Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
	)	
Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications	)	PS Docket No. 11-153
	)	
	)	
Framework for Next Generation 911 Deployment	)	PS Docket No. 10-255

COMMENTS OF THE INFORMATION TECHNOLOGY INDUSTRY COUNCIL

April 4, 2014

The Information Technology Industry Council (ITI) hereby responds to the Policy Statement and Second Further Notice of Proposed Rulemaking (FNPRM) in the above-captioned proceeding.[1]

Introduction and Summary

ITI welcomes the opportunity to provide feedback in this important proceeding as the Commission continues to examine how to meet the public's expectations for texting to 911. ITI believes it is extremely important to provide a structure that works for consumers and public safety answering points (PSAP), and all companies involved in making that connection.

ITI represents 56 of the nation's leading information and communications technology companies. [2] ITI is the voice of the high-tech community, advocating for policies that advance U.S. leadership in technology, promote innovation, open access

[1] *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications*, PS Docket No. 11-153, PS Docket No. 10-255 (rel. January 31, 2014).
[2] For more information on ITI, including a list of its member companies, please visit: http://www.itic.org/about/member-companies.dot.

to new and emerging markets, protect and enhance consumer choice, and foster increased global competition. ITI's member companies include wireless and wireline network equipment providers, computer hardware and software companies, Internet and cloud services, and network security providers. Additionally, ITI represents many of the largest application providers and mobile handset manufacturers in the marketplace today that this proceeding may impact.

As manufacturers and providers of devices, software, applications, and equipment, ITI's member companies touch every point in the technology and communications chain between the user and the PSAP. We believe it is essential that the Commission ensure that any text-to-911 rules fully recognize what our companies' products and services can - and cannot - achieve. As the Commission is well-aware, mandating an unworkable technical solution will cause significant risk for consumers. Additionally, imposing technically-possible, but overly broad and burdensome requirements will stifle investment and innovation in this space. Consumers currently reap significant benefits from our members' innovative services and applications, most of which are offered to the consumer at a very low cost or for free. The Commission should avoid adopting overly-prescriptive rules that could upset this equilibrium. We look forward to working with the Commission to effectively balance consumer demands for innovative messaging applications with offering the public reliable 911 service.

The Commission should clearly identify which applications and devices will be subject to any new rules.

At the outset, the FCC should make clear that this proceeding will only cover interconnected text applications that can 1) deliver a message to a telephone number using SMS-protocols, and 2) can receive a text message that is initiated from a telephone number using SMS-protocol.[3] This proceeding should not address non-interconnected text applications that do not interconnect with the PSTN or an SMS network, nor should it include text applications that only allow consumers to communicate with other users running the same application. As the Commission understands, many PSAPs today are not capable of receiving SMS messages, let alone IP-enabled messages that do not interconnect with the PSTN. Enabling PSAPs to receive such IP-enabled messages is a goal of Next Generation 911 (NG911). Therefore, it is premature to try to reach these non-interconnected text messages until PSAPs are ready as part of a NG911 network.

The Commission should also not apply final rules to applications solely based on an application's use of a telephone number. Although some non-interconnected text applications use telephone numbers for user or developer convenience or indexing, or for communicating with other applications, many of these applications cannot communicate with the PSTN or SMS networks. For these applications, it therefore is technically infeasible to deliver messages to PSAPs.

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[3] For further discussion on this, see ITI reply comments in *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications; Framework for Next Generation 911 Deployment*, Further Notice of Proposed Rulemaking, FCC 12-149, PS Docket No. 11-153, PS Docket No. 10-255, filed April 9, 2013.

The Commission should also make clear that any rules it adopts are only intended to apply to applications designed specifically for mobile handsets or smartphones. Many of our companies provide applications for multiple platforms where they appear similar to the user, but in fact have different capabilities.[4] A texting application that runs on a mobile handset, for instance, often does not have the location information that is needed to communicate with PSAPs. Further, other devices these applications run on may not have location awareness at all, nor the ability to communicate with the PSTN or PSAPs. The Commission should also be aware that, even on a mobile handset, there may be instances in which applications can deliver a message over a Wi-Fi network, without having access to accurate location information.

The Commission should keep in mind the place of text services in the communications' landscape and the best method for communicating with PSAPs.

