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October 26, 2005

VIA ELECTRONIC FILING

Marlene Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, DC 20554

Re: SouthernLINC Wireless Response to Request for Additional Information Supporting its  
Request for Waiver of the E911 Phase II Handset Deployment Deadline; CC Docket  
No. 94-102

Dear Ms. Dortch:

Southern Communications Services, Inc. d/b/a/ SouthernLINC Wireless (“SouthernLINC Wireless”), through its undersigned counsel, hereby responds to the telephonic request from the staff of the Wireless Telecommunications Bureau on Friday, October 21, 2005, for additional information regarding SouthernLINC Wireless’s July 26, 2005, Request for Waiver of the Commission’s December 31, 2005 deadline for achieving ninety-five percent penetration of location-capable handsets among its subscriber base.

Specifically, the Bureau has requested additional information regarding the steps taken by SouthernLINC Wireless after July 18, 2004, when a manufacturer’s software defect in the A-GPS-equipped location-capable handsets then being sold by SouthernLINC Wireless suddenly and unexpectedly rendered these handsets incapable of providing location data. As described in more detail in SouthernLINC Wireless’s Request for Waiver, this software problem had a cascading effect that disabled the location-capability of all of SouthernLINC Wireless’s location-capable handsets, the resolution of which required a two-step process: (1) the development and installation of new software on SouthernLINC Wireless’s network, and (2) “touching” each individual affected handset in order to install the necessary software patch to re-enable the handset’s location-capability.

With this submission, SouthernLINC Wireless seeks to respond to the Bureau’s questions of Friday, October 21, 2005, as fully and completely as possible given the time constraints imposed

by the requirements of the ENHANCE 911 Act.<sup>1</sup> SouthernLINC Wireless also hereby supplements the record by providing additional information regarding its E911 Phase II implementation efforts and its clear path to full compliance with its E911 Phase II obligations.

### **Response and Additional Information Regarding the A-GPS Software Defect**

As the Commission is aware, the A-GPS software problem simultaneously affected all three of the nation's iDEN carriers: SouthernLINC Wireless, Nextel, and Nextel Partners. SouthernLINC Wireless (along with the other iDEN carriers) immediately began to work with Motorola, the sole-source supplier of iDEN equipment and technology, on developing and testing a solution to the A-GPS problem. As the solution for each handset was developed, it was made available simultaneously to all three carriers. However, because the software patch for the network required coordination and participation by the carrier, Motorola, and Nortel, SouthernLINC Wireless was not the first iDEN carrier to install it. SouthernLINC Wireless would therefore like to emphasize that, while it was not the first carrier to receive the necessary network software patch, it nevertheless implemented it as quickly as possible.<sup>2</sup>

As described in SouthernLINC Wireless's Request for Waiver, as well as in previous filings with the Commission, the software defect that affected iDEN A-GPS handsets prevented users of these handsets from completing *any* calls to 9-1-1. SouthernLINC Wireless was therefore compelled to temporarily shut off the E911 Phase II functionality of its network and revert to operating on Phase I status only in order to ensure that users of these handsets would still have access to emergency services. SouthernLINC Wireless immediately notified its customers and each of the Phase II-capable PSAPs in its service area of the unavailability of Phase II location service and advised the Commission of the situation.

Upon receiving the necessary technical assistance from Motorola and Nortel, SouthernLINC Wireless technicians completed the necessary network upgrade on August 6, 2004, so that automatic location data would again be available to PSAPs. However, the process of restoring Phase II E911 capability to the affected handsets was far more complex and has proven to be far more challenging and resource-intensive to implement.

First, the A-GPS defect directly or indirectly affected all of the location-capable handsets available to SouthernLINC Wireless customers at that time. Specifically, the defect itself was

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<sup>1</sup> / National Telecommunications and Information Administration Organization Act – Amendment, Publ. L. No. 108-494, 118 Stat. 3986 (2004). SouthernLINC Wireless is a “qualified Tier III carrier” as that term is defined in Section 107 of the ENHANCE 911 Act.

