

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

|  |   |                      |
|--|---|----------------------|
| In the Matter of   | ) |                      |
|  | ) |                      |
| Wireless E911 Location Accuracy Requirements   | ) | PS Docket No. 07-114 |
|  | ) |                      |
| Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems   | ) | CC Docket No. 94-102 |
|  | ) |                      |
| Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling | ) |                      |
|  | ) |                      |

To: The Commission

**REPLY COMMENTS OF SOUTHERNLINC WIRELESS**

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Dated: October 14, 2008

## **EXECUTIVE SUMMARY**

SouthernLINC Wireless joins with numerous other commenters in applauding the efforts of APCO, NENA, AT&T, and Verizon Wireless on developing new approaches to the improvement of wireless E911 location accuracy. Nevertheless, SouthernLINC Wireless agrees with other commenters that the Joint Proposals presented to the Commission by APCO, NENA, AT&T, and Verizon Wireless may not be appropriate for every carrier.

Specifically, SouthernLINC Wireless shares the concern expressed by others that these proposals, while laudable in their intent, do not give any consideration to the circumstances and operational realities faced by the nation's smaller regional and rural carriers. SouthernLINC Wireless is particularly concerned that the Joint Proposals, if adopted as presented, could have a significant and disproportionate impact on smaller regional and rural wireless carriers – many of whom are often the sole source of wireless E911 service in many parts of the country.

Because the majority of regional and rural carriers, including SouthernLINC Wireless, are considered “small entities” under the Regulatory Flexibility Act, SouthernLINC Wireless hereby identifies its instant reply comments as responses to the Commission's IRFA. In particular, Section III of these reply comments responds to the IRFA's request for comments on how small entities would be affected if the Commission were to adopt the Joint Proposals, and Section IV of these reply comments responds to the IRFA's request for information on alternative approaches to alleviate any potential burdens on small entities.

The Commission must recognize and account for the particular difficulties that small and mid-size regional and rural carriers could face in achieving compliance with the new standards, given that – as occurred when location technology was first being deployed – such carriers will likely not have immediate access to the equipment, technology, and resources necessary to either

achieve or verify compliance. Even assuming that regional and rural carriers do eventually gain access to the necessary technology and equipment, the cost of actually obtaining it is often prohibitive. In short, small and mid-size carriers simply do not have the economies of scale enjoyed by AT&T, Verizon Wireless, and Sprint Nextel that make the acquisition and deployment of the necessary technology and equipment economically or operationally possible, at least within the timeframes set forth in the Joint Proposals.

The Joint Proposals would also impose significant new testing and reporting burdens. Most – if not all – Tier III carriers (and likely many larger carriers as well) lack the internal resources to conduct county-level testing themselves and would thus be compelled to turn to outside vendors to carry out the required tests. The potential costs and burdens of compliance testing are further exacerbated by the fact that there is no mention anywhere of the testing and reporting methodologies that will be required or accepted for demonstrating compliance with the proposed new location accuracy requirements. SouthernLINC Wireless and other regional and rural carriers do not have the resources to begin testing in a vacuum, and thus cannot at this time determine whether compliance with the proposed new county-level standard is even possible.

SouthernLINC Wireless is also concerned that the Joint Proposals are not supported by any studies or other technical data, and thus it questions whether these compliance standards and timeframes are even technically feasible. Nevertheless, SouthernLINC Wireless submits to the Commission alternative approaches designed to minimize the significant economic impact the Joint Proposals would have on small and mid-size regional and rural carriers. These include the adoption of staggered compliance benchmarks for Tier II and Tier III carriers, as well as the establishment of a waiver process with guidelines and procedures that are clear, consistent,

understandable, and reasonable. Additional details concerning these alternative approaches are provided in Section IV of these reply comments.

Aside from the potential impact of the Joint Proposals on non-nationwide regional and rural carriers, SouthernLINC Wireless has further concerns regarding the sufficiency of the record and the Commission's procedures for consideration of the Joint Proposals. In particular, SouthernLINC Wireless is concerned with the lack of record evidence, such as studies or other data, showing that the Joint Proposals are technically feasible. SouthernLINC Wireless is further concerned by the lack of sufficient opportunity provided by the Commission for adequate participation by all parties that would be affected by the Joint Proposals if they should be adopted as Commission rules applicable to all wireless carriers.

To the extent the Commission should adopt the Joint Proposals, SouthernLINC Wireless recommends that the term "heavy forestation" – as used in the proposal for carriers utilizing handset-based solutions – be changed to "challenging environments" in order to clarify the nature of the exclusion intended in the proposal and to avoid any confusion as to its applicability.

Finally, SouthernLINC Wireless joins other commenters in expressing its support for the establishment of an E911 Technical Advisory Group to address E911 location accuracy issues. SouthernLINC Wireless agrees with other commenters that the proposed ETAG must include not only representatives from public safety, manufacturers, and the major wireless interests, but should also include representatives from smaller regional and rural carriers as well. These carriers have operational needs and circumstances that differ significantly from those of the larger nationwide carriers, and these unique needs and circumstances must be appropriately taken into consideration in the development of any new E911 standards or requirements.

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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 Federal Communications Commission's September 22, 2008, *Public Notice* in the above-captioned proceeding regarding E911 location accuracy requirements for providers of commercial mobile radio services ("CMRS").<sup>1</sup> Furthermore, pursuant to the Commission's Initial Regulatory Flexibility Analysis (IRFA), SouthernLINC Wireless hereby identifies its reply comments – in particular Sections III and IV of these reply comments – as responses to the Commission's IRFA.<sup>2</sup>

SouthernLINC Wireless joins with numerous other commenters in applauding the efforts of APCO, NENA, AT&T, and Verizon Wireless on developing new approaches to the

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<sup>1</sup> / Comment Sought on Proposals Regarding Service Rules for Wireless Enhanced 911 Phase II Location Accuracy and Reliability, PS Docket No. 07-114, Public Notice, DA 08-2129 (rel. Sept. 22, 2008) ("*Public Notice*").

