

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

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In the Matter of)
)
Revision of the Commission's Rules To Ensure)
Compatibility with Enhanced 911 Emergency)
Calling Systems)
)
Request for Waiver by Verizon Wireless)
)
)
)

CC Docket No. 94-102

VED

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 dissenting and issuing a statement.

I. INTRODUCTION

1. In this Order, we approve, with certain modifications, that portion of the compliance plan proposed by Cellco Partnership d/b/a Verizon Wireless (Verizon) for implementing Phase II of E911 service. Under the compliance plan we approve today, Verizon will deploy a network-assisted Global Positioning System/Advanced Forward Link Trilateration (AGPS/AFLT) handset solution for Enhanced 911 (E911) Phase II, as rapidly as possible, without waiting for a Phase II request from a Public Safety Answering Point (PSAP). In addition, Verizon will be required, on an interim basis, to implement the network-based solution it has proposed for three major metropolitan areas, and to deploy the Enhanced Forward Link Trilateration (EFLT) solution it has proposed in certain markets. With respect to those portions of its system providing only analog service, we require that if Verizon receives a valid PSAP request where more than 50% of the PSAP's coverage area is covered by the Verizon analog-only network, Verizon comply with the Commission's rules by using a network-based solution or by upgrading its network in those areas to a digital network that is Phase II compliant. Further, we require Verizon to file Quarterly Reports concerning its E911 implementation program, including both Phase I and Phase II deployments, to permit effective monitoring and enforcement of its progress and performance in complying with the rules and the terms and conditions of its plan. We find that approval of this compliance plan is justified by the special circumstances Verizon faces in deploying location capability, the lack of viable alternatives demonstrated by its trial of location technologies, and the overall benefits to public safety. We therefore grant a temporary, conditional waiver of the Commission's wireless E911 rules necessary 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 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).¹ 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.² 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, 2005.³

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.⁴ 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 Public Safety Answering Point (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, 2000.⁵

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

¹ 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>.

² 47 C.F.R. § 20.18(h)(2).

³ 47 C.F.R. § 20.18(g).

⁴ 47 C.F.R. § 20.18(h)(1).

⁵ 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 comply.⁶

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*.⁷ 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.⁸ 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.⁹

B. Summary of Verizon's 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, 2000.¹⁰ On November 9, 2000, Verizon filed an E911 Phase II report in which it stated that it planned to deploy a network-based solution for its CDMA system. At that time, Verizon stated that it would continue to evaluate handset-based solutions as alternative location technologies. In its Updated E911 Phase II Report and Request for Limited Waiver¹¹ filed on July 25, 2001, Verizon proposes a network-assisted Global Positioning System/Advanced Forward Link Trilateration (AGPS/AFLT)¹² solution for Phase II E911. In its request for relief, Verizon explains that it based its decision on the status of location technology development and on the expected availability of that technology. Although Verizon developed and tested network-based technology, Verizon states that, "based on all available information, it determined that the AGPS/AFLT handset solution would provide the best and most ubiquitous location capability while presenting fewer of the problems that surfaced with the network technology."¹³ Thus, Verizon claims that approval of its comprehensive compliance plan for deployment of an AGPS/AFLT solution on its CDMA system will better serve the public interest by more rapidly providing more accurate location information.

9. Specifically, Verizon seeks a limited waiver of the deployment schedule set forth in section 20.18(g)(2) of the Commission's rules. Verizon seeks to deploy AGPS/AFLT on a timeline that is based on scheduled releases from its three network infrastructure vendors, Lucent, Nortel, and

⁶ *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*).

⁷ *Id.*

⁸ *Id.* at 17457, para. 44.

⁹ *Id.* at 17457-58, paras. 44-45.

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

¹¹ Verizon Wireless Updated Phase II E911 Report and Request for Limited Waiver, filed July 25, 2001 (*Verizon Request*).

¹² AGPS is a handset modification incorporating additional hardware and software that allows the handset to identify signals from GPS satellites for the purpose of generating location information. AFLT is a handset modification incorporating additional software that allows the handset to utilize signals from cell sites to generate location information. *Verizon Request* at 8-9.

¹³ *Verizon Request* at 3.

Motorola, and on the availability of compliant handsets. Verizon proposes that it be permitted to adopt the following revised schedule for the deployment of its AGPS/AFLT location technology:¹⁴

- Begin deploying the network-assisted portion of AGPS/AFLT by October 1, 2001¹⁵ in its switches and cell sites for Lucent markets; January 1, 2002 for Nortel markets and November 1, 2002 for Motorola markets.
- Complete deployment of these network upgrades by April 1, 2002 for Lucent markets; August 1, 2002 for Nortel markets; and March 1, 2003 for Motorola markets.

10. Verizon also requests a limited waiver of the deadlines set forth in section 20.18(g)(1) of the Commission's rules for the activation of handsets. Verizon claims that because of the long process required for commercial development, testing, manufacture, distribution, and sale, and the lead time required for the negotiation of the necessary contracts, the Commission's current handset deployment schedule is unachievable. Verizon therefore proposes that it be permitted to adopt the following alternative handset activation and penetration benchmarks:¹⁶

- Begin selling AGPS/AFLT Phase II compliant handsets no later than December 31, 2001;
- 25% of new handsets activated are AGPS/AFLT compliant by July 31, 2002;
- 50% of new handsets activated are AGPS/AFLT compliant by March 31, 2003;
- 100% of new handsets activated are AGPS/AFLT compliant by December 31, 2003; and
- 95% of embedded base is AGPS/AFLT compliant December 31, 2005.

