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
	)	

To: The Commission

REPLY COMMENTS OF SOUTHERNLINC WIRELESS

Southern Communications Services, Inc. d/b/a SouthernLINC Wireless ("SouthernLINC Wireless") hereby submits its reply comments in response to the Commission's *Third Further Notice of Proposed Rulemaking* ("*Third FNPRM*") in the above-captioned proceeding.[1]

I. INTRODUCTION

SouthernLINC Wireless, together with its peers in the wireless industry, is fully committed to ensuring that its subscribers have access to the best emergency communications services possible. SouthernLINC Wireless has been investigating the technical feasibility and costs involved in implementing text-to-911 on its network for quite some time – starting well before APCO, NENA, and the nationwide carriers first brought their jointly-developed text-to-

[1] / *Facilitating the Deployment of Text-to-911 and Other Next Generation 911 Applications, Framework for Next Generation 911 Deployment*, PS Docket No. 11-153, PS Docket No. 10-255, Second Report and Order and Third Further Notice of Proposed Rulemaking, FCC 14-118 (rel. Aug. 13, 2014) ("*Second Report and Order*" and "*Third FNPRM*").

911 Voluntary Commitment to the Commission – and is on pace to implement the capabilities necessary to support text-to-911 service on its network by year-end.

Nevertheless, SouthernLINC Wireless joins other commenters in this proceeding in expressing its concern that the new enhanced location information and roaming requirements for text-to-911 that have been proposed by the Commission will not be universally achievable within the Commission's proposed timeframes.[2] SouthernLINC Wireless further joins APCO, CTIA, and other commenters in cautioning the Commission against imposing any further interim requirements that would divert significant and essential resources from the development and deployment of long-term 911 and Next Generation 911 solutions.[3]

II. THE COMMISSION SHOULD REFRAIN FROM ADOPTING ADDITIONAL TEXT-TO-911 REQUIREMENTS AT THIS TIME

In the *Third FNPRM*, the Commission is proposing to require covered text providers to deliver enhanced location information within two years of the adoption of final rules.[4] However, as CTIA states in its comments, the record in this proceeding "does not show that such solutions can be developed and broadly implemented in the near term."[5] SouthernLINC Wireless agrees with CTIA that, to the contrary, "the record in this proceeding is replete with evidence that providing enhanced location information has not yet been demonstrated to be universally attainable."[6]

---

[2] / *See* Comments of CTIA at 8-10; Comments of Sprint at 2; Comments of T-Mobile at 2; Comments of the Rural Wireless Association ("RWA") at 1-3.

[3] / Comments of APCO at 2-4; Comments of CTIA at 7 and 9-10; Comments of ATIS at 1 and 4-5; Comments of AT&T at 5; Comments of Motorola Mobility at 3-4; Comments of Sprint at 2-3; Comments of T-Mobile at 3.

[4] / *Third FNPRM* at ¶ 82.

[5] / Comments of CTIA at 8.

[6] / Comments of CTIA at 8; *See also* Comments of Sprint at 3-4; Comments of RWA at 1.

For example, TruePosition has repeatedly represented to the Commission that its network-based U-TDOA location solution could be implemented by CMRS service providers "with minor modifications to their existing infrastructure" and with "relatively minor development effort."[7] According to T-Mobile, however, "This claim is simply untrue."[8] In its comments on the *Third FNPRM* – as well as in previous filings with the Commission – T-Mobile explains that "implementation of U-TDOA for any location purposes will require deployment of Location Measurement Units (LMUs) to every 3G and 4G cell site – sites that, in many if not most cases, are not architected to support LMU connections."[9]

Similarly, Sprint states that it has evaluated vendor proposals for U-TDOA solutions "numerous times" and found that "the development and deployment effort that would be needed would be significant."[10] Some of the specific concerns noted by Sprint with respect to U-TDOA include the need for new equipment at every base station and the potential need to modify handsets to improve U-TDOA performance.[11] Yet, as Sprint notes, even with new equipment and modifications to the network and subscriber handsets, the U-TDOA-based proposals that Sprint reviewed appeared to provide less accurate location solutions than the A-GPS solution Sprint uses for voice 911 calls and may not even meet the Commission's E-911 Phase II accuracy standards.[12]

---

[7] / *See, e.g.*, Comments of TruePosition at 8; *Third FNPRM* at ¶ 88 (citing comments filed in this docket by TruePosition on April 4, 2014).