<sup>2</sup> / The network patch was implemented on the networks of Nextel and Nextel Partners on or about July 25, 2004. After completing this work, Motorola and Nortel then had to coordinate their personnel and resources in order to implement the patch on SouthernLINC Wireless's network.

contained in the software of the i205, i305, i325, i530, i710, i730, and i830 model handsets, all of which are part of Motorola's "Falcon" generation of iDEN handsets. At the time, the only other location-capable handsets available to SouthernLINC Wireless and its customers were two models – the i58 and i88 – from Motorola's preceding-generation "Condor" line of iDEN handsets. Although the A-GPS capability of the two Condor models was not directly affected by the software defect, the reprogramming of SouthernLINC Wireless's network necessary to enable access to both Phase I and Phase II E911 services for users of the Falcon handsets meant that the software in the Condor handsets also needed to be upgraded in order to preserve their location-capability. In short, all nine models of location-capable handsets that SouthernLINC Wireless was selling in July 2004 were affected by the A-GPS defect and required reprogramming.

In addition, a unique software patch – or "utility" – is required not only for each individual handset model, but also for each *version* of each handset model. For example, there are multiple versions of the model i730, each of which requires a separate software utility. Motorola concentrated its initial efforts on developing and making available the utilities for those models that were being used by the greatest number of iDEN subscribers at that time (regardless of carrier). Motorola's first utility, which was for the model i730, became available to SouthernLINC Wireless on July 28, 2004, and the utilities for other models became available on a rolling basis thereafter through September 17, 2004. Once each utility was ready, Motorola posted the utility to its website, and SouthernLINC Wireless in turn provided a direct link through its own website to the Motorola utilities. This link was activated and available to SouthernLINC Wireless dealers on July 28, 2004 (the date the first utility was posted). SouthernLINC Wireless also sent all of its customers a letter dated August 11, 2004, explaining the A-GPS problem and directing them to the SouthernLINC Wireless website, where additional information and regular updates would be available. Through its website, SouthernLINC Wireless provided its customers with a link to the Motorola site, where customers can confirm whether their handsets are affected and, if they are, either download the utility to their handsets themselves or request that Motorola ship the software utility to them (both of these options are provided free-of-charge).

At the same time, SouthernLINC Wireless immediately began "reflashing" each handset in its own inventory with the appropriate utility once it became available, and it completed the reflashing of its entire inventory by November 12, 2004. In addition to advising its dealers and company-owned stores of the availability of the utilities on the Motorola website, SouthernLINC Wireless also sent them the necessary cables and CD-ROMs for carrying out the reflashing process on-site on September 10, 2004, with new kits containing updated software provided on October 15, 2004, and again on January 7, 2005. SouthernLINC Wireless strongly encouraged its dealers to reflash as many handsets as possible, whether they were in dealer stock or were brought in by customers for any reason. As a further incentive, a program has been in place since July 2004 providing dealers with a payment of \$15.00 from Motorola for each handset they reflash.

In addition to the measures described above, Motorola created a “self-update kit” consisting of the necessary software on a CD-ROM, instructions, and a USB cable for connecting the handset to a computer. In collaboration with SouthernLINC Wireless, this kit was sent free-of-charge via Federal Express to SouthernLINC Wireless customers in January 2005, enabling them to reflash their handsets themselves. Motorola and SouthernLINC Wireless then sent a follow-up letter in May 2005 to remind customers of the importance of having their handsets reflashed and to encourage them to use the kit. Customers also have always had the option of coming into any SouthernLINC Wireless sales office to have the reflashing performed free-of-charge.

When the problem was discovered in July 2004, it affected practically all of SouthernLINC Wireless’s supply of new handsets.<sup>3</sup> Given the intense competition in the wireless market and its position as a regional Tier III carrier, SouthernLINC Wireless was not able to simply cease selling these new handsets.<sup>4</sup> Nevertheless, SouthernLINC Wireless succeeded in ensuring that all affected handsets in its control were reflashed and capable of providing location information by November 12, 2004, ahead of the one-hundred percent new activation benchmark applicable to Tier III carriers.

### **SouthernLINC Wireless has a Clear Path to Full Compliance**

SouthernLINC Wireless has continued to put substantial effort into migrating as much of its customer base as possible to location-capable handsets through the reflashing of handsets affected by the A-GPS software problem and through upgrading customers to new location-capable handsets, and it is continuing on its path to full compliance through aggressive marketing, promotional, outreach and other efforts to encourage subscriber adoption of location-capable handsets as quickly as possible.

