## Testimony of Tom Evslin FCC Voice over IP Forum December 1, 2003

Good morning. Thank you for inviting me. Although I am Chairman and CEO of ITXC Corp, the largest carrier of international VoIP minutes, I am also speaking here today as policy chairman of the Voice on the Net coalition and a broader industry group which has coalesced around this hearing. The members of this *ad hoc* group, which includes both upstarts and established players, are listed in an appendix to these remarks.

The longstanding United States policy of "hands off the Internet," for which the FCC deserves much credit, has been emulated by governments everywhere and has been an enormous success. It has led to innovation and greater competition and improved the quality of life for millions of people. The Internet has changed almost every facet of communication and much of commerce. Its growth and the explosion of new applications and services it enable were only possible because the FCC and most other regulatory bodies practiced regulatory forbearance. Everywhere I travel, I hear regulators cite the U.S. example in this area and the fact that we practice what we preach.

The members of this coalition have different views on how much market power some facilities-based telecom providers have, particularly in their provision of broadband services. But we all agree that you should continue policies that permit entities that do not have significant market power to deploy voice over IP free from traditional telecom regulation.

Much of the investment that is being made in telecom today is in VoIP or in access technologies like WiFi and residential broadband whose value and economics are enhanced by VoIP. Regulation at the federal level or, even worse, a patchwork of varying state regulation will slow investment, slow deployment, and slow the growth of competition.

Why is Voice over Internet Protocol different from circuit-switched voice? The first, technical answer is that the TCP/IP protocol is designed for networks to be uniquely open to use by a multitude of parties, including a multitude of service and application providers, whereas circuit-switched voice networks are technically much more restricted. The second, more practical answer is that, unlike circuit-switched networks that are designed to provide voice, IP is the basis for an enormous new and rapidly growing network—the Internet—that is defined by its ability to do much more than just transmit voice. The Internet is increasingly the way we transfer, store, and process all kinds of information. Voice is truly just one of many applications riding on the Internet and other IP networks.

## **Advantages of VoIP**

A Force for Increased Competition. Voice over IP has been the engine of demonopolization around the world because it reduces the barriers and capital costs that would otherwise have made it difficult if not impossible for new entrants to challenge

former monopolies. Former monopolies from Africa to Australia have adopted Voice over IP and lowered their own cost of service once they are confronted with viable competition. Although there were many technological and legal changes that helped undermine the old settlement rate regime of artificially high international prices, VoIP deserves credit for having played a huge role in bringing prices down in much of the world to somewhere near costs.

The same can be true here at home and the right policies by the FCC will accelerate that process. There was a story in the Wall Street Journal two weeks ago about SBC offering a VoIP-based service for mid-sized business users *throughout the country*. VoIP not only makes it possible, it makes it necessary for the RBOCs to compete out of region. The ability to use the existing Internet for a new service removes the obstacle of having to build a costly infrastructure in each region where a carrier is going to provide service. To quote, Qwest's CEO in the same article, "VoIP is going to increase competition and that's a good thing."

A Platform for Innovation. Another big benefit of VoIP and one of the reasons it promotes greater competition is that IP networks are much more open to innovation than traditional TDM networks. For one thing, applications can be built at the open edge rather than in the protected middle of the network, and can be deployed from anywhere in the world for use anywhere in the world.

A Driver of Broadband Deployment. VoIP at the customer premise is driving and being driven by the deployment of broadband. The proliferation of IP PBXs this year (estimates are that more ports of IP PBX are being deployed in 2003 than TDM) is possible because businesses already have broadband WANs over which their inter-company voice services now ride. In Japan where residential broadband deployment has grown faster than in the US, there are already around three million consumer residential VoIP subscribers. The extra economic benefit of VoIP not only depends on but most importantly accelerates broadband deployment.

The Internet, which originally came into most homes on the copper infrastructure built for other purposes, has now become the transport on which new services including, but certainly not limited to, voice are riding. And, because all these services are IP-based, there are no firm barriers between them. A picture can talk; a voice command can call up an image; chat can be voice or text or both.

The best public policy is to refrain from applying traditional telecom regulation to VoIP and to affirmatively create a national policy vision that ensures that traditional telecom regulation does not apply to Internet voice communications throughout the country.

The historic reason for telephony regulation was the existence of monopoly providers and an infrastructure which made it nearly impossible to challenge such monopolies even in the rare case where it was legal to do so. In contrast, a provider of a VoIP service has no need to own or build the infrastructure on which the service is delivered and, since there are no

historic or even nascent VoIP monopolies, there is simply no basis for regulation of any such provider that does not have significant market power.

Regulation always has a cost in lost opportunity, lost innovation, and discouragement of private capital. Where there is no market power which requires regulation, these costs are unmatched by any public benefit.

The cost of regulation is unfortunately clear. How is it that wireless phones have so many more innovative features than landline phones despite being constrained by tiny power supplies and the requirements of mobility? Why can I send a picture or do text chat from my cell phone and not from my home phone? Why isn't a screen justified on my home phone? Why doesn't it have a built-in PDA? The answer is that wireless was left less regulated while it matured, allowing the market to drive innovation. But regulators were able to watch the technology as it matured, leaving room for course corrections when the technology was more mature.