[8] / Comments of T-Mobile at 8.

[9] / *Id*.

[10] / Comments of Sprint at 5-6.

[11] / *Id*. at 6.

[12] / *Id*.

SouthernLINC Wireless, like Sprint, has also explored various solutions for testing and enhancing its location accuracy performance. However, a leading provider and proponent of U-TDOA technology informed SouthernLINC Wireless that it would not be able to meet SouthernLINC Wireless' requirements because it does not support iDEN, nor did it have any plans to do so. This response was hardly unique and serves to demonstrate that even existing location technologies such as U-TDOA are not universally available and, in fact, may never be available for some existing networks. Moreover, this demonstrates the difficulties that service providers will face in attempting to retrofit existing networks and platforms to meet new performance mandates even as manufacturers and vendors increasingly abandon their investment in and support of technologies that pre-date LTE.

In the *Third FNPRM*, the Commission also points to commercial Location-Based Services ("cLBS") as a possible means for determining location information for text-to-911 messages.[13] According to the CSRIC Enhanced Location Report, in order to obtain enhanced location information, the user must first download a "location agent application" onto his or her device.[14] However, this step is entirely dependent on the individual subscriber and is subject to human error. As Sprint points out, "There is no way to ensure that the application will be downloaded to the [user equipment] and also no way to ensure that the user will not remove the application at some point in time."[15] SouthernLINC Wireless experienced these problems first-hand ten years ago when it had to push out an emergency software patch to tens of thousands of subscribers' handsets – each of whom had to individually download and activate the patch – in

---

[13] / *See Third FNPRM* at ¶¶ 96-97.

[14] / CSRIC IV WG1, Investigation into Location Improvement for Interim SMS (Text) to 9-1-1, Final Report (June 18, 2014) at 18 ("CSRIC Enhanced Location Report").

[15] / Comments of Sprint at 7.

order to correct a latent defect in the manufacturer's software that disabled the handsets' E-911 Phase II capabilities. Furthermore, as Sprint notes, there are multiple operating platforms in use by the various handsets already on the market, and not all feature phones – which still make up a significant percentage of the handsets used by US consumers – can use downloadable technologies and applications.[16]

In addition, commercial location-based services currently utilize a wide variety of technologies and approaches for determining a consumer's location. Not only are there no unified technological standards or protocols for these services, but there are also no standards regarding how accurate a cLBS solution must be. As Sprint states, these services "were not designed with emergency services in mind and as such do not adhere to the same level of quality, reliability, and redundancy."[17] While the accuracy levels and "time-to-fix" performance of a cLBS solution may be sufficient for purposes of guiding a consumer to a coffee shop, it is far from clear whether it will be sufficient for emergency situations where minutes – even seconds – count. SouthernLINC Wireless agrees with Sprint that any attempt to impose emergency-level standards on cLBS would be a time-consuming and burdensome endeavor.[18]

Even if enhanced location information for SMS-based text-to-911 services could be made universally attainable, the Commission's proposed two-year timeframe is unrealistic and does not account for the time necessary to identify, develop, test and implement a workable solution for each service provider's individual network.[19] Moreover, the Commission's proposed timeframe does not account for the fact that many wireless service providers are either

---

[16] / *Id*. at 9.

[17] / Comments of Sprint at 8.

[18] / *Id*.

[19] / *See, e.g.*, Comments of CTIA at 8-11; Comments of RWA at 1.

undertaking or are in the process of upgrading or transitioning their existing networks to LTE platforms capable of supporting more advanced 911 and NG911 capabilities. The two-year timeframe proposed by the Commission would potentially compel these service providers to expend considerable resources to implement additional text-to-911 location capabilities for services and platforms that are to be decommissioned in the near future, resulting in a significant stranded investment that could have otherwise been used for the deployment of a long-term 911 solution.