<sup>2</sup> / *Public Notice*, Appendix B ¶ 1.

improvement of wireless E911 location accuracy. SouthernLINC Wireless also appreciates APCO and NENA's position that location accuracy be measured at the county level and agrees that the county-level requirement is a step forward in addressing the concerns of public safety and the wireless industry.<sup>3</sup>

Nevertheless, SouthernLINC Wireless agrees with Nokia that the Joint Proposals presented to the Commission by APCO, NENA, AT&T, and Verizon Wireless "do not necessarily represent the views of the entire industry" and that the specific proposals put forth by AT&T and Verizon Wireless "may not be right for every carrier."<sup>4</sup> As Nokia stated, the Commission must therefore "consider carefully the views of carriers and other parties in this proceeding" regarding the Joint Proposals now under consideration.<sup>5</sup>

As set forth herein, SouthernLINC Wireless is concerned that the Joint Proposals, if adopted as presented, could have a significant and disproportionate impact on smaller regional and rural wireless carriers, the majority of whom are considered "small entities" pursuant to the Regulatory Flexibility Act. Accordingly, SouthernLINC Wireless submits to the Commission alternative approaches designed to minimize the significant economic impact the Joint Proposals would have on small and mid-size regional and rural carriers. These include the adoption of staggered compliance benchmarks for Tier II and Tier III carriers, as well as the establishment of a waiver process with guidelines and procedures that are clear, consistent, understandable, and reasonable.

Other areas of concern for SouthernLINC Wireless include the lack of record evidence, such as studies or other data, showing that the Joint Proposals are technically feasible, as well as

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<sup>3</sup> / *See* Comments of Motorola at 2.

<sup>4</sup> / Comments of Nokia at 1 – 2.

<sup>5</sup> / *Id.*

the lack of sufficient opportunity provided by the Commission for adequate participation by all parties that would be affected by the Joint Proposals if they should be adopted as Commission rules applicable to all wireless carriers.

Finally, SouthernLINC Wireless joins other commenters in expressing its support for the establishment of an E911 Technical Advisory Group made up of representatives from public safety, manufacturers, and nationwide, regional and rural carriers to address E911 location accuracy issues.

## **I. SOUTHERNLINC WIRELESS**

SouthernLINC Wireless, a wholly owned subsidiary of Southern Company, operates a commercial digital 800 MHz ESMR system using Motorola's proprietary Integrated Enhanced Digital Network (iDEN) technology to provide interconnected voice, dispatch, push-to-talk, Internet access, and data transmission services over the same handset. As an iDEN carrier, SouthernLINC Wireless has deployed a handset-based E911 Phase II location solution based on "assisted GPS" (A-GPS) technology.

SouthernLINC Wireless provides these services across a 127,000 square mile service territory covering Georgia, Alabama, southeastern Mississippi, and the panhandle of Florida. SouthernLINC Wireless offers the most comprehensive geographic coverage of any mobile wireless service provider in Alabama and Georgia, serving the extensive rural territory within its footprint as well as major metropolitan areas and highway corridors. Because of its expansive and reliable coverage within the region, SouthernLINC Wireless' service is widely used by local and statewide public safety agencies, school districts, rural local governments, public utilities, and other emergency responders such as ambulance and air medical evacuation ("medevac") service providers. It is also utilized by commercial and other government entities in both urban and rural areas.

As the Commission is aware, SouthernLINC Wireless has worked hard to achieve and ensure full compliance with the Commission's E911 requirements and has devoted significant time and resources towards making E911 Phase II service available throughout as much of its service area as possible. However, as a regional Tier III carrier, SouthernLINC Wireless has found the challenges of providing the most accurate location information possible to be daunting. SouthernLINC Wireless therefore urges the Commission to ensure that the unique needs and circumstances of non-nationwide regional and rural carriers are appropriately addressed as the Commission considers the Joint Proposals presented by APCO, NENA, AT&T, and Verizon Wireless.

## **II. SOUTHERNLINC WIRELESS' REPLY COMMENTS CONSTITUTE A RESPONSE TO THE COMMISSION'S INITIAL REGULATORY FLEXIBILITY ANALYSIS**

Pursuant to the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission is required to consider the possible significant economic impact of the Joint Proposals on "small entities," a category that includes the majority of regional and rural wireless carriers, including SouthernLINC Wireless.<sup>6</sup> The Commission has therefore prepared an Initial Regulatory Flexibility Analysis (IRFA) in conjunction with its Public Notice in this proceeding and has requested comments on the IRFA.<sup>7</sup> Specifically, paragraph 24 of the Commission's IRFA states as follows:

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<sup>6</sup> / See 5 U.S.C. § 603. According to the Initial Regulatory Flexibility Analysis (IRFA) prepared by the Commission, "[u]nder the Small Business Administration's small business standard, a business is small if it has 1,500 or fewer employees." *Public Notice*, Appendix B ¶ 10 (*citing* 13 C.F.R. § 121.201, NAICS code 513322 (changed to 517212 in October 2002)). Pursuant to this standard, SouthernLINC Wireless is a "small entity" for purposes of the RFA. See also Comments of the National Telecommunications Cooperative Association (NTCA) at 1 (identifying NTCA's member carriers as small entities as defined by the SBA).

<sup>7</sup> / *Public Notice* at 2 and Appendix B ¶ 24.

