

**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 T-MOBILE USA, INC.

The recent voluntary commitment made by America’s four national wireless carriers and leading public safety organizations¹ to offer interim text-to-911 service before full deployment of Next Generation 911 (“NG911”) is an important step in providing consumers – particularly those with disabilities – expanded access to 911. T-Mobile USA, Inc. (“T-Mobile”) is proud to be a part of that effort and looks forward to working with the Commission and other stakeholders to implement this near-term, transitional solution. As the record in this proceeding makes clear, however, it is crucial that the Commission avoid imposing any new mandates that would divert attention and resources from the longer-term transition to NG911. In particular, the Commission should refrain from imposing autolocation requirements on SMS messages sent to 911 and recognize the technical infeasibility of meeting any roaming mandates. Furthermore, it should ensure that network operators are free to take the necessary steps to protect their networks, as

¹ Letter from APCO International, AT&T, NENA – The 9-1-1 Association, Sprint Nextel, T-Mobile USA, and Verizon, to FCC Chairman Julius Genachowski (Dec. 6, 2012), *available at* http://c.ymcdn.com/sites/www.nena.org/resource/resmgr/GovAffairs/121206_-_Voluntary_Commitmen.pdf (“Voluntary Commitment Letter”).

well as foster the development of a nationwide liability standard that will provide wireless carriers with the certainty essential for successful text-to-911—and NG911—deployment.

Location and Roaming. The long-term goal for all stakeholders should be an emergency contact system that permits a high level of location accuracy for all callers: whether those callers are using a landline, a mobile phone, or a VoIP connection; and whether they are making a voice call or sending a text, photo, or video. NG911 holds the promise of being that system. Interim text-to-911, however, does not.

Location. The record is very clear that SMS has definite limitations as a mechanism for communicating with emergency services. It is a store-and-forward, best-effort service that was never designed to transmit precise location information. T-Mobile, like the other nationwide carriers, is committed to working with text-to-911 vendors and Public Safety Answering Points (“PSAPs”) to transmit the best possible location information for subscribers—meaning coarse location information based on cell site. More precision is simply not possible right now.

Calls for more precise location accuracy requirements ignore the technical limitations of SMS technology as well as the negative implications for NG911 deployment. While APCO argues that text-to-911 location information should be “at least as accurate as the Phase II requirements for wireless voice calls to 9-1-1,”² nearly every other public commenter that spoke to the issue of location accuracy acknowledged that level of location precision is currently technically infeasible.³ Moreover, as TCS notes, “[a]pplying Phase II location standards would

² Comments of APCO International (“APCO”) at 4. Unless otherwise noted, all comments discussed herein were filed on March 11, 2013, in PS Dockets No. 11-153 and 10-255.

³ See, e.g., Comments of The National Emergency Number Association (“NENA”) at 6; Comments of TeleCommunication Systems, Inc. (“TCS”) at 3; Comments of Verizon and Verizon Wireless (“Verizon”) at 7; see also Comments of the Boulder Regional Emergency Telephone Service Authority (“BRETSA”) at 13 (acknowledging that advanced technologies

have an unintended chilling effect on the deployment of location delivery strategies”⁴ as carriers would be forced to divert significant time and money away from NG911 efforts into developing solutions for what all agree is an interim solution.⁵ For this reason, adopting additional location accuracy requirements and deadlines for the interim text-to-911 solution, as advocated by BRETSA,⁶ does not make sense.

Roaming. Similarly, interim text-to-911, based as it is on SMS messaging, will not be available to roaming subscribers. It is simply not possible, in existing SMS network configurations, for a roaming subscriber’s home network to properly locate and route a 911 SMS message to the appropriate PSAP. As noted by several commenters, cell site information—in particular, location information retrievable in connection with an SMS message—is only available to the home network provider.⁷ Some commenters acknowledge these limitations, but still call for the Commission to revisit roaming in the short term.⁸ As with location accuracy, however, this proposal makes little sense. The Commission should instead “allow for eventual adoption of standards that would contemplate roaming in the NG911 environment.”⁹ To do

that might improve location accuracy for routing of SMS messages are not necessarily ready to be deployed).

⁴ TCS at 3.

⁵ *See id.*; Comments of Sprint Nextel Corporation (“Sprint”) at 14; *see also* Comments of AT&T Inc. (“AT&T”) at 12 (“this solution is by definition an interim one”). *Cf.* NENA at 16 (noting that PSAPs should be allowed to forgo interim text-to-911 capabilities in order to “preserv[e] precious public-sector funds for the longer-term transition to NG911”).

⁶ BRETSA at 13.

⁷ *See, e.g.*, AT&T at 20; Comments of CTIA- The Wireless Association (“CTIA”) at 12; Sprint at 13-14; Verizon at 7-8; *see also* NENA at 14 (“NENA believes that an exclusion of roaming support...is appropriate at this time.”).

⁸ *See* NENA at 14.