11. To bridge the transition to AGPS/AFLT, Verizon indicates that it intends to pursue two interim measures, separate and apart from deploying its AGPS/AFLT solution. Verizon claims that these interim measures for the CDMA portion of its system will provide network-based location information to PSAPs for many customers until AGPS/AFLT is deployed. First, Verizon plans to install an interim network-based technology in three major metropolitan areas beginning December 31, 2001.¹⁷ Second,

¹⁴ *Id.* at 21.

¹⁵ Based on information provided by Lucent as to its schedule for First Office Application (FOA) testing, Verizon's initial request stated that the Lucent-furnished upgrades were expected to be deployed beginning October 1, 2001. Lucent subsequently advised Verizon that FOA testing is expected to be completed in late October-early November 2001 and that the new target availability date is early November 2001. See *Verizon Reply Comments* at 4; see also Lucent Letter, dated August 20, 2001, from Franklin J. Novello, Sales Vice President, Verizon Wireless Consumer Team, to Larry Rybar, Executive Director, Technology and Implementation, Verizon Wireless.

¹⁶ *Verizon Request* at 19-20.

¹⁷ See Letter from Kathryn A. Zachem, of Wilkinson, Barker and Knauer, on behalf of Verizon Wireless, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 94-102 (filed Sept. 27, 2001) (*Verizon September 27th Ex Parte*). Verizon had originally committed to provide Phase II capability using network-based hardware to 50 percent of St. Clair County, Illinois (St. Louis market) and to 50 percent of Lake County, Indiana (Gary-East Chicago market) by October 1, 2001, and to the remaining 50 percent of St. Clair County, Illinois (St. Louis market) and the remaining 50 percent of Lake County, Indiana (Gary-East Chicago market), as well as 100 percent of five counties, including DuPage County, Illinois (Chicago), Madison County, Illinois (continued....)

Verizon plans to continue testing and, if the testing proves successful, deploy by April 1, 2002 an EFLT Phase II solution in all markets where it uses Lucent switches, followed closely by markets where it uses Nortel switches.¹⁸

C. Position of Interested Parties

12. The Verizon request for relief was placed on public notice on July 31, 2001.¹⁹ Comments largely supportive of the request for relief were filed by AT&T Wireless Services, Inc. (AT&T), Motorola, Inc. (Motorola), and the Cellular Telecommunications & Internet Association (CTIA). Joint Comments were also received from 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) (Public Safety Organizations). Verizon and Qualcomm Incorporated filed reply comments in support of Verizon's request for relief.²⁰ AT&T fully endorses Verizon's request for relief.²¹ Motorola supports Verizon's request with some modification and clarification of the timeline for activation of handsets and switch infrastructure implementation. Motorola emphasizes that in order to enable AGPS/AFLT in a network, the Position Determining Entity (PDE) and Mobile Positioning Center (MPC) must be integrated with the entire network infrastructure. With this in mind, Motorola indicates that the timeline presented in Verizon's request is slightly misstated because Motorola's cell site software will be generally available prior to the general availability of the Mobile Switching Center (MSC) switch software.²² Therefore, Motorola states that it expects to deploy a complete release for Phase II AGPS/AFLT enabled network infrastructure in the Second Quarter of 2002, rather than in early 2002 as Verizon has estimated. Motorola notes, however, that these general availability dates are based upon the use of an AGPS/AFLT solution interfacing with a SignalSoft MPC and SnapTrack PDE, which Verizon has not indicated to Motorola it will use.²³ CTIA contends that granting Verizon's waiver would be consistent with the Commission's policy of technological neutrality for E911.²⁴

13. While the Public Safety Organizations acknowledge that Verizon's approach to deployment has merit, they seek verification and clarification of several assertions made by Verizon. Specifically, the Public Safety Organizations raise the following issues and questions: why Verizon is not deploying a mix of technologies (network and handset-based) nationwide;²⁵ verification of equipment

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(Chicago), Cook County, Illinois (Chicago), St. Louis County, Missouri (St. Louis), and Harris County, Texas (Houston) by April 1, 2002. *See Verizon Request* at 29-30. Verizon subsequently indicated that it could not meet the 50% deployment on October 1, 2001 but accelerated the 100% deployment date from April 1, 2002 to December 31, 2001 for St. Clair County and Lake County, and dropped DuPage County and Madison County based on updated PSAP desires in those counties. *See Verizon September 27th Ex Parte*.

¹⁸ *See Verizon Request* at 28. Verizon reports that Motorola's architecture cannot presently support EFLT because a new platform is required. Motorola has further advised Verizon Wireless that it could potentially deliver a new platform in Software Release 17, which is scheduled for FOA in 2003.

¹⁹ WTB Seeks Comment on Wireless E911 Phase II Waiver Request Filed by Verizon Wireless, Public Notice, DA 01-1836 (rel. July 31, 2001).

²⁰ Comments and Reply Comments filed in response to Verizon's request are listed in Appendix A.

²¹ *AT & T Comments* at 1-6.

²² *Motorola Comments* at 4.

²³ *Id.* at 5.

²⁴ *CTIA Comments* at 4.

