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
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REPLY COMMENTS OF UNITED STATES CELLULAR CORPORATION

United States Cellular Corporation ("USCC"), by its undersigned attorneys, hereby submits its reply comments to the above-referenced Notice of Proposed Rulemaking ("NPRM") regarding Next Generation 911 ("NG-911").[1] In response to comments filed to this proceeding on December 12, 2011, USCC reemphasizes its opposition to the adoption of a SMS-to-911 standard. USCC, consistent with many comments, calls for a standardized, trigger-based process to be applied to the NG-911 transition and for enhanced liability protection. USCC also supports the creation of a collaborative, stakeholder process to further develop and implement NG-911.

I. INTRODUCTION AND SUMMARY

USCC continues to support the long-term transition to NG-911 because of the public safety benefits it would bring. The comments filed in the proceeding demonstrate, however, that the Commission should not rush to adopt a potentially faulty interim solution or firm and unworkable deadlines. The comments also serve as a warning to state and local governments of the complexities of NG-911 and similarly caution against attempting a hasty transition. The NG-

[1] *Framework for Next Generation 911 Deployment*, PS Docket No. 10-255, *Notice of Proposed Rulemaking* (Sept. 22, 2011).

911 transition will be a process that necessarily occurs over a number of years and there are no short cuts that can be taken in the name of expediency without risking the reliability of the 911 system for those who are relying on it in emergencies. As a large carrier serving numerous rural, as well as urban, markets, USCC wishes to remind the Commission that it must consider the needs and capabilities of a variety of different types of providers in any action it takes. USCC is particularly concerned with any effort to adopt a SMS-to-911 solution. USCC further believes that a standardized, trigger-based process needs to be put in place for all portions of the NG-911 transition to ensure that PSAPs are able to use these new technological offerings. Expanded and clarified liability protection is also important to ensure that the full benefits of NG-911 can be experienced by consumers. USCC also supports the collaborative stakeholder process advanced by other commenters.

II. THE COMMISSION SHOULD NOT RUSH A POORLY CONCEIVED, UNWORKABLE NG-911 SOLUTION

In the NPRM, the Commission sought to achieve a number of goals simultaneously including fulfilling the accessibility objectives of the Communications and Video Accessibility Act,[2] offering some type of short-term text-to-911 solution to the general public, and laying the groundwork for the long-term transition to NG-911. The comments filed in the proceeding demonstrate that the Commission, despite the best of intentions, cannot achieve all of these goals in one fell swoop.

A. SMS-to-911 Should Not Be Adopted By the Commission.

[2] 47 U.S.C. § 615c(g) provides the Commission with authority to "promulgate...any other regulations, technical standards, protocols, and procedures as are necessary to achieve reliable, interoperable communication that ensures access by individuals with disabilities to an Internet protocol-enabled emergency network, where achievable and technically feasible."

USCC wishes to restate its opposition to SMS-to-911 as a short-term NG-911 solution.[3] The technical shortcomings of SMS-to-911 were explained in great detail not only by USCC and other wireless carriers,[4] but also public safety organizations and advocates.[5] The limitations of SMS, familiar to the Commission by now, include the lack of technical capability to apply the "all calls" rule to SMS-to-911,[6] the inability for a sender to know their message was received[7] and a lack of location technology.[8] These elements, and many others, are at the core of 911 service. Without them, the promise of NG-911 would be hollow.

The Alliance for Telecommunications Industry Solutions ("ATIS") Non-Voice Emergency Services ("INES") Incubator, a collaborative effort including industry and public

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[3] *See* Comments of United States Cellular Corp., PS Docket No. 10-255 at 3-7 (filed Dec. 12, 2011) ("Comments of USCC").

[4] *See* Comments of AT&T Inc., PS Docket No. 10-255 at 14, *n.* 24 (filed Dec. 12, 2011) ("Comments of AT&T"); Comments of Sprint Nextel Corporation, PS Docket No. 10-255 at 3 (filed Dec. 12, 2011) ("Comments of Spring Nextel"); Comments of The Blooston Rural Carriers, PS Docket No. 10-255 at 2-5 (filed Dec. 12, 2011) ("Comments of Blooston"); Comments of T-Mobile USA, Inc., PS Docket No. 10-255 at 10-13 (filed Dec. 12, 2011) ("Comments of T-Mobile").

