

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
Report on Technical and Operational ) WT Docket No. 02-46  
Wireless E911 Issues )

To: The Chief, Wireless Telecommunications Bureau

**REPLY COMMENTS OF SOUTHERN LINC**

Southern Communications Services, Inc., d/b/a Southern LINC (“Southern”), respectfully submits these Reply Comments in response to the *Public Notice* released by the Wireless Telecommunications Bureau on October 16, 2002 in the above-captioned matter.<sup>1</sup>

**I. INTRODUCTION**

Southern is a wholly-owned subsidiary of Southern Company, operating a unique digitally enhanced, wide-area Specialized Mobile (SMR) system in the Southeastern United States, covering the states of Alabama and Georgia, the Panhandle of Florida, and Southeastern Mississippi. Southern’s wide-area SMR system employs Motorola’s proprietary Integrated Digital Enhanced Network (“iDEN”) technology, a digitally enhanced, time division multiple access technology. Southern provides dispatch, text messaging, and interconnected voice and Internet service over a service area of more than 127,000 square miles.

Southern is committed to delivering wireless E911 service to its customers quickly and effectively and to the timely deployment of Phase II location technology. Because Southern’s

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<sup>1</sup> Wireless Telecommunications Bureau Seeks Comment On Report on Technical and Operational Wireless E911 Issues, WT Docket No. 02-46, Public Notice, DA 02-2666 (rel. Oct. 16, 2002).

iDEN technology is a proprietary technology developed and owned by Motorola, which is also the sole vendor of handsets used with the iDEN system, Southern is working with Motorola to deliver a handset-based solution consistent with the FCC's requirements. Thus, Southern is acutely familiar with the complexities and interdependencies among the various stakeholders in deploying E911 Phase II service and appreciates the opportunity to submit comments in this proceeding.

In the *Public Notice*, the Bureau requested comments on "A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services" (hereinafter the "Report") prepared for the FCC by Dale N. Hatfield. Southern commends both the Commission for retaining Mr. Hatfield to undertake this study and Mr. Hatfield for his thorough analysis of the many complexities associated with wireless E911 service. Southern has also reviewed the comments of other parties on the Report and offers the following Reply Comments to highlight a few items that Southern believes could significantly affect the timely and efficient implementation E911 service.

## **II. THE REPORT AND COMMENTS SUPPORT THE NEED FOR REGULATORY FLEXIBILITY**

Southern agrees with the Report and a number of commenters that the complexity of wireless E911 indicates a need for flexible application of regulatory requirements. The Report contains several suggestions on ways in which the FCC could provide for flexibility in order to facilitate the rollout of wireless E911 services. Motorola notes, for example, that rigid enforcement of "overly optimistic timing benchmarks and accuracy requirements has inhibited the deployment of E911."<sup>2</sup> Nextel also notes that the time required to overcome the complexities of E911 deployment is not adequately recognized by implementation requirements and timelines

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<sup>2</sup> Comments of Motorola, Inc. at 3.

of the FCC's Rules. Further, because of "variations in equipment and technology as well as lack of uniform configuration standards, deployment is not a 'plug and play' process."<sup>3</sup>

Southern agrees with the Report and these observations, and it urges the FCC to remain sensitive to the complexities of introducing this service into existing networks. The various stakeholders implementing E911 have legacy systems that have evolved with disparate technical capabilities precisely because of the FCC's "hands-off," pro-competitive approach to network development. These differences must be acknowledged and accommodated in the regulatory process.

### **III. SOUTHERN SUPPORTS THE CONVENING OF A JOINT EXPERTS MEETING TO ADDRESS IMMEDIATE IMPLEMENTATION ISSUES**

The Report recommends that the FCC urge the Administration to establish a "National 911 Program Office" within the new Department of Homeland Security.<sup>4</sup> However, Southern agrees with Sprint and the Cellular Telecommunications and Internet Association ("CTIA") that Phase II services could be largely deployed by the time a new federal agency could take action.<sup>5</sup> Although such an agency might be of assistance to smaller PSAPs, Southern agrees with Sprint that a National 911 Program Office might have difficulty directing the actions of the many political subdivisions operating PSAPs across the country. As CTIA notes, wireline and wireless

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<sup>3</sup> Comments of Nextel Communications, Inc. at 6. Southern notes that the FCC has just adopted revisions to Section 20.18(j) of its Rules to clarify the obligation of a Public Safety Answering Point (PSAP) to demonstrate its readiness to receive and utilize the enhanced 911 service it has requested, and to toll the six-month deadline if the PSAP does not timely demonstrate its readiness or if it is not, in fact, ready to receive service at the end of the six-month period.

<sup>4</sup> Report at 17.

<sup>5</sup> Comments of Sprint Corporation at 4-5; Comments of the Cellular Telecommunications and Internet Association at 5-6. The National Emergency Number Association ("NENA"), the Association of Public Safety Communications Officials-International ("APCO"), and the National Association of State Nine One One Administrators ("NASNA") also express concern about the potential delay in establishing the new Department of Homeland Security. Comments of NENA, APCO and NASNA at 5.

carriers would remain subject to FCC oversight and direction in any event. Thus, such an office would be unlikely to address any near-term implementation issues, and it might have only minimal value even on a longer-term basis.

