

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

<i>In the Matter of</i>)	
)	
Inquiry Concerning 911 Access,)	PS Docket No. 17-239
Routing, and Location in Enterprise)	
Communications Systems)	

COMMENTS OF RINGCENTRAL, INC.

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I. INTRODUCTION

RingCentral, Inc. (“RingCentral”) is a leading provider of Enterprise Communications Services (“ECS”).¹ The company combines cloud PBX, team messaging and collaboration, and video and web conferencing in a single integrated platform for global delivery. More comprehensive and cost-efficient than legal on-premises communications systems, RingCentral empowers today’s mobile and global workforce to communicate, collaborate, and connect from anywhere, on any device.

RingCentral relentlessly focuses on customer success and product innovation. Rather than rely on others’ technology and developments, RingCentral decided early on to develop its own technology and platform so that it could incorporate the latest customer needs – however quickly they evolved – into its technologies. As a result of this strategy, RingCentral leads the global market in both revenue and subscriber seats for unified communications as a service.²

RingCentral strongly supports the Commission’s continuing commitment to ensuring that interconnected Voice over Internet Protocol (“VoIP”) 911 capabilities meet the needs of Americans facing a life-threatening emergency. RingCentral urges the Commission to recognize the power of the market to drive improvements in 911 service for enterprise and other customers,

¹ *RingCentral Named a Leader in the 2017 Gartner Magic Quadrant for Unified Communications as a Service, Worldwide Report*, BUSINESSWIRE (Sept. 11, 2017), <http://www.businesswire.com/news/home/20170911006179/en/RingCentral-Named-Leader-2017-Gartner-Magic-Quadrant>; *see also RingCentral Named 2017 Company of the Year by Frost & Sullivan in Hosted IP Telephony and UCaaS North America*, N.Y. TIMES (Sept. 6, 2017), http://markets.on.nytimes.com/research/stocks/news/press_release.asp?docTag=201709060900BIZWIRE_USPRX____BW5709&feedID=600&press_symbol=67863337.

² *RingCentral Breaks Away from the Competition as UCaaS Market Leader According to Latest Synergy Research Group Report*, BUSINESSWIRE (Oct. 19, 2017), <http://www.businesswire.com/news/home/20171019005527/en/>.

and to avoid regulatory requirements that could inadvertently lock in outdated solutions or otherwise undermine its public safety goals.

II. THE COMPETITIVE MARKET FOR ENTERPRISE COMMUNICATIONS DRIVES INNOVATION IN ENTERPRISE EMERGENCY CALLING.

As the Commission seeks to ensure that enterprise users have access to robust emergency calling, it should recognize the power of the market to deliver effective solutions. RingCentral's service is software-based, and thus quickly adaptable to customer needs. RingCentral succeeds in the marketplace by continually improving its product, including developing new solutions in response to customer requests. That ability to innovate translates into benefits for all RingCentral customers, as RingCentral implements new solutions service-wide.

This dynamic extends to emergency calling. In RingCentral's experience, large enterprise customers routinely demand sophisticated solutions to enable emergency calling that meets particular deployment or user challenges. Using its outstanding group of developers, RingCentral is able to quickly design and implement changes to RingCentral's service to meet these customer needs. Once designed, RingCentral is able to roll out these solutions to its entire customer base. The marketplace then responds as customers demand similar capabilities from competing providers.

Thus, while RingCentral is subject to requirements concerning emergency calling, it views those requirements as just the starting point for its emergency calling solutions. The Commission's Notice of Inquiry recognizes that RingCentral is already routing enterprise customer calls using registered location information.³ That solution does enable granular

³ *Inquiry Concerning 911 Access, Routing, and Location in Enterprise Communications Systems*, Notice of Inquiry, FCC 17-125, PS Docket No. 17-239, ¶ 26 n.45 (rel. Sept. 26, 2017) ("NOI").

location information; indeed, as a nationwide provider RingCentral is subject to state and local requirements concerning the delivery of location information in enterprise and other multi-line telephone system environments.⁴

Separate and apart from background legal requirements, RingCentral is continually identifying new use cases for its services and adapting its service to those new uses. For example, RingCentral has recognized that many of its customers employ “hot-desking” – a system in which desks, and phones, are allocated to users as needed, and in which users can log into any phone station and receive their calls at that station. To ensure that emergency calls route correctly when a customer employs hot-desking, RingCentral routes emergency calls from these phones using the physical location of the phone, rather than relying on the registered location associated with the logged-in user.

