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

In the matter of	)	
	)	
Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	
	)	
Request for Waiver by AT&T Wireless Services, Inc.	)	
	)	
	)	

ORDER

Adopted: October 2, 2001 **Released: October 12, 2001**

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

I. INTRODUCTION

1. In this order, we approve an implementation plan proposed by AT&T Wireless Services, Inc. (AT&T), subject to certain conditions, for providing enhanced 911 services on its Global System for Mobile Communications (GSM)/ General Packet Radio Service (GPRS) network. Under this plan, AT&T will be permitted additional time to deploy Enhanced Observed Time Difference of Arrival (E-OTD) technology, its hybrid network- and handset-based solution for locating 911 callers throughout its new GSM/GPRS network. The accuracy of its E-OTD technology must meet the Commission's rules for network-based technologies immediately upon deployment and the stricter standards for handset-based technologies by October 1, 2003. Further, we require AT&T 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 this alternative implementation plan is justified by the overall benefits to public safety of AT&T's proposed solution, particularly its ability to deploy E-OTD concurrently with deployment of its new GSM network, and 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 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

[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.

[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.*

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 AT&T's Request

8. In its Amended E911 Phase II Report,[10] AT&T stated that it planned to overlay a GSM/GPRS platform to its existing Time Division Multiple Access (TDMA) network. AT&T claimed that while this change would give AT&T's network higher speed data capabilities and its customers a wider array of mobile devices, the transition "seriously complicated" AT&T's plans regarding its location technology selection for Phase II.[11] AT&T stated that it intended to deploy E-OTD technology throughout its GSM network and indicated that it would make E-OTD available immediately upon deployment of its GSM network.[12] AT&T stated that it intended to seek relief from the rules once it had more information on its GSM deployment schedule and the performance and accuracy of the E-OTD technology.[13] As for its TDMA network, AT&T explained that it was in the process of investigating the use of E-OTD for its TDMA network, finding the preliminary analysis "promising," but stated that it was also exploring other network-based TDMA solutions through various field trials.[14]

9. On April 4, 2001, AT&T filed an E911 Phase II compliance plan and relief from the Commission's E911 Phase II rules.[15] Specifically, with respect to its new GSM network, AT&T requests that the Commission permit AT&T to deploy a hybrid network- and handset-based E-OTD technology. With respect to its selection of E-OTD location technology, AT&T claims that it faces circumstances similar to those of VoiceStream, whose waiver the Commission approved in 2000.[16] AT&T asserts that while E-OTD ultimately will meet and even exceed the Commission's accuracy requirements, E-OTD technology will not initially meet the Commission's accuracy rules for handset-based location technologies. Accordingly, AT&T requests relief from the location accuracy requirements for handset-based solutions set forth in section 20.18(h) of the Commission's rules to permit the deployment of E-OTD technology for AT&T's GSM network. AT&T asserts that it would provide E-OTD-compatible handsets to GSM customers when AT&T's GSM network comes online so that AT&T's GSM network is Phase II capable from day one.[17] Further, similar to VoiceStream's commitment, AT&T commits to meeting the accuracy requirements for handset-based solutions by October 1, 2003, or it will adopt

[8] *Id.* at 17457, para. 44.

[9] *Id.* at 17457-58, paras. 44-45.

[10] AT&T Wireless Services, Inc. Amended E911 Phase II Report, CC Docket 94-102 (filed Dec. 9, 2000) (*AT&T Amended E911 Phase II Report*). Pursuant to the Commission's orders, on November 9, 2000, AT&T filed a E911 Phase II report in which AT&T stated that it was not in a position to choose between a handset-based and network overlay solution, but it committed to filing an amended report as soon as possible regarding its E911 Phase II location technology choice. Subsequently, it filed the *AT&T Amended E911 Phase II Report* on December 9, 2000.

[11] *Id.* at 2.

[12] *Id.* at 3.

