

Before the
Federal Communications Commission
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL
RECORDS ROOM

In the Matter of)
)
)
Revision of the Commission's Rules To Ensure)
Compatibility with Enhanced 911 Emergency)
Calling Systems)
)
Request for Waiver by Sprint Spectrum L.P. d/b/a)
Sprint PCS)

2001 OCT 18 P 2:13
CC Docket No. 94-102
/ED

ORDER

Adopted: October 2, 2001

Released: October 12, 2001

By the Commission: Chairman Powell issuing a separate statement; Commissioners Abernathy and Martin issuing separate statements; Commissioner Copps concurring and issuing a statement.

I. INTRODUCTION

1. In this Order, we approve, in part, Sprint Spectrum L.P. d/b/a Sprint PCS (Sprint)'s individual Phase II compliance plan. Under the plan, as approved, Sprint will deploy an assisted Global Positioning Satellite (A-GPS) solution for its Code Division Multiple Access (CDMA) network. Sprint must have begun selling and activating a single A-GPS-capable handset model on October 1, 2001, will ensure that 25% of all new handsets activated are location-capable by July 31, 2002, and will ensure that 100% of new digital handsets activated are location capable by December 31, 2002.¹ These handsets will meet the Commission's accuracy standards for handset-based solutions from the date of initial deployment. With respect to network infrastructure, Sprint must complete its Phase II conversion of all Lucent switches by May 30, 2002 and the conversion of all Nortel switches by August 1, 2002.² We, however, allow Sprint until December 31, 2002 to complete all outstanding valid Public Safety Answering Point (PSAP) requests for Phase II service that it receives before July 1, 2002.³ Valid PSAP requests received on or after July 1, 2002 shall be processed within six months in accordance with our current rules. We also impose a quarterly reporting requirement, including reporting on Phase I deployment, to begin February 1, 2002. Therefore, we grant Sprint a temporary conditional waiver of the Commission's wireless E911 Phase II rules to allow implementation of this plan.

2. With this Order, along with the companion wireless E911 orders adopted today, the Commission clears the way for the start of actual deployment of E911 Phase II. The deployment plans

¹ See Sprint PCS Supplemental Phase II Implementation Report and Request for Temporary and Limited Waiver, CC Docket No. 94-102 (filed July 30, 2001) (*Sprint Request*); Sprint PCS Reply Comments and Further Supplemental Report, CC Docket No. 94-102, at 11-12 (filed September 4, 2001) (*Sprint Reply Comments*) (proposing a 10% benchmark by December 31, 2001 and a 30% benchmark by June 30, 2002). Comments and Reply Comments filed in response to the *Sprint Request* are listed in Appendix A.

² See Sprint PCS Further Supplemental Phase II Implementation Report, CC Docket No. 94-102 (filed September 20, 2001) (*Sprint September 20th Supplemental Report*).

³ *Sprint Request* at 6.

approved in these orders apply to carriers who serve more than 75 percent of all subscribers for wireless phone service in the United States. Under these plans the major national carriers will begin deploying technologies to locate wireless 911 callers within the next several months. They also should achieve complete deployment of Phase II, in full compliance with the Commission's accuracy standards, in all areas across the nation where 911 call centers are ready and able to use this information by the end dates in the existing Commission rules – *i.e.*, no later than December 31, 2005. These carriers must implement Phase II in accordance with the terms of these approved schedules or they will be subject to enforcement action by the Commission. The Quarterly Reports to be filed by these carriers will allow the Commission to monitor the pace and overall progress of Phase I and Phase II deployment, and to facilitate the prompt enforcement of the milestones and other requirements of the plans approved today.

3. Despite the substantial progress to date, especially given the groundbreaking nature of these technologies, much remains to be done to achieve the FCC's fundamental goal of having wireless E911 Phase II capabilities deployed throughout the country. All necessary participants – carriers, the public safety community, technology vendors, network equipment and handset vendors, local exchange carriers, and this Commission – must continue to work aggressively in the coming months and years to ensure the promise of these new life saving technologies becomes a reality.

II. BACKGROUND

A. Phase II Framework

4. Under Phase II of the Commission's wireless E911 rules, wireless carriers are required to provide the location of wireless 911 callers, a capability known as Automatic Location Identification (ALI).⁴ In establishing those rules, the Commission sought to be technologically and competitively neutral, allowing any location technology to be used that can comply with specified accuracy, reliability, and deployment schedule requirements. For example, the rules provide that handset-based location solutions must provide the location of wireless 911 calls with an accuracy of 50 meters for 67 percent of calls and 150 meters for 95 percent of calls.⁵ Carriers using a handset-based solution also must begin to offer one entry-level model with location capability no later than October 1, 2001 and must ensure that 95 percent of their customers have location capable handsets no later than December 31, 2005.⁶

5. For carriers choosing a network-based solution, the rules provide that the technology must report the location of wireless 911 calls with an accuracy of 100 meters for 67 percent of calls and 300 meters for 95 percent of calls.⁷ A carrier using a network-based solution must provide ALI to 50 percent of its coverage area, or 50 percent of its population, beginning on October 1, 2001 or within 6 months of a PSAP request, whichever is later, and to 100 percent of callers within 18 months of that request or by October 1, 2002, whichever is later. Wireless carriers subject to the rules were directed to report their Phase II plans, including the technologies they plan to use, by November 9, 2000.⁸

6. During the course of the E911 proceeding, the Commission recognized that the E911 deployment schedule was aggressive in light of the need for further technological advancement. Nonetheless, the Commission predicted that ALI technologies would generally be available in sufficient

⁴ See *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676 (1996). For additional information regarding the Commission's wireless E911 program, see <www.fcc.gov/e911>.

⁵ 47 C.F.R. § 20.18(h)(2).

⁶ 47 C.F.R. § 20.18(g).

⁷ 47 C.F.R. § 20.18(h)(1).

⁸ 47 C.F.R. § 20.18(i). See www.fcc.gov/e911, Wireless E-911 Phase II Automatic Location Identification Implementation, Reports From Wireless Carriers.

time for carriers to comply⁹

7. The Commission also recognized, however, that requests for waiver may be justified based on specific showings and discussed standards for such requests in the *E911 Fourth Memorandum Opinion and Order*.¹⁰ In the *E911 Fourth Memorandum Opinion and Order*, we explained that we would expect requests for waiver to be specific, focused, and limited in scope, with a clear path to full compliance.¹¹ We also stated that carriers should undertake concrete steps necessary to come as close as possible to full compliance and should document their efforts, including the solutions they considered and why none could be employed in a way that complies with our Phase II rules. Finally, we stated that carriers should not expect to defer implementing a location solution if one is available and feasible.¹²

B. Summary of Sprint's Implementation Plan and Request

8. Wireless carriers subject to the E911 rules were directed to report details regarding their Phase II implementation plans, including the technologies they plan to use, by November 9, 2000.¹³ After the Commission denied Sprint's request for a waiver to use an ALI technology called Forward Link Triangulation (FLT) in conjunction with Advanced FLT (AFLT) as its sole Phase II solution,¹⁴ on November 9, 2000, Sprint submitted a Phase II implementation report advising the Commission that it intended to use an assisted-GPS ALI solution for its CDMA network.¹⁵

9. On July 30, 2001, and September 20, 2001, Sprint provided supplemental information on its Phase II efforts, and requests relief from the Phase II rules to permit it to deploy an assisted¹⁶ Global Positioning Satellite (GPS) solution throughout its CDMA network. Specifically, Sprint requests relief from the Phase II requirement that carriers' network infrastructure must be capable of supporting Phase II service as early as October 1, 2001.¹⁷ Sprint's proposed ALI solution requires conversion of its Lucent

⁹ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442, 17457-58 (2000) (*E911 Fourth Memorandum Opinion and Order*).

¹⁰ *Id.*

¹¹ *Id.* at 17457, para. 44.

¹² *Id.* at 17457-58, paras. 44-45.

¹³ 47 C.F.R. § 20.18(i). See *Wireless Telecommunications Bureau Provides Guidance on Carrier Reports on Implementation of Wireless E911 Phase II Automatic Location Identification*, DA 00-2099, Public Notice (rel. Sept. 14, 2000).

¹⁴ On February 4, 1999, well before the reporting deadline, Sprint proposed a phased implementation of a hybrid solution. See *Sprint Spectrum L.P. Waiver Request*, CC Docket 94-102 (filed February 4, 1999). The *E911 Third Report and Order* dismissed that petition as moot based on rule changes that permit carriers to phase in ALI-capable handsets. *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Third Report and Order, 14 FCC Rcd 17388 (1999) (*E911 Third Report and Order*). In its Petition for Reconsideration, however, Sprint renewed its request for authorization to use its proposed hybrid solution that would have used a baseline level of ALI for all its users. See *Sprint PCS Petition for Reconsideration*, CC Docket No. 94-102 (filed Dec. 6, 1999) (*Sprint Petition for Reconsideration*). The Commission denied Sprint's FLT/AFLT proposal. See *E911 Fourth Memorandum Opinion & Order*, 15 FCC Rcd at 17459, para. 48.

