

**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
	)	

**REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

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**REPLY COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®**

**I. INTRODUCTION AND SUMMARY**

CTIA – The Wireless Association® respectfully submits these reply comments in response to the Commission’s Further Notice of Proposed Rulemaking (“*FNPRM*”) seeking comment on the Commission’s comprehensive text-to-9-1-1 proposals.<sup>1</sup> As the opening comments in this proceeding demonstrate, a variety of technical, regulatory, and policy issues must still be addressed to ensure that all citizens will benefit from an interim text-to-9-1-1 framework. CTIA believes that the Commission must recognize that:

- The record demonstrates that the Commission’s approach to impose a one-sided mandate on wireless service providers without a corresponding commitment to adopt text-to-9-1-1 services from the public safety community is unreasonable, particularly given the December 2012 agreement of APCO International, NENA, AT&T, Sprint Nextel, T-Mobile, and Verizon Wireless (“Carrier-NENA-APCO Agreement”)<sup>2</sup> to provide text-to-9-1-1 service only to requesting Public Safety Answering Points (“PSAPs”).

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<sup>1</sup> *Facilitating the Deployment of Text-to-9-1-1 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment*, Further Notice of Proposed Rulemaking, FCC 12-149 (Dec. 13, 2012) (“*FNPRM*”).

<sup>2</sup> Letter from Terry Hall, APCO International, Barbara Jaeger, NENA, Charles W. McKee, Sprint Nextel, Robert W. Quinn Jr., AT&T, Kathleen O’Brien Ham, T-Mobile USA, and Kathleen Grillo, Verizon, to Julius Genachowski, Chairman, Federal Communications Commission, and Commissioners McDowell, Clyburn, Rosenworcel, and Pai, PS Docket 11-153, PS Docket 10-255 (Dec. 6, 2012) (“Carrier-NENA-APCO Agreement”).

- As required by the Twenty-first Century Communications and Video Accessibility Act of 2010 (“CVAA”), the record does not support the technical or economic feasibility of modifications to existing network standards and infrastructure for native wireless service provider text communications in order to implement text-to-9-1-1 service.
- The Commission and public safety entities must lead the public education effort regarding text-to-9-1-1.

The wireless industry’s strong commitment to ensuring that wireless subscribers, including individuals who are deaf or hard of hearing, can access emergency communications services when they need them most is confirmed by the December 2012 voluntary agreement of CTIA member companies AT&T, Sprint, T-Mobile, and Verizon Wireless to enable text-to-9-1-1 on their networks.<sup>3</sup> Despite the well-documented technical challenges and inherent limitations of using Short Messaging Service (“SMS”) for emergency purposes,<sup>4</sup> the carriers agreed to a flexible framework that will provide near-term opportunities to meet emergency text-based communications needs, particularly for the deaf and hard of hearing communities.<sup>5</sup> Given SMS’s limitations, CTIA believes that the Commission can best achieve its objectives in this proceeding by ensuring that industry standards organizations and other groups representing a broad range of stakeholders have the flexibility to develop common solutions.<sup>6</sup> CTIA and the

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<sup>3</sup> See Carrier-NENA-APCO Agreement.

<sup>4</sup> For instance, CTIA and others have noted that SMS does not have native functionality to provide automatic location information. See, e.g., Reply Comments of CTIA – The Wireless Association®, PS Docket No. 10-255, at 6 (Mar. 14, 2011) (“CTIA March 2011 Reply Comments”); Comments of the Association of Public-Safety Communications Officials International, Inc., PS Docket No. 10-255, at 2 (Feb. 28, 2011) (“APCO February 2011 Comments”); Comments of the National Emergency Numbering Association, PS Docket No. 10-255, at 14-15 (Feb. 28, 2011) ; see generally Carrier-NENA-APCO Agreement at 1 (noting that SMS is a store-and-forward messaging technology that was never designed nor deployed to provide time-sensitive, mission critical service).

<sup>5</sup> Carrier-NENA-APCO Agreement at 1.

