

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

In the Matter of)	
)	
Wireless E911 Location Accuracy Requirements)	PS Docket No. 07-114
)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems)	CC Docket No. 94-102
)	
Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling)	
)	
911 Requirements for IP-Enabled Service Providers)	WC Docket No. 05-196
)	

COMMENTS OF YMAX CORPORATION

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YMax Corporation (“YMax”), through its attorneys, hereby respectfully submits its Comments in response to the Federal Communications Commission’s Notice of Proposed Rulemaking in the above-captioned proceeding.¹ YMax’s comments are focused specifically on the question posed by the Commission, “whether and to what extent providers of interconnected VoIP services should be required to provide ALI (Automatic Location Identification), and whether and to what extent they should be subject to the same location accuracy requirements that apply to certain services provided by circuit-switched CMRS carriers under Section 20.18 of

¹ See *In re Wireless E911 Location Accuracy Requirements, Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling, Requirements for IP-Enabled Service Providers*, Notice of Proposed Rulemaking, PS Docket 07-114, CC Docket No. 94-102, 911, WC Docket No. 05-196, FCC 07-108 (rel. Jun. 1, 2007) (“NPRM”).

the Commission's rules."² YMax supports Commission efforts to encourage, and industry efforts to develop, the technologies and equipment that will improve the functioning of public safety E911 systems and specifically to ensure that customers of Voice over Internet Protocol ("VoIP") services are able to communicate effectively with public safety answering points ("PSAPs") and provide them with the location information they require. YMax believes technology has advanced to the point where the Commission can and should require providers of interconnected VoIP services to begin to provide ALI and can model those requirements on the obligations imposed over time on CMRS carriers. Indeed, as described further below, YMax has developed a technology which enables providers of interconnected VoIP services to ensure their nomadic customers' 911 calls are delivered with ALI. With this first truly effective ALI solution at hand, the FCC can achieve its goal of requiring interconnected VoIP providers to improve the location information that is available to public safety officials.

About YMax And Its magicJack™ Device

YMax is a new entrant to the VoIP marketplace, having just begun to offer commercial services to customers in July of 2007. But YMax was formed in 2005 and has spent the past two years developing the technology, equipment and network infrastructure to provide those services in an efficient manner. Through its subsidiary magicJack LP, customers purchase a magicJack™ device which they plug into the USB port of their desktop or laptop computer.³ Any standard telephone will then plug into the telephone jack on the magicJack device and within moments customers can sign-up for services that will, so long as they have a broadband connection

² *Id.* ¶ 18.

³ Purchase of the magicJack device includes the applicable software license.

(whether cable modem, DSL, wi-fi or other system), allow them to call any other broadband-connected magicJack device wherever located, any PSTN-connected telephone and customers of other VoIP services. The magicJack device also allows customers to receive calls from any magicJack device, PSTN-connected telephone and other VoIP services. Many other features, such as voicemail, three-way calling and call forwarding, plus portable contact lists and call logs, are included.

YMax customers use their magicJack devices to make calls from their homes, plugged into their desktop or laptop computers and broadband connection. But YMax customers can also take their magicJack device and laptop along wherever they go, or can plug the magicJack device into any other broadband-connected computer. And, as the Commission has recognized, such nomadic uses raise a critical issue for the provision of E911 service.

The Nomadic VoIP E911 Problem

When E911 obligations were imposed on interconnected VoIP providers in 2005, they were tied to the customer's "registered location."⁴ Recognizing the limitations of the available technology at the time to deal with nomadic or portable VoIP services, the FCC Rules require obtaining from the customer, prior to initiating service, the physical location where the service will first be used. The provider must also provide a mechanism for customers to update their registered location. The Commission applauded plans by some carriers in 2005 to implement an automatic detection system that recognized when customers shut down their computers and then

⁴See *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10266 ¶ 37 (2005), *aff'd*, *NuVio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006) ("VOIP 911 Order").

required them to confirm they had not moved or to register a new location before resuming service. The Commission strongly encouraged other providers to adopt similar measures.

While using the best technology available at the time, flaws in this system are apparent. For example, laptop computers with batteries do not have to be shut down to be moved, and with wireless broadband access (e.g., CMRS data or wi-fi or wi-max connections) they may never lose connectivity to trigger a request for location confirmation. Customers may also just click “not moved” rather than bothering to register their new location. And customers may at times not even accurately know their location (a Holiday Inn on Interstate 80, or a Starbucks in Chicago, rather than a specific street address or geographic coordinates) in order to re-register effectively. Even if customers can and do register their new locations each time they move about, it is uncertain how long it will take for databases and systems to be updated with the new information and implement new routing and information relay.