²⁵ *Public Safety Organizations Comments* at 3.

delivery dates and vendor manufacturing schedules,²⁶ and clarification as to whether Verizon intends to activate Phase II based on switch upgrades rather than waiting for PSAP requests.²⁷ In addition, they ask the Commission to scrutinize and compare the deployment schedules of Sprint and Verizon and they find Verizon's EFLT interim solution lacking due to the lack of a firm commitment and a definite schedule.²⁸ Further, the Public Safety Organizations ask that Verizon document the number of Motorola subscribers served by Motorola switches that will be deprived of a Phase II solution until March 1, 2003.²⁹ Qualcomm disagrees with the Public Safety Organizations' criticism of Verizon's choice of technology and their request that the Commission seek additional information.³⁰

14. In its reply comments, and in supplemental filings, Verizon addressed the comments of record.³¹ Verizon argues that the differences in timelines noted by Motorola are attributable to the fact that each carrier employing Motorola's infrastructure will have to perform FOA tests and it states that it may not be the first carrier chosen to perform those tests.³² Verizon alleges that its deadlines were based on projections of when a FOA is likely to occur.³³ Verizon disagrees with the appropriateness of the Public Safety Organizations' comparison of Verizon's timelines with Sprint's timelines.³⁴ Verizon asserts that each carrier is faced with factors specific to the individual carrier. For example, Verizon notes that it must sell products with tri-mode capability (digital, analog, and PCS frequencies), whereas Sprint is a PCS carrier requiring only a single mode of capability.³⁵

15. Verizon asserts that it has invested substantial resources in adding digital network coverage as an "overlay" to its original cellular technology.³⁶ Verizon indicates that its network provides digital coverage to approximately 90 percent of the population it serves, and that it "expects digital coverage to reach almost 100 percent by the end of 2003. Although the percentage of analog customers "varies widely by market," Verizon indicates that about 35 percent of its customers nationwide have analog-only handsets.³⁷

III. DISCUSSION

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

²⁶ *Id.* at 4.

²⁷ *Id.* at 6.

²⁸ *Id.* at 4 -5.

²⁹ *Id.* at 5-6.

³⁰ *Qualcomm Reply Comments* at 1-4.

³¹ *See Verizon Reply Comments* at 2-8.

³² *Id.* at 6-7.

³³ *Id.* at 6.

³⁴ *Id.* at 8-9.

³⁵ *Id.* at 8.

³⁶ *Id.* at 7.

³⁷ *Id.* at 6-7. Verizon indicates that the number of analog-only customers is "steadily dropping," and that its larger markets have relatively fewer analog customers.

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

17. *Plan That Is Specific, Focused, and Limited in Scope.* Verizon's compliance plan and request for relief, as it relates to the digital portion of its system, is specific, focused, and limited in scope, and is in accordance with Commission guidelines. Verizon alleges that it seeks to reach as many customers as possible, with what it believes to be the most accurate technology, deployed in the shortest time frame.³⁸ Verizon explains that it had initially pursued a network-based solution but subsequently abandoned that approach because it "has become clear from Verizon's own testing and the record in this proceeding that there will not be a network technology that can meet required deadlines."³⁹ Verizon states that it selected the AGPS/AFLT Phase II handset-based solution for its CDMA system because AFLT provides accurate location information in urban environments, while AGPS provides accurate location information in rural environments.⁴⁰ Verizon emphasizes that it does not seek a waiver of the Commission's Phase II accuracy standards,⁴¹ and argues that a temporary waiver of the Commission's implementation deadlines is justified because, although a network assisted handset-based solution will provide the most accurate level of location information, the AGPS/AFLT solution cannot be deployed within those deadlines.

18. Although Verizon's proposed deadlines delay the roll out of Phase II service beyond the dates established in section 20.18, those deadlines are specific and are keyed to the particular, varied characteristics of its infrastructure and the time required to upgrade specific vendors' switches to accommodate the AGPS/AFLT location technology. Verizon plans to begin selling AGPS/AFLT Phase II compliant handsets no later than December 31, 2001 and to meet the following milestones for new handset activations: 25% of new handsets by July 31, 2002; 50% of new handsets by March 31, 2003; 100% of new handsets by December 31, 2003; and 95% of all handsets by December 31, 2005. Verizon also proposes to begin deploying the network-assisted portion of AGPS/AFLT by early November, 2001 in its switches and cell sites for Lucent markets; January 1, 2002 for Nortel markets; and November 1, 2002 for Motorola markets.⁴² Verizon proposes to complete deployment of these network upgrades by April 1, 2002 for Lucent markets; August 1, 2002 for Nortel markets; and March 1, 2003 for Motorola markets. The deadlines are specific, in terms of commencement as well as in terms of completion of roll-out. Verizon indicates, based on its system configuration and respective vendor schedules, that it "expect[s] to have network upgrades completed in markets serving 65% of the population we cover (e.g., in Lucent-switched markets) by April 2002." Thus, within six months, Verizon will perform upgrades to its network that will reach 155 million Verizon customers, and Verizon indicates that this "number will increase from 155 million to 195 million by August 2002 as upgrades are made in Nortel markets and to 235 million by March 2003 as the Motorola-switched markets are upgraded."⁴³

19. The proposed deadlines appear to be realistic. Verizon advises that the specific,

³⁸ *Verizon Request* at 18.

³⁹ *Verizon Request* at 3.

⁴⁰ *Id.* at 9.

⁴¹ *Id.* at 18; *see also Qualcomm Reply Comments* at 1-2.