<sup>6</sup> See, e.g., ATIS & TIA, Joint Press Release, *ATIS and TIA Develop Nationwide Text to 9-1-1 Solution* (Apr. 2, 2013), available at <http://atis.org/PRESS/pressreleases2013/040213.asp>.

wireless industry remain committed to collaborating with interested stakeholders to facilitate the deployment of viable solutions for text-based communications to 9-1-1. Further, CTIA and the wireless industry are committed to facilitating an efficient and effective transition to a Next Generation (“NG9-1-1”) system. To this end, CTIA submits the wireless community is already moving to implement interim text-to-9-1-1 service, making a regulatory mandate unnecessary and potentially harmful by diverting resources from a timely NG9-1-1 transition.

**II. THE RECORD DEMONSTRATES THAT THE COMMISSION’S APPROACH OF A ONE-SIDED MANDATE TO SUPPORT TEXT-TO-9-1-1 AS AN INTERIM SOLUTION FOR NG9-1-1 IS UNREASONABLE**

CTIA and its member companies continue to support the migration to NG9-1-1 services that can provide wireless subscribers, including persons with disabilities, the benefits of advanced emergency communication capabilities. However, CTIA remains concerned that the Commission’s approach to implementing text-to-9-1-1 as an interim solution amounts to an unnecessary one-sided mandate.

As CTIA and others have emphasized, four national wireless carriers, together with APCO and NENA have already voluntarily committed to make text-to-9-1-1 and “bounce-back” message services available to their subscribers and requesting PSAPs.<sup>7</sup> Further evidencing the industry’s commitment to the voluntary framework set forth in the Carrier-NENA-APCO Agreement, the Alliance for Telecommunications Industry Solutions (“ATIS”) and the Telecommunications Industry Association (“TIA”) have released a non-proprietary standard to support the provisioning of text-to-9-1-1 service to subscribers within the existing technical

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<sup>7</sup> See Carrier-NENA-APCO Agreement; *see also* Verizon March 2013 Comments at 3 (emphasizing that industry and public safety stakeholders are already coordinating text-to-9-1-1 deployment and have been able to constructively and amicably resolve technical and other issues).

capabilities of native carrier SMS.<sup>8</sup> The voluntary agreement, coupled with the release of this standard, demonstrates that the wireless community is *already* moving toward implementing the interim text-to-9-1-1 solution without the imposition of a regulatory mandate. Moreover, implementing this interim text-to-9-1-1 service as a regulatory mandate, rather than a voluntary commitment, unnecessarily diverts resources from NG9-1-1 deployment and thus may delay the NG9-1-1 transition.

The Commission's current proposed framework would impose cumbersome obligations on wireless service providers to support text-to-9-1-1 while permitting PSAPs the freedom to choose whether or not to enable text-to-9-1-1 services. As a result, the benefits of text-to-9-1-1 may be limited or not achieved at all. Even if the Commission could overcome the jurisdictional questions that CTIA highlighted in its opening comments,<sup>9</sup> the Commission is left with a public policy conundrum: the Commission must decide whether it would be reasonable to impose a one-sided mandate on wireless service providers without a parallel commitment and coordinated path for PSAPs to support text-to-9-1-1 services. The record in this proceeding illustrates that such an approach is unreasonable.<sup>10</sup>

Although the record demonstrates the wireless industry's strong commitment to making text-to-9-1-1 services available to subscribers, the record does not reflect a concomitant and universal level of support for text-to-9-1-1 from the public safety community. Unlike the

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<sup>8</sup> See ATIS & TIA, Joint Press Release, *ATIS and TIA Develop Nationwide Text to 9-1-1 Solution* (Apr. 2, 2013), available at <http://atis.org/PRESS/pressreleases2013/040213.asp>.

<sup>9</sup> See Comments of CTIA – The Wireless Association®, PS Docket No. 11-153, PS Docket No. 10-255, at 3-11 (Mar. 11, 2013) (“CTIA March 2013 Comments”).

