

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

In the Matter of)
)
Revision of the Commission's Rules to) CC Docket No. 94-102
Ensure Compatibility with Enhanced)
911 Emergency Calling Systems)
)
Wireless E911 Phase II Implementation)
Plan of Nextel Communications, Inc.)

**NEXTEL COMMUNICATIONS, INC.
PHASE I AND PHASE II E911 QUARTERLY REPORT
MAY 1, 2003**

**To: Chief, Enforcement Bureau
Chief, Wireless Telecommunications Bureau**

INTRODUCTION

Pursuant to the October 12, 2001 Order of the Federal Communications Commission ("Commission") in CC Docket No. 94-102,¹ Nextel Communications, Inc. ("Nextel") respectfully submits this Enhanced 911 ("E911") Quarterly Report on its implementation of Phase I and Phase II E911. Nextel achieved its first Phase II benchmark, October 1, 2002, when it began selling and activating an Assisted Global Positioning Satellite ("A-GPS") handset. Since that date Nextel has begun selling a second A-GPS handset model and has launched 42 Public Safety Answering Point ("PSAP") areas with Phase II service that encompass 121 PSAPs. Herein, Nextel provides an update on all relevant events impacting handset upgrades and network infrastructure necessary to enable Phase II E911 location capabilities as well as a listing

¹ *In the Matter of Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Wireless E911 Phase II Implementation Plan of Nextel Communications, Inc.*, Order, CC Docket No. 94-102, FCC 01-295, released October 12, 2001 ("Nextel Waiver Order").

of all pending requests for Phase I and Phase II E911 service and the status of each request.

BACKGROUND

Pursuant to the Nextel Waiver Order, the Commission imposed on Nextel the following Phase II E911 implementation plan:

- October 1, 2002:* Begin selling and activating A-GPS-capable handsets;
- December 31, 2002:* Ensure that at least 10% of all new handsets activated are A-GPS-capable;
- December 1, 2003:* Ensure that at least 50% of all new handsets activated are A-GPS-capable;
- December 1, 2004:* Ensure that 100% of all new digital handsets activated are A-GPS-capable;
- December 31, 2005:* 95% of all subscriber handsets in service are A-GPS-capable.²

As Nextel has detailed in its previous Reports,³ Nextel and Motorola began developing an A-GPS capability for Nextel's integrated digital enhanced network ("iDEN") technology in the Fourth Quarter of 2000, prior to the Commission granting Nextel's waiver request. Launching a complicated technology to first calculate, and then deliver, location information from an iDEN handset to a PSAP, particularly in the compressed timeline demanded by the Nextel Waiver Order, required unprecedented efforts and coordination among numerous entities. These extraordinary efforts and the multi-party coordination continue as Nextel deploys individual PSAPs.

² Nextel Waiver Order at ¶37.

³ See, e.g., *Nextel Communications, Inc. Phase I and Phase II E911 Quarterly Report*, CC Docket No. 94-102 (Nov. 1, 2002) ("Nextel's November Report"); *Nextel Communications, Inc. Phase II E911 Quarterly Report*, CC Docket 94-102 (Aug. 1, 2002); *Nextel Communications, Inc. Phase II E911 Quarterly Report*, CC Docket 94-102 (May 1, 2002).

DISCUSSION

A. A-GPS Capable Handsets

Following the launch of its first A-GPS capable handset, the i88s, on October 1, 2002 in compliance with its first Phase II implementation benchmark, Nextel launched its second A-GPS capable handset, the i58sr, on January 1, 2003. Nextel continues to work with its sole handset vendor, Motorola, to develop additional A-GPS capable models, which are anticipated to be commercially launched later in 2003. Nextel, via an independent third-party consultant, completed accuracy testing of its A-GPS handsets prior to its October 1, 2002 benchmark date and met the Commission's accuracy standards. Per Nextel's Waiver Order, the next deployment benchmark period on which Nextel must report ends on November 30, 2003. Nextel will report on that benchmark in its February 2004 Quarterly Report.⁴

B. Network Infrastructure

Nextel continues to commit significant resources and personnel to deploy PSAPs as rapidly as possible and has made noteworthy progress since its February Report, including testing and deploying a second Phase II deployment methodology using Emergency Services Routing Digits ("ESRD"). Moreover, because of complexities inherent in deployments and despite rigorous network and component testing by Nextel and Motorola prior to its October 1, 2002 Phase II launch, Nextel continues to discover end-to-end connectivity issues in some cases.

