

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

In the Matter of)	
)	
IP-Enabled Services)	WC Docket No. 04-36
)	
E911 Requirements for IP-Enabled Service Providers)	WC Docket No. 05-196
)	

REPLY COMMENTS OF SBC COMMUNICATIONS INC.

JACK ZINMAN
GARY L. PHILLIPS
PAUL K. MANCINI

Attorneys For:
SBC COMMUNICATIONS INC.
1401 Eye Street, NW
Suite 400
Washington, D.C. 20005
(202) 326-8911 – phone
(202) 408-8745 – facsimile

September 12, 2005

TABLE OF CONTENTS

	Page
I. INTRODUCTION AND SUMMARY	1
II. DISCUSSION	2
A. The Commission Should Stand By Its Decision to Require Interconnected VoIP Providers to Provide the Geographic Location of Their Subscribers to PSAPs for 911 Purposes	2
III. CONCLUSION.....	7

I. INTRODUCTION AND SUMMARY

SBC Communications, Inc. (SBC) respectfully submits the following reply comments in response to the notice of proposed rulemaking portion of the Commission's *VoIP 911 Order*.¹ As SBC indicated in its initial comments, we support the Commission's goal of ensuring that interconnected VoIP services are offered with 911 capability.² At the same time, we urge the Commission to allow the communications industry and the public safety community sufficient time to implement the existing VoIP 911 rules before deciding whether additional rules are warranted.

We file these reply comments to briefly address one issue raised by a handful of commenters. Some commenters have suggested that enabling the automatic identification of an interconnected VoIP subscriber's location for 911 purposes may be best accomplished using location information supplied by the provider of the underlying broadband service over which the interconnected VoIP service is provided. While SBC supports industry efforts to develop such automatic location information technology for 911 purposes, we urge the Commission to reject the suggestion by at least one commenter that the underlying broadband provider – as opposed to the interconnected VoIP provider – take sole responsibility under the Commission's rules for supplying an interconnected VoIP subscriber's location to the appropriate public safety answering point (PSAP). Instead, the Commission should stand by its decision to require providers of interconnected VoIP services to provide location information to the relevant PSAP,

¹ *E911 Requirements for IP-Enabled Service Providers*, WC Docket No. 05-196, First Report and Order and Notice of Proposed Rulemaking, FCC 05-116 (released June 3, 2005) (*VoIP 911 Order*).

² Throughout these comments we use the term 911 generically to encompass both 911 and E911 capability, unless otherwise indicated.

while at the same time encouraging collaborative industry efforts to develop automatic location information technology for VoIP 911.

II. DISCUSSION

A. **The Commission Should Stand By Its Decision to Require Interconnected VoIP Providers to Provide the Geographic Location of Their Subscribers to PSAPs for 911 Purposes.**

In the *VoIP 911 Order*, the Commission required providers of interconnected VoIP services to transmit 911 calls, including the registered geographic location of their VoIP subscribers, to the relevant PSAP.³ Pursuant to this registered location requirement, an interconnected VoIP provider must obtain the physical location at which a subscriber's service will first be utilized and must enable the subscriber to update that location information at will and in a timely manner.⁴ Although the Commission placed this requirement on all interconnected VoIP providers, it gave these providers the option of satisfying this requirement on their own or "by utilizing the services of a third party."⁵ Notwithstanding this registered location requirement, the Commission went on to observe that there is no technology currently available that allows the provider of a portable VoIP service to *automatically* obtain the location of its end user (i.e., without the end user's active input).⁶ The Commission then asked what it can do to facilitate the availability of such automatic location identification technology.

In response to this inquiry, a few parties have suggested that some prospective automatic location information technologies for VoIP 911 may be able to rely on location information

³ See 47 C.F.R. § 9.5(b)(2).

⁴ 47 C.F.R. § 9.5(d) (describing registered location requirement). See also 47 C.F.R. § 9.5(c) (describing exceptions to providing registered location information where PSAPs are unable to receive and process such information).

⁵ *VoIP 911 Order* ¶ 46.