⁴² Based on information provided by Lucent as to its schedule for FOA testing, Verizon's initial request stated that the Lucent-furnished upgrades were expected to be deployed beginning October 1, 2001. Lucent subsequently advised Verizon that FOA testing is expected to be completed in late October-early November 2001 and that the new target availability date is early November. *See Verizon Reply Comments* at 4; *see also* Lucent Letter, dated August 20, 2001 from Franklin J. Novello, Sales Vice President Verizon Wireless Consumer Team to Larry Rybar, Executive Director, Technology and Implementation, Verizon Wireless.

⁴³ *See Verizon Reply Comments* at 3-4.

aggressive implementation deadlines it has proposed are based on vendor negotiations, and that it expects to meet those deadlines, barring unforeseen delays in product availability and delivery. We note that Sprint's deployment schedule appears on the surface to be more aggressive than Verizon's because it completes all necessary switch upgrades by August 1, 2002.⁴⁴ Verizon's switch upgrades are scheduled to be completed April 1, 2002 for Lucent markets, August 1, 2002 for its Nortel markets, and March 1, 2003 for its Motorola markets. We find Verizon's proposed deadlines for its Lucent and Nortel switches reasonable and largely consistent with those of Sprint. As to its Motorola switches, while the switch upgrades lag behind those of Lucent and Nortel, Verizon has documented the particular problems with those upgrades and committed to what we find to be a reasonable schedule, given the problems.⁴⁵

20. We note that Verizon has committed to July 31, 2002 as the date for reaching the 25% activation benchmark, March 31, 2003 for reaching the 50% benchmark, and December 31, 2003 for reaching the 100% benchmark. Sprint, also a CDMA carrier, proposed a different schedule,⁴⁶ that allows Sprint to achieve compliance with our rules by December 31, 2002. By way of explanation, Verizon states that it must sell products that contain tri-mode capability to accommodate its operations, whereas Sprint, as a PCS carrier, is not confronted with the same issue.⁴⁷ Verizon also notes that its projections are in line with those proposed by ALLTEL and Qwest and warns against categorical comparisons with other wireless carriers.⁴⁸ We are persuaded by Verizon's argument that there are differences between Verizon and Sprint that have reasonably affected their individual deployment schedules. First, we note that Verizon has a much larger subscriber base to which it must deploy ALI-compliant handsets. According to end of the year 2000 statistics, Verizon has a subscriber base of approximately 27,500,000; whereas, Sprint has a subscriber base of approximately 9,543,000. Second, Verizon operates on three different combinations of spectrum and air interfaces (800 MHz analog, 800 MHz digital, and 1900 MHz PCS), and for its national plans, as well as some regional plans, a tri-mode phone must be used, which is available from a more limited number of vendors. Sprint operates solely a PCS network at 1900 MHz and uses digital only phones. Because of these factors, we agree with Verizon that its compliance is more complicated due to the challenges it faces. Nonetheless, although part of its delayed handset deployment schedule may be attributable to these factors, we also note that with the filing of its request only recently, Verizon made a significant change in its plans for complying with the Commission's E911 Phase II rules – from a network-based solution to a handset-based solution. Our rules and orders allow for such a change; nonetheless, had Verizon more timely selected a handset approach, it might have been able to meet a more aggressive handset deployment schedule than that it ultimately proposed. Given the critical public safety concerns underlying our E911 rules, Verizon must meet, if not exceed, its December 31, 2003 deployment deadline.

21. Additionally, we recognize that Verizon may have received a number of valid Phase II PSAP requests that under the Commission's rules must be satisfied within 6 months and that Verizon may continue to receive such requests in the future.⁴⁹ Because Verizon commits to upgrade its switches,

⁴⁴ Sprint has committed to completing roll-out of its Lucent switch upgrades by May 30, 2002 and to roll-out of Nortel switch upgrades by August 1, 2002. See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket 94-102, Request for Waiver by Sprint Spectrum L.P. d/b/a Sprint PCS (filed July 30, 2001) (*Sprint Request*).

⁴⁵ *Verizon Request* at 23-25.

⁴⁶ *Sprint Request* at 5-6; *Sprint Reply Comments* at 12.

⁴⁷ *Verizon Reply Comments* at 8.

⁴⁸ *Id.*

⁴⁹ See Letter from John T. Scott, III, Vice President and Deputy General Counsel Regulatory Law, Verizon Wireless, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket 94-102 (filed Sept. (continued....))

regardless of whether it has received PSAP requests in many areas, we believe establishing a schedule for responding to PSAP requests will promote an efficient roll-out of Phase II service. Therefore, on or before December 31, 2002, Verizon must complete all valid PSAP requests received on or before June 30, 2002, except in markets served by Motorola switches. In Motorola markets, on or before March 31, 2003, Verizon must complete all valid PSAP requests received on or before September 30, 2002. In markets served by Lucent and Nortel switches, Verizon must complete valid PSAP requests received on or after July 1, 2002 within six months of the request, as provided in the Commission's rules. In markets served by Motorola switches, Verizon must complete valid PSAP requests received on or after October 1, 2002 within six months of the request, as provided in the Commission's rules

22. We conclude that Verizon's compliance plan and request for relief present a reasonable proposal to deploy the AGPS/AFLT solution. We agree with Qualcomm that Verizon's AGPS/AFLT solution, which combines GPS satellite technology with network components, contains an appropriate "mix of technologies" in accordance with Commission rules.⁵⁰ Verizon has specifically described in a very focused manner the technological issues and exceptional circumstances that form the basis of an acceptable request for relief. Applying the standards the Commission used in the *E911 Fourth Memorandum Opinion and Order* in granting the VoiceStream waiver, we find that Verizon's proposal seeks to offer "significant public safety benefits" by immediately providing a level of accuracy and reliability, while also ensuring the rapid initial deployment of Phase II capability.⁵¹ The majority of commenters agree that not only has Verizon presented a request for relief that is specific, limited and focused, but it has also presented a compelling case for a temporary waiver of the Commission's Phase II E911 rules.⁵²