⁴ Nextel's Waiver Order states that "Nextel must report, in the Quarterly Report immediately following the benchmark date...for the periods of December 31, 2002 to November 30, 2003..., the percentage of new handsets activated nationwide during the respective periods that were A-GPS capable, as well as the total number of new handsets during those periods that were A-GPS capable." Nextel Waiver Order at ¶ 32.

As Nextel noted in its February Report, some PSAPs require a Phase II solution using ESRD rather than emergency services routing key (“ESRK”), which is the solution Nextel supported when it launched its Phase II technology.⁵ In an attempt to satisfy these requests, Nextel began analyzing an ESRD solution for its iDEN network and remained in contact and committed to working with PSAPs from those areas requiring the ESRD solution.⁶ Adjusting Nextel’s interconnectivity to support the use of ESRD was anticipated to create possible integration issues involving Nextel, the local exchange carrier (“LEC”), and Nextel’s third party vendor, Intrado.

After conducting extensive testing on its own network over the last few months, Nextel commenced testing its ESRD solution in a live market, referred to as a First Office Application (“FOA”), on March 10, 2003 in Spartanburg, South Carolina. Certain system integration issues and technical interconnectivity problems were not detected until the FOA, which resulted in the PSAP having to manually rebid twice to receive Phase II information. At Nextel’s request, Intrado and the LEC (BellSouth) investigated this issue for over a week and determined that timers in the LEC network caused certain Phase I information not to be available to the PSAP at initial call setup. Specifically, the need for two manual rebids resulted from interactions between timer settings in the LEC network as well as data availability in Nextel’s Gateway Mobile Location Center (“GMLC”) and the Intrado automatic location information (“ALI”) network. It was also determined that

⁵ Either ESRK or ESRD is a technologically acceptable signaling solution to allow the PSAP to obtain E911 Phase II information from the wireless carrier’s network. ESRK may also be referenced as non-call path associated signaling (“NCAS”) or wire line compatibility mode and ESRD may be referenced as hybrid call path associated signaling (“HCAS”).

⁶ As Nextel explained in previous Quarterly Reports, some PSAPs have requested that Nextel transmit the textual street address (i.e. 123 Main Street) of the cell site rather than (or in addition to) the latitude and longitude of the cell site. Nextel’s ESRD solution provides PSAPs that textual information.

these network timer settings could not be changed immediately without impacting other wireless carriers, landline customers and PSAP operations.

The PSAP accepted this ESRD Phase II solution, although it requires two manual rebids, and Nextel exited its FOA on March 28, 2003. Nextel continues to work with its vendors to fine-tune its ESRD solution and anticipates, absent unexpected technological problems or delays, to deliver enhancements in the near term. This unusually efficient deployment resulted from the cooperative efforts of all parties including the PSAP, BellSouth, Nextel and Intrado. Likewise, Nextel has experienced cooperation and good faith efforts in other deployments with many parties who are committed to deploying E911 as rapidly as possible.

In fewer than six weeks after exiting its ESRD FOA in Spartanburg, Nextel has deployed its ESRD Phase II solution in 3 other areas served by BellSouth including Guilford County, North Carolina; City of High Point, North Carolina; and the City of Greensboro, North Carolina, and currently is deploying Miami-Dade County, Florida. During this same time, Nextel also has deployed or commenced deployment of its ESRD Phase II solution with PSAPs and LECs in other areas of the country including Bond County, Illinois; SouthCom, Illinois (Ameritech) and the State of Connecticut (Southern New England Telephone). Furthermore, Nextel is scheduled to commence deployment of its ESRD Phase II solution with Los Angeles County, California (PacBell) in mid-May. Simultaneously, Nextel has continued to work with and aggressively deploy its ESRK Phase II solution to numerous other PSAPs throughout the country.

As Nextel has noted in its previous reports, the complexities of deployment may create unexpected, temporary delays even after a particular technology has been deployed

successfully many times. For example, when Nextel commenced deployment of its ESRK Phase II solution with Marion County, Florida, the parties discovered unexpected customer premises equipment (“CPE”) timer issues. Although delay occurred while additional testing was conducted to identify and isolate the problem, the issue was resolved with the cooperation of all parties and the PSAP was deployed successfully.

Nextel remains committed to working cooperatively with PSAPs throughout the country and to deploying E911 as efficiently as possible. Nextel will continue to dedicate significant resources to maintain its aggressive roll out schedule of its Phase I and ESRK and ESRD Phase II solutions.

