

**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 Sprint Spectrum L.P. d/b/a Sprint PCS	)	

**ORDER**

**Adopted: October 2, 2001**

**Released: October 12, 2001**

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

**I. INTRODUCTION**

1. In this Order, we approve, in part, Sprint Spectrum L.P. d/b/a Sprint PCS (Sprint)'s individual Phase II compliance plan. Under the plan, as approved, Sprint will deploy an assisted Global Positioning Satellite (A-GPS) solution for its Code Division Multiple Access (CDMA) network. Sprint must have begun selling and activating a single A-GPS-capable handset model on October 1, 2001, will ensure that 25% of all new handsets activated are location-capable by July 31, 2002, and will ensure that 100% of new digital handsets activated are location capable by December 31, 2002.<sup>1</sup> These handsets will meet the Commission's accuracy standards for handset-based solutions from the date of initial deployment. With respect to network infrastructure, Sprint must complete its Phase II conversion of all Lucent switches by May 30, 2002 and the conversion of all Nortel switches by August 1, 2002.<sup>2</sup> We, however, allow Sprint until December 31, 2002 to complete all outstanding valid Public Safety Answering Point (PSAP) requests for Phase II service that it receives before July 1, 2002.<sup>3</sup> Valid PSAP requests received on or after July 1, 2002 shall be processed within six months in accordance with our current rules. We also impose a quarterly reporting requirement, including reporting on Phase I deployment, to begin February 1, 2002. Therefore, we grant Sprint a temporary conditional waiver of the Commission's wireless E911 Phase II rules to allow implementation of this plan.

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

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

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

<sup>3</sup> *Sprint Request* at 6.

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

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

## II. BACKGROUND

### A. Phase II Framework

4. Under Phase II of the Commission's wireless E911 rules, wireless carriers are required to provide the location of wireless 911 callers, a capability known as Automatic Location Identification (ALI).<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup>

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.<sup>7</sup> A carrier using a network-based solution must provide ALI to 50 percent of its coverage area, or 50 percent of its population, beginning on October 1, 2001 or within 6 months of a PSAP request, whichever is later, and to 100 percent of callers within 18 months of that request or by October 1, 2002, whichever is later. Wireless carriers subject to the rules were directed to report their Phase II plans, including the technologies they plan to use, by November 9, 2000.<sup>8</sup>

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

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<sup>4</sup> 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](http://www.fcc.gov/e911)>.

<sup>5</sup> 47 C.F.R. § 20.18(h)(2).

<sup>6</sup> 47 C.F.R. § 20.18(g).

<sup>7</sup> 47 C.F.R. § 20.18(h)(1).

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

time for carriers to comply<sup>9</sup>

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*.<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup>

## B. Summary of Sprint's Implementation Plan and Request

8. Wireless carriers subject to the E911 rules were directed to report details regarding their Phase II implementation plans, including the technologies they plan to use, by November 9, 2000.<sup>13</sup> After the Commission denied Sprint's request for a waiver to use an ALI technology called Forward Link Triangulation (FLT) in conjunction with Advanced FLT (AFLT) as its sole Phase II solution,<sup>14</sup> on November 9, 2000, Sprint submitted a Phase II implementation report advising the Commission that it intended to use an assisted-GPS ALI solution for its CDMA network.<sup>15</sup>

9. On July 30, 2001, and September 20, 2001, Sprint provided supplemental information on its Phase II efforts, and requests relief from the Phase II rules to permit it to deploy an assisted<sup>16</sup> Global Positioning Satellite (GPS) solution throughout its CDMA network. Specifically, Sprint requests relief from the Phase II requirement that carriers' network infrastructure must be capable of supporting Phase II service as early as October 1, 2001.<sup>17</sup> Sprint's proposed ALI solution requires conversion of its Lucent

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<sup>9</sup> *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*).

<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 17457, para. 44.

<sup>12</sup> *Id.* at 17457-58, paras. 44-45.