¹⁵ Joint Sprint PCS Phase II Implementation Report, CC Docket 94-102 (filed Nov. 9, 2000) (*Sprint Nov. 9th Implementation Report*).

¹⁶ Sprint uses the terms "aided" and "assisted" interchangeably. Sprint previously agreed to pursue an assisted GPS solution. Compare *Sprint Request* at 7 to *Sprint Nov. 9th Implementation Report* at 4.

¹⁷ See 47 C.F.R. §20.18 (g)(2); *Sprint Request* at 4.

and Nortel Mobile Switching Center (MSC) switching software.¹⁸ Sprint originally stated that it would begin to deploy its switch upgrades by October 1, 2001, but due to switch vendor delay, modified this date by two months.¹⁹ In addition, Sprint estimated that it will need months to fully complete the Phase II conversion of all of its Lucent switches as well as other necessary equipment upgrades, and thus provided a detailed schedule for rolling out Phase II service.²⁰ Nevertheless, Sprint commits to complete the roll out of Lucent switch upgrades by May 30, 2002.²¹

10. Sprint also stated that Nortel has been unable to make available the necessary Phase II modifications for commercial deployment by the October 1, 2001 deadline.²² In its September 20, 2001 filing, Sprint indicated that it recently began testing Nortel switch software modifications and that it should begin to make the necessary upgrades to its Nortel switches in First Quarter 2002.²³ Sprint stated that given the number of markets involved in its national network, Sprint would also need months to phase in Nortel's switching software.²⁴ Nevertheless, Sprint commits to have fully deployed its Nortel switch upgrades by August 1, 2002.²⁵

11. In addition, Sprint requests certain relief from the Commission's Phase II handset activation requirements.²⁶ Sprint stated that it expected to begin selling location-capable handsets by the Commission's October 1, 2001 deadline, with 100% of all new handsets sold being GPS-compatible by December 31, 2002.²⁷ However, Sprint indicated that it is unlikely that it would meet the interim activation levels specified in the Phase II rules (25% of all new handsets by December 31, 2001 and 50% of all new handsets by June 30, 2002) due to the conversion of the Sprint network to third-generation (3G) technology.²⁸ As such, Sprint proposes activation levels of 10% of all new handsets by December 31, 2001, and 30% of all new handsets by June 30, 2002.²⁹

12. Sprint also requests relief from the requirement that it begin delivering Phase II service to a PSAP within six months of a request in order to permit Sprint to prioritize Phase II implementation.³⁰ Sprint stated that the volume of PSAP requests³¹ that must be processed and the custom network designs

¹⁸ Sprint states that it operates Lucent, Nortel and Motorola switches, and Nortel switches are currently replacing Motorola switches. *Sprint Request* at 14.

¹⁹ See *Sprint September 20th Supplemental Report* at 2-4.

²⁰ See *Sprint Request*, Appendix A (providing a conditional roll out schedule for the deployment of Phase II service for requesting PSAPs in Lucent markets, spanning from October 1, 2001 through October 15, 2002). Sprint subsequently modified this rollout schedule proposing to add two months to these dates based on delays in Lucent switching software. See *Sprint September 20th Supplemental Report* at 2-4.

²¹ See *Sprint September 20th Supplemental Report* at 4.

²² *Sprint Request* at 5.

²³ *Id.*; see also *Sprint September 20th Supplemental Report* at 2-3.

²⁴ *Sprint Request* at 5.

²⁵ Sprint Reply Comments at 13; Sprint did not provide a detailed schedule for rolling out Phase II service for PSAPs served by its Nortel switches.

²⁶ 47 C.F.R. §20.18(g)(2).

²⁷ *Sprint Request* at 3.

²⁸ *Sprint Request* at 5.

²⁹ Sprint Reply Comments at 12.

³⁰ *Sprint Request* at 6; *Sprint September 20th Supplemental Report* at 7-8.

³¹ Sprint states that PSAPs submitted 64 requests for Phase II implementations as of May 31, 2001, representing over 500 individual PSAPs. *Sprint Request* at 22.

that must be installed, make it unlikely that Sprint can engage in a simultaneous rollout of Phase II services based on PSAP requests received to date. Sprint requests that the six-month implementation window not be triggered until: (1) it has made the necessary switch upgrades; (2) it has completed installation of Phase I service using a delivery system compatible with Phase II; and (3) the ALI database provider has installed an interface compatible with Phase II service. Sprint further recommends that beginning on November 1, 2001, and continuing until it is in full compliance, Sprint submit quarterly reports to the Commission describing the status of its Phase II implementation.³²

C. Positions of Interested Parties

13. On August 2, 2001, Sprint's request for relief was placed on public notice.³³ AT&T Wireless Services, Inc. (AT&T) and the Cellular Telecommunications and Internet Association (CTIA) filed individual comments largely supportive of the request for relief, and Sprint and Qualcomm Incorporated filed reply comments in support of Sprint's request.³⁴ AT&T asserted that it is nearly impossible for many carriers, including itself and Sprint, to comply with the Commission's Phase II timeline given the current state of Phase II location technologies, and that Sprint's request also underscores carriers' problems with relying upon vendor claims.³⁵ AT&T also asserted that, like VoiceStream, Sprint has provided a detailed explanation of the technology-related issues and special circumstances supporting its request, and has provided a reasonable path to come into full compliance with the Commission's rules.³⁶ Similarly, CTIA asserted that Sprint has satisfied the Commission's standard for relief, and indicated that granting the relief would be consistent with the Commission's policy of technological neutrality.³⁷ On reply, Qualcomm takes note that Sprint's selected technology will enable the carrier to meet the Commission's accuracy rules for handset-based solutions, supports Sprint's decision to use chipsets with both position location and 3G technology, and asserts that there is no valid reason to deny the request for relief.³⁸ Qualcomm states that an interim location solution is not needed.

14. The National Emergency Number Association (NENA), the Association of Public Safety Communications Officials-International, Inc. (APCO) and the National Association of State Nine One One Administrators (NASNA) (Public Safety Organizations) filed joint comments opposing the request.³⁹ The Public Safety Organizations argue that in terms of handset deployment Sprint has placed its commercial interest in 3G technology ahead of the public interest in deploying available location-capable handsets, and that Sprint should provide an interim solution and contingency plan to back up the A-GPS proposal.⁴⁰ The Public Safety Organizations defer on the issue of deploying within six months of a PSAP's request.⁴¹

³² *Sprint Request* at 28.

³³ *WTB Seeks Comment on E911 Phase II Waiver Request Filed by Sprint Spectrum L.P.*, Public Notice, DA 01-1857 (rel. Aug 2, 2001).

³⁴ Comments and Reply Comments filed in response to the *Sprint Request* are listed in Appendix A.

³⁵ AT&T Comments at 1.

³⁶ AT&T Comments at 3-4.

³⁷ CTIA Comments at 3-4.

³⁸ Qualcomm Reply Comments at 1.

³⁹ Public Safety Organizations Comments at 5.

⁴⁰ Public Safety Organizations Comments at 4.

⁴¹ Public Safety Organizations Comments at 4-5.

III. DISCUSSION

15. We conclude that, based on the record, granting Sprint's proposed implementation plan and its request for relief subject to the modifications specified below is consistent with the Commission's standard for E911 Phase II relief. We analyze below this request under the standard for relief set forth in the *E911 Fourth Memorandum Opinion and Order*.

A. Sprint Has Satisfied the Commission's Standard for E911 Phase II Relief

16. *Plan That Is Specific, Focused, and Limited in Scope.* We conclude that Sprint's request for relief is specific, focused, and limited in scope. Sprint specifies that it plans to implement a handset-based solution, using assisted-GPS technology for its CDMA network and provides specific milestones for Phase II implementation for both its handsets and network upgrades. These deployment schedules are justified based on delays in the necessary technology. Significantly, Sprint does not seek relief from the Commission's accuracy requirements. Moreover, Sprint represents that it intended to meet the Commission's October 1, 2001, initial handset deployment date, and will meet the Commission's December 31, 2002, 100 percent activation level requirement, and the December 31, 2005, 95 percent penetration requirement.