[13] *Id.*

[14] *Id.* at 4-5.

[15] AT&T Wireless Services, Inc. Request for Waiver of the E911 Phase II Location Technology Implementation Rules, CC Docket No. 94-102 (filed April 4, 2001) (*AT&T Request*).

[16] *AT&T Request* at 1. *See E911 Fourth Memorandum Opinion and Order.*

[17] *AT&T Request* at 5.

another ALI methodology that comports with the Commission's requirements.[18]

10. AT&T asserts that its implementation plan to deploy E-OTD over its new GSM network is justified because E-OTD is the standardized location method for GSM, using an E-OTD solution would ensure rapid initial deployment of ALI capability, and accuracy of E-OTD is expected to improve over time.[19] AT&T argues that the Commission should approve its compliance plan and grant its request in light of these substantial customer and public safety benefits and because the Commission already granted a waiver to VoiceStream under similar circumstances.[20]

11. In the *AT&T Request*, AT&T also announced its selection of Mobile-Assisted Network Location Systems (MNLS) technology for its TDMA network, which, according to AT&T, would provide location accuracy of approximately 250 meters for 67 percent of calls and 750 meters for 95 percent of calls.[21] After numerous parties including public safety organizations and location technology vendors challenged AT&T's proposal to use MNLS for its TDMA network, AT&T filed a letter on September 17, 2001 amending its request for relief with respect to its TDMA network.[22] In lieu of implementing MNLS as its E911 Phase II network-based solution for its TDMA network, AT&T seeks permission to deploy either TruePosition's or Grayson Wireless' (Grayson) network overlay technologies. AT&T indicates that its TDMA solution proposed in the *AT&T September 17th Ex Parte* "is in lieu of MNLS and supersedes AWS's MNLS proposal set forth in its request and amplified in its August 6, 2001 letter."[23] While AT&T has submitted a compliance plan for the TDMA portion of its network, the timing of that submission did not permit Commission consideration. Accordingly, discussions have been initiated between AT&T and FCC Enforcement Bureau staff concerning possible consent decrees with the Commission to resolve this compliance issue.[24]

C. Positions of Interested Parties

12. The *AT&T Request* was placed on public notice on April 6, 2001.[25] Comments largely supportive of AT&T's request for its GSM network were filed by handset manufacturers and wireless carriers, including Ericsson, Motorola, Nokia, Qwest, the Cellular Telecommunications and Internet Association (CTIA), and VoiceStream.[26] AT&T also submitted reply comments in support of its compliance plan and request for relief from the Commission's rules. Ericsson asserts that AT&T should be permitted to use E-OTD technology as its Phase II location solution because its circumstances are similar to VoiceStream's for E-OTD.[27] VoiceStream also supports AT&T's position that E-OTD at this

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[18] *Id.*

[19] *AT&T Request* at 4-5.

[20] *Id.* at 6.

[21] *Id.*

[22] Letter from Douglas I. Brandon, Vice President – External Affairs & Law, AT&T Wireless Services Inc., to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, CC Docket No. 94-102 (filed Sept. 17, 2001) (*AT&T September 17th Ex Parte*).

[23] *Id.* at 2.

[24] *See* Press Release, "FCC Acts on Wireless Carrier and Public Safety Requests Regarding Enhanced Wireless 911 Services" (rel. Oct. 5, 2001).

[25] Public Notice, "WTB Seeks Comment on Wireless E911 Phase II Waiver Request Filed by AT&T Wireless Services, Inc." DA 01-894 (rel. Apr. 6, 2001).

[26] Comments and reply comments filed in response to AT&T's request are listed in Appendix A.

