

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matters of	)	
	)	
Wireless E911 Location Accuracy Requirements	)	PS Docket No. 07-114
	)	
E911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196
	)	

**REPLY COMMENTS OF VERIZON<sup>1</sup>**

The comments filed in this proceeding show why it would be premature for the Commission to impose new automatic location requirements or location accuracy standards on Voice over Internet Protocol (“VoIP”) providers. At this time, there is no technically feasible method for VoIP providers to provide a customer’s location automatically when the customer calls 911. The Commission should therefore allow more time for the industry to address these issues and defer any further consideration of adopting automatic location requirements or location accuracy standards until it knows what capabilities are technically and commercially feasible and the costs and benefits of such capabilities. The industry has been working to develop standards associated with automatic location capabilities for nomadic VoIP services. The Commission should monitor the VoIP industry’s ongoing efforts and continue its practice of reaching out to industry forums. This approach will enable the Commission to remain fully informed of industry efforts, including the solutions being developed, testing for technical and economic feasibility and usefulness, and any issues presented.

The comments also demonstrate that customers of VoIP services already have the benefit of robust E911 capabilities. According to the VON Coalition, interconnected VoIP providers

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<sup>1</sup> The Verizon companies participating in this filing (“Verizon”) are the regulated, wholly owned subsidiaries of Verizon Communications Inc.

“provide E911 service to more than 97 percent of their subscribers.”<sup>2</sup> As a result, nearly all customers of interconnected VoIP services have their “civic address” provided to the public safety answering point (“PSAP”) call takers and, assuming that nomadic customers update their Registered Location when they move their VoIP equipment, the location information provided to PSAPs is equivalent to that provided by traditional circuit-switched telecommunications providers.

1. The Commission should not impose automatic location requirements on VoIP providers because it is not technically feasible at this time. Several industry groups in the United States and European Union have been working toward developing standards that will improve the provision of location information to PSAPs. Despite these efforts, “it is just not possible at this time to implement autolocation requirements at the CMRS accuracy level across the broad range of interconnected VoIP services.” VON Coalition Comments at 26. As ATIS explained, “[f]or technologies such as interconnected VoIP and associated location technologies, which are still evolving, additional work must be conducted before location accuracy requirements could be applied,” which “includes: fundamental research and development, creation of standards and testing and deployment of those standards in the industry.”<sup>3</sup>

Interconnected VoIP services present unique challenges for providing automatic location information. For example, users of VoIP services are frequently located in buildings where they are not able to communicate with satellites. GPS technology is therefore not effective for

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<sup>2</sup> Comments of the VON Coalition, *Wireless E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196 (Aug. 20, 2007)(“VON Coalition Comments”) at 2.

<sup>3</sup> Comments of the Alliance for Telecommunications Industry Solutions, *Wireless E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196 (Aug. 20, 2007) at 9.

obtaining location information automatically for these users. Other automatic location technologies developed for the wireless industry are not adaptable to VoIP service because of fundamental differences between wireless and Internet networks.<sup>4</sup>

In the face of these technical feasibility challenges, the Commission should not adopt requirements that would deprive the public of important communication tools in times of emergencies. Interconnected VoIP services have already proven to be very effective in several recent disasters where traditional communication technologies have been overwhelmed or incapacitated. For example, during Hurricane Katrina's immediate aftermath, the New Orleans Mayor relied on interconnected VoIP to call President Bush and to coordinate the efforts of state and local authorities because the storm disabled completely the New Orleans city government's telephone network and all other communications systems.<sup>5</sup> If these interconnected VoIP services were not offered to the public simply because they were not capable of providing automatic location information on 911 calls, the public would be deprived of important communication tools and public safety benefits, particularly in times of crisis and disaster.

The Commission should also recognize that not all VoIP service arrangements would benefit from an automatic location requirement. For example, some VoIP service arrangements restrict the customer to use the service only from a fixed location, such as the customer's residence or office. For these static arrangements, there is no benefit to deploying automatic

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<sup>4</sup> One commenter suggests that it has a new "offering which will soon be available" that will route 911 calls from a VoIP device through a cellular transceiver. Comments of YMax Corp., *Wireless E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196 (Aug. 20, 2007) at 5. While this new offering may at some time in the future be useful for some VoIP service applications, it will not be useful in locations where a cell phone would not work.

