

**Before the  
Federal Communications Commission  
Washington, DC 20554**

In the Matter of	)	
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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 the  
Alliance for Telecommunications Industry Solutions**

The Alliance for Telecommunications Industry Solutions (ATIS), on behalf of its Wireless Technologies and Systems Committee (WTSC), Emergency Services Interconnection Forum (ESIF), Packet Technologies and Systems Committee (PTSC), and Next Generation Interconnection Interoperability Forum (NGIIF), hereby submits these Reply Comments in response to the Federal Communications Commission’s (Commission) *Notice of Proposed Rulemaking (NPRM)* in the above-referenced dockets. ATIS’ reply comments are focused on two issues: (1) ATIS urges the Commission to recognize the challenges associated with direct Short Message Service (SMS)-to-Public Safety Answering Point (PSAP) solutions and to exercise caution when evaluating single-vendor solutions and research data presented that contradict what industry experts have stated; and (2) ATIS continues to support the establishment of a near-term target date for the availability of any interim solution.

## **I. The Limitations of Direct SMS-to-911 Solutions Are Well Documented**

ATIS notes that some commenters have suggested that a direct SMS-to-PSAP solution should be considered as either a short term or long term solution.<sup>1</sup> As ATIS stated in its comments and in the Report and Recommendation of its Interim Non-Voice Emergency Services (INES) Incubator, the challenges associated with direct SMS-to-PSAP communications have been well documented both by the industry and by the Commission.<sup>2</sup> Subject matter experts with practical experience of how networks operate in real-world environments acknowledge that SMS messages may be delayed or lost, senders may not receive error messages indicating that such messages have been delayed or lost, and senders do not receive confirmation of the receipt of these messages so there is no way for a sender to ensure that his or her message got through to the intended recipient. These challenges are not a flaw in the SMS technology – they stem from the fact that SMS messaging technology was not developed to transmit emergency communications. These challenges also cannot be easily resolved but are inherent in SMS technology.

The challenges noted by the industry have been demonstrated by real world experience. Many wireless customers have experienced incidents when SMS messages have been delayed for lengthy periods of time. Moreover, the impact of these challenges would likely have significant real world impacts on emergency callers. A timely response by emergency services is critical depending on the incident (e.g., a life-threatening accident, a residence fire, robbery in progress,

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<sup>1</sup> See Comments of Telecommunications for the Deaf and Hard of Hearing, Inc., et al at p. 12; TeleCommunication Systems, Inc. at p. 8; Twilio Inc. at 3.

<sup>2</sup> See, e.g., 4G Americas, Texting to 9-1-1: Examining the Design and Limitations of SMS (October 2010) available at: [www.4gamericas.org/documents/SMS%20to%20911%20White%20Paper%20Final%20October%202010.pdf](http://www.4gamericas.org/documents/SMS%20to%20911%20White%20Paper%20Final%20October%202010.pdf) (4G Americas Texting to 9-1-1 White Paper); *NPRM* at ¶28; Comments of APCO at 6; AT&T Inc. at p. 5; Blooston Rural Carriers at p. 2; Joint Comments of the Boulder Regional Emergency Telephone Service Authority and the Colorado 9-1-1 Task Force at p. 17; King County E911 Program at p. 4; Motorola Mobility at 3; Sprint Nextel at p. 5; TruePosition at p. 2.

fight on the highway, etc.). In these cases, a delay in transmitting a text message to a PSAP could have disastrous consequences. In addition, during an emergency, the PSAP may not be able to reply to every SMS message; this lack of response and/or confirmation may cause the caller to think their message did not get through and therefore send additional messages for help. These redundant SMS messages will exacerbate the congestion at the PSAP. There could also be limitations with the caller's device (i.e., if the device's SMS buffer is full) that prevent the receipt of a PSAP's SMS response.

ATIS urges the Commission to exercise caution when evaluating single-vendor solutions and research data presented that contradict what industry experts have stated.<sup>3</sup> Additionally, ATIS notes that some of the comments raise significant unanswered questions. For instance, if a direct SMS-to-PSAP solution is selected: (1) how would SMS calls be handled for PSAPs that cannot currently handle SMS or text messages; (2) how would the network determine what PSAPs are able to accept SMS messages and what PSAPs are not; and (3) perhaps most importantly, how would the lack of ubiquitous availability of SMS-to-PSAP capability impact persons with disabilities?

ATIS also notes that many of the proposed SMS solutions will require additional capabilities to enable the routing of the call to the appropriate PSAP. Without automatic location capabilities, for example, the caller would have to provide location information manually when contacting a PSAP. In some cases, callers may not know their exact location. Moreover, if a call is not automatically routed to the proper PSAP, that PSAP will need the ability to transfer a text call to the proper jurisdiction in a timely manner. This type of text transfer between PSAPs does not exist today. Additional capabilities would be needed to translate the SMS messages into a

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<sup>3</sup> See, e.g., Comments of the University of Colorado, Interdisciplinary Telecommunications Program.

single text stream that can be delivered to the same PSAP operator.

The industry remains committed to working with all concerned parties, including advocates for persons with disability, to find an interim text-to-911 solution that will not jeopardize public safety while the long term NG 911 solution is being deployed.

### **III. To Be Useful, an Interim Solution Must Be Available Quickly**

The ATIS INES Incubator's Report and Recommendation, which was submitted in ATIS' comments in this docket, documented the industry's technical review of commercially-available text-based communications solutions to enable emergency communications to existing PSAPs for the deaf, hard of hearing and speech impaired communities by June 2012. ATIS notes that some commenters have questioned the INES' target deadline of June 2012.<sup>4</sup>

As ATIS explained in its comments and in the Incubator report, the June 2012 availability deadline was established by the industry (in the absence of Commission guidance on this issue) to allow the Incubator to focus on candidate interim solutions that could reasonably be expected to be deployed quickly, thus providing short-term improvements in emergency access while awaiting more robust improvements promised under IMS/LTE and NG911.

While the Commission's continued work on this issue may make the June 2012 infeasible, ATIS continues to believe that a short-term deadline for an interim solution is necessary. A near-term deadline remains particularly important because the timeframe for national implementation of the long-term MMES solution is only a matter of years. ATIS continues to believe that taking years to develop an interim solution, which then may only be available concurrently with the availability of the long-term solution, will only cause confusion

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<sup>4</sup> See Comments of National Emergency Number Association at p. 3.

to consumers and waste industry resources.

#### **IV. Conclusion**

ATIS reiterates its support for the industry work to develop both interim and long-term text-to-911 solutions. ATIS urges the Commission to recognize the challenges associated with direct SMS-to-PSAP solutions and to exercise caution when evaluating single-vendor solutions and research data presented that contradict what industry experts have stated. ATIS continues to support the establishment of a near-term target date for the availability of any interim text-to-911 solution and notes that the industry remains committed to working with all concerned parties, including advocates for persons with disability, to find such an interim solution.

Respectfully submitted,



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