providers remains an open issue in the *IP-Enabled Services* rulemaking. *See* WC Docket No. 04-36.

²¹ *FNPRM* at ¶ 33.

Finally, intercarrier compensation decisions are necessarily commingled with Universal Service. Though the subject of a separate proceeding on contribution methodology, VON reiterates support for a change from the current system of basing contributions on interstate revenues to an equitable and nondiscriminatory methodology based on an end user's connections to the PSTN. The connections based proposals (whether relying on fixed line connections or active telephone numbers) will provide a more sustainable Universal Service Fund, while discouraging debates over technology and responsibility for payments.²²

²² The VON Coalition agrees with principles 7 and 8 of the comments of the Iowa Utilities Board: “(7) Universal service funding should be technology neutral. Carriers should not experience changes in universal service funding based upon technological changes in their networks, i.e., converting from circuit-switched to IP technology. Funding should be based on the most cost effective and efficient way to provide supported services. The technology employed must be capable of evolving to provide broadband services and must not constitute a barrier to providing advanced services. Definitions of supported services should be modernized and made technologically neutral. (8) The basis for universal service contributions should be expanded. A unit charge for connections, bandwidth, and possibly telephone numbers is the best approach to date.” Comments of the Iowa Utilities Board at 3 (May 23, 2005).