Leaving the Internet unregulated allows the maximum scope and incentive to find real solutions to real problems. The Voice on the Net Coalition and the broader coalition endorsing this testimony freely concede that there are important social policy issues where you and state regulators have a legitimate role. We are prepared to work constructively with you and others on such issues, including providing access to those with disabilities, access to emergency services, cooperation with law enforcement, secure funding for universal service, and reform of inter-carrier compensation. We also respectfully submit that these legitimate concerns can be address without imposing heavy regulation on VoIP and that if they are addressed successfully the political pressure to regulate VoIP will dissipate.

The VoIP industry has a track record of voluntarily addressing social policy issues. As demonstrated in the Commission's disability access docket, we have undertaken voluntarily to develop and implement technology that is interoperable with TTY devices. (It is also worth noting that the deployment of VoIP itself has positive implications for access to communications by the hearing impaired. For instance, video relay service, an Internet-based video interpreting service for the deaf and hard-of-hearing introduced in 2000, now offers callers options involving web cameras for sign language.)

The VoIP industry has been taking a similar proactive approach with respect to access to emergency services. VoIP industry representatives have been working with the National Emergency Number Association's ("NENA's") VoIP/Packet Technical Committee and VoIP Operations Committee to assess the current state of 911 provisioning in VoIP environments and to develop 911 solutions. There are important differences between the provision of 911 for traditional PSTN traffic and for VoIP, but there is every reason to expect that technical solutions exist to provide users with reliable access to public safety services. Indeed, this past month, NENA and representatives of the VoIP industry reached a voluntary agreement on the next steps to develop the technical and operational mechanisms for providing effective access to emergency services by users of VoIP.

Voluntary efforts also are underway with respect to compliance with CALEA, the statute that addresses cooperation with law enforcement. Packet-switched technology poses unique technical issues, but manufacturers and providers of VoIP are moving ahead to implement compliance capabilities into their systems. Moreover, my understanding is that CALEA has a different definition of telecommunications than the Communications Act, so there is no need to define VoIP as telecommunications for Communications Act purposes in order to mandate that VoIP manufacturers and service providers cooperate with law enforcement.

As for universal service, of course, VoIP providers directly or indirectly already contribute to USF. The fact that more and more calls, including wireless and business calls made on modal access as well as some VoIP calls, don't contribute or contribute unevenly to USF should not be an excuse for regulation of all these modes. Instead, what is needed is reform of funding for explicit USF. We believe that a numbers-based contribution mechanism would better ensure the continued sustainability of USF than any attempt simply to include VoIP or other information services in the current revenue-based mechanism. If one of the goals of universal service is to provide affordable voice communications to rural America, then no technology offers more promise for providing more affordable communications, not only to rural America, but to all of America.

As for inter-carrier compensation, we urge the Commission to move away from a hodgepodge of implicit subsidies and towards a rational series of voluntary inter-carrier business arrangements with regulation required only when there is effective monopoly ownership of a bottleneck. "Bill and keep" may well turn out to be an effective arrangement as it has been in much of the IP world.

One suggestion that has been made is that phone-to-phone Voice over IP be regulated while "other" VoIP is not. This would be a mistake even if it were possible and it is, in fact, impossible to define today what is a phone. Phone-to-phone VoIP in which only the "middle" or long haul portion of a call travels over an IP network is providing much of the benefit in IP telephony today. According to *Telegeography* 10% of all international phone to phone calls handled by carriers used VoIP in 2002 up from 6% in 2001. A much greater percentage of new capacity in the developing world is based on VoIP.

It is phone-to-phone traffic which has funded and continues to fund the buildout of a worldwide network of interfaces between the PSTN and the Internet around the world. ITXC has relationships in 175 countries, for example. These interfaces are necessary so that VoIP phone and voice PBXes can connect with the TDM world and vice versa. Even with the very fast growth of VoIP, the world will have both TDM and IP devices for a long time to come. It is the existence of these networks of traffic exchange points which are making possible the deployment of innovative new VoIP services because the users of these services have full connectivity to the TDM world – not just to other VoIP users.

The argument that "if it walks like a duck and quacks like a duck it ought to be regulated like a duck" is intellectually bankrupt. The reason for regulation in telephony is not that people talking to each other through handsets at a distance inherently requires regulation; it

is because the service used to be provided primarily by monopolies and was supplied on monopoly-owned infrastructure. The functional equivalence test is inappropriate because the VoIP duck doesn't walk or talk or lend itself to monopoly--just the opposite.

Moreover, any attempt to regulate this one kind of VoIP begs the question of what is a "phone." Proponents of differential regulation say that computers are not phones. But cell phones are computers. So are the phones on some desktops. Some TDM phones are connected directly to computers called PBXes. Could a phone escape regulation because someone found a reason to put a chip in it? Differential regulation is both undesirable and will lead to easy but uneconomic artifacts in implementation to escape regulation.

Another particularly spurious complaint is that unregulated VoIP will lead to number depletion. In fact, we're seeing that number depletion was caused by artificial barriers between services leading to multiple lines and multiple numbers being provisioned. This is now reversing and numbers are being retired from use as separate lines for IP access are replaced by "numberless" broadband and as consumers elect to use their wireless phones as their only phones.

We also don't deny that there is a legitimate role for state governments, but that role has to be defined in a way that is consistent with the interstate nature of the Internet and the practical problems that would be caused by varying state regulation.

We believe that the FCC has the legal authority to continue to keep its hands off the Internet and IP networks even when they are used for voice applications. I'll rely on the regulatory attorneys for the details, but Voice over IP should be classified as an information service and regulated only to the extent necessary pursuant to the Commission's Title I or ancillary jurisdiction.