[27] Ericsson Comments at 1-2.

time is the "best solution" for GSM operators.[28] Public safety organizations, namely, the Association of Public-Safety Communications Officials-International, Inc. (APCO) and the National Emergency Number Association (NENA), as well as Dr. John Brown of the City and County of San Francisco, EMS Section of the Department of Health, oppose AT&T's compliance plan and request for relief. APCO and NENA argue that E-OTD does not meet the Commission's accuracy requirements for a handset-based solution, nor has AT&T adequately demonstrated that this is the best solution.[29]

III. DISCUSSION

13. We conclude that, based on the record, granting AT&T's proposed implementation plan for its GSM network and its request for a temporary, conditional waiver, subject to the modifications specified below, is consistent with the Commission's standards set out in the *E911 Fourth Memorandum Opinion and Order*. It is our understanding that AT&T is not currently offering service on its GSM network. In order to ensure that E-OTD is available in AT&T's GSM network upon deployment of the GSM air interface, AT&T has required its vendors to be in compliance with the FCC's rules on the date of deployment.[30]

A. AT&T Has Satisfied the Commission's Standard for E911 Phase II Relief With Respect to Its Proposed Solution for Its GSM Network

14. ***Plan That Is Specific, Focused, and Limited in Scope.*** With respect to its GSM network, AT&T has presented an implementation plan and request that is specific, focused, and limited in scope. In its request, AT&T specifies the location technology it has selected to deploy in its GSM network, E-OTD, and identifies why its implementation plan is necessary to deploy this technology. Specifically, AT&T notes that it has selected E-OTD as its location technology because E-OTD is the standardized location method for GSM, it is included in the current GSM standards, and consequently, AT&T's handset manufacturers can be expected to include E-OTD capability in all future GSM handsets.[31] Handset manufacturers Nokia and Motorola indicate that they plan to include E-OTD in future handsets.[32] AT&T reasons that using an E-OTD solution will ensure rapid initial deployment of ALI capability to all of AT&T's GSM subscribers because AT&T will provide E-OTD-compatible handsets when AT&T's network comes online, ensuring that AT&T's GSM network is Phase II capable from day one.[33] As explained above, however, E-OTD's accuracy currently fails to meet the handset-based accuracy requirements and therefore AT&T seeks temporary relief from those requirements. AT&T's implementation plan and request is also focused and limited in scope. AT&T requests relief of the handset-based accuracy requirements until October 1, 2003, at which time AT&T asserts that either E-OTD will meet the handset-based accuracy requirements or AT&T will select another location technology solution that will meet the Commission's standards. AT&T notes that the Commission previously granted similar relief to VoiceStream to allow VoiceStream to implement E-OTD technology.[34]

15. We conclude that AT&T's proposal to deploy E-OTD simultaneously with the rollout of its GSM network represents a reasonable technology choice by which to meet the Commission's Phase II

[28] VoiceStream Reply Comments at 2.

[29] APCO/NENA Comments at 5, 7.

[30] *See* Partial Response of AT&T Wireless Services, Inc. to Order of the Wireless Telecommunications Bureau, CC Docket No. 94-102 at 5 (May 30, 2001) (*AT&T Partial Response*).

[31] *AT&T Request* at 4.

[32] Motorola Comments at 3; Nokia Comments at 4.

[33] *AT&T Request* at 5.

[34] *Id.* at 6.

requirements. As the Commission stated in granting the VoiceStream waiver, GSM is used by carriers serving only a small percentage of U.S. wireless subscribers and the development of ALI capabilities for use by GSM carriers lagged behind that for carriers using other interfaces, such as AMPS, CDMA, and TDMA.[35] Although a year has passed since the Commission made that determination and it appears some new GSM location technologies may become available,[36] we find AT&T's proposal to use E-OTD technology to be a suitable Phase II solution. The majority of commenters agree with AT&T that E-OTD is the best currently available solution for AT&T's GSM network.[37] In its comments, Motorola states that E-OTD is "the most effective, efficient location technology that will be available in the Commission's accelerated timeframe and useable for Phase II E911 purposes."[38] Based on the record in this proceeding and our own review of the costs and benefits of the various technological approaches, we agree with these assessments.