23. *As Close As Possible to Full Compliance.* Based on the evidence before us, we believe that Verizon has also demonstrated that it has taken concrete steps to come as close as possible to full compliance. Verizon states that it is persuaded that AGPS/AFLT is the best solution available, and commits to deploying this solution as aggressively as possible. Verizon seeks to deploy its AGPS/AFLT technology on a timeline consistent with the scheduled switch and cell software releases from its three network vendors, Lucent, Nortel, and Motorola, and on the availability of compliant handsets. In its vendor negotiations, Verizon has emphasized the Commission's handset activation milestones.⁵³ Verizon's proposed compliance plan is therefore premised on a realistic assessment of deployment dates.

24. Verizon's deployment of two interim measures is a primary indicator that it has taken and will take concrete steps to come as close as possible to full compliance with the Commission's Phase II rules for the digital portion of its network.⁵⁴ As mentioned, EFLT is a network-based technology that has

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11, 2001) (*Verizon Wireless September 11th Ex Parte*). As of September 11, 2001, Verizon had received 90 Phase II PSAP requests.

⁵⁰ *Qualcomm Reply Comments* at 3-4; *Public Safety Organization Comments* at 3; see also *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17461-17464, paras. 57-60.

⁵¹ *Id.* at 17461-17463 (paras. 57-60); see also *AT&T Comments* at 2.

⁵² *AT&T Comments* at 2-3; *CTIA Comments* at 4; *Motorola Comments* at 2.

⁵³ *Verizon Reply Comments* at 4.

⁵⁴ *Verizon Request* at 28, n.25. Verizon notes that the PSAP community has recognized the significance of the deployment of an interim technology in assessing carriers' efforts to come as close as possible to meeting the Commission's Phase II rules.

the potential to give PSAPs and Verizon greater location accuracy than exists under Phase I.⁵⁵ The advantages of EFLT, as an interim solution, are that it can be deployed without the need to install hardware at each cell site and service can be provided using existing handsets, although it cannot be deployed on the portion of Verizon's network served by Motorola switches.⁵⁶ Furthermore, Verizon's commitment to deploy a network-based solution⁵⁷ in three major metropolitan areas is a strong indication that Verizon has taken concrete steps toward Phase II compliance. We note that Verizon maintains that this could very well constitute the first Phase II service to PSAPs in the nation.⁵⁸ Thus, based on the evidence of record, we conclude that Verizon has taken concrete steps to ensure that it comes as close as possible to full compliance with our Phase II requirements. Therefore, Verizon, as previously indicated, must install a network-based technology in counties with Phase II requests and previously tested network components. Specifically, Verizon must provide Phase II capability to 100% of two counties, St. Clair County, Illinois (St. Louis) and Lake County, Indiana (Gary-East Chicago market) by December 31, 2001. In addition, Verizon must provide Phase II capability to 100% of Cook County, Illinois (Chicago), St. Louis County, Missouri (St. Louis) and Harris County, Texas (Houston) by April 1, 2002.⁵⁹ Verizon must also deploy the EFLT solution in its Lucent and Nortel markets by April 1, 2002. The status and availability of EFLT for use in Motorola markets will be a part of Verizon's reporting requirements, as discussed below.

25. **Clear Path to Full Compliance.** Finally, Verizon presents a clear path to full Phase II compliance for the digital portions of its network. Verizon remains committed to the Commission's accuracy requirements. After considerable testing of a network-based solution,⁶⁰ with what Verizon claims to be disappointing results, Verizon has selected a feasible alternative solution and compliance plan that will enable it to conform to the Commission's rules in what it considers to be the shortest timeframes possible. It is actively pursuing testing of that solution on its Lucent infrastructure at two sites. Verizon is conducting tests with Lucent in New Jersey on its infrastructure and PDE and promises to provide the test results to the Commission "in late September." It expects to complete the FOA at this site by late October 2001. Verizon also advises that an FOA and testing of switch and cell site software, PDE and MPC technology are presently underway in Dallas, Texas. Verizon concludes that, in the absence of delays in the availability of Lucent switches and upgrades,⁶¹ "the April 1, 2002 date for

⁵⁵ We note that the 250 to 350 meter accuracy levels that can be achieved by EFLT are similar to the accuracy levels of the solutions AT&T and Cingular proposed to use for their TDMA networks. We view Verizon's EFLT solution as different, however, because it is a "true" interim solution that Verizon will use as it phases in its AGPS/AFLT solution, whereas AT&T and Cingular proposed to use their TDMA solutions for an extended period of time or with no firm phase-out commitment.

⁵⁶ Verizon has a total network coverage of approximately 235 million people. Of that, approximately 40 million Verizon customers are served by Motorola switches. See *Verizon Reply Comments* at 3-4.

⁵⁷ In May and June of 2001, Verizon participated in live testing in Houston, Texas with three vendors: Grayson Wireless, which is providing the Position Determining Equipment/Entity (PDE), Lucent, which is providing switches and switch upgrades, and Intrado, which is providing the Service Control Point/Mobile Positioning Center (SCC/MPC) database.

⁵⁸ *Verizon Request* at 29.