⁶ *VoIP 911 Order* ¶ 57.

generated by the broadband infrastructure underlying an interconnected VoIP service. Cisco, for example, states that the broadband service provider “will generally have direct knowledge of the location of the facilities the caller is using.”⁷ Thus, according to Cisco, “the most promising automatic geographic location sensing approach for wireline VoIP services is for the end user [VoIP] devices to receive location information from the broadband access provider (*i.e.*, the ‘Layer 2’ provider). . . . The end user VoIP device will then automatically transmit its location coordinate information to the VoIP service provider at the outset of the 911 call.”⁸ Similarly, the Texas 911 Alliance observes that “[s]ince the access infrastructure network has a physical presence, it seems only natural that the access infrastructure network may be the appropriate way to determine [the] location of the end user customer automatically.”⁹

SBC agrees with these and other commenters to the extent they are suggesting that location identification technologies that involve information supplied by the underlying broadband infrastructure represent promising solutions for VoIP 911. Indeed, SBC has been an active participant in industry efforts to develop such solutions. SBC is greatly concerned, however, to the extent any commenter is suggesting that the Commission’s attention regarding automatic location identification solutions for VoIP 911 should be focused *solely* on broadband providers while relieving non-facilities-based VoIP providers from any potential obligation to implement such solutions. At least one commenter appears to be suggesting that when a non-facilities-based VoIP provider offers VoIP service by relying on the last-mile transmission facilities of an unaffiliated broadband provider, the broadband provider (rather than the VoIP

⁷ Cisco Comments at 2.

⁸ Cisco Comments at 5-6.

⁹ Texas 911 Alliance Comments at 18.

provider) should be required under Commission rules to determine the VoIP subscriber's location for 911 purposes. Specifically, the Texas 911 Alliance asserts that “[f]or the purposes of the deployment of mandatory automatic location identification [technology] and any new rules, the FCC and state regulatory authorities may ultimately achieve a higher success rate working with access infrastructure network providers *instead of* applications providers like Vonage, AOL, and Skype.”¹⁰

SBC urges the Commission to reject any suggestion that the burdens of developing and deploying automatic location information solutions for VoIP 911 service should fall solely on the backs of those unaffiliated providers offering the underlying broadband transmission service. As the Commission has acknowledged, a variety of entities are often involved in successfully providing VoIP 911 service, including VoIP providers, CLECs, ILECs and third party vendors, as well as the public safety authorities who receive and respond to 911 calls.¹¹ The Commission has also clearly stated that it “expect[s] and strongly encourage[s] all parties involved to work together to develop and deploy VoIP E911 solutions”¹² Retreating from that collaborative approach to developing VoIP 911 solutions would be a serious mistake.

Indeed, without cooperation and close coordination among these various parties, it is doubtful that *any* automatic location identification solution for VoIP 911 could be successfully implemented. For example, some interconnected VoIP services are offered by non-facilities-

¹⁰ Texas 911 Alliance Comments at 18 n. 27. *See also* Texas 911 Alliance Comments at 19 (“the Commission should remain ready to adopt mandatory rules that may need to depend on or more heavily involve the access infrastructure network providers.”). In a similar vein, United Online argues that, to the extent the Commission adopts performance standards for updating registered location information, such requirements should apply only to VoIP providers that own their own facilities and E911 infrastructure and not to non-facilities-based VoIP providers. United Online Comments at 13.

¹¹ *VoIP 911 Order* ¶ 40.

¹² *VoIP 911 Order* ¶ 40.

based VoIP providers on a “bring-your-own-broadband” basis (i.e., the VoIP subscriber must purchase broadband service from someone other than its VoIP provider). In such a scenario, the underlying broadband provider may be completely unaware that its subscriber is utilizing a VoIP service from a VoIP provider. As Cisco points out, “a broadband provider may never know whether its customers are using their connections in order to conduct voice communications.”¹³ The Commission itself has also recognized the limits of a broadband provider’s ability to identify the specific nature of the various IP packets that its subscribers’ send to, and receive from, third parties.¹⁴ Under these circumstances, it would be entirely unreasonable for the Commission to relieve interconnected VoIP providers of their existing obligation to obtain the geographic location of their own subscribers for 911 purposes and to foist that burden solely on the unaffiliated entities providing the underlying broadband service.¹⁵

Instead, the Commission should stand by its decision to place the legal responsibility for obtaining the geographic location of an interconnected VoIP subscriber for 911 purposes on the provider of that interconnected VoIP service.¹⁶ The provider of the interconnected VoIP service has a direct provider-subscriber relationship with the interconnected VoIP subscriber. Because

¹³ Cisco Comments at 2.

