



**VIA ECFS**

May 5, 2014

Marlene H. Dortch, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
TW-A325  
Washington D.C. 20554

**Re: In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications Framework for Next Generation 911 Deployment**

Dear Ms. Dortch:

Enclosed for filing in the above referenced Second Further Notice of Proposed Rulemaking are reply comments of the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC).

Should you have any questions concerning this filing, please do not hesitate to contact me via email at [helena.mitchell@cacp.gatech.edu](mailto:helena.mitchell@cacp.gatech.edu).

Respectfully submitted,

Helena Mitchell  
Principal Investigator, Wireless RERC  
Center for Advanced Communications Policy  
Georgia Institute of Technology

Enclosure

**Before the  
Federal Communications Commission**

Washington, D.C. 20554

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  
REHABILITATION ENGINEERING RESEARCH CENTER FOR  
WIRELESS TECHNOLOGIES (WIRELESS RERC)

**INTRODUCTION**

The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) hereby submits reply comments to the above-referenced Second Further Notice of Proposed Rulemaking, released on January 31, 2014. The Wireless RERC<sup>1</sup> mission is to research, evaluate and develop innovative wireless technologies and products that meet the needs, enhance independence and improve the quality of life and community participation of people with disabilities. As such, we are pleased that the FCC is taking steps to codify disability access to advanced emergency services. Likewise, the Wireless RERC commends the voluntary actions of industry to deploy an interim text-to-911 solution via the Carrier-NENA-APCO agreement; however we remain a proponent of obligatory rules concerning the deployment of text-to-911.<sup>2</sup>

The Wireless RERC reaches out to the community of people with disabilities to gather their input regarding their specific accessibility needs. This is an ongoing effort conducted through the Web-

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<sup>1</sup> The Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) is sponsored by the National Institute on Disability and Rehabilitation Research (NIDRR) of the U.S. Department of Education under grant number H133E110002. The opinions contained in this filing are those of the authors and do not necessarily reflect those of the U.S. Department of Education or NIDRR.

<sup>2</sup> See Wireless RERC Reply Comments filed in response to *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]. Federal Communications Commission: Washington, DC, April 9, 2013.

based Wireless RERC Survey of User Needs (SUN), which is updated regularly. In addition, the Wireless RERC conducts periodic surveys on topics of a timely nature such as hearing aid compatibility, use of social media in emergency communications, and the potential of next-generation 911 (NG911) technologies. The comments respectfully submitted are based on subject matter expertise developed over the 13 years of the Wireless RERC's existence. Findings from our research and development efforts inform the recommendations made herein.

### **Reply to Comments filed by Sprint**

The Wireless RERC agrees with the comments of Sprint that “Relay services are not delivered via SMS and should remain separate until a more robust, reliable text-to-911 messaging service becomes available.”<sup>3</sup> And further, “Sprint strongly urges the Commission to act with caution before imposing any new obligations associated with SMS-based text-to-911 service on relay service providers.”<sup>4</sup>

Relay service providers perform an invaluable role in providing telecommunications access for people with disabilities; however in the context of 911 calls relay services are not ideal. They rely on a third party to convey information from the caller to the call taker and back again. Naturally, this adds time, which in an emergency is of the utmost importance. Data collected by the Wireless RERC concerning actual and preferred methods for people with disabilities to contact emergency services revealed that telephone relay services (mobile and landline) were amongst the lowest rated methods used *and* preferred to use by people with hearing and speech disabilities.<sup>5</sup> Conversely, text message and other text-based messaging (e.g. instant messages) were rated amongst the most preferred methods.<sup>6</sup> Hence, it is the opinion of the Wireless RERC that the interim text-to-911 solution not be extended to relay

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<sup>3</sup> Comments filed by Sprint in Dockets No. 11-153, 10-255, April 4, 2014.

<sup>4</sup> *Ibid*, P. 9.

<sup>5</sup> Wireless RERC (2013). *Research Brief (Number 01): Technology Use by People with Hearing and Speech Loss for Communicating with Emergency Response Services*. April 4, 2013. Available at [http://www.wirelessrerc.gatech.edu/sites/default/files/publications/Research\\_Brief\\_Tech\\_Hearing\\_and\\_Speech\\_Loss\\_911\\_2013-04-04\\_Final%5B1%5D.pdf](http://www.wirelessrerc.gatech.edu/sites/default/files/publications/Research_Brief_Tech_Hearing_and_Speech_Loss_911_2013-04-04_Final%5B1%5D.pdf).

<sup>6</sup> *Ibid*, p. 3.

service providers, but focus on mobile SMS and OTT messaging services.