17. Concerning network upgrades, Sprint explains that there will be delays in making the necessary upgrades to its CDMA network, because Lucent and Nortel have delayed the delivery of their switching software. Because Lucent could not deliver its switching software upgrade in a timely manner, Sprint requested that Lucent deliver a software patch for its current switch software that would support the delivery of Phase II data.⁴² However, when the software patch was initially delivered to Sprint's testing facilities it demonstrated a number of failures.⁴³ Sprint indicates that, when this happens, the failures have to be corrected and re-tested.⁴⁴ Sprint states that it recently began testing its GPS location systems in Rhode Island using this patch, but Lucent will not certify the software for use with live end-user customers. In September 2001, Lucent provided Sprint with a more mature version of the CDMA E911 Phase II software which is being tested by Sprint.⁴⁵ Lucent's target date for their software upgrade is now November 9, 2001.⁴⁶ Sprint's states that its initial projection for completing Phase II deployment in Lucent markets was based on the assumption that the software would be ready for deployment by October 1, 2001. Nortel, however, pushed back the delivery date until July of 2001 because it had not finished working on the software.⁴⁷ Sprint states that Nortel has only recently made the initial release of MTX 10, the software necessary for providing network support for Sprint's GPS-enabled phones available for testing.⁴⁸

18. Sprint also indicated that it placed timely orders with its vendors and pushed them to meet the Commission's deadlines.⁴⁹ Sprint purchased and installed Mobile Positioning Center (MPC) and Position Determining Equipment (PDE) components, which are necessary for the delivery of Phase II service, and

⁴² *Sprint Request* at 14; *Sprint September 20th Supplemental Report* at 3.

⁴³ *Sprint Request* at 14-15.

⁴⁴ *Id.*

⁴⁵ *Sprint September 20th Supplemental Report* at Attachment A, Letter from David Timpe, Lucent Technologies, dated September 18, 2001 to Susan Norris, AVP, Technology and Systems Development, Sprint PCS

⁴⁶ *Id.*

⁴⁷ See *Sprint Request* at Appendix C; Nortel Networks Verification (July 19, 2001).

⁴⁸ *Sprint September 20th Supplemental Report* at 3.

⁴⁹ *Sprint Request* at 27.

it ordered the requisite switching software in a timely manner.⁵⁰ Moreover, Sprint stated that it initially planned to launch a First Market Application (FMA) in the State of Rhode Island to permit Sprint to field test Phase II prior to the October 1, 2001 deadline, but because of delays by switch vendors Sprint has been forced to revise its schedule.⁵¹ In light of these delays in the availability of handsets and switch upgrades, and Sprint's apparent diligence in pursuing these necessary elements of Phase II service, based on the record evidence, Sprint's request for limited relief satisfies this element of the Commission's standard.

19. *As Close as Possible to Full Compliance.* Sprint demonstrates it has come as close as possible to full compliance with the Phase II rules, and has taken concrete steps toward full compliance. Sprint committed to use an A-GPS solution early in the process, signing contracts to deploy that solution. Sprint has invested thousands of hours and tens of millions of dollars over the past year toward developing and installing a compliant Phase II technology.⁵² Sprint has searched for technology vendors, collected data on location solutions, including network overlay solutions, explored using an AFLT solution, sought pricing and deployment information for a GPS system, filed its Phase II implementation report, and worked to secure location chipsets for the provision of Phase II service.⁵³ Sprint committed to purchase commercial quantities of Qualcomm chipsets to meet the Commission's October 1, 2001 deadline. Significantly, Sprint will ensure that 100 percent of all new handsets will be GPS-enabled by the Commission's December 31, 2002 deadline.⁵⁴

20. Moreover, Sprint has worked to make Phase II upgrades to its network, but the delivery of switching software has been delayed. The Commission recognizes that delays in the delivery of manufacturers' Phase II switching software are not unique to Sprint. As Lucent recently advised the Commission, due to the complexity of Phase II solutions and the need for complete testing, no manufacturer has an E911 solution that will be commercially available in time for carriers to meet the current Phase II deadline.⁵⁵ Similarly, Nortel has verified that there will be delays with its switching software.⁵⁶ Nevertheless, Sprint plans to complete its Lucent switch upgrades by May 30, 2002, and Nortel switch upgrades by August 1, 2002. In addition, Sprint has proposed a Phase II-implementation schedule to prioritize PSAP requests for its Lucent markets, and has proposed to provide a similar schedule for its Nortel markets before the end of this year. Based upon the record evidence, Sprint's efforts to expedite delivery of handsets and network upgrades show it has come as close as possible to full compliance.

21. *A Clear Path to Full Compliance.* We conclude that Sprint's implementation plan and its request for relief provides a clear and full path to compliance. In terms of ALI-handset deployment, Sprint states that it intended to begin selling location-capable handsets by October 1, 2001, and it plans to meet the 100% activation rate by December 31, 2002.⁵⁷ Overall, Sprint intends to sell five million new

⁵⁰ *Id.*

⁵¹ *Sprint Request* at 4; Sprint states that its initial testing in Rhode Island is continuing and its preliminary tests have been successful. Sprint indicates that due to Lucent's inability to certify its Phase II software until November 9, 2001, commercial deployment of Phase II service in Rhode Island must be delayed until after this date. *Sprint September 20th Supplemental Report* at 2.

⁵² *Sprint Request* at 3.

⁵³ *Sprint Request* at 9-12.

⁵⁴ *Sprint Request* at 3, 5.

⁵⁵ Letter from Diane Law Hsu, Corporate Counsel, Lucent Technologies, to Magalie R. Salas, Secretary, Federal Communications Commission, CC Docket No. 94-102 (filed August 30, 2001) (*Lucent August 30th Ex Parte*).

⁵⁶ See *Sprint Request* at Appendix C, Nortel Networks Verification, July 19, 2001.

⁵⁷ *Sprint Request* at 5.

GPS-enabled handsets before December 31, 2002.⁵⁸ We generally approve Sprint's proposed deployment plan for location-capable handsets, and grant limited relief regarding the Commission's Phase II requirements for handset-based solutions. Sprint seeks relief from the Commission's Phase II interim benchmarks and activation rates (25% of all new handsets by December 31, 2001 and 50% of all new handsets by June 30, 2002).⁵⁹ However, Sprint proposes, alternatively, to meet activation levels of 10% by December 31, 2001 and 30% by June 30, 2002 if other carriers are also required to do so.⁶⁰ We require Sprint to meet a 25% interim activation level by July 31, 2002, which matches the 25% interim benchmark that we impose on Verizon Wireless, the other nationwide CDMA carrier.⁶¹

22. The Public Safety Organizations argue that Sprint has elevated its own commercial interest in speed of data transmission over the public interest of finding the fastest possible deployment of location-capable wireless because Sprint's interim benchmarks allow it to synchronize roll out of location-capable handsets with roll out of 3G services even though location-capable handsets will be available sooner.⁶² We believe Sprint's proposed deployment plan for location-capable handsets is consistent with the Commission's goal of implementing accurate and reliable Phase II services. In the *E911 Fourth Memorandum Opinion and Order*, the Commission indicated that it modified the ALI-capable handset benchmarks primarily so that handset manufacturers and wireless carriers would have a more reasonable opportunity to test and market ALI-capable handsets.⁶³ The interim benchmarks, however, are designed to help ensure that wireless carriers stay on a clear path to full compliance. Sprint's proposed deployment provides such a path. Sprint will begin selling and activating the handsets on time, but most importantly, will meet the Commission's 100% activation rate by December 31, 2002. Sprint's proposed benchmarks reflect only slight adjustments in the interim activation levels. For the reasons discussed above, we find that these adjustments are reasonable.

23. In spite of the vendor delays, Sprint's implementation plan and its request for relief also provide a clear and full path to compliance for upgrading its network to support Phase II. While Sprint will not be able to meet the October 1, 2001, requirement, it has estimated that based on current vendor commitments, deployment of the necessary switch upgrades in all markets will be completed by August 1, 2002.⁶⁴ Indeed, Sprint has committed to make all these upgrades regardless of whether it has a valid outstanding PSAP request.⁶⁵ We believe the record supports the requested extension of time beyond October 1, 2001.

24. We grant, only in part, deferment of its obligation to implement Phase II service within six months of a PSAP request. Sprint argues that it currently has pending over 500 PSAP requests and that it should not have to comply with the six-month requirement until all necessary network upgrades to process these requests are available.⁶⁶ In fact, Sprint proposes that the six-month clock should not start to run until all these network upgrades are completed. We reject Sprint's request for such a fundamental change in the requirements of our rules. Such a change would cause uncertainty and does not appear

⁵⁸ *Sprint Request* at 5-6; *Sprint Reply Comments* at 6.

⁵⁹ *Sprint Request* at 5-6.

⁶⁰ *Sprint Reply Comments* at 12.

⁶¹ *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Verizon Wireless Order, FCC 01-299 (rel. Oct. 12, 2001).

⁶² Public Safety Organizations Comments at 2.

⁶³ *E911 Fourth Memorandum Opinion & Order* at 13-14.

⁶⁴ *Sprint September 20th Supplemental Report* at 5.