⁹ Sprint at 14.

otherwise would detract from NG911 deployment efforts as well as undermine the Commission's commitment to base its regulatory framework on the voluntary text-to-911 commitment.¹⁰

A roaming mandate is also unnecessary as a means of avoiding consumer confusion. Interim text-to-911 will never be universally available, as not all PSAPs will accept text-to-911 messages in the near term, and some may never choose to do so, instead waiting for NG911.¹¹ The bounce-back requirement in the voluntary commitment is designed to alleviate consumer confusion in those circumstances in which a subscriber attempts to send a text message to 911 where it cannot be delivered to a PSAP.¹² That same requirement will have a similar effect where subscribers are roaming on another provider's network. In short, if the bounce-back message requirement is sufficient to address consumer confusion concerns in areas where no PSAP has elected to receive text-to-911 messages, it should be equally sufficient with respect to roaming subscribers and possible confusion.¹³

Security. In mid-March, 2013, the Department of Homeland Security issued a bulletin noting that PSAPs in multiple jurisdictions had reported denial of service attacks targeting their telephone systems.¹⁴ The heavy volume of calls prevented these PSAPs from receiving legitimate calls over a period of several hours. These so-called "telephone denial of service"

¹⁰ See *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment*, Further Notice of Proposed Rulemaking, PS Docket Nos. 11-153 & 10-255, at ¶ 3 (2011).

¹¹ See NENA at 15-16.

¹² See Voluntary Commitment Letter at 2-3.

¹³ See, e.g., APCO at 3 (noting that by requiring a bounce-back message from all providers, the Commission can ensure that consumers are appropriately informed when text messages to 911 cannot be delivered).

¹⁴ Chris Nussman, NENA, *DHS Bulletin on Denial of Service (TDOS) Attacks on PSAPs*, March 17, 2013, <http://www.nena.org/news/119592/DHS-Bulletin-on-Denial-of-Service-TDoS-Attacks-on-PSAPs.htm>.

(TDoS) attacks underscore the importance of building robust security protocols into any system that allows communication with public safety—including interim text-to-911.¹⁵ TCS correctly notes that the ATIS/JSMS911 working standard does not permit text-to-911 from non-handset origination points¹⁶—*i.e.*, spoofing—but SMS has other vulnerabilities as well, including “flooding,” or SMS denial of service attacks.¹⁷ As T-Mobile has previously stated, carriers must be permitted to suspend text-to-911 service whenever necessary to protect their networks, their customers, and public safety.¹⁸

Liability. Mobile wireless is inherently a nationwide service and, as such, wireless carriers should be afforded the certainty and predictability that comes with a nationwide liability standard for provision of 911 access. Almost every commenter on the record agrees with a national approach.¹⁹ The only commenter to press for a state standard—BRETSA—bases its parochial conclusion on what it sees as the “appropriate” approach provided for under Colorado law.²⁰ Whether a given state’s liability protections are “appropriate,” however, is irrelevant in this instance; the real issue is that the protections are not uniform from state to state. As AT&T notes, “tying that protection to a myriad of sources—statutes, judicial decisions, tariffs, *etc.*—

¹⁵ *Cf. Public Safety And Homeland Security Bureau Seeks To Refresh The Record Regarding Options For Addressing Non-Emergency Calls To 911 From Non-Service Initialized Handsets*, Public Notice, DA 13-430, PS Docket No. 08-51 (rel. Mar. 14, 2013) (noting public safety reports of “an ever-growing onslaught of non-emergency calls to 9-1-1 from NSI devices” and seeking to refresh the record on the non-service initialized device rules).

¹⁶ TCS at 5.

¹⁷ *See* 4G Americas, *Texting to 9-1-1: Examining the Design and Limitations of SMS*, at 43 (Oct. 2010), available at <http://www.4gamerica.org/documents/SMS%20to%20911%20White%20Paper%20Final%20October%202010.pdf>.

¹⁸ *See, e.g.*, Comments of T-Mobile USA, Inc. at 3 (filed Jan. 29, 2013); Comments of T-Mobile USA, Inc. at 9-10.

¹⁹ *See, e.g.*, AT&T at 14-15; CTIA at 18-20; Comments of Motorola Solutions at 5-6; Comments of NTCA-The Rural Broadband Association at 7-8; Sprint at 16; TCS at 6.

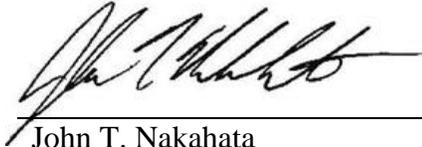
²⁰ BRETSA at 20.

some of which are obscure or present interpretation issues or are insufficient” causes confusion²¹ and undermines development and deployment of new technologies. The Commission should press Congress to ensure wireless carriers are afforded a uniform, nationwide liability protection scheme.

* * *

T-Mobile believes that interim text-to-911 and the voluntary carrier agreement is an important step on the path to full NG911 deployment. It urges the Commission to avoid implementing any new regulatory mandates with that in mind, recognizing that enhanced autolocation and roaming access to text-to-911 are not feasible at this time. At the same time, the Commission should ensure that wireless carriers can adequately protect their networks—and are, in turn, sufficiently protected from liability. These steps will ensure that all stakeholders can properly dedicate their limited resources to longer-term goals while ensuring that, in the short term, access to public safety is improved to the extent possible.

Respectfully submitted,



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²¹ AT&T at 17.