⁵⁹ We recognize that Verizon's obligation to deploy its network-based solution in these counties extends only to those portions of these counties covered by a valid PSAP request.

⁶⁰ *Id.* at 32-37. Verizon conducted trials of cell site equipment and technology with TruePosition and Grayson in the year 2000.

⁶¹ See Lucent Letter, dated August 20, 2001 from Franklin J. Novello, Sales Vice President, Verizon Wireless Consumer Team, to Larry Rybar, Executive Director, Technology and Implementation, Verizon Wireless. Lucent originally estimated that E911 network features would be generally available in early September. Due to delays in its testing schedule, the new general availability date for E911 Phase II compliance is changed to November 9, 2001.

nationwide deployment [in Lucent markets] remains feasible.”⁶² As CTIA argues in its comments, approval of Verizon’s selection of the AGPS/AFLT network-assisted handset-based solution is consistent with the Commission’s goal of technological neutrality.⁶³ In addition, its deployment of an interim, network-based solution is evidence of its desire to provide Phase II service as early as possible, by any available means.

26. Verizon’s revised compliance plan schedules for handset activation, too, are the result of its efforts to identify realistic availability dates and represent a clear path to full Phase II compliance. Verizon expects widespread availability of new handsets with AGPS/AFLT capability during the second half of 2002, and it plans to meet the 100 percent benchmark in our rules by December, 2003.⁶⁴ It chronicles communications with its “core suppliers” to achieve handset availability as quickly as the design, manufacture and distribution process will permit.⁶⁵ Given the circumstances, we conclude that Verizon has committed to an aggressive and clear path toward full compliance.⁶⁶

B. Justification for Partial Grant of Verizon’s Compliance Plan and Request for Relief Regarding the Use of Analog-Only Handsets.

27. Verizon has provided no compliance plan for those portions of its system providing only analog service; yet analog-only service continues to constitute a significant portion of its customer base. As noted, 10 percent of Verizon’s service areas have no digital service; about 35 percent of Verizon’s customers have analog-only handsets.⁶⁷ These numbers represent a substantial portion of Verizon’s customer base that cannot avail itself of the benefits of Phase II service and for which Verizon has made no provision in its compliance plan and request for relief.

28. Verizon argues that its manner of addressing non-ALI capable handsets is as was intended by the Commission.⁶⁸ Verizon notes that the Commission has recognized that handset solutions present problems in universal coverage, because those without ALI-capable handsets, such as roamers and those using older handsets, might not receive Phase II ALI. Verizon also argues that the Commission has stated that any concerns associated with non-ALI capable handsets and roamers can be addressed and minimized within a reasonable time. Verizon emphasizes that its analog-only coverage is steadily decreasing and argues that the fact that the 100% new activation benchmark only applies to digital handsets underscores the Commission’s expectation that the embedded base of handsets would be phased out over time. Verizon further argues that in adopting the interim benchmarks and the 2005/95 percent requirement, the Commission directly addressed concerns that handset-based solutions might not adequately account for a carrier’s non-ALI capable handsets.

29. The handset activation rules cited by Verizon have never been the only requirement placed on carriers selecting a handset solution with respect to their analog network and customers. For

⁶² See *Verizon Reply Comments* at 4-5.

⁶³ *CTIA Comments* at 4.

⁶⁴ *Verizon Reply Comments* at 8-9.

⁶⁵ *Id.* at 8. Verizon notes that “meeting the prescribed benchmarks [for handsets] entails not only the availability of adequate commercial volumes but also widespread customer demand and acceptance.”

⁶⁶ *Verizon Request* at 19, *Verizon Reply Comments* at 8.

⁶⁷ *Verizon Reply Comments* at 7.

⁶⁸ See Letter from Kathryn A. Zachem, Wilkinson, Barker and Knauer, on behalf of Verizon Wireless, to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket No. 94-102 (filed Sept. 20, 2001) (*Verizon September 20th Ex Parte*).

instance, the Commission never intended that in areas where there is analog-only access, customers would not receive any Phase II service at all for an indefinite period of time. The Commission requires that carriers take a “best practice” approach to providing ALI to callers who do not have ALI-capable handsets where the PSAP is able to receive and use Phase II ALI service.⁶⁹ The Commission further recognized that depending upon the transmission technology the carrier uses and the location technologies available in particular locations, carriers could exercise several options to fulfill this obligation. While the Commission decided that a “best practices” approach did not require that carriers selecting a handset approach deploy a broadscale network approach in order to take care of all roamers and customers with analog-only handsets, we find that it is not sufficient, in all instances, to wait until Verizon has migrated all of its networks and customers, given Verizon’s significant number of analog-only customers and analog-only areas. Thus, we conclude that when Verizon receives a valid PSAP request where more than 50% of the PSAP’s coverage area is covered by the Verizon analog-only network, Verizon must comply with the Commission’s Phase II rules by using a network-based solution or by upgrading its network to a digital network with a Phase II compliant solution in that area.

C. Additional Conditions of Relief Granted

30. To assist in monitoring and enforcing each of the conditions imposed on Verizon, as set forth in summary form below, we also require that Verizon 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 Verizon’s progress closely and determine whether Verizon 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

31. 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 Verizon claims it is valid, and its status. To the extent any request has been pending for more than six months, Verizon must identify the specific reasons underlying the failure to provide the requested service, the steps Verizon 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 Verizon 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 Verizon to serve this report on APCO, NENA, and NASNA.⁷² In addition, the Commission will post this

⁶⁹ See *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, 17414 -17415 at paras. 55-58 (1999).