<sup>5</sup> See Christopher Rhoads, *Cut Off: At Center of Crisis, City Officials Faced Struggle to Keep in Touch*, Wall Street Journal (Sept. 9, 2005) (describing the Mayor's use of Vonage accounts to connect with the outside world), [http://www.von.org/usr\\_files/Katrina%20-%20WSJ%20-%20Cut%20off%20Mayors%20office%20uses%20VoIP%209-9-05.pdf](http://www.von.org/usr_files/Katrina%20-%20WSJ%20-%20Cut%20off%20Mayors%20office%20uses%20VoIP%209-9-05.pdf).

location capability as the current Registered Location already provides accurate location information on 911 calls. In addition, certain business customers use communication devices where the end user has no expectation of emergency communications.<sup>6</sup> For example, “it is highly unlikely that a softphone user would boot up a laptop to call 911.” VON Coalition Comments at 12. Users of these devices do not rely on such services for E911 or 911 capability and there is little to no risk that someone will assume that such devices provide the same capability as traditional phones.

2. The Commission should continue to monitor industry efforts to develop automatic location capabilities for VoIP services. Several industry groups in the United States and European Union have been working toward developing standards that will improve the provision of location information to PSAPs. As the Telecommunications Industry Association (TIA) explained, “[i]ndustry, not the government, is in the best position to proffer cutting-edge solutions for meeting the emergency response needs of consumers and public safety authorities.”<sup>7</sup> The Commission should therefore continue to “provide industry with sufficient time and flexibility to develop appropriate location technology solutions to address the critical needs of public safety.” *Id.* Other commenters likewise recommend that the Commission allow the industry to address these important issues. *See, e.g.*, Comments of 911 Industry Alliance at 2 (“urges the FCC to use the industry-proven collaborative approach”); Comments of the National

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<sup>6</sup> These devices include newer services, such as soft-phones. Soft phone services are software driven applications that run on personal computers, often times laptops. In other instances, business or enterprise end users may use large desk phones not intended for mobile use, so that, for example, requirements for automatic location capability would make no sense.

<sup>7</sup> Comments of TIA, *Wireless E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196 (Aug. 20, 2007) at 5.

Telecommunications Cooperative Association at 3 (the Commission “should continue to work with the industry and collaborate to meet the public interest goals”).<sup>8</sup>

These industry groups play a vital role in facilitating the development and deployment of new capabilities in the networks of service providers and equipment used by end users. It is not enough for a manufacturer to announce that it has developed a particular capability or type of equipment. The industry groups need to develop the standards that will enable such capability or equipment to be deployed and used by a wide range of service providers and end users.

The Commission can monitor the progress of the industry by continuing its current practice of outreach to industry groups and forums involved in developing new and more advanced solutions (as the Commission does today). By doing so, the Commission will remain informed about promising technologies, the promulgation of standards, and the progress that the industry is making toward technically and economically feasible solutions. The Commission will also remain aware of the challenges these new technologies may pose, both for VoIP service providers and for consumers.

### **Conclusion**

Nearly all customers of interconnected VoIP services have E911 capabilities and these capabilities can provide their location to PSAPs. Although it is not technically feasible to provide automatic location information on interconnected VoIP services at this time, the industry is continuing to work diligently to develop more advanced solutions to provide automatic location capability. The Commission can facilitate these efforts by continuing its practice of reaching out to industry forums, in order to remain fully informed of industry efforts, and by

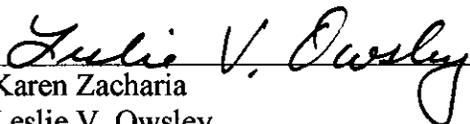
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<sup>8</sup> Both filed in *Wireless E911 Location Accuracy Requirements, E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196 (Aug. 20, 2007)

avoiding the imposition of requirements that are not technically feasible and that do not bring additional benefits to consumers, or that bring costs that outweigh the benefits.

Respectfully submitted,

Michael E. Glover  
*Of Counsel*

  
Karen Zacharia  
Leslie V. Owsley  
1515 North Courthouse Road  
Suite 500  
Arlington, Virginia 22201

(703) 351-3158

Attorneys for Verizon

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