Finally, SouthernLINC Wireless shares the concerns expressed by AT&T and CTIA regarding the vagueness and uncertainty raised by the Commission's proposal to define "enhanced location" in the context of SMS-based text-to-911 service as "the best available location that covered text providers could obtain from any available location technology or combination of technologies, including device-based location."[20] SouthernLINC Wireless agrees with AT&T that this proposed standard "could be read to require covered text providers to adopt technologies that are not particularly well suited to their SMS texting platforms or their networks or user equipment."[21] SouthernLINC Wireless also agrees with CTIA that the proposed language appears to confront providers with a constantly moving target "where a carrier may be compliant one day and non-compliant the next, depending on what the Commission deems to be 'best available' location information at any given time."[22]

If the Commission should ultimately decide to adopt an enhanced location requirement for text-to-911 services, SouthernLINC Wireless submits that the Commission should evaluate covered text providers on the basis of what is "achievable" as that term is used in the Twenty-

---

[20] / *Third FNPRM* at ¶ 82; Comments of AT&T at 1-4; Comments of CTIA at 11-12.

[21] / Comments of AT&T at 3.

[22] / Comments of CTIA at 11-12.

First Century Communications and Video Accessibility Act of 2010 ("CVAA").[23] The CVAA defines "achievable" to mean "with reasonable effort or expense,"[24] and Congress has provided the Commission with clear guidance on the factors that are to be taken into consideration when making an achievability determination pursuant to the CVAA. Because the Commission cites the CVAA as one of its sources of direct legal authority for the adoption of text-to-911 rules,[25] it would be both reasonable and appropriate to incorporate the standards established by the CVAA for evaluating text-to-911 services.

III. IF NEW TEXT-TO-911 REQUIREMENTS ARE ADOPTED, THE COMMISSION MUST ADDRESS THE IMPACT ON REGIONAL AND RURAL WIRELESS CARRIERS

If the Commission should nevertheless decide to adopt its proposed new text-to-911 location requirements, the Commission should consider alternative implementation timeframes that would allow these additional text-to-911 requirements to be implemented industry-wide in an achievable and cost-effective manner.

In particular, the Commission must take into account the disparate impact that its proposed requirements will have on regional and rural carriers. As the Commission's experience with wireless E911 Phase II service demonstrated, the deployment of new network technologies places a significant burden on the more limited resources of Tier II and Tier III carriers, and such carriers have in the past found themselves "pushed to the end of the line" in their efforts to obtain needed technology, equipment, and vendor support.[26] Thus, at every stage of 911 deployment,

---

[23] / Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. 111-260 ("CVAA").

[24] / 47 U.S.C. § 617(g).

[25] / *See, e.g.*, *Second Report and Order* at ¶¶ 71-74.

[26] / The Commission has previously acknowledged that Tier II and Tier III carriers "have much less ability than the nationwide CMRS carriers to obtain the specific vendor commitments

regional and rural carriers have generally been unable to begin deploying new technologies and solutions until well after the nationwide carriers, and any delays in the deployment schedules of the nationwide carriers necessarily create downstream delays for smaller carriers that are beyond these carriers' control.

SouthernLINC Wireless therefore urges the Commission to consider the adoption of staggered timeframes for smaller regional and rural wireless carriers in the recognition of the constraints such carriers will face in implementing additional text-to-911 capabilities. Based on the experience of E911 Phase II, appropriately staggered timeframes would provide regional and rural carriers additional time to deploy the needed technologies and solutions (once they become available) in a reasonable and cost-effective manner in light of their operational constraints and their more limited access to resources, equipment, technology, and vendor support.

