

Federal Communications Commission
Washington, DC

December 11, 2003

Sub.: Comments Submitted to VoIP Forum

Dear Chairman and Commissioners:

You are facing a difficult task of judging a new technology that promises new and bright things. We shouldn't unwittingly inhibit its ability to deliver on its promises and at the same time protect the larger society.

What is VoIP?

You were told both within and without last week's forum that VoIP introduces competition and consequently benefits the public at large. This may be true, but only if we clearly answer the question what is VoIP and why VoIP fosters competition. Even though this was an agenda item for Panel I, no clear definition emerged in the end. The common definition that voice stream is packetized and carried over an IP network is not satisfactory. This broad definition does not prevent a service provider from being anti-competitive. To see this, please consider the following stepwise logic. One needs an analog adaptor function that converts the human speech to digital form and performs packetization function. This could be integrated into the user device or be placed externally. These external devices can be owned by the user or be leased from the service provider. If it is leased from the service provider, it may be economical to host them in a central location. From the point of view of the user, the last step is no different than the current PSTN setup with the Gateway function placed at the Central Office.

So VoIP becomes special only when it allows a user to derive service concurrently from different service providers, because in the ultimate, two end-users can establish a communication session between themselves without involving any service providers at either end. This is possible because the signaling protocol messages and the media can be addressed to any point in the network. This is the fundamental difference between VoIP and POTS Tip and Ring interface as well as ISDN message oriented signaling. All other differences are secondary. So any regulatory relief you may consider must be contingent on that this freedom is not curtailed.

Restriction on ISPs and VoIP Service Providers

Not all VoIP architectures and protocols allow for such freedom. Service providers using these constraining architectures and protocols should not receive special treatment. Also it is critical that you ensure that all ISPs allow unfettered exchange of signaling messages and the media. This has two components. The signaling messages and media should not be blocked. More importantly, they should provide public (dynamic or static) IP addresses to their subscribers. Otherwise, even if VoIP service providers are unregulated, it is very easy to eliminate competition in the voice service provider market segment.

Public Policy Matters

To the extent broadband access is becoming the communication medium of choice, this segment should contribute to Universal Service Fund and not a specific application that uses this technology. This is especially true if the technology allows for hiding the specific nature of the application. This is in accordance with the current practice of levying USF on dial-tone service and not voice service.

Some enterprise systems use the access points as the means of identifying the location of emergency caller. It is quite likely that this same scheme may be used in general as well.

Additionally, as was pointed out by a couple of panelists, many applications can be used to communicate with E911 operators. For these reasons, we should look towards the access network for E911 capability.

Legal authorities and civil libertarians have thought about CALEA and so I abstain from commenting on it. In many other walks of life, we as a society have setup systems to support and accommodate people with disabilities. So why should we behave different now?

Interworking Scenario:

There is one aspect that did not come up in the Forum that I would like to bring to your attention. What is the nature of a call between a VoIP user and a PSTN user? If, for the sake of argument it is decided that VoIP is an Information service, is the interworking call a telecommunications service or an information service? The reason this is important is the phone user has certain rights. Will they be preserved now? Should a VoIP provider facilitate Malicious Call Tracking? Can they? What happens to Do Not Call registry? Will it be preserved?

Sincerely

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