⁶⁵ *Id.*

⁶⁶ *See*, para. 12, *supra*.

necessary. Sprint has already proposed a roll out plan for PSAPs served by its Lucent switches that extends through the end of 2002, and proposes to submit such a plan for its Nortel switches.⁶⁷ The delays in the necessary switch upgrades support a more modest deferral of this obligation to provide Sprint some flexibility to allow it to come into compliance with the rules. We allow Sprint until December 31, 2002 to complete all outstanding valid PSAP requests for Phase II service that it receives before July 1, 2002. Valid PSAP requests received on or after July 1, 2002 shall be processed according to our current rules. We reject Sprint's request to waive the six-month requirement for an indeterminate period of time as unnecessary and unworkable.

25. The Public Safety Organizations also argue that the Commission should require an interim location solution and a contingency plan or an explanation of why these are not needed.⁶⁸ We believe that Sprint has provided an adequate explanation of why these are not needed under Sprint's proposal. We agree with Sprint that the implementation of an alternative Phase II solution would divert Sprint's focus and resources from its A-GPS solution to which it has been committed since at least its November 2000 Report.⁶⁹ Even if Sprint were to pursue an alternative ALI solution, such as a network-based solution, it still would have to resolve network-switching problems, and would face similar deployment issues to those it faces with its handset-based solution.

26. We believe that Sprint's proposed compliance plan and request for limited relief is in the public interest. Sprint's proposal best furthers the ultimate goal of the deployment of E911 Phase II service because it puts in place commitments to specific implementation. Furthermore, Sprint's plan will most likely lead to the completion of deployment of Phase II service in a time frame reasonably close to that specified in the Commission's Phase II rules. We conclude that based on the record special circumstances exist to justify limited relief from the Commission's Phase II rules.

B. Additional Conditions of Relief Granted

27. To assist in monitoring and enforcing each of the conditions imposed on Sprint, as set forth in summary form below, we also require that Sprint file Quarterly Reports with the Chief of the Enforcement Bureau and the Chief of the Wireless Telecommunications Bureau. Because mere assertions of compliance with the conditions of this Order and with our rules are not sufficient to show compliance, these reports are intended to provide specific, verifiable information to allow us to monitor Sprint's progress closely and determine whether Sprint is in compliance with each of the benchmarks and conditions of this order and with other applicable provisions of the E911 rules, permitting prompt enforcement action if necessary.⁷⁰

28. Specifically, the Quarterly Reports must include the following information:⁷¹

- The Report must include information on all pending Phase I and Phase II requests, including the name of the PSAP, the date the request was received by the carrier, whether or not it is valid, and its status.

⁶⁷ See *Sprint Request*, Appendix A (providing a conditional roll out schedule for the deployment of Phase II service for requesting PSAPs in Lucent markets, spanning from October 1, 2001 through October 15, 2002).

⁶⁸ Public Safety Organizations Comments at 4-5.

⁶⁹ Sprint Reply Comments at 4.

⁷⁰ To the extent Sprint believes any of the required information is proprietary, it may file a request for confidential treatment pursuant to 47 C.F.R. § 0.459.

⁷¹ We delegate authority to the Chiefs of the Wireless Telecommunications Bureau and the Enforcement Bureau to require Sprint to provide additional information in its Quarterly Reports, if necessary, to evaluate Sprint's compliance with the terms and conditions of the relief granted, and its progress in deploying Phase I and Phase II E911 services.

To the extent any request has been pending for more than six months, Sprint must identify the specific reasons underlying the failure to provide the requested service, the steps Sprint has taken to resolve the problems, and the anticipated date of full completion of the work necessary to deliver the requested information to the PSAP in question. If Sprint believes there are questions concerning a PSAP's compliance with the conditions necessary for a valid Phase I or II request, such as its readiness to receive and utilize Phase I or Phase II information, it should identify specifically the question and the efforts it has undertaken, including the communications it has had with the PSAP, to resolve the question. Further, to help keep PSAPs informed, we direct Sprint to serve this report on APCO, NENA and NASNA.⁷² In addition, the Commission will post this information on its website.⁷³ Because it is important for each individual PSAP with a pending Phase I or Phase II request to have access to this information, we authorize the Wireless Telecommunications Bureau to require any additional steps necessary to ensure PSAP access to this information.

- The Report must also include information on: current handset models being activated or sold that are A-GPS-capable and important events affecting location-capable handset penetration levels, such as introduction of new handset models.
- The Report also must contain statements regarding whether Sprint has met each deployment benchmark and, if not, the reasons for its failure to comply. Specifically, Sprint must report, in the Quarterly Report immediately following the benchmark date:⁷⁴ (1) for the October 1, 2001 benchmark, a statement of whether Sprint has begun selling and activating a single A-GPS model and, if so, on what date; (2) for the periods of October 1, 2001 to July 30, 2002, and July 31, 2002 to December 30, 2002, 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 activated nationwide during the respective periods and the total number of new handsets activated during those periods that were A-GPS-capable; (3) for the December 31, 2002 benchmark, a statement of whether 100 percent of new digital handsets being activated nationwide were A-GPS-capable; (4) for the December 31, 2005 benchmark, a statement of the percentage of the total number of Sprint subscriber handsets in service nationwide as of that date that are A-GPS-capable, as well as the total number of Sprint subscriber handsets in service nationwide as of that date and the total number of those handsets that are A-GPS capable as of that date;⁷⁵ (5) for the May 30, 2002 benchmark date, a statement of whether Sprint has completed its Phase II conversion of all Lucent switching software, and if so, the date each upgrade was completed and the service areas covered by each switch; (6) for the August 1, 2002 benchmark date, a statement of whether Sprint has completed its Phase II conversion of all Nortel switching software, and if so, the date each upgrade was completed and the service areas covered by each switch.
- In addition, in its February 1, 2002 Report, Sprint must provide a PSAP-specific conversion schedule which describes how it will prioritize PSAP requests and deploy Phase II service for its Nortel markets.

⁷² Sprint should serve the Executive Director of each organization as well as its counsel, to extent such counsel has been identified in the record in response to Sprint's request for relief.

⁷³ See www.fcc.gov/e911.

⁷⁴ To the extent Sprint cannot provide the information required under this paragraph in its next Quarterly Report following the respective benchmark, it must file with the Chief, Enforcement Bureau, a request for extension of time to file the required information. Such request must be filed as early as possible before the Quarterly Report filing date, but generally no later than 10 business days prior to the Quarterly Report filing date. The request must specify the reasons for the request.

⁷⁵ Sprint's Quarterly Reports are due February 1, May 1, August 1 and November 1 of each year, beginning February 1, 2002 and continuing through February 1, 2006. To the extent Sprint cannot provide any of the information required in its final report, it must file with the Chief, Enforcement Bureau, a request for extension of time to file the required information in accordance with the procedures set forth in n.74 *supra*.

- Sprint must support each Quarterly Report with an affidavit, from an officer or director of Sprint, attesting to the truth and accuracy of the report.
- To the extent Sprint anticipates that it will fail to satisfy any one of the conditions, it must advise the Commission of the problem. Seeking relief from that condition will not, in and of itself, insulate Sprint from possible enforcement in cases where Sprint has violated a condition of this Order.

29. Sprint's Quarterly Reports to the Commission should be the principal vehicle for providing the Commission with notice of anticipated problems but, to the extent unexpected problems arise affecting Sprint's ability to perform in the period between reports, Sprint should notify the Commission through a supplementary filing. This supplemental filing must include specific details regarding the problems Sprint has encountered affecting its ability to comply.

30. These Quarterly Reports by Sprint will assist the Commission and the PSAPs in monitoring its compliance not only with its Phase II implementation plan, but also with the Phase I deployment requirements of the rules. Information on Phase I deployment will allow us to assess whether this aspect of E911 deployment - itself a critical public safety benefit - is being achieved. The reports on Phase II deployment will assist in monitoring Sprint's compliance with both its implementation plan and the Phase II rule. The reports on handset deployment will assist us in assessing whether Sprint is in compliance with the requirements of its implementation plan.

31. Sprint is required to comply with each individual condition of this Order, including the reporting requirements set forth above. Consistent with the *E911 Fourth Memorandum Opinion and Order*, we note that the conditions imposed herein as part of the grant of Phase II relief have the same force and effect as a Commission rule itself. Each specific benchmark and Quarterly Report is a separate condition of the plan as approved. In addition, Sprint remains subject to all other requirements of the Commission's wireless E911 rules apart from those specifically modified in this Order. To the extent that Sprint fails to satisfy any condition or Commission rule, it will be subject to possible enforcement action, including but not limited to revocation of the relief, a requirement to deploy an alternative ALL technology, letters of admonishment or forfeitures. We will not entertain requests for additional relief that seek changes in the requirements, schedules, and benchmarks imposed herein absent extraordinary circumstances.