If such carriers should be required to implement the Commission's proposed new text-to-911 requirements under the aggressive timeframe proposed in the *Third FNPRM*, they will be compelled to divert scarce resources away from essential projects such as the deployment of new advanced wireless broadband technologies and infrastructure that will expand access to competitive broadband services for US consumers and which will lay the foundation for the deployment of Next-Generation 911 services. This diversion of resources could therefore ultimately delay the deployment of both wireless broadband and NG911 to the detriment of consumers – particularly those in rural and underserved areas – thus frustrating the very policy goals the Commission has been pursuing for the past several years.

---

necessary" to carry out their E-911 obligations and are often pushed to the end of the supply line by vendors. *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Phase II Compliance Deadlines for Non-Nationwide CMRS Carriers*, CC Docket No. 94-102, Order to Stay, 17 FCC Rcd 14841, 14844 (2002).

In addition, the Commission should adopt a reasonable waiver process with clear and reasonable standards that would permit covered text providers to obtain waivers of certain text-to-911 implementation obligations on an individualized basis.[27] SouthernLINC Wireless emphasizes, however, the need for such waiver guidelines and standards to be clear, consistent, understandable, and reasonable.

IV. THE COMMISSION SHOULD ADOPT T-MOBILE'S PROPOSALS TO FINE-TUNE THE PLANNED PSAP NOTIFICATION DATABASE

Finally, SouthernLINC Wireless appreciates and supports T-Mobile's thoughtful proposals for fine-tuning the centralized database that the Commission plans to establish for PSAP notification of readiness for text-to-911 service.[28] SouthernLINC Wireless agrees with T-Mobile that this database solution "may not allow carriers to adequately determine if a PSAP is, in fact, ready to receive 911 texts and risks putting a carrier in a position of non-compliance in cases where the PSAP is, in fact, ready."[29]

Under the letter notification process currently in place for E-911 Phase II deployment, once SouthernLINC Wireless receives a letter from a PSAP requesting implementation of Phase II services, SouthernLINC Wireless sends a "PSAP Readiness Form" requesting information from the PSAP that SouthernLINC Wireless needs in order to proceed with enabling Phase II service. Similar to the experience T-Mobile describes, SouthernLINC Wireless finds that there is often a significant delay from the time a PSAP requests Phase II service until the time that the PSAP completes and returns the PSAP Readiness Form with the information necessary to commence implementation, even with multiple requests from SouthernLINC Wireless for the

---

[27] / *See* Comments of AT&T at 4.

[28] / Comments of T-Mobile at 4-6; *Second Report and Order* at ¶¶ 52-56.

[29] / Comments of T-Mobile at 4.

return of the form.[30] In addition, on a number of occasions SouthernLINC Wireless has begun to implement E911 Phase II to a PSAP only to find out that the PSAP was in fact not ready to receive Phase II service.

Based on the experience of Phase II deployment, SouthernLINC Wireless urges the Commission to implement the specific proposals presented by T-Mobile to extend the existing provider certification process used for voice E911, or, in lieu of such process, to fine-tune the database solution for PSAP notification of text-to-911 readiness to implement safeguards for covered text providers.[31]

---

[30] / Comments of T-Mobile at 4-5. In the case of at least two PSAPs, this delay has already extended several years and is still ongoing despite repeated requests from SouthernLINC Wireless.

[31] / Comments to T-Mobile at 6.

WHEREFORE, THE PREMISES CONSIDERED, SouthernLINC Wireless respectfully requests the Commission to take action in this docket consistent with the views expressed herein.

Respectfully submitted,

SOUTHERNLINC WIRELESS

/s/ David D. Rines

David D. Rines
LERMAN SENTER, PLLC
2000 K Street, N.W.
Suite 600
Washington, D.C. 20006
T: 202.429.8970
F: 202.293.7783

Michael D. Rosenthal
Director of Legal and External Affairs
SouthernLINC Wireless
5555 Glenridge Connector, Suite 500
Atlanta, GA 30342
T: 678.443.1500

Kristin Dial
Manager of External Affairs and Compliance
SouthernLINC Wireless
5555 Glenridge Connector, Suite 500
Atlanta, GA 30342
T: 678.443.1500

Its Attorneys

Dated: November 17, 2014