¹⁴ See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, 13 FCC Rcd 11501 ¶ 87 (1998) (“The Internet service providers over whose networks the information passes may not even be aware that particular customers are using IP telephony software, because IP packets carrying voice communications are indistinguishable from other types of packets.”); *Communications Assistance for Law Enforcement Act and Broadband Access and Services*, ET Docket No. 04-295, Notice of Proposed Rulemaking and Declaratory Ruling, 19 FCC Rcd 15676 ¶ 65 (2004) (“As the packet makes its way through the network of the broadband access service and Internet service providers, these providers’ equipment generally do not examine or process information in the layers used to control packet-mode services such as VoIP, and in fact operate at layers below the ones that carry control information for broadband access services. As a result, the broadband access service and Internet service providers may not be able to easily isolate call-identifying information for VoIP without examining the packet in detail, or in other words, examining the packet content.”).

¹⁵ When the interconnected VoIP service and the underlying broadband service are provided by the same entity, or by affiliated entities, the concerns outlined above may not be present.

¹⁶ See 47 C.F.R. § 9.5(b), (c), (d).

of that relationship, the interconnected VoIP provider is in the best position to have relevant information about each of its own VoIP subscribers and the VoIP services they have chosen, which is critical for determining which location identification solution for VoIP 911 is most appropriate for a given VoIP subscriber. Moreover, as a result of this direct provider-subscriber relationship, the interconnected VoIP provider is also in the best position to recover 911 implementation costs from its own subscribers, who are the entities causing those costs to be incurred in the first place. Thus, the Commission logically and appropriately chose to place the obligation for obtaining subscriber location information for 911 purposes on the providers of interconnected VoIP services.¹⁷

Of course, interconnected VoIP providers should remain free to enter into commercial arrangements with unaffiliated broadband service providers, ILECs, CLEC, equipment vendors, and other 911 stakeholders to develop, implement and pay for VoIP 911 automatic location identification solutions made available to the interconnected VoIP providers' subscribers.¹⁸ The Commission should also continue to expect and encourage cooperative efforts among all of these parties to deploy such solutions.¹⁹ As Commissioner Abernathy has stated, the Commission "should work to preserve diverse business arrangements through which VoIP providers offer E911. . . . These different arrangements help to ensure competition, and thus promote experimentation."²⁰ According to Commissioner Abernathy, the Commission "should guarantee that when providers *do* innovate, they are able to reap the fruits of their efforts. That approach

¹⁷ See *VoIP 911 Order* ¶ 46.

¹⁸ See *VoIP 911 Order* ¶ 46 (permitting interconnected VoIP providers to comply with the registered location requirement on their own or "by utilizing the services of a third party."). See also SBC Comments at 15-18.

¹⁹ *VoIP 911 Order* ¶ 40.

²⁰ *Remarks of FCC Commissioner Kathleen Q. Abernathy*, VON Coalition/NENA Provider Summit, Washington, DC, at 3 (July 7, 2005) (*Commissioner Abernathy NENA VoIP 911 Remarks*).

will encourage providers to make wise use of their resources, and will direct even more capital to the providers who do so, leading to even better offerings in the future.”²¹ SBC agrees with these remarks and urges the Commission to continue to rely on market-based relationships among providers of 911 services for the development of innovative 911 solutions.

III. CONCLUSION

SBC looks forward to working cooperatively with all 911 stakeholders to develop automatic location identification solutions. We urge the Commission, however, to stand by its decision to place the obligation on interconnected VoIP services to provide their subscribers’ location information to the relevant PSAPs.

Respectfully Submitted,

By: /s/ Jack Zinman

JACK ZINMAN
GARY L. PHILLIPS
PAUL K. MANCINI

Attorneys For:
SBC COMMUNICATIONS INC.
1401 Eye Street, NW
Suite 400
Washington, D.C. 20005
(202) 326-8911 – phone
(202) 408-8745 – facsimile

September 12, 2005

²¹ *Commissioner Abernathy NENA VoIP 911 Remarks* at 3 (emphasis in original).