For example, through the first three quarters of 2005, SouthernLINC Wireless offered a \$50 rebate on almost all of its new handsets, thus making some handset models free or nearly free. In the third quarter of 2005, this offer was enhanced with the addition of a “buy-one-get-one-free” offer on certain handset models, an offer that has since been extended to all of SouthernLINC Wireless’s new handset models for the fourth quarter of 2005. In addition, these special promotional offers have been made available not only to new customers, but also to existing customers in an effort to convince them to upgrade to a new location-capable handset.

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<sup>3</sup> / The only other new handset in SouthernLINC Wireless’s handset offering at this time was the non-location capable r750, a specialized unit designed to appeal to a select customer segment needing a ruggedized, high-powered unit with certain advanced features.

<sup>4</sup> / We note that, pursuant to the Commission’s *Non-Nationwide Carriers Order*, SouthernLINC Wireless was not required to ensure that all of its new handsets were location-capable until November 30, 2004.

SouthernLINC Wireless has also linked its A-GPS reflash/upgrade efforts with its 800 MHz rebanding program. As the Commission is well aware, SouthernLINC Wireless is required to move its services to a different frequency position in the 800 MHz band throughout its entire network, which requires physically touching hundreds of thousands of existing subscriber handsets in order to either update them with a new bandmap or, if the customer agrees to an equipment upgrade instead, to collect the old handset and replace it with a new handset containing both the new bandmap and location-capability.

For example, SouthernLINC Wireless's initial communication to customers in April 2005 regarding rebanding not only addressed rebanding but also reminded customers using the affected A-GPS handsets that they should have received the above-described "self-update kit" and how these kits should be used to address the A-GPS problem. The letter further advised customers that they could reorder the kit if necessary, and it also explained how customers could take advantage of handset promotions and upgrade to new handsets, all of which would be location-capable.

Beyond written communications to customers, SouthernLINC Wireless has used other events to address A-GPS reflashing in addition to rebanding. Among the outreach efforts it has conducted regarding rebanding and location-capability, SouthernLINC Wireless regularly holds "Customer Appreciation Days" where it invites customers to visit a SouthernLINC Wireless booth at various government conferences, trade shows, fairs, and other community events to have their handsets rebanded and reflashed, and where SouthernLINC Wireless takes the opportunity to persuade customers with older model handsets to upgrade to new rebanded and location-capable handsets by describing the advantages of these capabilities and presenting them with special upgrade offers. SouthernLINC Wireless will have conducted fifteen of these "Customer Appreciation Day" events between May and November of 2005.

In addition, SouthernLINC Wireless held a three-day "Call a Customer" campaign in September 2005, reaching several thousand existing SouthernLINC Wireless customers in order to discuss rebanding and A-GPS reflashing with them. SouthernLINC Wireless service technicians also make free site visits to customers with 20 or more handsets (*i.e.*, enterprise and government customers) to carry out rebanding and A-GPS upgrades.

SouthernLINC Wireless's efforts have been successful in increasing the level of penetration of location-capable handsets among its subscriber base, both through customer handset upgrades and the activation of new location-capable handsets for new customers. Through these efforts, SouthernLINC Wireless has succeeded in raising its penetration level of location-capable handsets from zero in July 2004 (after the A-GPS defect struck) to approximately 43% in just over one year. SouthernLINC Wireless intends to continue these and similar activities and campaigns until its penetration level reaches at least ninety-five percent.

However, SouthernLINC Wireless notes that it has also experienced difficulties with customer resistance to replacing or upgrading existing handsets. Although some resistance should be

expected for various reasons that have been discussed in this docket by CTIA, NARUC, and others (*e.g.*, the burden and inconvenience of learning new functions, transferring stored information, changing out accessories, etc.), SouthernLINC Wireless has been surprised by the degree of customer resistance it is encountering.

As SouthernLINC Wireless previously described in its Request for Waiver, a significant percentage of its customer base consists of enterprise or government agency subscribers who generally have long-term equipment upgrade cycles and who have been resistant to upgrading due to the significant burdens imposed by operational constraints and the need to change out equipment on an account-wide (rather than handset-by-handset) basis. SouthernLINC Wireless is also encountering resistance from customers who are unwilling to replace their existing 1 watt and 3 watt units with the new 0.6 watt location-capable handsets.