[5] *See* Comments of APCO International, PS Docket No. 10-255 at 2 (filed Dec. 12, 2011) ("Comments of APCO") ("[T]here are serious, inherent deficiencies in SMS as a 9-1-1 delivery mechanism."); Comments of the National Association of State 9-1-1 Administrators, PS Docket No. 10-255 at 5 (filed Dec. 9, 2011) ("Comments of NASNA") ("The limitations of a nationwide short-term SMS-to-9-1-1 solution far outweigh the benefits.").

[6] Comments of CTIA-The Wireless Association, PS Docket No. 10-255 at 8 (filed Dec. 12, 2011) ("Comments of CTIA"); Comments of USCC at 4-5.

[7] Comments of Sprint-Nextel at 12 ("When an SMS message is sent, the sender does not receive a delivery receipt and will not know if a message does not go through."); Comments of Motorola Mobility, Inc., PS Docket No. 10-255 at 3 (filed Dec. 12, 2011) ("[U]nder its current implementation, senders of SMS text messages are not provided with confirmation that the message was received by the destination recipient.").

[8] Comments of T-Mobile at 3 (SMS "will never be able to provide autolocation."); Comments of GreatCall, Inc., PS Docket 10-255 at 3 (filed Nov. 30, 2011) ("The main feature that would not be available with [a SMS] solution is location support.").

safety, found similar concerns when it surveyed fourteen potential short-term NG-911 solutions in a recent report.[9] Among the issues it identified were that (1) SMS does not allow real time communication, (2) there are no delivery or performance guarantees, (3) SMS platforms are not built for emergency communications, (4) there are length limitations of the individual messages, (5) SMS is not capable of checking servers for location, (6) SMS can only be routed to a single location for a given short code, (7) there are security and authentication concerns, (8) there are spam and spoofing vulnerabilities, and (9) SMS is not compatible with expected long term solutions.[10] Even commenters expressing some support for SMS-to-911 recognized its limitations.[11]

Because PSAPs are generally unable to handle SMS today, some proposals have been offered for a national SMS relay center to receive SMS messages and relay them to the appropriate PSAP.[12] This would add additional logistical complexities to a so-called "short-

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[9] ATIS Interim Non-Voice Emergency Services (INES) Report and Recommendations, December 12, 2011.

[10] *Id.*, at 15-16.

[11] *See Emergency Access Advisory Committee (EEAC) Report and Recommendations* at 66 ("There are significant and well-documented technical challenges associated with the use of SMS to contact 9-1-1 emergency services (such a latency and lack of reliability)); Comments of Rave Mobile Safety, PS Docket 11-153 at 2 (filed Dec. 12, 2011) ("[I]nherent delays and 'out of order' messaging delivery in this non-synchronous communication method can be frustrating or worse.").

[12] *See, e.g.*, *Id.*, at 15; Comments of the National Emergency Number Association, PS Docket 10-255 at 9 (filed Dec. 12, 2011); Comments of Intrado, Inc., PS Docket 10-255 at 3-4 (filed Dec. 12, 2011).

term" solution[13] and also degrade emergency services for the general public because of the delays inherent in a relay, as opposed to direct, service.[14]

Given all of these well documented concerns with any SMS solution plus the reality that any effort to alter SMS to assuage those concerns would distract from long term solutions, USCC joins others in restating its opposition to SMS-to-911. The general public would be better served by the Commission focusing on the long-term deployment of NG-911.

B. A Trigger-based Transition Process Should be Adopted.

As USCC explained in its opening comments, the Commission should adopt a transition process similar, though not identical, to what was used for E-911 deployment.[15] As with the E-911 process, a carrier's NG-911 obligations should only commence when public safety service providers are capable of using the technology.[16] Unlike E-911 however, the transition process would be better served if triggers are based on state or regional readiness, as opposed to the individual PSAP-level. There are approximately 7,000 PSAPs nationwide and organizing the transition at a higher level would be much less burdensome on state and local governmental authorities, PSAPs, and carriers. As explained by T-Mobile, states should determine when there is a critical mass of PSAPs ready to convert to NG-911 and then all PSAPs within that state, or

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[13] ATIS Interim Non-Voice Emergency Services (INES) Report and Recommendations, December 12, 2011 at 15 (citing the lack of a "national SMS relay platform" which must be "developed and staffed" and the lack of a "funding model.").

[14] Comments of APCO at 9.

[15] Comments of USCC at 10-12.