The Public Notice seeks comment on the relative merits of APCO, NENA, AT&T, Sprint Nextel Corporation, and Verizon Wireless' proposals. To assist in the analysis, commenters are requested to provide information regarding how small entities would be affected if the Commission were to adopt APCO, NENA, AT&T, Sprint Nextel Corporation, and Verizon Wireless' proposals, or any alternative proposals offered by other commenters. Commenters should also provide information on alternative approaches to alleviate any potential burdens on small entities.<sup>8</sup>

Accordingly, SouthernLINC Wireless hereby identifies its instant reply comments as responses to the Commission's IRFA.<sup>9</sup> In particular, Section III below responds to the IRFA's request for comments on how small entities would be affected if the Commission were to adopt the Joint Proposals, and Section IV below responds to the IRFA's request for information on alternative approaches to alleviate any potential burdens on small entities.

### **III. THE POTENTIAL IMPACT OF THE JOINT PROPOSALS ON REGIONAL AND RURAL CARRIERS**

SouthernLINC Wireless submits that the new wireless E911 location accuracy requirements proposed by APCO, NENA, AT&T, and Verizon Wireless are at best incomplete, since they are based solely on what the largest nationwide carriers, with their vast resources and unmatched access to the newest and latest equipment and technologies, believe *might* be achievable on their own networks and systems.

Specifically, SouthernLINC Wireless shares the concern expressed by other commenters that these proposals, while laudable in their intent, fail to give any consideration to the circumstances and operational realities faced by the nation's smaller regional and rural wireless carriers.<sup>10</sup> SouthernLINC Wireless is particularly concerned that the Joint Proposals, if adopted

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<sup>8</sup> / *Public Notice*, Appendix B ¶ 24.

<sup>9</sup> / *Id.*, ¶ 1.

<sup>10</sup> / *See* Comments of T-Mobile and the Rural Cellular Association (RCA) at 3; Comments of NTCA at 2; *See also Ex Parte* Letter of NTELOS, Inc., dated October 3, 2008 ("NTELOS *Ex Parte* Letter").

as presented, could have a significant and disproportionate impact on smaller regional and rural carriers – many of whom are often the sole source of wireless E911 service in many parts of the country.

The Joint Proposals will place an enormous strain on Tier III carriers in particular, draining and diverting vital resources from these carriers' efforts to roll out Phase II services and achieve full compliance with the Commission's Phase II requirements. These efforts already place a significant strain on Tier III carriers – who, despite their more limited resources, are expected by the Commission to meet the same performance standards as the largest nationwide carriers with respect to PSAP deployment and implementation – and the additional demands of having to meet new location accuracy standards, including demonstrating compliance at the county level for every county in their service area (with very limited exceptions), could strain these carriers' resources beyond what they can bear.

SouthernLINC Wireless agrees with NTCA that “imposing costly regulation or creating impossible to achieve standards may hamper deployment of service or force small carriers to halt operations.”<sup>11</sup> This is not a hypothetical scenario, but rather one that is supported by real events.<sup>12</sup> SouthernLINC Wireless further agrees with NTCA that “[i]nadequate technologies coupled with unrealistic compliance timeframes would at the least ensure noncompliance by

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<sup>11</sup> / Comments of NTCA at 3.

<sup>12</sup> / *See Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Petitions for Waiver of Cellular Phone of Kentucky, Inc., Litchfield County Cellular, Inc. d/b/a Ramcell of Kentucky, and Litchfield County Cellular, Inc. d/b/a Ramcell of Oregon*, CC Docket No. 94-102, Order FCC 07-77, ¶¶ 11 – 12 (rel. May 2, 2007) (denying the waiver requests of two rural Tier III carriers who sold their systems after determining that they could not afford the network conversion necessary to comply with E911 Phase II requirements).

many small carriers,” and, at worst, “could result in the discontinuance of service in some rural areas as providers turn off cell sites rather than risk fines for noncompliance.”<sup>13</sup>

First, as it considers the Joint Proposals submitted by APCO, NENA, AT&T, and Verizon Wireless, the Commission must recognize and account for the particular difficulties that small and mid-size regional and rural carriers could face in achieving compliance with the new standards, given that – as occurred when location technology was first being deployed – such carriers will likely not have immediate access to the equipment, technology, and resources necessary to either achieve or verify compliance. The Commission previously acknowledged in its 2002 *Non-Nationwide Carriers Order* that Tier II and Tier III carriers “have much less ability than the nationwide CMRS carriers to obtain the specific vendor commitments necessary” to deploy E911 solutions,<sup>14</sup> and the histories of both E911 and hearing aid compatibility (HAC) deployment explicitly demonstrate that Tier III carriers in particular are pushed to the end of the supply line by vendors.<sup>15</sup>

In addition, the increased location accuracy envisioned by the Joint Proposals is apparently predicated largely on the introduction of A-GPS handsets on network-based systems, as well as the deployment by carriers using handset-based solutions of new handsets with improved GPS receivers and technologies.<sup>16</sup> However, as Corr Wireless pointed out in its

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<sup>13</sup> / Comments of NTCA at 3; *See also* Comments of the Blooston Rural Carriers at 3.

<sup>14</sup> / *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) (“*Non-Nationwide Carriers Order*”).

<sup>15</sup> / Comments of Corr Wireless at 4; *See also* NTELOS *Ex Parte* Letter (“In addition, larger carriers have the attention and assistance of a wide variety of vendors because of the large volumes purchased by these carriers.”).

<sup>16</sup> / *See, e.g.*, Comments of Sprint Nextel at 1 (“Sprint has also released new handsets equipped with more sensitive [GPS] receivers that will allow the handsets to ‘hear’ more GPS

comments, this reliance on new, more accurate handsets does no good “if the largest carriers are permitted to continue to cut exclusive deals with the manufacturers, effectively denying small carriers access to the necessary handsets.”<sup>17</sup> On May 20, 2008, the Rural Cellular Association filed a Petition for Rulemaking regarding such handset exclusivity arrangements, and the Commission has just issued a Public Notice establishing a pleading cycle for public comment on this Petition.<sup>18</sup> Nevertheless, to the extent exclusive handset arrangements impede the rapid deployment of new E911 location technologies to the public, the Commission should expedite its consideration of the RCA Petition.