As an example of this problem, part of the joint SouthernLINC Wireless/Motorola effort to address the A-GPS software problem included a program whereby government customers would receive – free of charge – a new or refurbished replacement handset directly from Motorola. However, fewer than one percent of SouthernLINC Wireless’s government customers have chosen to take advantage of this offer.

Another example is provided by SouthernLINC Wireless’s efforts to carry out location-capable software or handset upgrades in conjunction with its rebanding efforts. Even though the handset rebanding process is not yet complete, over 16,000 subscribers with non-A-GPS-equipped handsets have thus far elected to have a new bandmap installed on their existing handset rather than upgrade to a location-capable handset, despite generous upgrade offers and efforts to convince them of the benefits of upgrading.<sup>5</sup>

These examples illustrate a good portion of the challenge SouthernLINC Wireless faces regarding handsets. Even when cost and inconvenience – two major factors when customers do decide to upgrade – are overcome for customers, they will frequently choose to keep their existing handsets.

Nevertheless, SouthernLINC Wireless anticipates that, with additional time, it should be able to carry out enough customer software and handset upgrades that, together with the addition of new subscribers with new location-capable handsets, the level of ninety-five percent penetration will be reached. SouthernLINC Wireless has already made significant progress in just one year through its marketing, promotional, and outreach efforts, and SouthernLINC Wireless anticipates even further progress as more of its enterprise and government agency customers (who make up a significant portion of its subscriber base) enter their equipment replacement cycles over the

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<sup>5</sup> / These subscribers make up just over five percent of SouthernLINC Wireless’s overall subscriber base, and this group alone would be sufficient to prevent SouthernLINC Wireless from achieving ninety-five percent penetration of location-capable handsets by December 31, 2005.

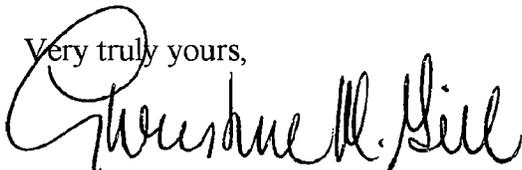
next one-to-two years and are prepared to upgrade their handsets. SouthernLINC Wireless also expects its penetration level to increase in conjunction with rebanding.

Finally, SouthernLINC Wireless again submits that the grant of its requested waiver would be in the public interest and would have no adverse affect on public safety. As demonstrated in its Request for Waiver and in subsequent filings with the Commission, SouthernLINC Wireless has been diligent in fulfilling its E911 responsibilities and has consistently communicated and coordinated in good faith with PSAPs and public safety representatives in its service territory regarding all aspects of E911 implementation. This is illustrated in the numerous letters submitted by PSAPs in SouthernLINC Wireless's service territory supporting its waiver request, as well as by SouthernLINC Wireless's record of timely responding to all PSAP Phase I and Phase II implementation requests it has received (and of the requests still pending, all have been pending for less than six months).

However, SouthernLINC Wireless notes that, while it has timely responded to all of the PSAP requests it has received, fewer than twenty percent of the PSAPs in its service area are currently capable of receiving its data, while fewer than fifty percent have even requested Phase I service. In other words, even if every single SouthernLINC Wireless subscriber had a location-capable handset today, they would still be unable to receive Phase II E911 service in most of SouthernLINC Wireless's service territory. Therefore, the requested limited extension of time for achieving ninety-five percent penetration of location-capable handsets would have little effect on public safety.<sup>6</sup>

For these reasons, SouthernLINC Wireless submits that the grant of the requested waiver would enable SouthernLINC Wireless to continue focusing its efforts on getting location-capable handsets into the hands of as many consumers as possible as quickly as possible without compelling its customers to unwillingly replace their existing handsets with new handsets that, depending on where the customer is located, may not be able to deliver E911 Phase II service or may not even be capable of providing any service whatsoever.

Very truly yours,



Christine M. Gill

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<sup>6</sup> / SouthernLINC Wireless also notes that the limited availability of actual Phase II E911 service in its footprint makes it highly problematic for SouthernLINC Wireless to strongly promote Phase II E911 safety benefits as a reason for its customers to replace their existing handsets, since this could present serious liability issues if customers were to develop an expectation of a service that they cannot, in fact, receive.