<sup>10</sup> See, e.g., Comments of Verizon and Verizon Wireless, PS Docket No. 11-153, PS Docket No. 10-255, at 3 (Mar. 11, 2013) (“Verizon March 2013 Comments”) (highlighting that PSAP acceptance of and investment in text-to-9-1-1 is a “prerequisite” to the service’s nationwide implementation).

national wireless carrier signatories to the Carrier-NENA-APCO Agreement, the public safety community has not made a similar commitment to support interim text-to-9-1-1, much less by a particular deadline. Specifically, the public safety community requests that PSAPs be free to choose whether to support text-to-9-1-1 prior to the deployment of NG9-1-1.<sup>11</sup> NENA, for example, points out that it is of “critical importance that PSAPs retain the ability to elect not to receive non-PSTN-originated text messages *at all* until traffic engineering, staffing, and systems analyses have been completed to the satisfaction of local center managers, and their recommendations implemented.”<sup>12</sup>

CTIA recognizes that implementation of text-to-9-1-1 will require the expenditure of considerable resources by public safety as well as the wireless industry. Given PSAPs’ need for flexibility in adopting and accepting text-to-9-1-1 services, the appropriate approach to text-to-9-1-1 is already set forth in the Carrier-NENA-APCO Agreement. Indeed, the voluntary agreement accounts for PSAPs that may not wish to support text-to-9-1-1 by requiring PSAPs to affirmatively request to receive text-to-9-1-1 services.<sup>13</sup> Such a flexible approach is also consistent with the Commission’s Emergency Access Advisory Committee (“EAAC”)

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<sup>11</sup> See Comments of Fairfax County, Virginia on Sections Other Than III.A., PS Docket No. 11-153, PS Docket No. 10-255, at 2 (Mar. 11, 2013) (“Fairfax County March 2013 Comments”) (“Therefore, the County strongly supports the Commission’s decision to leave to PSAPs the decision whether to accept text-to-911 messages and, if PSAPs decide to accept such messages, the ability to select the format in which they will receive text messages.”).

<sup>12</sup> Comments of the National Emergency Number Association, PS Docket No. 11-153, PS Docket No. 10-255, at 16 (Mar. 11, 2013) (“NENA March 2013 Comments”) (emphasis in original).

<sup>13</sup> Carrier-NENA-APCO Agreement at 2.

observations that numerous technical and policy questions and challenges remain concerning the capability of PSAPs to support text-to-9-1-1 implementation in the near term.<sup>14</sup>

As the Carrier-NENA-APCO Agreement recognizes, text-to-9-1-1 is an “interim” solution and simply a “step towards a comprehensive NG9-1-1 system.”<sup>15</sup> Implementing this interim text-to-9-1-1 service as a regulatory mandate, rather than a voluntary commitment, unnecessarily diverts resources from NG9-1-1 deployment and thus may delay the NG9-1-1 transition. This phenomenon of delay and “Requirements ‘Creep’” is an important “lesson learned” and was recognized by former Office of Engineering and Technology Chief Dale Hatfield in the assessment of E911 implementation:

The tradeoff here between faster rollout of Phase II wireless E911 services and accommodating specialized and new requirements is apparent. While I am convinced that this is an issue worth mentioning because of the potential impact on the rollout of wireless E911 services in the short term, I am not convinced any formal Commission action is necessary. However, on balance, I do recommend that the Commission (a) avoid the addition of new requirements during this critical stage of the rollout, (b) encourage coalescence around standardized interfaces ..., and (c) work with the industry, in conjunction with the system engineering entity ... to prioritize the future evolution of wireline and wireless E911 in such a way that short term and long term priorities are properly balanced.<sup>16</sup>

In addition, deploying text-to-9-1-1 in an ad hoc manner that permits PSAPs to decline to participate while carriers are required to upgrade could result in substantial public confusion about the availability of the service. As a technical and operational resource-intensive

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<sup>14</sup> See EAAC, Report of Emergency Access Advisory Committee (EAAC) Subcommittee 1 on Interim Text Messaging to 9-1-1, at 15-18 (Mar. 1, 2013) (“EAAC March 2013 Text Messaging Report”).

<sup>15</sup> Carrier-NENA-APCO Agreement at 1.

<sup>16</sup> Dale N. Hatfield, A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services, § 4.3 (2002) (“Hatfield Report”).

proposition, PSAPs may not even choose to accept text-to-9-1-1 messages.<sup>17</sup> Given these realities, the Commission must account for the policy and public safety issues that would be created by imposing a one-sided mandate on wireless service providers without a corresponding commitment to adopt text-to-9-1-1 services from the public safety community, particularly given the Carrier-NENA-APCO Agreement to provide text-to-9-1-1 service only to requesting PSAPs.