16. ***As Close as Possible to Full Compliance.*** AT&T demonstrates it has come as close as possible to full compliance and taken concrete steps toward full compliance. As an initial matter, AT&T will ensure that all GSM handsets are E-OTD-capable from day one, thus preventing a legacy handset problem. To ensure that this happens, AT&T has obtained firm commitments from its handset manufacturers.[39] Therefore, unlike other carriers that select a handset-based solution, AT&T will ensure that 100 percent of all new digital handsets activated are ALI-capable and it will simultaneously achieve 100 percent penetration of ALI-capable handsets among its GSM subscribers from the time the GSM network is deployed.[40] AT&T's inability to meet the handset-based accuracy standards is offset by the fact that ALI-capable handsets will be rapidly deployed in the GSM network and that all GSM handsets will be ALI-capable. Therefore, AT&T's proposed solution is in many ways more akin to a network-based solution than a handset-based solution because no legacy handset problem will exist.

17. ***Clear Path to Full Compliance.*** Finally, AT&T presents a clear path to full compliance. Like VoiceStream, AT&T has committed to meeting the handset-based accuracy requirements by October 1, 2003, or it will implement another location solution that meets the Commission's rules.[41]

18. Although issues have been raised as to whether E-OTD can meet the Commission's accuracy requirements for handset-based solutions (50 meters for 67 percent of calls), evidence suggests that E-OTD can meet and ultimately exceed these requirements. As the Commission recognized in granting relief to VoiceStream, VoiceStream claims that the accuracy of E-OTD technology will improve over time, "as the software is refined, experience is gained, and additional cell sites are added to serve increasing traffic."[42] More recent evidence also supports that conclusion. In its comments, Nokia indicates that its internal tests confirm that E-OTD should be capable of meeting the requirement for

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[35] *E911 Fourth Memorandum Opinion and Order* at para. 56.

[36] Some network technology vendors have fairly recently announced they have adopted their technologies for GSM although it is not clear that these technologies have been tested in actual GSM networks. *See, e.g.*, Press Release, "Grayson Wireless Adds GSM Compatibility to Its Geometrix® Wireless E911 Caller Location System" (rel. Aug. 30, 2001). Moreover, since AT&T will be locating 100% of its GSM subscribers to the network accuracy standard immediately, it is unclear what benefit would be achieved were it to move to a network-based approach.

[37] *See, e.g.*, Ericsson Comments at 3-6; Motorola Comments at 2-3; Nokia Comments at 3-6; VoiceStream Reply Comments at 2.

[38] Motorola Comments at 3.

[39] *See AT&T Partial Response* at 5.

[40] AT&T Request at 5.

[41] *Id.*

[42] *E911 Fourth Memorandum Opinion and Order* at para. 59.

network-based solutions (100 meters for 67 percent of calls).[43] Furthermore, VoiceStream states in its reply comments that its trials in Houston yielded accuracy results of 75 to 80 meters for 67 percent of calls.[44] VoiceStream states that it is confident that the location accuracy of E-OTD will improve over time.[45]

19. APCO and NENA, however, criticize AT&T's selection of E-OTD technology as its ultimate solution because there is "no assurance that 50 meter accuracy will ever be achieved."[46] AT&T has committed to meeting the accuracy requirements by October 1, 2003, or if E-OTD is unable to meet those requirements, to adopting another ALI methodology that comports with the Commission's requirements.[47] APCO and NENA are concerned that AT&T has not suggested that it will be able to convert immediately to an alternative technology on October 1, 2003 should E-OTD fail to meet the handset-based accuracy requirements. This concern may not become a problem, however: AT&T expects that E-OTD's accuracy levels will improve over time, noting that E-OTD is expected to improve further in accuracy performance "as carriers such as AT&T advance along the path to the wider-band third generation ("3G") technologies."[48]