⁷⁰ To the extent Verizon 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 Verizon to provide additional information in its Quarterly Reports, if necessary to evaluate Verizon’s compliance with the terms and conditions of the relief granted, and its progress in deploying Phase I and Phase II E911 services.

⁷² Verizon 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 Verizon’s request for relief.

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 additional steps necessary to ensure PSAP access to this information.

- With respect to its handset deployment, Verizon must report, in the Quarterly Report immediately following the benchmark date:⁷⁴ (1) for the December 31, 2001 benchmark, a statement as to whether Verizon has begun selling and activating a single AGPS/AFLT handset model and, if so, on what date; (2) for the periods of July 31, 2002 to March 30, 2003, and March 31, 2003 to December 30, 2003, the percentage of new handsets activated nationwide during the respective periods that were AGPS/AFLT-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 AGPS/AFLT-capable; (3) for the December 31, 2003 benchmark, a statement of whether 100 percent of new digital handsets being activated nationwide were AGPS/AFLT-capable; and (4) for the December 31, 2005 benchmark, a statement of the percentage of the total number of Verizon subscriber handsets in service nationwide as of that date that are AGPS/AFLT-capable, as well as the total number of Verizon subscriber handsets in service nationwide as of that date and the total number of those handsets that are AGPS/AFLT capable as of that date.⁷⁵
- 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 must also contain statements regarding whether Verizon has met the deployment benchmarks for upgrading its network. Verizon must report, in the Quarterly Report immediately following the benchmark dates for completion, whether it completed the deployment of network upgrades to Lucent switches by April 1, 2002; upgrades to Nortel switches by August 1, 2002; and to Motorola switches by March 1, 2003. In the event Verizon fails to meet these benchmarks, the Report must also include information on events affecting deployment, such as the status of vendor negotiations.
- The Report also must contain statements regarding whether Verizon has met each deployment benchmark for its interim deployment solutions and, if not, the reasons for its failure to comply. Specifically, Verizon must report, in the Quarterly Report immediately following the benchmark date of December 31, 2001 whether it has provided Phase II capability to 100% of two counties, St. Clair County, Illinois (St. Louis) and Lake County, Indiana (Gary-East Chicago market). In addition, Verizon must report, in the Quarterly Report immediately following the benchmark date of April 1, 2002, whether it has provided Phase II capability to 100% of Cook County, Illinois (Chicago), St.

⁷³ See www.fcc.gov/e911.

⁷⁴ To the extent Verizon 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 specific reasons for the request.

⁷⁵ Verizon'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 Verizon 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 footnote 74, *supra*.

Louis County, Missouri (St. Louis), and Harris County, Texas (Houston).⁷⁶ Verizon must also report, in the Quarterly Report immediately following the benchmark date of April 1, 2002 for deployment of its EFLT interim solution in its Lucent and Nortel markets, whether it has completed deployment of EFLT in its Lucent and Nortel markets. In its Quarterly Reports, Verizon must report on the progress of any FOA testing and the status of availability of the EFLT solution for its Motorola markets.

- Verizon must support each Quarterly Report with an affidavit, from an officer or director of Verizon, attesting to the truth and accuracy of the report.
- To the extent Verizon 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 Verizon from possible enforcement in cases where Verizon has violated a condition of this Order.

32. Verizon'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 Verizon's ability to perform in the period between reports, Verizon should notify the Commission through a supplementary filing. This supplemental filing must include specific details regarding the problems Verizon has encountered affecting its ability to comply.

33. These Quarterly Reports by Verizon 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 Verizon's compliance with both its implementation plan and the Phase II rules. The reports on handset deployment will assist us in assessing whether Verizon is in compliance with the requirements of its implementation plan.

34. Verizon 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, Verizon 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 Verizon 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 ALI 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.

35. Moreover, the approval of Verizon's compliance plan does not alter Verizon's ultimate obligation to comply with the Phase II rules and the conditions of this relief. Verizon remains ultimately responsible for providing timely compliant Phase II service. If Verizon 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

⁷⁶ We recognize that Verizon's obligation to deploy its network-based solution in these counties extends only to those portions of these counties covered by a valid PSAP request.

be considered as possible mitigation factors in such an enforcement context.⁷⁷ As set forth above, Verizon 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 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 reports, or more generally Verizon's compliance, Verizon may be required to provide additional documentation to refute the complaint or respond to the Commission's questions. In the event that Verizon's Phase II solution unexpectedly fails to comply with the Phase II accuracy requirements, Verizon shall, as a condition, propose to deploy a solution that does comply with those requirements, as well as the other conditions of this Order and applicable Phase II rules.⁷⁸

D. Summary of Conditional Relief Granted

36. Verizon's request to deploy AGPS/AFLT technology for its CDMA network is granted, subject to compliance with the specific conditions set forth below.

37. Accordingly, Verizon must comply with the following timeline with respect to its AGPS/AFLT capable handsets:

December 31, 2001:	Verizon must begin selling and activating AGPS/AFLT-capable handsets and ensure that at least one entry-level AGPS/AFLT-capable handset model is available;
July 31, 2002:	25% of all new handsets activated must be A-GPS-capable;
March 31, 2003:	50% of all new handsets activated must be A-GPS-capable;
December 31, 2003:	100% of all new digital handsets activated must be A-GPS-capable;
December 31, 2005:	95% of all customer handsets in service must be A-GPS-capable.