### **III. CONTRARY TO THE CVAA, THE RECORD FAILS TO DEMONSTRATE THAT MODIFICATIONS TO EXISTING TEXT MESSAGE STANDARDS AND SERVICES ARE TECHNICALLY AND ECONOMICALLY FEASIBLE**

The CVAA requires that the Commission impose only regulations that are “achievable,” “technically feasible,” and “necessary.”<sup>18</sup> CTIA is concerned by the proposals of some commenters in this proceeding that would seek to expand the technological scope of the Carrier-NENA-APCO Agreement and/or have the Commission require capabilities that would delay the rollout of text-to-9-1-1 and NG9-1-1. In addition to delaying the rollout of text-to-9-1-1, expanding the technological scope of the Carrier-NENA-APCO Agreement will require substantial changes to existing network architectures that have not been proven to be technically or economically feasible.

Several parties have stated that wireless service providers must provide improved location accuracy technology for text-to-9-1-1. APCO submits that “accurate location information for each 9-1-1 text should be provided to the PSAP.”<sup>19</sup> Even though BRETSA acknowledges that “it is not clear if [location accuracy] technologies are ready for market,” it

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<sup>17</sup> NENA March 2013 Comments at 16; *see* Fairfax County March 2013 Comments at 2.

<sup>18</sup> *See* Reply Comments of CTIA – The Wireless Association®, PS Docket No. 11-153, PS Docket No. 10-255, at 10 (Feb. 9, 2012) (“CTIA February 2012 Reply Comments”) (citing 47 U.S.C. § 615c(g)).

<sup>19</sup> Comments of APCO International, PS Docket No. 11-153, PS Docket No. 10-255, at 4 (Mar. 11, 2013) (“APCO March 2013 Comments”).

still urges the Commission to “adopt additional deadlines for improvements” and “require service providers to improve location capabilities.”<sup>20</sup> However, the text-to-9-1-1 standard recently released by ATIS and TIA includes the provision of “coarse” location information (*e.g.*, cell site location).<sup>21</sup> CTIA agrees with the EAAC that “a text-messaging to 9-1-1 solution should not be subject to all of the requirements of either voice 9-1-1 calls or long-term solutions (*i.e.*, NG9-1-1) so that it can be implemented in the near term and without extensively reworking carrier, handset, or PSAP systems.”<sup>22</sup> Similarly, the EAAC has noted that the Commission’s proposal to convert SMS text messages to TTY calls that PSAPs could receive over existing TTY facilities would require further study to assess whether such an approach would meet the requirements of an emergency communication. Contrary to the CVAA’s technical feasibility mandate, these suggestions essentially ask the Commission to transform native wireless service provider SMS into a wholly different service.

As the EAAC has recognized, significant modifications to existing network standards and infrastructure should be avoided to ensure the timely deployment of text-to-9-1-1.<sup>23</sup> As discussed above, text-to-9-1-1 is merely an interim, “best efforts” service that is provided to meet near term objectives.<sup>24</sup> Imposing requirements that entail significant network modifications will divert limited resources from long-term NG9-1-1 goals to text-to-9-1-1 compliance, ultimately

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<sup>20</sup> Comments of the Boulder Regional Emergency Telephone Service Authority, PS Docket No. 11-153, PS Docket No. 10-255, at 12-13 (Mar. 11, 2013) (“BRETSA March 11, 2013 Comments”).

<sup>21</sup> ATIS and TIA, *Joint ATIS/TIA Native SMS to 9-1-1 Requirements and Architecture Specification*, J-STD-110, at 5 (2013) (“*ATIS/TIA Standard*”).

<sup>22</sup> EAAC March 2013 Text Messaging Report at 9.

<sup>23</sup> *See id.* at 2.

<sup>24</sup> Carrier-NENA-APCO Agreement at 1.

delaying the availability of NG9-1-1 services to the public.<sup>25</sup> What is more, the record fails to demonstrate that such network modifications would even be technically or economically feasible for the entities subject to the Commission’s mandate—a demonstration required by the CVAA.