Non-interconnected text services begin and end in an IP infrastructure. And while interconnected text messaging services can connect with the PSTN or SMS network, they may not be as reliable or timely as native SMS texting, which is designed specifically to utilize the PSTN. Furthermore, while the Commission notes that consumers' reliance on text messaging is growing,[5] for most users even SMS is a second best solution for contacting 911. Without question, for most consumers, and for first responders, calling remains the best option for communicating with a

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[4] For example, many applications can run on a mobile handset, tablet, mp3 player or digital music player, mobile gaming device, laptop, or desktop computer.
[5] FNPRM, ¶ 5.

PSAP.[6] Deaf or hearing-impaired consumers and individuals with speech impediments may rely on text as their best solution, and these consumers should be encouraged to use SMS as their primary means for communicating with 911 if their PSAP has that capability.

With this in mind, the Commission should ensure that any rules it adopts in this proceeding do not upend the flood of innovation in the app marketplace. Nearly all text applications are available for free, or for a nominal charge to consumers. We have seen significant experimentation, investment, and innovation in the mobile application space precisely because the barriers to entry are so low. As a result, consumers now have numerous choices for free or very low cost text communication. Some of the text-to-911 technical solutions being considered, however, would erect high cost and technical barriers that could force application developers to leave or limit the messaging application market. This would negatively impact investment, innovation, and ultimately consumers.

The Commission recognizes some costs will be incurred. But based on the experience of ITI's member companies, we think that the FNPRM significantly underestimates these compliance costs.[7] While specific figures provided to ITI's companies are proprietary, the average price quotes from third party technology providers have been approximately $0.50 to $1/user/year—which must be multiplied by potentially millions of individuals using a texting application. In most instances, moreover, this cost covers only the capability to connect to 911; actually

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[6] From multiple sources: http://www.know911.org/message-guidelines/, http://www.fcc.gov/text-to-911, http://www.ctia.org/policy-initiatives/policy-topics/911

[7] FNPRM, ¶ 35.

delivering a text to 911 would incur additional costs for the company providing the interconnected text application. Commissioner Rosenworcel notes in her statement that 400,000 calls are made to 911 each day from wireless phones.[8] Were even a small percentage of those calls to transition to texts from interconnected text applications, the costs would be significantly higher, and the financial viability of continuing to provide the texting applications might vanish. This could be very problematic for deaf and hearing-impaired individuals and other users who rely on text as their primary means of communication. As the Commission moves forward, it must balance these issues, along with consumer expectations and the needs of first responders.

SMS handoff is the best of the options available for connecting interconnected text services to connect with PSAPs.

If the Commission moves ahead, it should allow interconnected text applications on mobile handsets to use the SMS API in the mobile device to enable handoff of 911 messages to the mobile device's native SMS. This would be the most efficient method to ensure the text is routed to the appropriate PSAP and information provided to the PSAP is delivered in a consistent manner, with accurate information, regardless of how the individual using the mobile handset initiates the text.

An SMS handoff solution to the carrier's native SMS dialer has several advantages over other proposals. First, it ensures that PSAPs get the most accurate location information possible. Indeed, unlike native SMS, which obtains reliable

[8] FNPRM, Statement by Commissioner Jessica Rosenworcel, page 46.

wireless network location information from the service provider, interconnected applications are offered by entities that are not affiliated with the relevant network operator. Without SMS handoff, interconnected applications may not be able to obtain location information if the user has not given the application permission to do so.

Interconnected applications may use Wi-Fi network information, for example, to determine location. This type of location information may not meet the needs of PSAPs or first responders. For instance, if an interconnected text application is connected to a virtual private network (VPN) and relies on that connection's location information, the location information could give the wrong street, city, or even state. Indeed, the user could be working from home, but due to the VPN connection the application could advise the PSAP that the user is at their corporate headquarters. SMS handoff to the wireless carrier's SMS service does not suffer from this same problem.

Second, SMS handoff offers the easiest and least costly path for PSAP implementation. Creating additional interfaces for every interconnected text application, or ensuring every application functions with a single PSAP interface, would be inefficient, technically difficult, and costly for PSAPs. By contrast, PSAPs are beginning to establish SMS connections with service providers and cost recovery mechanisms for SMS text-to-911 are (or necessarily will be) in place.

Third, SMS handoff would ensure that consumers can communicate with 911 if a cellular network is available and the PSAP is able to receive SMS text messages. If the PSAP cannot receive an SMS text message, the mobile handset would receive

the normal SMS bounce-back message. If the interconnected application is not able to handoff the text message, the application should provide the user with a bounce-back message.

Conclusion

ITI appreciates the Commission's careful examination of this issue and we stand ready to work with the Commission to ensure a positive outcome that will enhance public safety, while protecting consumer choice and the robust marketplace for over-the-top applications and services.

Respectfully submitted,

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