Even assuming that non-nationwide regional and rural carriers do eventually gain access to the necessary technology, equipment, or other infrastructure, the cost of actually obtaining it is often prohibitive.<sup>19</sup> Not only are the initial costs high, but small and mid-size carriers often have too few customers to allow these costs to be spread across their customer base in an economically feasible manner. For example, a switch upgrade (which can potentially run into the millions of dollars to implement) costs the same regardless of whether the switch is serving ten thousand, fifty thousand, or five million subscribers. Regional and rural carriers simply do not have the economies of scale enjoyed by AT&T, Verizon Wireless, and Sprint Nextel that make the acquisition and deployment of the necessary technology and equipment economically or operationally possible, at least within the timeframes set forth in the Joint Proposals.

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satellite signals in more environments.”); *See also Ex Parte* Letter of Sprint Nextel, dated September 24, 2008, at 2 – 3.

<sup>17</sup> / Comments of Corr Wireless at 4.

<sup>18</sup> / Wireless Telecommunications Bureau Seeks Comment on Petition for Rulemaking Regarding Exclusivity Arrangements Between Commercial Wireless Carriers and Handset Manufacturers, RM No. 11497, Public Notice, DA 08-2278 (rel. Oct. 10, 2008).

<sup>19</sup> / *See, e.g.*, Comments of NTCA at 2; Comments of Blooston Rural Carriers at 2.

Of greater and more immediate concern for carriers utilizing handset-based solutions, such as SouthernLINC Wireless, the Joint Proposals would impose significant new testing and reporting burdens. Sprint Nextel, a supporter of the Joint Proposals, conceded as much in its comments, stating:

Under the Proposal, carriers would be required to conduct far more compliance tests, *at significant additional costs*, because measurements must be made in much smaller geographic areas .. and more tests would be needed within each of the smaller areas in order to obtain a statistically valid sample within a particular county. The new accuracy standard will require testing in each of the 2,100 counties Sprint currently serves *and will take extensive time and resources*.<sup>20</sup>

In a separate *ex parte* filing in this docket, Sprint Nextel referred to its development and deployment of an automated testing and data collection system as a “multi-year, multi-million dollar effort.”<sup>21</sup>

While its substantial size and resources make it possible for Sprint Nextel to bear the significant testing costs it describes (and Sprint Nextel should be commended for doing so), such extensive testing is simply beyond the resources of most non-nationwide carriers. For example, NTELOS, a Tier III CDMA carrier serving approximately 425,000 subscribers, stated that it “do[es] not have the expertise within the company to accomplish this task” and thus “depends heavily on outside vendors for support in our accuracy testing.”<sup>22</sup>

Like NTELOS, most – if not all – Tier III carriers (and likely many larger carriers as well) lack the internal resources to conduct county-level testing themselves and would thus be compelled to turn to outside vendors to carry out the required tests. However, in addition to the costs involved in engaging an outside vendor to conduct testing, it is the experience of

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<sup>20</sup> / Comments of Sprint Nextel at 4 (emphasis added).

<sup>21</sup> / *Ex Parte* Letter of Sprint Nextel, dated September 24, 2008, at 2.

<sup>22</sup> / NTELOS *Ex Parte* Letter.

SouthernLINC Wireless – and many others – that, as with technology and equipment vendors, outside vendors of testing services will be focused almost entirely on the larger carriers, especially at the outset, and may ignore the needs of smaller regional and rural carriers entirely. This problem will become especially severe as dozens upon dozens of carriers are compelled to simultaneously vie for the services of a limited number of qualified vendors in order to meet the aggressive compliance deadlines set forth in the Joint Proposals.

The potential costs and burdens of compliance testing are further exacerbated by the fact that there is no mention anywhere in the Joint Proposals – or in the docket of this proceeding – of the testing methodologies or reporting requirements that will be required or accepted for demonstrating compliance with the proposed new location accuracy requirements.<sup>23</sup> As a result, SouthernLINC Wireless, like NTELOS, has no way to determine what sort of testing it may need to undertake or to assess with any degree of accuracy what the potential costs of such efforts be.<sup>24</sup> Furthermore, SouthernLINC Wireless and other regional and rural carriers do not have the resources to begin testing in a vacuum – *i.e.*, without any guidance from the Commission – to determine whether compliance with the proposed new county-level standard is even possible.<sup>25</sup>

For these reasons, the Commission should modify the Joint Proposals in accordance with the alternative approaches presented below in these reply comments.

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<sup>23</sup> / See NTELOS *Ex Parte* Letter (“NTELOS is unclear on what the future reporting requirements and testing methodology would be and does not feel that has been [*sic*] outlined in the proposals in such a way that an accurate assessment of what will be needed to comply is possible.”).

<sup>24</sup> / *Id.*

<sup>25</sup> / For all SouthernLINC Wireless knows, it may already be capable of meeting the accuracy requirement at the county level. However, without further guidance from the Commission, SouthernLINC Wireless has no way of being able to conduct the testing that would be necessary to verify this.