Southern does see merit in CTIA's recommendation that the FCC encourage stakeholders to convene a Joint Experts Meeting ("JEM") as was done with early deliberations over wireless E911. This entity would have many of the attributes of a Federal Advisory Committee. It would benefit, however, from the shorter lead-time involved in structuring the organization and the greater flexibility it would have to convene meetings and actually adopt recommendations or "best practices" that could be used by appropriate industry standard-setting organizations. Southern therefore urges the FCC to serve as a catalyst for the formation of a JEM with a well-defined mission.

#### **IV. THE FCC SHOULD ENCOURAGE ADOPTION OF STANDARD FEATURE SET SPECIFICATIONS FOR EACH OF THE VARIOUS WIRELESS TECHNOLOGIES**

Southern agrees with Nextel that the adoption of end-to-end standards for all stakeholders would greatly facilitate the implementation of Phase II service.<sup>6</sup> As noted in the Report, for Phase II service to be implemented for a requesting PSAP, "interface standards must be agreed upon, upgrades to the Selective Routers, ALI data bases, and trunks made, facilities provisioned and tested, and tariff-based and/or contractual business relationships put in place."<sup>7</sup> Without some standards, interfaces must be implemented on an ad hoc basis, making it more difficult and costly to implement Phase II service.

Because of the variety of network configurations used by wireless carriers, Southern agrees with Nextel that standard feature set specifications should be developed for each of the

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<sup>6</sup> Comments of Nextel at 7.

<sup>7</sup> Report at 32.

various wireless technologies (*i.e.*, GSM, TDMA, CDMA, and iDEN). Development of these specifications would, as Nextel notes, establish their respective technological capabilities and help manage PSAP expectations about each system's functionalities.<sup>8</sup> They would also help to accommodate new technologies, such as Voice Over IP, when they become widespread. Although Nextel has suggested that the FCC convene a "feature set standards advisory committee," citing Mr. Hatfield's call for the formation of an advisory organization under the Federal Advisory Committee Act, Southern believes that a more expedient approach would be to refer this issue to a Joint Experts Meeting, as described above.

#### **V. THE FCC SHOULD EXHIBIT FLEXIBILITY IN APPROVING COMPLIANCE TESTING**

The Report correctly observes that although the FCC's Office of Engineering and Technology has issued OET Bulletin No. 71 to establish basic guidelines for determining whether position location systems comply with the FCC's accuracy requirements, the Bulletin does not specify standardized methods for verifying that a deployed system meets the accuracy requirements. In addition, the Report identifies two specific issues related to accuracy testing: (1) whether it is permissible to assess accuracy by increasing the number of measurements taken during call set-up and/or increasing the processing time allowed for each call; and (2) the geographic area over which accuracy measurements are to be taken.<sup>9</sup> The Report therefore recommends that the FCC encourage the development of an "industry-wide testing and certification (and re-certification) program."

CTIA states that it has no objection to such a voluntary, industry-wide program but rightly notes that establishing one will not be easy or quick. Carriers and their vendors are

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<sup>8</sup> Comments of Nextel at 7.

<sup>9</sup> Report at 35-36.

already working on solutions and are required to meet regulatory deadlines for deployment. Implementation cannot be delayed while standard-setting organizations develop specific testing procedures and methodologies. CTIA therefore urges the FCC not to penalize wireless carriers and their vendors for their good faith efforts to comply by any reasonable means with the FCC's accuracy requirements as measured by the guidelines in OET Bulletin No. 71.<sup>10</sup>

Southern concurs with CTIA's assessment and supports Motorola's recommendation that the FCC allow industry to develop common technology test plans, potentially tied to particular air interfaces or local solutions. Southern also supports Motorola's recommendations for ways in which the FCC can further clarify how carriers can demonstrate compliance with the accuracy requirements, including: (1) that the FCC support industry collaborative efforts toward a standardized procedure for testing and certification of new wireless model handsets and that these results should be used as a "safe harbor" for that accuracy verification that lies in the handset; (2) that approaches such as geographic averaging and use of a system "test-bed" are acceptable for demonstrating compliance; (3) that the accuracy requirements recognize the limitations of the technology, given the expense and complexity of the network elements involved; and (4) that entities should be given flexibility to average location measurements over any geographic area where they are providing seamless coverage.<sup>11</sup>

#### **VI. THE FCC MUST ASSERT ITS AUTHORITY OVER ILECS TO ENSURE TIMELY IMPLEMENTATION OF E911 PHASE II SERVICE**

The Report notes that ILECs "essentially stand between the wireless carrier and the PSAP," and that ILECs must be ready to support wireless E911 systems before wireless E911 service can be provided on an end-to-end basis.<sup>12</sup> A number of commenters addressed the vital

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<sup>10</sup> Comments of CTIA at 15-16.

<sup>11</sup> Comments of Motorola at 4.