C. Phase I Requests

With respect to the Commission’s requirement that Nextel provide “information on all pending Phase I and Phase II requests,”⁷ Nextel has attached Exhibit A listing all of its 193 pending Phase I requests and their current status.⁸ For all on-going Phase I deployment efforts, Exhibit A provides a list of every pending Phase I request, the name of the PSAP, the date of the request, whether or not the request is valid,⁹ its status, an explanation of the delay if the request is older than six months,¹⁰ and an anticipated Phase

⁷ See Nextel Waiver Order at ¶32.

⁸ In many cases a PSAP area listed in Exhibit A and Exhibit C represents multiple local PSAPs.

⁹ Per Nextel’s Waiver Order, Nextel is required to report whether it believes each deployment request is (or is not) valid. See Nextel Waiver Order at ¶32. On March 24, 2003 Nextel filed a letter in WT Docket No. 03-76 stating that Nextel has been and continues to be in contact with PSAPs that have requested Phase I or Phase II service and will deploy these PSAPs as soon as possible pursuant to a mutually agreeable implementation schedule. Thus, Nextel is complying herein with the Commission’s requirement that it mark as “valid” or “invalid” each PSAP request, although as a practical matter, Nextel’s deployment team is working with each and every PSAP listed in Exhibits A and C to deploy them as soon as possible pursuant to a mutually agreed-upon time frame.

¹⁰ In some cases there are delays caused by technology issues. Such delays do not necessarily mean that the PSAP or Nextel is not “ready” for Phase I service. Rather, it often means there are issues involving incompatible technologies between Nextel, the LEC and/or the PSAP. See also note 8 herein.

I launch date. The proposed deployment dates in Exhibit A are *target launch dates*, which Nextel and the relevant PSAP are striving to meet. Nextel is in regular contact with each of these PSAPs and is working to deploy Phase I E911 as soon as possible. Nextel has fully deployed Phase I E911 service with 780 PSAPs, which are listed on Exhibit B.

With regard to Exhibit A, Nextel reiterates herein that Phase I E911 deployments, similar to Phase II deployments, continue to be complicated by a number of factors – many of which are outside of Nextel’s control. As Nextel outlined in its May 18, 2001 letter to the Wireless Telecommunications Bureau,¹¹ there are essentially five stages of Phase I deployment and issues that arise in any of these areas can cause delay in the deployment effort. The five stages are:

- (1) Data Collection – Nextel collects from the PSAP and LEC information necessary to understand the equipment used by the PSAP and LEC, the capacity of the particular 911 system, and the location of certain equipment (e.g., Selective Routers, dispatch centers), among other things.
- (2) Network Recommendation – Based on the data collected, Nextel determines how it will route calls to the Selective Router(s), e.g., how many trunks will be needed based on the number of Selective Routers, which MSC will be routed to each Selective Router and the trunking capacity needed for each Selective Router based on load analyses.
- (3) Routing Decisions/Awaiting Trunk Orders – Using the information collected in the first two phases, Nextel places trunk orders with the LEC. Trunk delivery typically requires 30 to 60, and sometimes 90, days. Once delivered, the trunks are tested. If for any reason the trunks fail the testing process, Nextel is typically required by the LEC to start over – adding an additional 30, 60 or 90 days to the trunk deployment process.

During this time, Nextel and the affected PSAP(s) map out the routing of all 911 calls in the area, ensuring that every 911 call from every Nextel cell site or cell sector is transmitted to a predetermined PSAP. Where multiple PSAPs

¹¹ *In the Matter of Revision of the Commission’s Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Letter to Kris Monteith, Chief, Policy Division, Wireless Telecommunications Bureau, from Lawrence R. Krevor, Vice President-Government Affairs, May 18, 2001.

are involved, or in areas on the border of adjacent PSAPs, this process often requires substantial time, cooperation and joint efforts by all parties.

- (4) ALI Database Load – Nextel assigns each cell site (or cell sector) a pseudo ANI (“P-ANI”) (a ten-digit telephone number that identifies that particular cell site or sector), and then loads that information into the LEC’s ALI database. This, too, requires input and cooperation from both the LEC and PSAP to ensure the information is loaded correctly to display on the PSAP’s computer terminals in the requested format.
- (5) Carrier Test – This is the final stage of Phase I deployment, ensuring that the 20 digits are transmitted to the correct PSAP and displayed appropriately on the PSAP dispatcher’s screen. Testing must be conducted in coordination with each PSAP to avoid burdening the PSAP during busy times and to preclude inadvertent false calls.

As noted above, some of the listed Phase I requests in Exhibit A are more than six months old. For each of those requests, Nextel includes an explanation of the delay based on the five stages listed above.