20. In sum, we find that AT&T has satisfied the standards set forth in the *E911 Fourth Memorandum Opinion and Order* for the grant of a temporary, conditional waiver of the Phase II rules. We conclude that, based on the record developed here, granting limited relief to AT&T for its deployment of E-OTD technology over its GSM network is consistent with the Commission's standard for the grant of relief from the Phase II rules, specifically that AT&T has demonstrated that special circumstances warrant a deviation from the general rule and that such a deviation will benefit public safety overall and the public interest. Although E-OTD will not initially satisfy the handset-based accuracy standards, there are substantial public safety benefits "including rapid initial deployment of ALI capability with a relatively brief transition to even more precise levels of accuracy."[49]

B. Additional Conditions of Relief Granted

21. To assist in monitoring and enforcing each of the conditions imposed on AT&T, as set forth in summary form below, we also require that AT&T 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 AT&T's progress closely and determine whether AT&T 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.[50]

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[43] Nokia Comments at 5.

[44] VoiceStream Reply Comments at 2.

[45] *Id.*

[46] APCO/NENA Comments at 7.

[47] *AT&T Request* at 5.

[48] *Id.*

[49] *E911 Fourth Memorandum Opinion and Order* at para. 59.

[50] To the extent AT&T believes any of the required information is proprietary, it may file a request for confidential treatment pursuant to 47 C.F.R. § 0.459.

22. Specifically, the Quarterly Reports must include the following information:[51]

- 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 AT&T considers it valid, and its status. To the extent any request has been pending for more than six months, AT&T must identify the specific reasons underlying the failure to provide the requested service, the steps AT&T 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 AT&T 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 AT&T to serve this report on APCO, NENA and NASNA.[52] In addition, the Commission will post this information on its website.[53] Because it is important for each individual PSAP with a pending Phase I or Phase II request to have access to this information, we authorize the Wireless Telecommunications Bureau to require any additional steps necessary to ensure PSAP access to this information.

- The Report must also include information on: current handset models being activated or sold that are E-OTD-capable; and important events affecting location-capable handset penetration levels, such as introduction of new handset models.

- Each Quarterly Report also must contain statements regarding whether AT&T has met each deployment benchmark falling due in the period immediately preceding the Quarterly Report,[54] and, if not, the reasons for its failure to comply. Each Quarterly Report must contain: (1) a statement of whether AT&T has commenced offering service on its GSM network and, if so, on what date it began offering its GSM service; (2) a statement of whether AT&T has begun selling and activating E-OTD handsets and, if so, on what date AT&T began selling and activating E-OTD handsets and whether E-OTD handsets sold and activated prior to October 1, 2003 meet the accuracy requirements of 100 meters for 67 percent of calls and 300 meters for 95 percent of calls; and (3) for the October 1, 2003 benchmark, a statement of whether all E-OTD handsets to be sold and activated after October 1, 2003 meet the handset-based accuracy standards of 50 meters for 67 percent of calls and 150 meters for 95 percent of calls.[55]

- AT&T must support each Quarterly Report with an affidavit, from an officer or director of AT&T,

[51] We delegate authority to the Chiefs of the Wireless Telecommunications Bureau and the Enforcement Bureau to require AT&T to provide additional information in its Quarterly Reports, if necessary to evaluate AT&T's compliance with the terms and conditions of the relief granted, and its progress in deploying Phase I and Phase II E911 services.

[52] AT&T 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 AT&T's request for relief.

[53] *See* <www.fcc.gov/e911 >.

[54] To the extent AT&T 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.

[55] AT&T's Quarterly Reports are due February 1, May 1, August 1 and November 1 of each year, beginning February 1, 2002 and continuing through November 1, 2003. To the extent AT&T cannot provide any of the information required in its final report, it must file with the Chief, Enforcement Bureau, a request for extension of time to file the required information in accordance with the procedures set forth in n.54, *supra*.

attesting to the truth and accuracy of the report.