32. Moreover, the approval of Sprint's compliance plan does not alter Sprint's ultimate obligation to comply with the Phase II rules and the conditions of this relief. Sprint remains ultimately responsible for providing timely compliant Phase II service. If Sprint does not have compliant Phase II service available on the dates set forth herein, it will be deemed noncompliant and referred to the Commission's Enforcement Bureau for possible action. At that time, an assertion that a vendor, manufacturer, or other entity was unable to supply compliant products will not excuse noncompliance. However, a carrier's "concrete and timely" actions taken with a vendor, manufacturer, or other entity may be considered as possible mitigation factors in such an enforcement context.⁷⁶ As set forth above, Sprint is required to include in its Quarterly Reports a statement regarding whether it has met each deployment benchmark, activation rate, accuracy milestone, and any other condition as set forth below, and, if not, the reasons for its failure to comply. As noted above, the Quarterly Report must be supported with an affidavit. To the extent that the Commission receives a complaint or otherwise has questions regarding the information in the report, or more generally Sprint's compliance, Sprint may be required to provide additional documentation to refute the complaint or respond to the Commission's questions. In the event that Sprint's Phase II solution unexpectedly fails to comply with the Phase II accuracy requirements, Sprint shall, as a condition, propose to deploy a solution that does comply with those requirements, as well as

⁷⁶ E911 Fourth Memorandum Opinion and Order, 15 FCC Rcd at 17458.

the other conditions of the Order and applicable Phase II rules.⁷⁷

C. Summary of Conditional Relief Granted

33. Sprint's request to deploy A-GPS technology for its CDMA network is granted, subject to compliance with the specific conditions set forth below.

- | | |
|--------------------|---|
| October 1, 2001: | Begin selling and activating A-GPS-capable handsets; Sprint must ensure that at least one entry-level A-GPS-capable handset model is available; |
| July 31, 2002: | Ensure that at least 25% of all new handsets activated are A-GPS-capable; |
| December 31, 2002: | 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. |

34. These revised benchmarks apply generally in the same manner as the benchmarks for location-based handset deployment in our rules.⁷⁸ In the *E911 Fourth Memorandum Opinion & Order* we recognized that measuring compliance with interim percentage benchmarks, such as the 25 and 50 percent benchmarks in our rules, might be difficult.⁷⁹ We emphasized that, in evaluating compliance, we would look at the reasonableness of a carrier's measurement methodology and the circumstances surrounding the measurement.⁸⁰ To further clarify the benchmarks and their enforcement, we believe that one reasonable methodology to show compliance with the approved plan would be for Sprint to demonstrate that it has complied with the required fractional percentage figures during the period beginning at the date on which that percentage takes effect and ending at the date of the next benchmark.⁸¹ Thus, for the 25 percent benchmark, Sprint would demonstrate that at least 25 percent of the new handsets it activated during the period between July 31, 2002 and December 31, 2002 were A-GPS-capable. The difficulty in measuring compliance should not arise in the case of the other two handset sales benchmarks, *i.e.*, the benchmark for beginning to sell and activate A-GPS handsets and that for ensuring that 100 percent of all new digital handsets are A-GPS-capable. Under the approved plan, Sprint must begin selling and activating at least one model A-GPS handset no later than October 1, 2001; as of December 31, 2002, 100 percent of new digital handsets Sprint activates must be A-GPS-capable.

35. Second, in the event that Sprint's solution fails to comply with the Phase II accuracy requirements, Sprint is required, as a condition, to propose a solution that does comply with those

⁷⁷ As stated above, seeking relief will not, in and of itself, insulate Sprint from possible enforcement in cases where Sprint has violated a condition of this Order.

⁷⁸ For example, the benchmarks apply only to new handsets, not to new activations of older model or refurbished handsets. The benchmarks also apply to all the carrier's areas of operation and services subject to the E911 rules, *i.e.*, nationally in the case of Sprint. See *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17455, fn. 62 and 17453-5.

⁷⁹ *E911 Fourth Memorandum Opinion & Order*, 15 FCC Rcd at 17455 n. 65.

⁸⁰ *Id.*

⁸¹ If Sprint is found to be in violation of a benchmark using the measurement period described above, the carrier will be deemed to be out of compliance for the entire period over which the benchmark is measured.

requirements, as well as the other conditions of this order and applicable Phase II rules.⁸²

36. Third, Sprint must file Quarterly Reports, on its progress and compliance with the terms and conditions of the implementation plan and the wireless E911 rules, as set forth in paragraphs 27-32, *supra*.

37. Fourth, we grant limited relief from the Phase II network-infrastructure requirements to permit Sprint to complete its Phase II conversion of all Lucent switches by May 30, 2002 and the conversion of all Nortel switches by August 1, 2002 for its CDMA network.

38. Fifth, we grant, only in part, deferment of its obligation to implement Phase II service within six months of a PSAP request.⁸³ This allows Sprint until December 31, 2002 both to complete any additional software and infrastructure upgrades necessary to support Phase II and to complete all outstanding valid PSAP requests for Phase II service that it receives before July 1, 2002. Valid PSAP requests received on or after July 1, 2002 shall be processed according to our current rules.

39. Sixth, we require Sprint to provide the Commission with a PSAP-specific conversion schedule—similar to the schedule it provided for its Lucent markets—describing how it will prioritize PSAP requests and deploy Phase II service for its Nortel markets at the time of its first Quarterly Report.

IV. PROCEDURAL MATTERS AND ORDERING CLAUSES

A. Paperwork Reduction Analysis

40. This Order does not contain an information collection applicable to ten or more entities.

B. Further Information

41. For further information, contact Steve Rangel of the Policy Division, Wireless Telecommunications Bureau, at (202) 418-1310 (voice) or (202) 418-1169 (TTY).

C. Ordering Clauses

42. Accordingly, IT IS ORDERED that Sprint's implementation plan and request for relief from wireless E911 Phase II rules IS GRANTED, effective October 1, 2001, to the extent indicated and subject to the conditions indicated herein.

⁸² Proposing such a revised implementation plan would not relieve Sprint from its obligations under the rules and its revised implementation plan or insulate Sprint from possible enforcement action. *See paras. 28, 32, supra.*

⁸³ *Sprint Request* at 6.

43. IT IS FURTHER ORDERED that authority is delegated to the Chief of the Enforcement Bureau and the Chief of the Wireless Telecommunications Bureau to administer, clarify, and, as appropriate, modify the Quarterly Reports specified in this Order, including requiring the filing of additional information.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

APPENDIX A**Comments (filed August 22, 2001):**

1. AT&T Wireless Services, Inc. (AT&T).
2. Cellular Telecommunications and Internet Association (CTIA).
3. National Emergency Number Association (NENA), the Association of Public Safety Communications Officials-International, Inc. (APCO) and the National Association of State Nine One One Administrators (NASNA) (Public Safety Organizations).

Reply Comments (September 4, 2001):

1. Sprint PCS L.P. d/b/a Sprint PCS (Sprint).
2. Qualcomm Incorporated (Qualcomm).

SEPARATE STATEMENT OF CHAIRMAN MICHAEL POWELL

Re: *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Cingular Wireless LLC, Sprint Spectrum L.P. d/b/a Spring PCS, Verizon Wireless, AT&T Wireless Services, Inc., Nextel Communications, Inc.*

I am disappointed and unsatisfied with the progress we have made, thus far, on Phase II E911 rules. I know and respect that carriers have made concerted strides in this area, but those efforts must be re-doubled. It goes without saying that there is a new sense of urgency around using mobile phones as important safety devices. They have become indispensable tools for calling for help and for delivering help.

Thankfully, we are only at the beginning of the implementation of this process and not at the end. I am committed to reaching that end with full and unqualified success. Today, we accept revised implementation plans from some of the major carriers. We initiate enforcement investigations with regard to others. All these decisions are designed to pursue single-mindedly one objective: the full availability of enhanced 911 by the original deadline established by the Commission. Given that this service can save lives, I trust that the carriers, the manufacturers and public safety authorities will work tirelessly to get this service to people as soon before that deadline as possible. It is not good enough to go for a gentleman's "C." This test requires an "A+" effort.

I look forward to working with my colleagues, the public safety community, the carriers and their suppliers, Congress and other governmental agencies, including the Department of Transportation, on exploring ways to ensure and facilitate the successful nationwide deployment of E911.

SEPARATE STATEMENT OF COMMISSIONER KATHLEEN ABERNATHY

Re: Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Cingular Wireless LLC, Sprint Spectrum L.P. d/b/a Spring PCS, Verizon Wireless, AT&T Wireless Services, Inc., Nextel Communications, Inc. (adopted Oct. 2, 2001)

Today's orders are another positive, albeit complex and difficult, step towards the world's first wireless E911 location-based public safety network. That journey began in 1996 when the national wireless and public safety trade associations reached a hard-fought consensus agreement on a deployment plan for E911. That solution was to be network-based, rolled out in a multiyear deployment beginning in 2001, and achieve accuracy requirements of 125 meters – about 67% of the time. Remarkably, Sprint sold its first E911 capable handset on Monday – a solution not even contemplated by the Commission's first order back in 1996 – with better than twice the level of accuracy thought possible in our original order. The waiver and enforcement referrals we take today should not cloud the fact that we have made tremendous progress on E911. There is no doubt that our collective sensitivity to public safety and individual security were greatly heightened by the events of September 11, 2001. Indeed, the terrorist attacks only served to drive home the importance of wireless communications to our national communications infrastructure and our everyday lives. Today we validate that significance by becoming the only nation in the world that has harnessed the power of location-based wireless cellphone technologies to assist public safety in performing their vital work. The Commission working with Congress, the public safety community, and the carriers should be proud of this accomplishment, but also must continue to be diligent in finishing the task.