These revised benchmarks apply generally in the same manner as the benchmarks for location-based handset deployment in our rules.⁷⁹ In the *E911 Fourth Memorandum Opinion and Order* we recognized that measuring compliance with interim percentage benchmarks, such as the 25 and 50 percent benchmarks in our rules, might be difficult.⁸⁰ We emphasized that, in evaluating compliance, we would look at the reasonableness of a carrier's measurement methodology and the circumstances surrounding the measurement.⁸¹ To further clarify the benchmarks and their enforcement, we believe that one reasonable

⁷⁷ *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17458.

⁷⁸ As stated above, seeking relief will not, in and of itself, insulate Verizon from possible enforcement in cases where Verizon has violated a condition of this Order.

⁷⁹ The new handset activation benchmarks under Verizon's plan will be applied in the same manner as the benchmarks in the Phase II rules. 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 Verizon. See, *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17455, n. 62 and 1753-4.

⁸⁰ *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17455 at n. 65.

⁸¹ *Id.*

methodology to show compliance with the approved plan would be for Verizon 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.⁸² Thus, for the 25 percent benchmark, Verizon would demonstrate that at least 25 percent of the new CDMA handsets it activated during the period between December 31, 2001 and July 30, 2002 were A-GPS-capable. Similarly, it would demonstrate that at least 50 percent of new CDMA handsets it activated during the period between July 31, 2002 and March 30, 2003 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, Verizon is required to begin selling and activating at least one model A-GPS handset no later than December 31, 2001; as of December 31, 2003, 100 percent of new digital handsets Verizon activates must be A-GPS-capable.

38. Second, on or before April 1, 2002, Verizon must complete deployment of the network-assisted portion of AGPS/AFLT in its switches and cell sites for Lucent markets.

39. Third, on or before August 1, 2002, Verizon must complete deployment of the network-assisted portion of AGPS/AFLT in its switches and cell sites for Nortel markets.

40. Fourth, on or before March 1, 2003, Verizon must complete deployment of the network-assisted portion of AGPS/AFLT in its switches and cell sites for Motorola markets.

41. Fifth, in areas where Verizon receives a valid PSAP request where more than 50% of the PSAP's coverage area is covered by the Verizon analog-only network, Verizon must comply with the Commission's Phase II rules by using a network-based solution or by upgrading to a digital network with a Phase II compliant solution in those areas.

42. Sixth, on or before December 31, 2002, Verizon must complete all valid PSAP requests received on or before June 30, 2002, except in markets served by Motorola switches. In Motorola markets, on or before March 31, 2003, Verizon must complete all valid PSAP requests received on or before September 30, 2002. In markets served by Lucent and Nortel switches, Verizon must complete valid PSAP requests received on or after July 1, 2002 within six months of the request, as provided in the Commission's rules. In markets served by Motorola switches, Verizon must complete valid PSAP requests received on or after October 1, 2002 within six months of the request, as provided in the Commission's rules.

43. Seventh, Verizon must install a network-based technology in the following counties where there are Phase II requests and previously tested network components, according to the following schedule:

December 31, 2001: Verizon must provide Phase II capability to 100% of St. Clair County, Illinois (St. Louis) and Lake County, Indiana (Gary-East Chicago market).

April 1, 2002: Verizon must provide Phase II capability to 100% of Cook County, Illinois (Chicago), St. Louis County, Missouri (St.

⁸² If Verizon 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.

Louis) and Harris County, Texas (Houston).⁸³

44. Eighth, on or before April 1, 2002, Verizon must deploy the EFLT Phase II solution, with an accuracy on average of within 250 to 350 meters, without the assistance of a modified handset, in all markets served by Lucent and Nortel switches. Verizon must report on the status and availability of the EFLT solution for Motorola switches, as indicated herein.

45. Ninth, Verizon 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 30-35, *supra*.

IV. PROCEDURAL MATTERS AND ORDERING CLAUSES

A. Paperwork Reduction Analysis

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

B. Further Information

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

C. Ordering Clauses

48. Accordingly, IT IS ORDERED that the Verizon 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.

49. 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 the filing of additional information.

FEDERAL COMMUNICATIONS COMMISSION



Magalie Roman Salas
Secretary

⁸³ We recognize that Verizon's obligation to deploy its network-based solution in these counties extends only to those portions of these counties covered by a valid PSAP request.

APPENDIX A

Comments (filed August 21, 2001):

Association of Public-Safety Communications Officials-International, Inc.,
National Emergency Number Association, and National Association of State Nine One One
Administrators (Public Safety Organizations)
AT&T Wireless Services, Inc. (AT&T)
Cellular Telecommunications and Internet Association (CTIA)
Motorola Inc. (Motorola)

Replies (filed August 31, 2001)

Verizon Wireless (Verizon)
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 showings 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.⁵ 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, 1996.⁶ 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.⁷ 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."⁸

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.⁹ 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, 2001.¹⁰

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.

⁵ See *E911 First Report and Order*, 11 FCC Rcd 18676.

⁶ *Id.* at ¶ 23.

⁷ *Id.*

⁸ *Additional Ex Parte Comments of APCO, NENA and NASNA* at 2.

⁹ See *E911 Reconsideration Order*, 12 FCC Rcd 22665 (1997); *E911 Second Memorandum Opinion and Order*, 14 FCC Rcd 10954.

¹⁰ *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.”¹¹

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 compliance¹²

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

¹¹ *E911 Fourth Memorandum Opinion and Order* ¶¶ 26-30 (emphasis added).

¹² *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.