#### **IV. THE COMMISSION AND PUBLIC SAFETY ENTITIES MUST TAKE A LEADING ROLE IN PUBLIC EDUCATION REGARDING TEXT-TO-9-1-1**

The Commission correctly stated in the *FNPRM* that “educating the public is critical to the successful roll-out of text-to-911 and preventing consumer confusion.”<sup>26</sup> Comments filed in this proceeding clearly demonstrate the important role that the Commission and public safety entities must play in educating the public about the availability of text-to-9-1-1.<sup>27</sup>

In light of the public safety community’s request that PSAPs be given the freedom to choose not to implement text-to-9-1-1, educating the public about which PSAPs support text-to-9-1-1 will be a critical component of the Commission and public safety’s education efforts. This is particularly true in areas where a carrier provides text-to-9-1-1 service but the local PSAP does not accept the service. The Commission and public safety should take a leadership role in this education effort because the wireless industry cannot be solely responsible for knowing the

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<sup>25</sup> See Comments of T-Mobile USA, Inc., PS Docket No. 11-153, PS Docket No. 10-255, at 7 (Mar. 11, 2013) (“T-Mobile March 2013 Comments”) (asserting that requiring major network infrastructure changes to support text-to-9-1-1 would “be a fundamental misallocation of resources, resources that could be better directed towards developing next generation technologies”).

<sup>26</sup> *FNPRM* at ¶ 36.

<sup>27</sup> See Comments of AT&T Inc., PS Docket No. 10-255, PS Docket No. 11-153, at 7 (Jan. 29, 2013) (“AT&T January 2013 Comments”) (suggesting the Commission should be the primary public educator); Comments of the National Emergency Number Association, PS Docket No. 11-153, PS Docket No. 10-255, at 7 (Jan. 29, 2013) (“NENA January 2013 Comments”); Comments of The Boulder Regional Emergency Telephone Service Authority, PS Docket No. 11-153, PS Docket No. 10-255, at 11 (Jan. 29, 2013) (“BRETSA January 2013 Comments”) (arguing that public education should be a shared responsibility of state and local 9-1-1 and the Commission).

individual decisions of more than 6,000 PSAPs regarding whether or not they will support text-to-9-1-1 services.<sup>28</sup> Although the automated “bounce-back” message will play an important role in educating consumers regarding the availability of text-to-9-1-1 services, “bounce-back” messages alone cannot adequately inform the public about the availability and limitations on text-to-9-1-1 services. There are many situations in which a PSAP may not be able to receive or respond to text-to-9-1-1 communications. The automated “bounce-back” message cannot serve as a PSAP “busy signal” or otherwise shed light on the real-time activities and capabilities of individual PSAPs.<sup>29</sup> Moreover, the public must be educated regarding the availability of text-to-9-1-1 beyond real-time “bounce-back” messages. Put simply, consumers must be educated *before* an emergency arises, not only *during* an emergency.

## V. CONCLUSION

CTIA and its member companies have long collaborated with interested stakeholders to craft flexible and innovative solutions to implementing 9-1-1 services and, now, an interim text-to-9-1-1 service. This deep commitment is reflected in the Carrier-NENA-APCO voluntary agreement. As the record reveals, such voluntary efforts have produced results as wireless service providers are already moving toward text-to-9-1-1 deployment in a collaborative and efficient manner, without the need for a regulatory mandate. The wireless industry will undoubtedly continue to ensure that its networks, devices, and services are capable of providing

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<sup>28</sup> See generally Comments of Sprint Nextel Corp., PS Docket No. 11-153, PS Docket No. 10-255, at 15 (Mar. 11, 2013) (“Sprint March 2013 Comments”) (noting that “there is typically extensive variation in PSAP deployments.”).

<sup>29</sup> See Comments of CTIA – The Wireless Industry®, PS Docket No. 11-153, PS Docket No. 10-255, at 6 (Jan. 29, 2013) (“CTIA January 2013 Comments”) (explaining that “current network architectures do not permit carriers to support automated PSAP messages for granular issues such as network congestion, return receipts, and an individual [PSAPs] ability to respond to a text message in a timely manner”).

9-1-1 emergency communications for subscribers, including individuals with disabilities. At the same time, the Commission must take steps to provide a framework for text-to-9-1-1 services that permits the industry the ability to craft flexible solutions that will enhance these services and serve the public's needs.

Respectfully submitted,

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