I believe that the parties and the Commission staff have worked together in good faith to craft the best available solutions to serve the American people – and I support that result. If I had dissented from some or all of today's orders, I could have claimed that the Commission was not “tough enough” on the carriers and cast myself in the more politically beneficial role as defender of public safety. Although these issues are extremely difficult, I rejected that approach. I have spent extensive time with members of Congress, the carriers, manufacturers, consumers and the public safety community to better understand the challenges faced by each of the parties. Would I prefer that carriers, particularly those in rural areas, roll out E911 more quickly? Of course. Would I prefer that manufacturers provide the necessary equipment on a timely basis to ensure compliance? Yes. Would I prefer that every PSAP have adequate funds to upgrade their facilities immediately to be ready to utilize location-based information? Absolutely. Would I prefer that we had ruled on these waivers long before today and sent clear signals to all the parties about our expectations regarding deployment and our emphasis on enforcement? Beyond a doubt, yes. But none of those things happened and all of us are responsible.

The Context of Today's Decisions

Our E911 regime was a government-led effort to speed the development and deployment of a new technology prior to a commercial demand for that product. It was not based on any statutory mandate; nor was it based on any tangible technological showing. It was a tremendous undertaking, full of uncertainty about the technology, the timing, and the costs for all parties.

Each step forward in this process has been engendered by a constructive dialogue amongst all of the parties based on an evolving knowledge base – not by carriers pointing at

manufacturers, PSAPs pointing at carriers, or manufacturers pointing at the Commission. For example, our adoption of the handset-based alternative evolved from concerns that permitting only a network-based solution was technologically discriminatory and greater accuracy could be achieved through handset solutions. In that instance, we recognized our initial network-only decision as only a first step based on the best information available. With the active support of many in the public safety community, we modified our policy; as a result, consumers and public safety entities will soon be able to locate handset-based consumers twice as accurately as network-based.¹ It was the right decision then, and it remains the right decision today. We owe it to the parties, and the American people to engage beyond the sound bites, by continually assessing our policy approaches while striving to achieve the maximum good for the maximum number in the shortest time frame.

The Commission's critical date for E911 Phase II deployment is December 31, 2005 when 95% of all handsets must be E911 Phase II compatible and achieve our accuracy requirements.² Significantly, none of the waiver requests we act on today sought modification of our full deployment deadlines or the ultimate accuracy requirements. Therefore these waivers only request modifications of interim steps on the way to compliance. Despite the Commission's efforts to adopt a plan developed through a consensus process with all interested parties, those interim predictions on the pace of technology simply missed their mark.

In light of these circumstances, today we grant a number of waivers based on specific showing by each carrier of a clear path to compliance. These waivers permitted each carrier to develop and implement their own compliance schedule, while maintaining the overall integrity of our E911 policy goals. However, absent specific showings of their compliance efforts, carriers received clear signals that their waivers would be rejected. In two cases, carriers withdrew their waivers amidst mounting questions about the efficacy of their proposed solutions. These carriers are now engaged in discussions with Enforcement Bureau staff concerning possible consent decrees to resolve these issues. It is my hope and expectation that these proceedings will yield concrete and verifiable plans to achieve full compliance. Moreover, I trust that treating these compliance issues in the enforcement context will send a clear signal to those that might have been tempted to take these obligations lightly.

It is also important to recognize that some of the carriers' requests actually speed deployment of certain aspects of E911. For example, Sprint and Verizon plan to deploy all of their Phase II switch upgrades regardless of whether a PSAP has made the request that would trigger the obligation for such deployment. Verizon also plans to install a network-based technology to 100% of two counties (St. Clair County, IL, and Lake County, IN) by December 31, 2001 and 100% deployment of a network-based solution in three additional markets - Cook County, IL (Chicago), St. Louis County, MO (St. Louis), and Harris County, TX (Houston), by April 1, 2002 -- all in advance of our requirement to reach 100% of these coverage areas by Oct. 1, 2002. In addition, AT&T plans to deploy a GSM network that will be location-capable its inception -- regardless of whether there is a valid PSAP request for deployment.

¹ See, e.g., Reply Comments of APCO, CC Docket No. 94-102 (filed July 2, 1999) (stating that "facilitating handset-based technologies as an option may actually speed delivery of Phase II capability").

² For handsets, this accuracy level is 50 meters -- 67% of the time and 150 meters -- 95% of the time. Alternatively for those carriers who chose a network-based solution, the key date is full deployment 18 months after a Public Safety request or October 2002, whichever is later. The accuracy requirements for the network-based solution are 100 meters -- 67% of the time and 300 meters -- 95% of the time.

Why Approval of the Nextel and Verizon Waivers and Our Enforcement Approach is Appropriate

Although some disagree, I believe approval of the Nextel and Verizon waivers and the enforcement approach we adopt today best serves American consumers. While I am disappointed that we are addressing these pleadings at the 13th hour, I am not at all convinced that denial would advance the public interest. Denial would not lead to the miraculous introduction of equipment by manufacturers or any other silver bullet solution. Instead, denial would mean more revised plans, more changed technologies, and potentially more delay. It also could mean that some carriers walk away from E911 and challenge the Commission's E911 mandate in court with the potential for even greater delays. As discussed above, the E911 deadlines and performance requirements were largely aspirational and the public safety and wireless communities have worked hard together to make this possible; a court challenge prompted by unrealistic policies could jeopardize the entire program. I am seriously concerned about the impact of delay, litigation costs, uncertainty, and the risk of litigation on the actual deployment of E911 to the American people.

A denial of the waiver requests based on comparisons between carriers compliance plans is also inconsistent with the technical reality of America's wireless networks. To their considerable credit, American wireless regulators permitted wireless carriers to adopt a broad range of technical standards. This policy reflected a fundamental trust in the powers of free markets to drive licensees to the best service offerings for the public. That approach yielded, among other things, the technical interface that forms the foundation for third generation wireless networks. It also yielded distinct technological networks for each licensee. Therefore one cannot readily impose a technical solution or timeline on Verizon just because it works for Sprint. Verizon operates 800 MHz analog, 800 MHz digital and 1900 MHz PCS, and for many of its most popular regional and national plans, it requires a tri-mode phone available from a more limited number of vendors - whereas Sprint operates solely a PCS network at 1900 MHz and regularly uses dual mode phones. Similarly, Verizon has roughly three times as many subscribers to which it must get ALI-compliant handsets than Sprint. While Sprint has been a leader in E911 and should be given credit for their commitments, imposing their path to compliance on other licensees does not withstand vigorous scrutiny. Nextel is also uniquely situated. It has exactly one vendor to supply their equipment; while that arrangement has yielded significant advantages to Nextel and its customers in other contexts, it does impact their ability to respond to the E911 mandate. It should also be noted that the public safety community offered qualified support for Nextel's approach.³ Therefore one cannot compare Verizon's network with Sprint's or Nextel's to Cingular's and adopt a cookie cutter approach to their paths to compliance. Unique networks require unique E911 solutions.

I appreciate the frustration of my colleague regarding the Commission's lack of control over manufacturers and vendors. Whenever the Commission mandates various technological capabilities by licensees, it runs into the very real limits imposed by manufacturing capabilities and timelines. But it is a mistake to equate manufacturer conduct with carrier conduct and to punish one for the acts and omissions of the other. I do believe that carriers are obligated to use their best efforts to obtain compliant equipment in a timely fashion. However, it is unreasonable for the Commission automatically to "begin an enforcement action" against a carrier because a vendor "fails to make equipment . . . available on time" based on the carriers' "significant control over their vendors." First, as someone who worked in the wireless industry, I believe this

³ See Comments of APCO, CC Docket No. 94-102, 3 (filed Jan. 5, 2001); Comments of NENA, CC Docket No. 94-102, 4 (filed Jan. 5, 2001).

assertion is inconsistent with the global marketplace and the multiple business factors which affect manufacturing decisions, especially in light of the fact that the U.S. is the only country mandating this E911 equipment. Wireless manufacturing is a global industry with thousands of carriers around the world seeking products. And each of the national carriers here has only a fraction of that market. These carriers generally do not have the equipment market power to exercise "significant control." Second, creating carrier liability based on manufacturer conduct is essentially a back door effort to expand the Commission's jurisdiction so as to reach manufacturers. The FCC's jurisdiction is limited by Congress through the statute and only Congress can expand that jurisdiction. Third, there is significant evidence that carriers cannot predict with complete accuracy (which is what our initial rules required) when products will be available and how they will perform when initially deployed – regardless of the commercial or other incentives to do so. One needs look no further than the extended delays in rolling out 3G handsets and performance issues with 2.5G for a dramatic illustration of this fact.⁴

I also have serious concerns about prejudging any future carrier filings regarding E911. The Commission has an obligation to judge each licensee's filing on the merits at the time they are filed. I do not believe adjudicatory filings, such as waiver requests, should be prejudged as "suspicious" any more than they should be prejudged as "sympathetic."