- To the extent AT&T 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 AT&T from possible enforcement in cases where AT&T has violated a condition of this Order.

23. AT&T'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 AT&T's ability to perform in the period between reports, AT&T should notify the Commission through a supplementary filing. This supplemental filing must include specific details regarding the problems AT&T has encountered affecting its ability to comply.

24. These Quarterly Reports by AT&T 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 AT&T's compliance with both its implementation plan and the Phase II rules. The reports on handset deployment will assist us in assessing whether AT&T is in compliance with the requirements of its implementation plan.

25. AT&T 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, AT&T 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 AT&T 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.

26. Moreover, the approval of AT&T's compliance plan does not alter AT&T's ultimate obligation to comply with the Phase II rules and the conditions of this relief. AT&T remains ultimately responsible for providing timely compliant Phase II service. If AT&T does not have compliant Phase II service available on the dates set forth herein, it will be deemed noncompliant and referred to the Commission's Enforcement Bureau for possible action. At that time, an assertion that a vendor, manufacturer, or other entity was unable to supply compliant products will not excuse noncompliance. However, a carrier's "concrete and timely" actions taken with a vendor, manufacturer, or other entity may be considered as possible mitigation factors in such an enforcement context.[56] As set forth above, AT&T is required to include in its Quarterly Reports a statement regarding whether it has met each 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 report, or more generally AT&T's compliance, AT&T may be required to provide additional documentation to refute the complaint or respond to the Commission's questions. In the event that AT&T's Phase II solution unexpectedly fails to comply with the Phase II accuracy requirements, AT&T shall, as a condition, propose to deploy a solution that does comply with those requirements, as well as the other conditions of the Order and applicable

[56] *E911 Fourth Memorandum Opinion and Order*, 15 FCC Rcd at 17458.

Phase II rules.[57]

C. Summary of Conditional Relief Granted

27. We grant AT&T's request for waiver of the Phase II requirements to permit AT&T to deploy E-OTD technology for its GSM network only, subject to compliance with the specific conditions we set forth in the paragraphs below. Because E-OTD requires handset modifications in order to be effective, AT&T will be subject to all of the requirements applicable to handset-based technologies except as specifically waived or modified in this order.

28. First, initially AT&T's E-OTD-capable handsets must provide ALI with an accuracy of 100 meters/67 percent of calls and 300 meters/95 percent of calls. Thus, effective October 1, 2001, all of AT&T's E-OTD-capable handsets sold and activated must comply with this accuracy requirement. [58]

29. Second, all of AT&T's E-OTD-capable handsets sold and activated on or after October 1, 2003 must comply with an accuracy of 50 meters/67 percent of calls and 150 meters/95 percent of calls.[59]

30. Third, in the event that AT&T's solution fails to comply with the Phase II accuracy requirements by October 1, 2003, AT&T is required, as a condition, to propose a solution that does comply with those requirements as well as the other conditions of this Order and applicable Phase II rules.[60]

31. Fourth, AT&T 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 21-26, *supra.*

IV. PROCEDURAL MATTERS AND ORDERING CLAUSES

A. Paperwork Reduction Analysis

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

B. Further Information

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

C. Ordering Clauses

34. Accordingly, IT IS ORDERED that the AT&T petition for relief from the wireless E911 Phase II rules with respect to the use of E-OTD for its GSM network IS GRANTED effective October 1, 2001, to the extent indicated and subject to the conditions indicated herein.

35. IT IS FURTHER ORDERED that authority is delegated to the Chief of the Enforcement

[57] As stated above, seeking relief will not, in and of itself, insulate AT&T from possible enforcement in cases where AT&T has violated a condition of this Order.

[58] This requirement applies only to new handsets, not to new activations of older models or refurbished handsets. *See, E911 Fourth Memorandum Opinion and Order,* 15 FCC Rcd at 17455, fn. 62 and 17453-4.