[16] In the E-911 context, this was called the "Richardson Process," named after a pair of decisions involving the city of Richardson, Texas. Pursuant to the Richardson Process, the E-911 requirement was only triggered if a PSAP had requested service, would be capable of receiving and utilizing the E-911 data, and a cost recovery mechanism for the PSAP's E-911 costs were in place.

region, should be required to convert.[17] A triggered-based transition had support among commenters because of the certainty they would bring to the process.[18] It would provide incentives for a coordinated design, funding and construction process, not a hodgepodge of inconsistent, geographically and temporally, unstructured deadlines.

As explained in USCC's opening comments, many jurisdictions are already advancing their NG-911 transitions. USCC has itself received requests from jurisdictions in eight different states to transition its infrastructure to accommodate future NG-911 deployment. It is far from clear that their requests are technologically consistent and compatible, much less leading to an efficient and reliable NG-911 system. Before these nascent transitions progress further, the Commission should establish clear triggers based on certain geographic areas to determine when NG-911 needs to be deployed by carriers.

C. The Commission Should Clarify Liability Protection for NG-911.

The primary basis for liability protection for wireless carriers providing emergency service is the New and Emerging Technologies (NET) 911 Improvement Act of 2008.[19] Section 222 of the Communications Act also provides an exception to customer proprietary network information ("CPNI") protections so that carriers are able to provide call location information to PSAPs.[20] As USCC explained in its comments, the existing protections are insufficient for the

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[17] Comments of T-Mobile at 9.

[18] *See, e.g.*, Comments of AT&T at 19-20; Comments of Blooston at 5-6; Comments of CTIA at 15-16.

[19] Pub. L. 110-283 (2008) codified at 47 U.S.C. § 615a.

[20] 47 U.S.C. § 222(d)(4)(A).

current 911 system, let alone a future system complicated by NG-911.[21] USCC urged the Commission to clarify the liability protections and explicitly expand them to NG-911.[22]

Other commenters recognized the need for clarification on liability protection issues.[23] That support was not limited just to carriers but also included the public safety community and others.[24] There is broad consensus that the Commission needs to extend liability protection both to explicitly include NG-911 technology and to ensure that carriers that provide services through a variety of states will not face potential liability for actions in one state that are inconsistent with their obligations elsewhere.

D. USCC Supports a Collaborative Stakeholder Process.

USCC supports the collaborative, stakeholder process called for by T-Mobile in its opening comments.[25] The process USCC endorses would be similar to the process undertaken in the development of Wireless Emergency Alerts ("WEA") or Commercial Mobile Alert Services ("CMAS"). In order to enact CMAS, Congress established the Commercial Mobile Service Alert Advisory Committee ("CMSAAC") made up of representatives from state, local and tribal governments, wireless service providers, equipment vendors and manufacturers, and the

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[21] USCC Comments at 15.

[22] *Id.*, at 19.

[23] AT&T Comments at 15, 22-23; Comments of CTIA at 8; Verizon Comments at 16.

[24] Comments of the Alliance for Telecommunications Industry Solutions, PS Docket 10-255 at 11-12 (filed Dec. 12, 2011); Comments of NASNA at 6; Comments of NENA at 15-16; Comments of Motorola Solutions, Inc., PS Docket 10-255 at 5-6 (filed Dec. 12, 2011).

[25] Comments of T-Mobile at 2. It is expected that CTIA's Reply Comments will also endorse this approach. USCC associates itself with the entirety of CTIA's comments but wishes to express particular support for the collaborative, stakeholder process discussed here.

disability community.[26] CMSAAC worked collaboratively and came up with a voluntary framework for carriers to deploy CMAS.[27] The voluntary framework has been widely adopted by carriers, including USCC.[28]

USCC believes that the Commission should repeat that collaborative, stakeholder driven process in the NG-911 context. Only with full participation of stakeholders can a credible and feasible NG-911 solution be developed and, most importantly, implemented. Without a collaborative process, it is unlikely that a NG-911 solution which can best serve the public during their time of need can be implemented.

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[26] 47 U.S.C. § 1202; *The Commercial Mobile Alert System*, PS Docket No. 07-287, *First Report and Order* at ¶ 5, n. 11 (April 9, 2008).

[27] *Id.*, at ¶ 2.

[28] *See FCC Master CMAS Registry File* available at http://www.fcc.gov/pshs/docs/services/cmas/MasterCMASRegistry.xls.

III. CONCLUSION

USCC continues to support a timely and effective implementation of NG-911 for the public safety benefits it will bring to those in distress. USCC cannot, however, support ineffective solutions such as SMS. The best path forward is to establish a collaborative process to determine a solution and implement that solution through a trigger-based transition.

Respectfully submitted,

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