Finally I feel compelled to clarify a few facts about our Order. Today's Order does not create a dramatic extension of the handset phase-in schedule that the prior Commission rejected a year ago. The extension referenced in the Fourth Report and Order called for a blanket delay for 100% of new activations until 4/1/05 with no specific requirement to ever reach the 95% overall penetration level. Even the lengthiest extension in today's Orders, granted to Nextel, beats that schedule for new activations by four months and maintains the integrity of the 95% penetration requirement. The other carriers, Verizon (15 months), Sprint (more than two years), AT&T/GSM (more than three years), Cingular/GSM (more than two and a half years) dramatically exceed that proposal and maintain the 95% penetration threshold for 2005. In addition I want to point out that the Commission's approval in 1999 of a handset-based E911 solution did not represent a "delayed schedule" for E911 deployment. The handset-based E911 deployment option was new, so there was nothing to delay. Although it is true the initial roll out date was later than the network-based solution schedule, this change was supported by many in the public safety community because a handset solution doubled the accuracy of the location information – a vital and lifesaving improvement over our initial plan.

* * * * *

The final chapters of E911 deployment, like the first, must have many authors – public safety, carriers, manufacturers, technology vendors, incumbent local exchange carriers, Congress and the Commission. In this regard, I specifically wish to thank the public safety community for their tireless efforts in this docket. As the events of September 11 reminded each of us, the men and women of the public safety community are dedicated public servants who risk their lives to ensure our safety. They are truly American heroes. Remarkably, some of these heroes go beyond even those substantial responsibilities to volunteer their time as advocates for public safety policy issues at the Commission. The Commission and the public greatly benefit from their unique contributions to the decision-making process. I also wish to thank Congressman Upton, Congressman Markey, Congressman Rush, Congresswoman Eshoo, Senator Hollings, Senator McCain, and Senator Burns for their continued attention and constructive engagement on this

⁴ See, e.g., Elisa Batista, *3G Stands for 3-Year Glitch*, Wired News at <http://www.wired.com/news/wireless/0,1382,44029,00.html> (May 23, 2001).

difficult issue. It is unquestionable that American consumers will benefit from E911 deployment, and the bipartisan leadership of these members has sharpened our resolve, generated a meaningful public dialogue, and helped to shape the approach we adopt today. Finally I wish to recognize the tremendous effort of the Bureau staff on this docket. These issues are extremely difficult, complex, and changing. They have required innumerable long nights and lengthy redrafts. Your hard work and dedication are greatly appreciated. Going forward, this important work will require all of us to continue this difficult work together to deliver the benefits of enhanced 911 services to the American people.

**STATEMENT OF
COMMISSIONER MICHAEL COPPS
Concurring in Part, Dissenting in Part**

Re: *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Cingular Wireless LLC, Sprint Spectrum L.P. d/b/a Spring PCS, Verizon Wireless, AT&T Wireless Services, Inc., Nextel Communications, Inc.*

When dealing with life critical technology, especially in today's environment, we cannot conduct "business as usual." We must make extra effort, expend extra resources, and do a better job. None of us has done that in the context of E911. Many carriers have not met deadlines for deploying E911 systems and handsets. Many manufacturers have not made equipment and software upgrades available quickly enough. Many in the public safety community have not secured funding for upgrades or made adequate progress towards installing needed new equipment. Importantly, the Commission is only now dealing with dozens of pending waivers at the last possible moment and in a way that is not consistent with its stated waiver standard.

We can do better than this – we *must* do better than this. Enhanced 911 will save lives. We all therefore have a special responsibility to work hard to make certain our wireless networks are E911 compliant so they are better able to help Americans when there is an emergency. If there was ever any doubt about the value of wireless communications to public safety, recent events have completely erased them. Wireless communications save lives today. By making E911 a reality, we will improve our networks and equipment so that they will save far more lives in the future.

Yet today the Commission decides to grant waivers that excuse compliance with our October 1, 2001 deadline and push compliance benchmarks far into the future. I fear that because of this decision consumers will not have E911 services as quickly as they deserve, and in the coming months and years we will see more waiver requests, more finger pointing, and unacceptably slow progress. The country cannot afford to go down that road. I hope instead that carriers and manufacturers will not seek further extensions based on arguments of more vendor delay, technology failure, or the fact that the Commission today grants some carriers far more lenient compliance schedules than others. I hope that PSAPs move forward quickly to do their part and modernize their facilities. And, I hope that, when faced with compliance failures or waiver requests, the Commission holds fast and requires carriers to live up to the promises made in the waiver requests we dispose of today.

I respectfully dissent from the Nextel and Verizon Orders because the underlying requests do not satisfy our waiver requirements. These requests do not give us "a clear path to full compliance," and do not come "as close as possible to full compliance." I also would have preferred that the Commission include stronger compliance language in all of today's Orders that would have made it clear that carriers have the burden of proving that they have met each benchmark they have agreed to, that failure to meet a benchmark will result in enforcement action and punitive measures, and that waivers that seek changes to these benchmarks will be received with suspicion.

For these reasons I concur in the result of the *AT&T*, *Cingular*, and *Sprint* Orders, agree with the *City of Richardson* Order, and respectfully dissent from the *Nextel*, and *Verizon* Orders.

Previous Commission Action on E911

In 1996 the Commission worked closely with the public safety community and the wireless communications industry to devise E911 rules.¹ In the *E911 First Report and Order*, the Commission and industry began the process of making our national wireless system able to report the location of an emergency call to public safety personnel. As part of this proceeding, the Cellular Telecommunications Industry Association and various members of the public safety community suggested that the Commission require “Phase II” compliance within five years in a “Consensus Agreement” filed on the record on February 12, 1996.² Recognizing the complexity of achieving Phase II compliance, the Commission agreed with CTIA and the public safety community and provided industry with a full five years to reach “Phase II” compliance.³ Thus, carriers knew on July 26, 1996 that their systems would have to achieve Phase II compliance on October 1, 2001, as they had proposed.

The Association of Public Safety Communications Officials (APCO), the National Emergency Number Association (NENA), and the National Association of State Nine One One Administrators (NASNA) therefore recently stated, “The Commission established its rules five years ago, and carriers and their suppliers have long known that deployment must begin on October 1, 2001. Thus, the Commission must stand firm on this and other deployment deadlines. Otherwise there will be little incentive for carriers and others to fulfill the promise of wireless E9-1-1.”⁴

In several subsequent Orders, the Commission relaxed the Phase II requirements, delayed compliance dates, and allowed more flexibility in the types of technologies that could be used to achieve Phase II compliance.⁵ As part of allowing the use of handset-based technologies, the Commission relaxed the five-year period for achieving Phase II compliance in order to achieve the greater location accuracy of GPS. Therefore, carriers were allowed to choose between network technologies that were required to be in place by October 1, 2001 and handset technologies on a delayed schedule. This delayed schedule required initial availability of Phase II compliant phones by March 1, 2001, compliance of 50% of new phones sold by October 1, 2001, and compliance of 100% of new phones sold within six months of a PSAP request received after October 1, 2001.⁶

In the *E911 Fourth Memorandum Opinion and Order*, the Commission delayed compliance yet again. Responding to carrier and manufacturer arguments that handset technologies were behind schedule, the Commission extended compliance deadlines as follows: initial availability of compliant phones was delayed until October 1, 2001, 25% compliance of new phones was delayed until December 31, 2001, 50% compliance was delayed until June 30, 2002, and 100% compliance was delayed until December 31, 2002. Carriers were required to achieve 95% compliance of all phones in their network by December 31, 2005, a delay of one year.

¹ See *E911 First Report and Order*, 11 FCC Rcd 18676.

² *Id.* at ¶ 23.

³ *Id.*

⁴ *Additional Ex Parte Comments of APCO, NENA and NASNA* at 2.

⁵ See *E911 Reconsideration Order*, 12 FCC Rcd 22665 (1997); *E911 Second Memorandum Opinion and Order*, 14 FCC Rcd 10954.

⁶ *E911 Third Report and Order*, 15 FCC Rcd 17388, at ¶ 9 (1999).