For users that frequently relocate, for example using a soft client on a laptop, RingCentral is likewise continually evaluating and improving its solution. Because the interconnected VoIP 911 rules provide for 911 routing based on customer-provided registered location, RingCentral has implemented numerous safeguards to ensure that its users provide the most accurate and up-to-date registered location information possible. RingCentral recognizes that small changes in its user experience can alter user behavior and, through innovation and experimentation, improves its processes and interfaces. These continuous experiments result in more robust solutions that clear the way for users to properly update their location when there is reason to think a user’s location may have changed and – just as essential – discourage users from attempting to circumvent this requirement. Free to experiment, RingCentral’s constant tech iterations have already led to better and more accurate location information for its users. Thus, as the

⁴ See NOI, Appendix B (summarizing existing state E911 ECS requirements).

Commission continues to weigh how to address 911 for ECS, the Commission should ensure that any proposed action encourages continued testing and improvement by providers rather than creating legal risks for this type of innovation.

III. THE COMMISSION SHOULD REGULATE WITH CARE.

RingCentral is providing its customers with advanced and innovative 911 solutions today. It does so because its customers demand these solutions, and RingCentral succeeds in the marketplace by responding quickly its customers' needs. Against this backdrop, there is a risk that regulation may interfere with the market forces and incentives to innovate that currently drive RingCentral and other providers to develop robust 911 solutions.

The existing interconnected VoIP 911 rules illustrate this risk. Today, those rules require providers to "distribute . . . warning stickers or other appropriate labels" to subscribers to attach to their phones to warn customers of the ways that 911 service "may be limited or not available."⁵ While it is certainly beneficial to ensure that customers are educated about the capabilities of their 911 service, the physical sticker requirement is not the most effective way to deliver these warnings. Today's technology frequently permits providers to use "soft stickers" in the user interface rather than physical stickers. These virtual labels do not require user intervention, as they are automatically included as part of the user interface. They can be updated in the event 911 capabilities change, and will not be lost if the customer changes phone hardware. Softstickers are also typically less expensive to deploy, as they avoid the considerable cost of having equipment providers include physical stickers when they distribute hardware to RingCentral customers. But the existing rules, on their face, do not provide for the use of this more effective and less expensive option. Going forward, the Commission should not adopt ECS

⁵ 47 C.F.R. § 9.5(e)(3).

911 rules that could potentially limit providers' ability to develop and deploy improved 911 solutions for their customers.

The Commission should similarly expressly endorse the use of back-up emergency call centers. In order to provide valuable redundancy for 911 service, many providers rely on back-up emergency call centers. These call centers can, among other things, receive and route calls in areas that are not served by selective routers and thus fall outside of the VoIP 911 requirements. They can also effectively route emergency calls using specially trained staff in circumstances where a provider has reason to believe a user's registered location information may not be accurate. The Commission's rules do not expressly permit use of this valuable tool.⁶ As providers continue to develop solutions for ECS 911, the Commission should make clear that providers are free to include emergency call centers as part of their 911 solutions.

RingCentral's experience illustrates that any regulatory requirements must avoid two pitfalls. First, as explained above, providers must have the flexibility to adapt and improve their solutions. In RingCentral's experience, small changes to user experience significantly influence user behavior. This means that it is critically important that RingCentral be free to improve its services so that it can continually make it easier for customers to provide the most accurate registered location information possible. Overly prescriptive rules can short-circuit this cycle, locking in current technology at the expense of innovation.

Second, regulatory requirements and user expectations must not get ahead of technology. When a user calls 911, it must work every time. Therefore, solutions should depend on proven, established technology. This approach ensures that users will not come to expect 911 service where it cannot be reliably provided. For this reason, any move to autolocation for nomadic uses

⁶ NOI ¶ 8 n.9.

of interconnected VoIP 911 would be premature. One of the benefits of VoIP is that it can run on any number of devices, including laptops and Chromebooks that do not (and should not be expected to) have GPS chips or other built-in autolocation hardware. VoIP can also run across many network configurations. Some enterprise customers, for example, may configure their networks so that all worldwide traffic routes through a single point for security or other reasons. These deployments can prevent reliance on IP address or other network markers for location information. Regulation should not deny users the flexibility to use their VoIP service on a range of devices and across a range of network deployments.

IV. CONCLUSION

RingCentral believes that reliable emergency calling is the responsibility of every ECS provider. The Commission should continue to empower providers to innovate to meet their customer demands, as RingCentral does today, and avoid taking regulatory steps that could lock in outdated solutions or otherwise stand in the way of continued market-driven improvements.

Respectfully submitted,



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