#### **IV. THE JOINT PROPOSALS MUST BE MODIFIED IN ORDER TO MEET THE REQUIREMENTS OF THE REGULATORY FLEXIBILITY ACT**

Pursuant to the Commission's IRFA issued in conjunction with its *Public Notice*, SouthernLINC Wireless hereby "provide[s] information on alternative approaches to alleviate any potential burdens on small entities."<sup>26</sup>

As demonstrated in Section III of these reply comments, the adoption of the Joint Proposals would impose significant and disproportionate economic and regulatory burdens on non-nationwide regional and rural carriers. However, as the Blooston Rural Carriers stated, "it would be both counterproductive and contrary to the public interest for the Commission to adopt aggressive location accuracy requirements, or to impose one-size-fits-all reliability standards, that ultimately discourage rural carriers from extending service to the most remote areas."<sup>27</sup>

Unless they are modified to accommodate the needs and circumstances of non-nationwide carriers – as proposed below – the Joint Proposals will impose substantial economic, operational, and regulatory burdens that will significantly affect non-nationwide carriers' ability to continue to provide essential communications services, including emergency services, to millions of Americans, let alone these carriers' ability to continue to compete in the rapidly-consolidating wireless market.<sup>28</sup>

##### **A. Alternative Compliance Benchmarks for Non-Nationwide Carriers**

As an initial matter, and as discussed in more detail in Section V.A. of these reply comments, SouthernLINC Wireless is concerned whether the compliance standards and timeframes set forth in the Joint Proposals are even technically feasible, and thus it questions

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<sup>26</sup> / *Public Notice*, Appendix B ¶ 24.

<sup>27</sup> / Comments of the Blooston Rural Carriers at 3.

<sup>28</sup> / *See, e.g.*, Comments of NTCA at 3; Comments of the Blooston Rural Carriers at 3.

whether they should be adopted in the first place. Nevertheless, to the extent the Commission should decide to impose new compliance standards and benchmarks on all carriers, SouthernLINC Wireless hereby proposes the adoption of alternative benchmarks for small and mid-size Tier II and Tier III carriers.

In their joint comments, T-Mobile and the Rural Cellular Association recommended the adoption of staggered compliance timeframes for small and mid-size Tier II and Tier III carriers in recognition of the constraints such carriers face in the acquisition and deployment of location technologies and equipment, as well as the time needed to conduct the necessary empirical testing at the county level.<sup>29</sup> However, the T-Mobile/RCA proposal is limited to those carriers currently utilizing network-based location solutions.

SouthernLINC Wireless supports T-Mobile and RCA's proposal for staggered compliance timeframes and recommends that this approach be applied to *all* Tier II and Tier III carriers, regardless of platform or location technology. This approach has already been proven sound and successful during the initial stages of E911 Phase II deployment.<sup>30</sup>

As the Commission recognized in its 2002 *Non-Nationwide Carriers Order*, Tier II and Tier III carriers "have much less ability than the nationwide CMRS carriers to obtain the specific vendor commitments necessary" to deploy E911 solutions.<sup>31</sup> Thus, small and mid-size carriers are generally unable to begin deploying new technologies or equipment or engage the services of qualified vendors of testing services until well after the nationwide carriers, and any delays in the deployment schedules of the nationwide carriers necessarily create downstream delays for Tier II and Tier III carriers that are beyond the smaller carriers' control. In the *Non-Nationwide*

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<sup>29</sup> / See, e.g., Comments of T-Mobile and RCA at 5 – 7 and 22 – 23.

<sup>30</sup> / See, e.g., *Non-Nationwide Carriers Order*.

<sup>31</sup> / *Non-Nationwide Carriers Order*, 17 FCC Rcd at 14844.

*Carriers Order*, the Commission therefore concluded that “[b]y permitting each set of wireless carriers to begin Phase II rollout at different times, the Commission may help to alleviate carriers’ deployment problems attributable to third party vendors.”<sup>32</sup> This conclusion remains just as valid today as it was in 2002.

Accordingly, with respect to carriers currently utilizing handset-based solutions, SouthernLINC Wireless recommends the following compliance benchmarks at the county level, as counted from the effective date of Commission rules:<sup>33</sup>

|  | <b>Tier I Carriers</b> | <b>Tier II Carriers</b> | <b>Tier III Carriers</b> |
|--|------------------------|-------------------------|--------------------------|
| 67% of calls accurate within 50 meters;<br>80% of calls accurate within 150 meters <sup>34</sup> | Within two years       | Within three years      | Within five years        |
| 67% of calls accurate within 50 meters;<br>90% of calls accurate within 150 meters <sup>35</sup> | Within eight years     | Within nine years       | Within ten years         |

SouthernLINC Wireless submits that these timeframes will provide Tier II and Tier III carriers sufficient time to implement the measures necessary to conduct county-level accuracy

<sup>32</sup> / *Non-Nationwide Carriers Order*, 17 FCC Rcd at 14846.

<sup>33</sup> / SouthernLINC Wireless’ proposal addresses only those requirements applicable to carriers utilizing a handset-based solution. For carriers utilizing network-based solutions, SouthernLINC Wireless supports the proposals set forth in the Comments of T-Mobile and RCA.

<sup>34</sup> / As in the initial Joint Proposal, carriers may exclude up to 15 percent of the counties they cover based upon “heavy forestation” or “challenging environments.” SouthernLINC Wireless’ recommendations regarding the specific applicability of this exclusion are discussed in more detail in Section V.C. of these reply comments.

<sup>35</sup> / See note 34 *supra*.

testing (including securing the services of qualified third party vendors of testing equipment and services) and to implement any necessary changes to their systems in an economically and logistically feasible manner while furthering the Commission's goals of improving wireless E911 location accuracy for all consumers. Nevertheless, these extended deadlines would still require Tier II and Tier III carriers to work extremely vigorously and diligently in order to achieve compliance as rapidly as possible.