The Commission found that adopting further delays would not be in the public interest. It stated that:

“We find that [additional proposed delay] would substantially reduce the public safety benefits of Phase II, leaving many wireless 911 callers without the benefits of ALI for a greatly extended period of time. Such delay also would compound the increasing burdens that rapidly growing numbers of wireless 911 calls impose on PSAPs. Emergency call takers now must devote critical time and resources to questioning wireless 911 callers to determine their location. Emergency response teams must often waste critical minutes – or longer – searching for those callers. Further, we determine that any wholesale deferral of the handset deployment schedule would be unfair to the many competitors who have been working to timely develop and market other ALI solutions A radical extension of the handset phase-in schedule . . . would amount to a decisive and unwarranted preference for handset-based technologies, substantially altering the terms of the competition between technologies . . . *In sum, we conclude that the public interest and the public safety do not support a substantial delay in the current handset deployment schedule.* Even if some major handset manufacturers prove unable or unwilling to produce ALI-capable handsets in the near future, we believe the public safety will be better served if carriers are required to deploy other available ALI solutions, including GPS handsets that may be available from other manufacturers, according to the timetable we set herein. To allow the lengthy delay requested by some parties, would, in our view, jeopardize the progress made to date in the development of ALI solutions.”⁷

Despite this finding, and despite a long history of delays of E911 implementation schedules, the majority has now granted waivers for Nextel and Verizon that allow a “radical extension of the handset phase-in schedule” after the Commission found such a delay to be against the public interest a mere 12 months ago. While the delay the Commission faced then was not identical to the one it faces now, it was similar in scale. Nearly doubling the time after our October 1, 2001 deadline in which Nextel may continue to sell non-compliant handsets, and accepting schedules that place our 2005 end date in grave danger, as we do today, can only be seen as a “radical extension.”

The Waivers Before the Commission

The Commission has created a special standard for E911 waiver requests. In the *E911 Fourth Memorandum Report and Order* the Commission stated that:

Waivers thus should not generally be warranted, especially in light of the vital public safety benefits of Phase II. In those particular cases where waivers may be justified, however . . . we expect waiver requests to be specific, focused and limited in scope, and with *a clear path to full compliance.* Further, carriers should undertake concrete steps necessary to come *as close as possible to full compliance*⁸

Several carriers have met this standard in their waiver requests. Sprint, AT&T (GSM), and Cingular (GSM) make firm commitments to begin offering consumers Phase II compliant handsets on October 1 or, in the case of AT&T, as soon as the first GSM phone is available. They each have made enforceable promises to sell only Phase II handsets, and to have all switch

⁷ *E911 Fourth Memorandum Opinion and Order* ¶¶ 26-30 (emphasis added).

⁸ *Id.* at ¶ 44 (emphasis added).

upgrades complete, by the end of next year. The Commission will be able to monitor the progress of these carriers through quarterly reports, and will be able to bring enforcement actions if any of the carriers miss any of their benchmarks. These compliance plans thus give us “a clear path to full compliance,” and come “as close as possible to full compliance.”

The Nextel and Verizon waiver requests do not meet our waiver standard. Nextel will not make a single compliant phone available until December 2002 – by which time Sprint, AT&T, and Cingular have promised to sell *only* compliant phones. Nextel will continue to sell non-compliant phones far into the future, not reaching 100% compliance of new handsets until December 2004 – nearly two years behind Sprint, and two years and two months behind Cingular. In addition, Nextel’s request indicates that the company will be able to have 95% of its entire imbedded base of handsets compliant only one year after it stops selling non-compliant phones. This seems unlikely to me, even with the large number of corporate customers Nextel describes in its comments. Even the evidence Nextel proffers related to turnover of Internet-capable phones show that they required more time for handset turnover than allowed in this order. These extreme delays and unlikely benchmarks do not give us “a clear path to full compliance,” or come “as close as possible to full compliance.”

Similarly, Verizon will not sell a single compliant handset by the October 1 deadline. It will continue to sell non-compliant phones until December 2003 – a full year later than Sprint despite using similar technology and a year and three months later than Cingular. Additionally, Verizon depends on Motorola switches for a substantial portion of its network. Motorola has stated that it will not be able to make its switches compliant until March 2003. This will leave a substantial number of Verizon customers without even the possibility of Phase II E911 services, even if they purchase a compliant handset, for a year and six months after the October 1, 2001 deadline. Again, these extreme delays and manufacturer uncertainties do not give us “a clear path to full compliance,” or come “as close as possible to full compliance.”

Nextel’s asserts that its use of iDEN technology and reliance on Motorola for equipment availability puts it in a different position than other carriers. Verizon states that it was delayed because its original E911 technology failed, and because it also depends on delayed equipment availability from Motorola. I believe that carriers have significant control over their vendors and can speed equipment availability through financial and contractual pressure. In the end it is the carrier’s responsibility to meet E911 responsibilities. I recognize the need for flexibility because of equipment availability. I support such flexibility where delays are brief in the Sprint, AT&T, and Cingular waivers. Problems with suppliers should not, however, excuse radical departures from carriers’ responsibilities.

Enforcement Language

The majority grants all five E911 waiver requests because the carriers commit to deployment schedules. These schedules include dates of initial handset availability, dates when various interim benchmarks will be met, dates when switch upgrades will be complete, and the December 31, 2005 date by which all carriers must have 95% of their entire base of handsets Phase II compliant. In order for these schedules to move us towards “full compliance” carriers must understand that the benchmarks are not targets but commitments. If a carrier misses a benchmark it must expect that the Commission will begin an enforcement action, even if it missed the benchmark because its vendor fails to make equipment or software available on time. Carriers should also understand that waivers will not be granted merely because a technology fails to work as expected or because of delays by a vendor.

To make this perfectly clear, I would have preferred to include stronger enforcement language with each Order. This language would have made it explicit that the Carriers themselves offered the schedules and benchmarks and that therefore we would not expect to grant any future waiver based on an argument that these schedules and benchmarks are unreasonable or unobtainable. I also would have preferred language that made it clear that the carriers had the legal burden of proving that they had met each benchmark, and that mere assertions that they met these benchmarks would be insufficient.

The Orders, unfortunately, do not include this stronger enforcement language. However, the majority has made efforts to strengthen the language to the point that I can concur in the result of granting the Sprint, AT&T, and Cingular waivers. I believe, nonetheless, that the addition of stronger language would have made the Orders far more effective.

Smaller and Rural Carriers

The Commission also received a number of waiver requests from smaller carriers and rural carriers. Because we do not have an adequate record on how to treat smaller and rural carriers, and because hundreds of carriers have not filed waivers or indicated the status of their E911 deployment, the Commission will delay enforcement of its E911 rules for these carriers for a brief period.

I support this action because many small and rural carriers have unique situations and the Commission must carefully consider how to address these situations. However, the fact that we must delay on the very week when carriers are supposed to meet E911 requirements demonstrates why it was a bad idea to wait so long to deal with this issue. We should not have to be in this situation. When, after developing a record, we decide how to address the situations of small and rural carriers, I will seek reporting requirements and benchmarks that, while sensitive to these carriers' differences from the major carriers, nevertheless are strong, enforceable, and in concert with "a clear path to full compliance."

Conclusion

I am encouraged that the December 31, 2005 deadline by which 95% of all carriers handsets must be Phase II compliant is not postponed in any of these Orders. This date is critical, and now all six major carriers have stated that it is reasonable and that they will meet it. This date must not be allowed to slip.

We have a long way to go to meet this responsibility. Carriers, manufacturers, PSAPs and the Commission must all rally around the goal of making E911 fully available to the American people before the end of 2005. In every moment of national emergency our country has faced, American workers, American enterprise, and American leaders have come together not only to meet, but to exceed critical production and infrastructure needs. We are in such an emergency now. To me, and I think to a vast majority of my fellow citizens, our challenge is clear.

SEPARATE STATEMENT OF COMMISSIONER KEVIN MARTIN

Re: *Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Cingular Wireless LLC, Sprint Spectrum L.P. d/b/a Spring PCS, Verizon Wireless, AT&T Wireless Services, Inc., Nextel Communications, Inc.*

Like all of my fellow Commissioners, I am very frustrated and disappointed that Phase II E911 is not farther along than it is today. I too would have preferred to take more immediate enforcement measures, and the current failure to meet the Commission's Phase II E911 deadlines is shameful. Nonetheless, we are told by manufacturers and suppliers that meeting today's deadlines is a practical impossibility. Let me be clear, however, these delays must come to an end. We must remain vigilant to ensure that this technology will quickly meet its full potential for the American public. Much hard work remains to be done in the days ahead.

I also commend and express my gratitude to the public safety community for the time and dedication they have put into this issue. I have relied on their expertise and look forward to continued partnership with them as we move forward with implementation *and strict enforcement* of the schedules we adopt today.