D. Phase II Requests

Exhibit C addresses Nextel’s ongoing Phase II deployment efforts, providing a list of every pending Phase II request, the name of the PSAP, the date of the request, whether or not the request is valid,¹² its status, an explanation of the delay if it is “on hold,” and an anticipated Phase II launch date.¹³ Nextel has received Phase II service requests in 198 PSAP areas and has asked that each of these PSAPs provide the documentation required in the *Richardson Order* for determining the request’s validity.¹⁴

¹² See note 9 herein.

¹³ *Id.*

¹⁴ See generally, *In the Matter of Revision of the Commission’s Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petition of City of Richardson*, Order On Reconsideration, CC Docket No. 94-102, FCC 01-293, released November 26, 2002. See also, *Revision of the Commission’s Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, *Order on Reconsideration*, rel. Nov. 26, 2002.

As in Exhibit A, the proposed deployment dates in Exhibit C are *target launch dates, which Nextel and the relevant PSAP are striving to meet*. Nextel reiterates that accomplishing such deployments is subject to numerous factors and parties outside of Nextel's control; thus, Nextel's deployment schedule establishes a goal toward which Nextel will work. It is likely, however, that complexities will be encountered that will delay some PSAP deployments. Nextel is in regular contact with each of these PSAPs and is working to deploy Phase II E911 as soon as possible within mutually agreed upon time frames.

LEC "holds" in some areas have prevented Phase II deployments. For example, in the territories served by Qwest, the LEC advised Nextel that deployments cannot commence until tariffs or contracts with PSAPs have been approved. In those service territories where tariff issues have been resolved, Nextel is in the process of scheduling all PSAPs that are ready to deploy Phase II. Nextel, moreover, is prepared to begin deployments in those Qwest regions still awaiting final tariffs/contracts, and will deploy Phase II service as rapidly as possible within mutually agreeable time frames when these issues have been resolved. However, because Nextel's human capital is a finite resource and, in light of the technical complexities often involved with deployments, Nextel cannot possibly deploy all Qwest-area PSAPs simultaneously. Rather, once the tariff issues are resolved, Nextel will work with each PSAP to arrange a mutually agreeable deployment schedule and deploy service as quickly as possible.

Since October 1, 2002, its first implementation benchmark, Nextel has deployed Phase II service in 42 PSAP areas, which are listed in Exhibit D, encompassing 121 PSAPs. Nextel has deployed Phase II service in The State of Delaware; Marion County,

Florida; Sumter County, Florida; Bond County, Illinois; Cook County, Illinois; SouthCom, Illinois; St. Clair County, Illinois; Village of Lansing, Illinois; Allen County; Indiana; Bartholomew County, Indiana; Delaware County, Indiana; Hamilton, Indiana; DeKalb County, Indiana; Hancock County, Indiana; Miami County, Indiana; Madison County, Indiana; Monroe County, Indiana; Noblesville, Indiana; Steuben County, Indiana; Tippecanoe County, Indiana; Shelby County, Indiana; Johnston County, North Carolina; Randolph County, North Carolina; Guilford County, North Carolina; City of High Point, North Carolina; City of Greensboro, North Carolina; Delaware County, Ohio; Hocking County, Ohio; Delaware County, Pennsylvania; The State of Rhode Island; Spartanburg, South Carolina; Bexar Metro, Texas; City of Dallas, Texas; Denton County, Texas; Galveston, Texas; Greater Harris County, Texas; Montgomery, Texas; City of Richardson, Texas; Tarrant County, Texas; City of Hampton, Virginia; and York County, Virginia. Nextel remains actively engaged with other PSAPs at multiple locations and anticipates deploying Phase II service in additional areas in the near future, consistent with mutually agreeable timeframes.

CONCLUSION

As required in the Nextel Waiver Order,¹⁵ Nextel is providing this Quarterly Report to the Executive Directors and counsel of the Association of Public Safety Communications Officials-International, Inc. (“APCO”), the National Emergency Number Association (“NENA”) and the National Association of State Nine One One Administrators (“NASNA”). Should any of these organizations or their individual PSAP members have questions or concerns about Nextel’s submission, Nextel encourages them

¹⁵ Nextel Waiver Order at ¶32.

to contact Laura Holloway, at the number listed below, as soon as possible to facilitate rapid and efficient deployment of Nextel's Phase I and Phase II E911 services.

Respectfully submitted,
Nextel Communications, Inc.

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May 1, 2003

CERTIFICATE OF SERVICE

I, Laura Holloway, hereby certify that on this 1st day of May 2003, I caused a copy of the attached Phase II E911 Quarterly Report of Nextel Communications, Inc. to be served via Federal Express or First Class Mail to the following:

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