As with the T-Mobile and RCA proposal for carriers with network-based solutions, these extended compliance deadlines for carriers utilizing handset-based solutions recognize that regional and rural carriers face even greater logistical challenges due to their smaller size and more limited resources, as well as the fact that it may be difficult for these carriers to get the attention of vendors while larger carriers are also being served.<sup>36</sup> Moreover, the modified deadlines proposed above would be consistent with the Regulatory Flexibility Act, which requires the Commission to "minimize the significant economic impact on small entities consistent with the stated objectives of the applicable statutes."<sup>37</sup>

#### **B. Waivers for Tier III Carriers**

SouthernLINC Wireless agrees with numerous commenters in this proceeding – as well as APCO and NENA – that the Commission should establish a waiver process with clear guidelines and procedures.<sup>38</sup> As T-Mobile and RCA note, and as past industry and Commission experience has clearly demonstrated, it is impossible to address or to try to foresee the entire range of different circumstances that regional and rural wireless carriers may face in their efforts

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<sup>36</sup> / See Comments of T-Mobile and RCA at 23.

<sup>37</sup> / 5 U.S.C. § 601.

<sup>38</sup> / See Comments of T-Mobile and RCA at 21 – 22; Comments of NTCA at 3; Comments of the Blooston Rural Carriers at 3; See also *Ex Parte* Letter of APCO and NENA, dated July 14, 2008, at 1.

to achieve and demonstrate compliance with any new E911 location accuracy requirements that the Commission may adopt.<sup>39</sup> Congress itself recognized the importance of waivers for Tier III carriers when it adopted Section 107 of the *ENHANCE 911 Act*.<sup>40</sup>

However, based on its own experience with the Commission's waiver process for the handset penetration deadline, SouthernLINC Wireless emphasizes the importance of making the Commission's waiver guidelines and standards clear, consistent, understandable, and reasonable. In particular, it would not be sufficient for purposes of satisfying its obligations under the Regulatory Flexibility Act for the Commission to adopt the vague and ill-defined "clear path to full compliance" standard previously applied to Tier III carrier waiver requests – a standard that was simultaneously very strict, yet so vague that most, if not all, grants of Tier III carrier waiver requests occurred only through an act of Congress.<sup>41</sup>

Accordingly, SouthernLINC Wireless recommends that the Commission establish a straightforward process that enables Tier III carriers to obtain individual waivers based on a showing of one or more of the following factors:

- The carrier has deployed the latest technology and is operating its network and equipment as intended/designed, yet is still unable to achieve full compliance;
- The carrier is facing impediments to obtaining and/or deploying the latest technology, including, but not limited to, unavailability, high costs, unforeseeable technical issues, system or network compatibility issues, problems with third party vendors or suppliers, delays or other problems with zoning/permitting for the deployment or construction of infrastructure, etc.;
- The carrier is experiencing customer resistance to upgrading or exchanging CPE (such as handsets);

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<sup>39</sup> / Comments of T-Mobile and RCA at 22.

<sup>40</sup> / National Telecommunications and Information Administration Organization Act – Amendment, Pub. L. No. 108-494, 118 Stat. 3986 (2004) ("*ENHANCE 911 Act*"), § 107(a).

<sup>41</sup> / *I.e.*, pursuant to the statutory mandate of the *ENHANCE 911 Act*.

- The carrier is unable to achieve full compliance by the applicable deadline due to financial hardship or financial burdens. In evaluating this question, the Commission should take into consideration a variety of factors, including, but not limited to:
  1. The overall cost and expense of compliance;
  2. The extent to which the carrier is able to spread its costs over its customer base in an economically feasible manner;
  3. The extent to which the carrier actually has or is actually able to receive cost recovery or reimbursement from the relevant state government(s) for the cost of deploying Phase II service to PSAPs (a substantial cost that many Tier III carriers have been compelled to bear despite numerous state laws to the contrary); and
  4. The carrier's access to the necessary capital, including through loans or credit, to achieve or otherwise demonstrate compliance (a significant concern in the current economic environment).
- Strict enforcement of the Commission's location accuracy rules will result in consumers having decreased access to emergency services.<sup>42</sup>

In addition to these factors, the Commission should also give careful consideration to the impact that a denial of a waiver request could have on a carrier's ability to ultimately achieve compliance with the location accuracy requirements. In 2007, several parties pointed out during an earlier phase of this proceeding that being found to be out of compliance with the Commission's rules can threaten the financing and credit agreements on which many carriers rely, resulting in punitive increases in interest or even declarations of default for existing agreements and severe restrictions on carriers' ability to secure new funding.<sup>43</sup> Unfortunately, as the recent drastic developments in the US financial markets and overall economy demonstrate, this is a very real possibility and a very real threat for even the strongest and most financially sound of carriers. The perverse result could very well be that the denial of a waiver request

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<sup>42</sup> / See *ENHANCE 911 Act*, § 107(a).

<sup>43</sup> / See, e.g., Reply Comments of SouthernLINC Wireless filed July 11, 2007, PS Docket No. 07-114, CC Docket No. 94-102, at 13 – 14.

could effectively cut a carrier off from access to the capital it needs continue its operations, let alone implement any programs or deployments necessary to achieve or demonstrate compliance with the Commission's location accuracy rules. Considering that regional and rural carriers are often the sole source of wireless E911 service in many parts of the country, the impact on consumers in these areas would be devastating.

The establishment by the Commission of a waiver process with clear guidelines and procedures, as set forth above, would serve to alleviate potential burdens of the Joint Proposals on small entities and would be consistent with the requirements imposed on the Commission by the Regulatory Flexibility Act.

## **V. OTHER CONCERNS REGARDING THE JOINT PROPOSALS**

In addition to the issues discussed above regarding the potential impact of the Joint Proposals on non-nationwide regional and rural carriers, particularly in light of the mandates of the Regulatory Flexibility Act, SouthernLINC Wireless has further concerns regarding the Joint Proposals and the Commission's *Public Notice*.