### **Reply to Comments filed by CTIA – The Wireless Association (CTIA)**

CTIA asserts that that “...the Commission should not codify or play any enforcement roles over voluntary agreement such as the Carrier-NENA-APCO Agreement.”<sup>7</sup> The Wireless RERC is concerned that in the absence of obligatory rules concerning the deployment of text-to-911 that the deployment of a nationwide capability for text-to-911 messages to be sent *and* received will exacerbate an already anticipated patchwork deployment and further riddle it with coverage inconsistencies. As stated in the FCC’s Policy Statement, rules should be implemented “...so it applies to all providers equally (including future entrants into the market) in a manner that brings regulatory clarity so that all participants in the 911 ecosystem can plan accordingly.”<sup>8</sup>

The “participants” that stand to benefit the most are people with disabilities; particularly, people with hearing loss and speech disabilities. People with speech disabilities are a large and diverse group which includes individuals with Autism, traumatic brain injury, stroke, physical trauma to the vocal chords, cleft lip or palate, and others with difficulties vocalizing (e.g., stuttering). Of course, other situations may require “silent calls” by the hearing population, as well. Therefore, despite the voluntary measures taken by the top four U.S. providers, it is necessary that *all* mobile service providers be held to the same standards to ensure as great of coverage as possible with regard to text-to-911 availability.

Regulations are created to protect the public interest by outlining rules that aim to ensure a fair market,

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<sup>7</sup> Comments filed by CTIA in Dockets No. 11-153, 10-255, April 4, 2014.

<sup>8</sup> FCC (2014). *Policy Statement and Second Further Notice of Proposed Rulemaking In the Matter of Facilitating the Deployment of Text-to-911* (11-153) and *Framework for Next Generation 911 Deployment* (10-255). Washington, D.C., January 30, 2014.

encourage innovation and protect the consumer. Equally important is the creation of policies and enforceable regulations that assure the accessibility of communications systems that serve as lifelines during emergencies. Although market forces have necessitated the inclusion of mobile text into the emergency communications ecosystem, it is essential that mandates be put into place to ensure that all consumers can benefit. That is the foremost opinion of the Wireless RERC in these proceedings. However, if the FCC determines that regulation is unnecessary, and CMRS and other IP text providers can voluntarily deploy text-to-911 capabilities, the Wireless RERC recommends that the FCC follow the model used with Wireless Emergency Alerts (formerly CMAS) in that providers were required to formally elect to participate in the program, and upon election to participate rules concerning deployment became applicable. Additionally, an opt-in model may require incentives to encourage providers that are not party to the Carrier-NENA-APCP Agreement to participate. While not our preference, this model will at least ensure that participating providers have regulatory parity and there is an enforceable, accountability structure in place. As stated by the Association of Public-Safety Communications Officials-International, Inc. (APCO), "...it is important that there be FCC enforcement options as public safety parties will have few independent avenues to enforce voluntary agreements, other than in the "court of public opinion"<sup>9</sup> Likewise, for people with disabilities.

If the evidence presented in this proceeding results in regulations, the Wireless RERC agrees with CTIA (and Verizon and Verizon Wireless<sup>10</sup>) that "regulations governing the interim text-to-911 solution...should be limited to the vision of text-to-911 set forth in the Carrier-NENA-APCO Agreement."<sup>11</sup> Such an approach would balance the need to create an enforcement structure without damaging industry's' future willingness to proffer voluntary initiatives that address a national interest. The Carrier-NENA-APCO Agreement expedited the regulatory process and allowed for the

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<sup>9</sup> Comments filed by APCO in Dockets No. 11-153, 10-255, April 4, 2014.

<sup>10</sup> Comments filed by Verizon and Verizon Wireless in Dockets No. 11-153, 10-255, April 4, 2014.

<sup>11</sup> Comments filed by CTIA in Dockets No. 11-153, 10-255, April 4, 2014, p. 9.

provisioning stakeholders to inform final rules.<sup>12</sup> This rulemaking allows for other stakeholders, namely those commenting on behalf of consumers, and specifically consumers with disabilities, to provide their perspectives to ensure that final rules are effective and appropriate for all involved parties.

In closing, the Wireless RERC wishes to reemphasize the importance of access to emergency services by people with hearing loss and speech disabilities. Currently, a person who is deaf cannot independently and effectively use their mobile device to contact 911. They can place a call but not explain what is needed. This puts both the caller and the first responder in jeopardy by 1) increasing the time between the call for help and response and 2) decreasing the information needed for the 911 operator to dispatch the appropriate first responders (e.g., fire vs. police). Unfortunately, we are not speaking in hypotheticals. It is critical that the literal, lifesaving service of 911 be extended to people with disabilities in the mobile environment.

Respectfully submitted,



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Dated this 5<sup>th</sup> day of May, 2014.

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<sup>12</sup> Comments filed by APCO in Dockets No. 11-153, 10-255, April 4, 2014, p. 7.