The FCC encouraged nomadic VoIP providers to find new solutions, and indicated it would look toward mandating an automatic system that would not require customer action. The Commission previously sought comment on whether and how interconnected VoIP service providers might be able to provide location information automatically.⁵ The record to date has not demonstrated a workable ALI system for nomadic VoIP users on which the FCC, and more importantly, public safety officials and the public depending on them, can rely with confidence. In this *NPRM*, the FCC is now seeking comment on whether and to what extent providers of interconnected VoIP services should be required to provide ALI. YMax believes that it has developed an effective ALI solution that would enable the FCC to adopt an ALI requirement for all interconnected VoIP providers.

⁵ See *VOIP 911 Order*, 20 FCC Rcd at 10257-58 ¶ 24; see also *id.* at 10276-77 ¶ 57.

A Solution Is At Hand

Like other VoIP services with nomadic capability, the first generation magicJack device-based offering requires customers to register their location when beginning service, and to re-register a new location any time they move. magicJack customers all use a softclient, or softphone, that remains visible on their computer operating the magicJack at all times. The softclient contains an always visible dashboard icon that displays the customer's currently registered 911 service location and provides an easy one-click drop down menu that allows the customer to effortlessly toggle between already registered 911 locations, for example, the Office, Home, Favorite Starbucks or college dormitory. This always visible 911 service dashboard icon keeps the customer informed and active with regard to his or her registered 911 service location.

A new YMax offering which will soon be available, however, will provide ALI for nomadic VoIP users that the Commission -- and the public and public safety officials -- have hoped for. The second-generation magicJack device will incorporate a cellular transceiver within the device. The cellular transceiver will lie idle, and un-powered, for all VoIP calls made over the customer's broadband connection, unless the customer dials "911." For all those normal calls, the second generation device will operate in all respects just like the first generation magicJack device. If the customer dials 911, however, the call (and power) will be routed to the cellular transceiver rather than to the broadband connection. The 911 call will be sent directly from the radio transceiver in the magicJack device and will be perceived by a local CMRS system as any other 911 call. The CMRS provider would then route the call, along with the location information it routinely acquires for all other 911 calls, to the appropriate PSAP. The phone number transmitted by the transceiver with the 911 call will be the normal phone number

associated with the magicJack device, enabling the PSAP to return the emergency call through the customer's VoIP broadband connection if interrupted or if follow-up is required.

This 911 calling capability will be available in the marketplace soon in the second-generation magicJack device. It will incorporate the technology providing these emergency calling capabilities for which YMax has a series of patent applications pending with the U.S. Patent & Trademark Office and internationally. But YMax recognizes the importance of having this emergency calling capability more widely available for customers of nomadic VoIP services. In accordance with the Commission's patent policy and numerous Commission proceedings dealing with the use of patented technologies,⁶ YMax will license this capability to other nomadic VoIP providers on reasonable and non-discriminatory terms. And implementation of this patent pending capability does not require a magicJack device or even a USB port. Licensees will also be able to implement it by building the capability into a laptop, VoIP handset or cordless base unit, analog telephone adapter ("ATA") or otherwise.

Conclusion

A customer registration-based location identification system should be adequate for stationary VoIP systems. Customers provide their fixed location at sign-up and the service provider can then ensure proper routing of 911 calls and delivery of this location information, where PSAPs are capable of receiving it. But with the increased use of nomadic VoIP systems, expecting customers repeatedly to re-register their location each time they move around, whether

⁶ See *Revised Patent Procedures of the Federal Communications Commission*, Public Notice, 3 FCC 2d 26 (1966); see also, e.g., *In re Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, Further Notice of Proposed Rulemaking and Notice of Inquiry, 19 FCC Rcd. 7505 (2004) (examining whether iBiquity was entering into licensing agreements for its IBOC system for digital radio "under reasonable terms and conditions that are demonstrably free of unfair discrimination").

prompted by the network or not, is at best an imperfect approach. The time has come -- and technology has enabled -- a better solution.

YMax will incorporate in its second generation magicJack device, and will license to other providers of nomadic VoIP services, the ability to send a 911 emergency call out via a cellular transceiver. Whether built into a USB device like the magicJack, or into a laptop, VoIP handset or cordless base unit, ATA or other equipment used to enable VoIP calls, the emergency call can then be routed, and the customer in need of emergency assistance can be located, in the same manner as all other emergency calls made using CMRS phones.

With this new technology now available, the Commission can therefore now achieve its goal of ensuring customers of interconnected VoIP providers have access to the benefits of ALI for their emergency calls, and with the same location accuracy that applies to services provided by circuit-switched CMRS carriers.

Respectfully submitted,

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