### **A. There Has Been No Showing that the Joint Proposals are Technically Feasible**

SouthernLINC Wireless is concerned that the Joint Proposals do not appear to be based on any actual studies or data, but instead represent what is essentially a political agreement between APCO, NENA, and the nation's three largest wireless carriers. No other parties were involved in the development of these proposals, nor have any the parties who formulated these proposals presented any studies, data, or other analyses demonstrating that they are even technically feasible.<sup>44</sup> SouthernLINC Wireless itself has no information as to whether it can

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<sup>44</sup> / See, e.g., Comments of T-Mobile and RCA; Comments of NTCA at 2; Comments of the Rural Telecommunications Group (RTG) at 1 – 2.

meet the Commission's accuracy requirements at the county level today, nor is it aware of any other carrier that has demonstrated or claimed such a capability other than the three largest nationwide carriers (who themselves admit that they cannot achieve this in every county they serve).

In 2007, the Commission was presented with overwhelming and uncontroverted evidence that it is technologically impossible for carriers to meet the existing accuracy requirements in every area they serve with the technology available today – whether at the PSAP level or at the county level<sup>45</sup> – and nothing has been submitted in the record of this proceeding to alter this conclusion. In fact, AT&T, Verizon Wireless, and Sprint Nextel themselves admit that their proposed county-level accuracy requirements cannot be met in every county with the technology currently available, and they further admit that compliance with these standards will generally require the development and deployment of new, unproven technologies that may or may not work or that may or may not be available within the timeframes envisioned in their proposals, if ever.

Given the lack of record evidence that the Joint Proposals are even technologically feasible, SouthernLINC Wireless is concerned that any rush by the Commission to adopt the Joint Proposals raises significant legal and public policy concerns, including the Commission's compliance with the Administrative Procedure Act ("APA").<sup>46</sup> As NTCA stated, the Commission "should not create legal requirements based on mere speculation that technology will have evolved."<sup>47</sup>

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<sup>45</sup> / See, e.g., Reply Comments of SouthernLINC Wireless filed Sept. 18, 2007, PS Docket No. 07-114, CC Docket No. 94-102, at 2 – 3 (and comments cited therein).

<sup>46</sup> / See, e.g., Comments of T-Mobile and RCA at 10 – 12 (and the cases cited therein).

<sup>47</sup> / Comments of NTCA at 2 and note 5.

**B. The Commission Has Not Provided Sufficient Opportunity for Adequate Participation by Affected Parties**

In addition to the lack of record evidence regarding the technical feasibility of the Joint Proposals, SouthernLINC Wireless is concerned about the lack of sufficient opportunity the Commission has provided to affected parties to participate meaningfully in this process.<sup>48</sup>

This summer, APCO, NENA, AT&T, and Verizon Wireless developed the Joint Proposals now under consideration. To the best of SouthernLINC Wireless' knowledge, no other carriers or entities participated, nor did the parties consult with any other carriers as they negotiated their plans.<sup>49</sup> The rest of the wireless industry did not learn of these proposals until they were presented to the Commission as a *fait accompli* in late August. Even then, the full range of information regarding the Joint Proposals consisted of little more than a few brief *ex parte* letters from a handful of parties containing few details and no supporting documentation, such as technical studies, survey results, etc.

Less than one month later, while SouthernLINC Wireless and other non-nationwide carriers were still attempting to understand and evaluate the Joint Proposals – a task made more difficult by the lack of any supporting evidence or technical information – the Commission issued its *Public Notice* requesting comments on the Joint Proposals. However, the Commission provided the public with only ten days to submit comments and only an additional seven days to review all of the comments and to prepare and submit replies. The Commission also flatly rejected a request to extend the deadline for filing reply comments by seven days (which would still have brought the entire pleading cycle to a close just one month after the *Public Notice* was

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<sup>48</sup> / See, e.g., *Ex Parte* Letter of RCA and T-Mobile, dated Sept. 19, 2008 (discussing the requirement that all affected parties receive an opportunity to participate pursuant to the Administrative Procedure Act).

<sup>49</sup> / See Comments of T-Mobile and RCA at 3.

released).<sup>50</sup> While not as egregious as the procedural irregularities that led the US Court of Appeals for the District of Columbia Circuit to stay the implementation of the location accuracy rules initially adopted by the Commission in September 2007,<sup>51</sup> the instant proceeding still suffers from serious problems with notice.

Non-nationwide carriers simply do not have the resources to perform in-depth analysis and testing of any of the hundreds of proposals presented every year to the Commission on a variety of matters. Therefore, while the Joint Proposals first appeared in the public docket on August 20 and August 25, respectively, it is in no way realistic to assume that non-nationwide carriers would immediately be able to begin giving these proposals the same level of scrutiny as they would for proposed rules coming directly from the Commission – *i.e.*, through the issuance of a Notice of Proposed Rulemaking. It is even more unrealistic to expect that these carriers would then have the resources to carry out the necessary analysis and confirmation testing required to appropriately evaluate the Joint Proposals in scarcely ten days, and furthermore be able to review and respond to all comments in just one week.

SouthernLINC Wireless is therefore concerned that it and other non-nationwide regional and rural carriers have been denied the opportunity to fully participate in the development and adoption of new rules that will have a direct and immediate impact on them.

### **C. The Exclusion for Counties with “Heavy Forestation”**

SouthernLINC Wireless is also concerned about the exception in the Joint Proposal for carriers utilizing handset-based solutions that allows them to exclude up to 15 percent of the

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<sup>50</sup> / *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Order, DA 08-2258 (rel. Oct. 8, 2008).

