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 TruePosition, Inc.

TruePosition presents these comments in response to the Commission's Notice of Proposed Rulemaking (*NPRM*) addressing Next Generation (NG 911).[1] TruePosition is a leading provider of wireless location solutions and technology. Its Uplink Time Difference of Arrival ("U-TDOA") system is the principal network based location technology deployed in the United States.

The *NPRM* explores reliable 911 text messaging and proposes that the widely deployed Short Messaging Service (SMS) protocol be adopted voluntarily by 911 Centers, carriers and equipment vendors. It requests comment addressing this path. TruePosition's comments are directed to the *NPRM* inquiry regarding location information capability in the context of SMS and other texting protocols.

Reliable and effective text messaging can provide improvement to emergency response, particularly for citizens who are hearing impaired. The record relates legitimate concern regarding SMS' limitations and how it falls short of E 911 voice services. SMS deficiencies

[1] In the Matter of Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications and the Framework for Next Generation 911 Deployment, *Notice of Proposed Rulemakng*, FCC 111-134, PS Docket No. 10-255 and PS Docket 11-153 (September 22, 2011) , 76 Fed Reg 63257 (October 12, 2011).

result from not being designed to summon 911 emergency response.[2] Concern is also noted regarding the investment needed to improve SMS to provide compliant 911 service. Effective and reliable 911 texting can possess the attributes of vibrant voice E 911 services, including location information consistent with the Commission's revised accuracy standards.[3]

Currently designed and deployed SMS texting does not engage the processes dedicated to directing the call to the correct public safety answering point (PSAP) and providing the automatic location information (ALI). SMS also has no defined latency and delay requirements critical to a 911 call. Inability to locate with any degree of accuracy relates to several deficiencies, including the limited period a SMS text signal remains on the control channel to allow measurements to be collected, calculations made and location determined. The core challenge is that SMS has not been integrated into the 911 platform. The *NPRM* inquires whether this limitation can be overcome; it asks whether there is means to query the ALI database associated with the phone number assigned to the device.[4]

Location accuracy information and public safety answering point (PSAP) identification are integral elements of today's communications. Wireless communication standards support the location of mobile devices in all modes of communication, including voice and data. The standards also support location when the phone is in the idle state. In general, wireless operators have implemented location technologies to work in these modes.

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[2] *NPRM* at paragraph 49.

[3] In the Matter of the Definition of Interconnected VOIP Service in Section 9.3 of the Commission's Rules, et seq., *Notice of Proposed Rulemaking, Third Report and Order and Second Further Notice of Proposed Rulemaking,* FCC 11-107, GN Docket No. 11-117, PS Docket No. 07-114 and WC Docket No. 05-196 (July 13, 2011) ("*Second Further Notice*").

[4] *NPRM* at paragraph 56.

The location technologies deployed by wireless operators can be applied to modes of operation beyond the E 911 voice call scenarios to which they are often applied today. Wireless operators currently provide the location of wireless phones in the idle mode, in support of law enforcement. As an example, this idle mode location technique could be applied in a situation where a device has just sent an emergency message using SMS, allowing a location to be delivered to the PSAP moments after the emergency message. As a result, there is ability, consistent with emergency response standards, to locate a device that has transmitted a 911 text message. Work would be needed on both operator and PSAP systems to initiate the location procedure and link the location with the emergency data message.

The *NPRM* embraces reliable E 911 text messaging as an important element of NG 911 and inquires of consumer expectation.[5] The Commission's path with regard to texting, broadband and other services should reflect consumer expectation that E 911 services are not shortchanged. It should not create an extended environment where there are varied abilities dependent on device, provider or network. While not all devices have to be linked to 911, what is important is that a device summoning emergency assistance complies with all 911

[5] *NPRM* at paragraph 106.

requirements, not just its concept. Critical functions, such as transmitting location information comporting with the Commission's rules, are vital to 911's credibility. Citizens and emergency services must rely on it. NG911 must be the source of improvement; disparate capabilities across devices and systems weaken it.[6]

Respectfully submitted,

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[6] TruePosition Comments at 3-4, PS Docket 10-255 (March 11, 2011).