<sup>12</sup> Report at 32-33.

role of the ILECs in wireless E911 deployment and called upon the FCC to exercise its oversight authority over these carriers to ensure that wireline technical issues, timing of upgrades, operational matters, and how ILECs intend to recover their E911 costs, are not allowed to delay implementation of wireless E911 service.<sup>13</sup> Southern agrees with these commenters and urges the FCC to quickly resolve any disputes that may arise concerning recovery of ILEC costs from PSAPs.<sup>14</sup>

**VII. THE FCC SHOULD SERVE AS A CLEARINGHOUSE OF INFORMATION ON E911 IMPLEMENTATION AND PUBLISH PROGRESS REPORTS ON CARRIER PERFORMANCE**

The Report recommends the establishment of a national level clearinghouse to collect, store and disseminate status information on the rollout of wireless E911.<sup>15</sup> The clearinghouse would facilitate exchange of information among stakeholders, such as basic technical and operational information needed to facilitate rollout, and would publish regular reports on the Nation's progress toward establishing ubiquitous E911 wireless service. The Report does not recommend a specific entity to serve as the clearinghouse, but it suggests the FCC, one of the public safety associations, or the proposed National E911 Program Office.

Southern joins CTIA in recommending the FCC as the most logical entity to provide this clearinghouse function. As noted in the Report, the FCC is already collecting status information from wireless carriers and ILECs, and it has existing systems to collect and routinely publish the kind of information envisioned in the Report. The Commission also has authority to require this

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<sup>13</sup> Comments of AT&T Wireless Services, Inc. at 2-3; Comments of Sprint at 8; and Comments of CTIA at 14.

<sup>14</sup> The FCC should also ensure that ILECs are not permitted to shift costs to wireless carriers by assessing fees on Mobile Positioning Centers that are, in reality, costs associated with upgrading the ALI databases.

<sup>15</sup> Report at 25.

information and would not be subject to the same competitive or “political” concerns as an outside organization having its own interest in E911 implementation.

Southern also recommends that the FCC publish regular progress reports on how carriers, both wireless and wireline, are performing to date in meeting the requirements for Phase II implementation, including information on how carriers are conforming to the guidelines of OET Bulletin No. 71 on accuracy testing. This information would not only serve to apprise the public and PSAPs as to the status of E911 roll-out, but would help to set the appropriate level of expectations and provide informal standards against which each carrier could benchmark its progress. The FCC has the statutory authority to collect such information and would be in a position to delineate a standard reporting format that would permit useful comparison among carriers.

Mr. Hatfield noted that consumers could be confused by wireless E911 service, basing their expectations on their long experience with E911 services generally.<sup>16</sup> However, because of uneven roll-out of Phase II service around the country, the “normal vagaries of radio propagation,” and other unique attributes of wireless E911, consumers might lose confidence in wireless E911 even when it is available. Publication of a regular “report card” on E911 implementation would also help to illuminate any issues that might be retarding the deployment of wireless E911 and help with public awareness of both the promise and the limitations of this service.<sup>17</sup>

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<sup>16</sup> Report at 42-43.

<sup>17</sup> See also Comments of Motorola at 6: “It is also important that wireless phone users understand the functions, capabilities and limitations of E911 location technology for their product and network so that they can make informed decisions and maximize location performance.”

## **VIII. SOUTHERN SUPPORTS A MORATORIUM ON ADDITIONAL E911 REQUIREMENTS**

The Report recommends that the FCC avoid imposing additional E911 requirements because “there is a danger that constantly changing requirements will lead to scheduling delays.”<sup>18</sup> Southern concurs with AT&T Wireless, Sprint, Motorola, and the CTIA that the FCC should avoid adding new requirements during this critical stage of E911 so wireless carriers can focus on deploying E911 rather than debating whether or not a particular feature should be required.<sup>19</sup> It is much more important to implement E911 under the current regulations quickly than to incur delays so that every “bell and whistle” can be included. Therefore, Southern supports Sprint’s proposal to impose a three-year moratorium on additional E911 requirements.<sup>20</sup>

## **IX. CONCLUSION**

Southern commends Mr. Hatfield for identifying a number of technical, regulatory, and operational issues associated with implementation of wireless E911 service. One of the overriding themes in this Report is the complexity of this undertaking, given the number of stakeholders that must coordinate their efforts and the lack of standardization among their networks. Southern joins other commenters in recommending that the FCC acknowledge these differences and to accommodate them by flexibly applying regulatory requirements, particularly with respect to compliance testing. Southern supports the formation of an informal Joint Experts Meeting to identify “best practices” and make other recommendations, such as the adoption of standard feature set specifications for each of the wireless technologies. Southern supports the Report’s recommendation for establishment of a national clearinghouse of information on

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<sup>18</sup> Report at 40.

<sup>19</sup> Comments of AT&T Wireless Services, Inc. at 4; Comments of Sprint at 6-7; Comments of Motorola at 6 and Comments of CTIA at 2.

<sup>20</sup> Comments of Sprint at 7.

wireless E911, and believes it would also help to ensure that ILECs fulfill their statutory responsibilities to interconnect for the provision of E911 service.

**WHEREFORE, THE PREMISES CONSIDERED,** Southern LINC respectfully requests that the Commission act in the public interest as set forth herein.

Respectfully submitted,

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