<sup>51</sup> / [ cite DC Circuit Order ] (holding that the court did not need to address the substantive issues raised “because the movants have demonstrated a likelihood of success based on the Order’s procedural irregularities – in particular, the serious problems with the notice.”).

counties they serve from the 150-meter accuracy standard on the basis of “heavy forestation.” Although tree coverage is certainly one environmental factor that can reduce the ability of an A-GPS-equipped handset to provide sufficient location accuracy, the performance of A-GPS systems can be affected by other environmental factors as well.

The potential confusion caused by the term “heavy forestation” is apparent in Sprint Nextel’s comments, wherein Sprint Nextel states that the exclusion would apply “based on terrain obstructions, whether natural or manmade.”<sup>52</sup> In a footnote to this statement, Sprint Nextel further explains that although the Joint Proposal “specifically referenced only one type of terrain obstruction (“forestation”), it is Sprint’s understanding that APCO and NENA agree that the proposal applies to all terrain obstructions, whether natural (cloud cover, mountains) or manmade (buildings), because both types of obstructions adversely affect location accuracy.”<sup>53</sup>

SouthernLINC Wireless believes that Sprint Nextel’s interpretation of the scope of the 15-percent exclusion better reflects the intent and purpose of the Joint Proposal, and this interpretation is also supported by Motorola.<sup>54</sup> Accordingly, SouthernLINC Wireless recommends that, to the extent the Commission should adopt the Joint Proposal, the term “heavy forestation” should be changed to “challenging environment” in order to clarify the nature of the 15-percent exclusion and avoid any confusion as to the exclusion’s applicability.

In addition, SouthernLINC Wireless is concerned that neither APCO, NENA, Verizon Wireless, or Sprint Nextel provide any information as to how the determination was made that 15

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<sup>52</sup> / Comments of Sprint Nextel at 3.

<sup>53</sup> / *Id.* at note 5.

<sup>54</sup> / Comments of Motorola at 3 (recommending that the Joint Proposal be modified to “provide carriers the flexibility for exclusions based not only on forestation, but also other situations such as urban canyons and urban/rural buildouts that limit handset-based technology accuracy”).

percent is an appropriate cap on the number of counties that can be excluded from the 150-meter accuracy requirement. If this number is based on nothing more than the amount of counties that Verizon Wireless and/or Sprint Nextel themselves would need to exclude in order to be in compliance, this cannot serve as an adequate basis for an industry-wide mandate.<sup>55</sup>

SouthernLINC Wireless therefore recommends that, should the Commission adopt this exclusion, the Commission should also make a waiver of the 15 percent cap available to carriers on an individual basis upon a showing by the carrier that more than 15 percent of the counties it serves are characterized by challenging environments that reduce the ability to obtain sufficient accuracy to establish compliance.

It is also not clear in the record or from any of the comments submitted in this proceeding why “heavy forestation”/ “challenging environments” should be considered only with respect to the 150-meter standard. Given that these conditions determine whether accuracy is even possible in the first place, SouthernLINC Wireless suggests that carriers be permitted to exclude up to 15 percent of the counties they cover from both the 50-meter and 150-meter standards.

Alternatively, carriers who exclude a county from the 150-meter standard should be permitted to meet a lower percentage for the 50-meter standard in recognition of the topographical challenges and conditions in that same county.

## **VI. ESTABLISHMENT OF AN E911 TECHNICAL ADVISORY GROUP**

Finally, SouthernLINC Wireless joins other commenters in supporting the plan contained in the Joint Proposals for the establishment of an E911 Technical Advisory Group (ETAG) to

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<sup>55</sup> / See, e.g., Comments of T-Mobile and RCA at 10 – 12 (arguing that the application to all GSM carriers of requirements based on network conditions specific to AT&T would be arbitrary and capricious).

investigate and develop recommendations regarding other E911 location accuracy issues.<sup>56</sup> As Motorola notes, AT&T and Verizon Wireless do not represent the wireless industry as a whole, and the ETAG would allow for greater industry participation in developing and refining further improvements in wireless E911 location accuracy.<sup>57</sup> SouthernLINC Wireless agrees with NTCA that the proposed ETAG must include not only representatives from public safety, manufacturers, and the major wireless interests, but should also include representatives from smaller regional and rural carriers as well.<sup>58</sup> These carriers have operational needs and circumstances that differ significantly from those of the larger nationwide carriers, and these unique needs and circumstances must be appropriately taken into consideration in the development of any new E911 standards or requirements.<sup>59</sup>

SouthernLINC Wireless agrees that the role of the proposed ETAG should include consideration and evaluation of new technologies and location solutions. However, as a result of its own experiences during its initial efforts to implement a Phase II solution on its system in 1999-2000, SouthernLINC Wireless cautions against getting carried away by the promises of new technologies and emphasizes the need for rigorous field testing of any and all location technologies under a variety of challenging, real-world conditions before relying on any of them as the basis for any new accuracy standards or requirements.

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<sup>56</sup> / See, e.g., Comments of AT&T at 4 – 5; Comments of T-Mobile and RCA at 24; Comments of NTCA at 2 – 3; Comments of RTG at 4; Comments of Motorola at 4 – 5; Comments of Nokia at 2 – 3; Comments of the Telecommunications Industry Association.

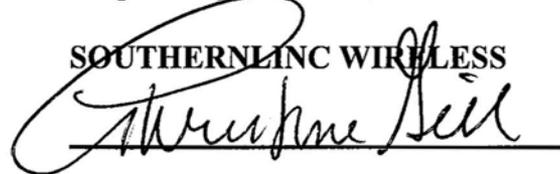
<sup>57</sup> / Comments of Motorola at 4.

<sup>58</sup> / Comments of NTCA at 3.

<sup>59</sup> / The mix of representatives from smaller regional and rural carriers should also ensure that all types of air interfaces and Phase II solutions are included.

**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**  


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