[59] *See* n.58, *supra.*

[60] Proposing such a revised implementation plan would not relieve AT&T from its obligations under the rules and its implementation plan or insulate AT&T from possible enforcement action. *See* paras. 22, 26, *supra.*

Bureau and the Chief of the Wireless Telecommunications Bureau to administer, clarify, and, as appropriate, modify the Quarterly Reports specified in this Order, including requiring the filing of additional information.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas

Magalie Roman Salas
Secretary

APPENDIX A

Comments and Oppositions (filed May 7, 2001):

Association of Public-Safety Communications Officials-International, Inc. and National Emergency Number Association (APCO and NENA)
Cellular Telecommunications and Internet Association (CTIA)
Ericsson Inc. (Ericsson)
Motorola, Inc. (Motorola)
Nokia Inc. (Nokia)
Qwest Wireless, LLC (Qwest)

Replies (filed May 21, 2001):

AT&T Wireless Services, Inc. (AT&T)
Dr. John Brown, Department of Public Health, EMS Section, City & County of San Francisco (Brown)
VoiceStream Wireless Corporation (VoiceStream)

SEPARATE STATEMENT OF CHAIRMAN MICHAEL POWELL

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

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

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

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

SEPARATE STATEMENT OF COMMISSIONER KATHLEEN ABERNATHY

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

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

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

The Context of Today's Decisions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

* * * * *

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

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

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

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

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

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

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

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

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

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

Previous Commission Action on E911

In 1996 the Commission worked closely with the public safety community and the wireless communications industry to devise E911 rules.[1] In the *E911 First Report and Order*, the Commission and industry began the process of making our national wireless system able to report the location of an emergency call to public safety personnel. As part of this proceeding, the Cellular Telecommunications Industry Association and various members of the public safety community suggested that the Commission require "Phase II" compliance within five years in a "Consensus Agreement" filed on the record on February 12, 1996.[2] Recognizing the complexity of achieving Phase II compliance, the Commission agreed with CTIA and the public safety community and provided industry with a full five years to reach "Phase II" compliance.[3] Thus, carriers knew on July 26, 1996 that their systems would have to achieve Phase II compliance on October 1, 2001, as they had proposed.

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

In several subsequent Orders, the Commission relaxed the Phase II requirements, delayed compliance dates, and allowed more flexibility in the types of technologies that could be used to achieve Phase II compliance.[5] As part of allowing the use of handset-based technologies, the Commission relaxed the five-year period for achieving Phase II compliance in order to achieve the greater location accuracy of GPS. Therefore, carriers were allowed to chose between network technologies that were required to be in place by October 1, 2001 and handset technologies on a delayed schedule. This delayed schedule required initial availability of Phase II compliant phones by March 1, 2001, compliance of 50% of new phones sold by October 1, 2001, and compliance of 100% of new phones sold within six months of a PSAP request received after October 1, 2001.[6]

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

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[1] *See E911 First Report and Order*, 11 FCC Rcd 18676.
[2] *Id.* at ¶ 23.
[3] *Id.*
[4] *Additional Ex Parte Comments of APCO, NENA and NASNA* at 2.
[5] *See E911 Reconsideration Order*, 12 FCC Rcd 22665 (1997); *E911 Second Memorandum Opinion and Order*, 14 FCC Rcd 10954.
[6] *E911 Third Report and Order*, 15 FCC Rcd 17388, at ¶ 9 (1999).

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

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

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

The Waivers Before the Commission

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

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

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

[7] *E911 Fourth Memorandum Opinion and Order* ¶¶ 26-30 (emphasis added).
[8] *Id.* at ¶ 44 (emphasis added).

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

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

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

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

Enforcement Language

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

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

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

Smaller and Rural Carriers

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

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

Conclusion

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

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

SEPARATE STATEMENT OF COMMISSIONER KEVIN MARTIN

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

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

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