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

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

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

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

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

and Nortel Mobile Switching Center (MSC) switching software.<sup>18</sup> Sprint originally stated that it would begin to deploy its switch upgrades by October 1, 2001, but due to switch vendor delay, modified this date by two months.<sup>19</sup> In addition, Sprint estimated that it will need months to fully complete the Phase II conversion of all of its Lucent switches as well as other necessary equipment upgrades, and thus provided a detailed schedule for rolling out Phase II service.<sup>20</sup> Nevertheless, Sprint commits to complete the roll out of Lucent switch upgrades by May 30, 2002.<sup>21</sup>

10. Sprint also stated that Nortel has been unable to make available the necessary Phase II modifications for commercial deployment by the October 1, 2001 deadline.<sup>22</sup> In its September 20, 2001 filing, Sprint indicated that it recently began testing Nortel switch software modifications and that it should begin to make the necessary upgrades to its Nortel switches in First Quarter 2002.<sup>23</sup> Sprint stated that given the number of markets involved in its national network, Sprint would also need months to phase in Nortel's switching software.<sup>24</sup> Nevertheless, Sprint commits to have fully deployed its Nortel switch upgrades by August 1, 2002.<sup>25</sup>

11. In addition, Sprint requests certain relief from the Commission's Phase II handset activation requirements.<sup>26</sup> Sprint stated that it expected to begin selling location-capable handsets by the Commission's October 1, 2001 deadline, with 100% of all new handsets sold being GPS-compatible by December 31, 2002.<sup>27</sup> However, Sprint indicated that it is unlikely that it would meet the interim activation levels specified in the Phase II rules (25% of all new handsets by December 31, 2001 and 50% of all new handsets by June 30, 2002) due to the conversion of the Sprint network to third-generation (3G) technology.<sup>28</sup> As such, Sprint proposes activation levels of 10% of all new handsets by December 31, 2001, and 30% of all new handsets by June 30, 2002.<sup>29</sup>

12. Sprint also requests relief from the requirement that it begin delivering Phase II service to a PSAP within six months of a request in order to permit Sprint to prioritize Phase II implementation.<sup>30</sup> Sprint stated that the volume of PSAP requests<sup>31</sup> that must be processed and the custom network designs

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

<sup>19</sup> See *Sprint September 20<sup>th</sup> Supplemental Report* at 2-4.

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

<sup>21</sup> See *Sprint September 20<sup>th</sup> Supplemental Report* at 4.

<sup>22</sup> *Sprint Request* at 5.

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

<sup>24</sup> *Sprint Request* at 5.

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

<sup>26</sup> 47 C.F.R. §20.18(g)(2).

<sup>27</sup> *Sprint Request* at 3.

<sup>28</sup> *Sprint Request* at 5.

<sup>29</sup> *Sprint Reply Comments* at 12.

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

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

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

### C. Positions of Interested Parties

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

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

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<sup>32</sup> *Sprint Request* at 28.

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

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

<sup>35</sup> AT&T Comments at 1.

<sup>36</sup> AT&T Comments at 3-4.

<sup>37</sup> CTIA Comments at 3-4.

<sup>38</sup> Qualcomm Reply Comments at 1.

<sup>39</sup> Public Safety Organizations Comments at 5.

<sup>40</sup> Public Safety Organizations Comments at 4.

<sup>41</sup> Public Safety Organizations Comments at 4-5.

### III. DISCUSSION

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

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

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

17. Concerning network upgrades, Sprint explains that there will be delays in making the necessary upgrades to its CDMA network, because Lucent and Nortel have delayed the delivery of their switching software. Because Lucent could not deliver its switching software upgrade in a timely manner, Sprint requested that Lucent deliver a software patch for its current switch software that would support the delivery of Phase II data.<sup>42</sup> However, when the software patch was initially delivered to Sprint's testing facilities it demonstrated a number of failures.<sup>43</sup> Sprint indicates that, when this happens, the failures have to be corrected and re-tested.<sup>44</sup> Sprint states that it recently began testing its GPS location systems in Rhode Island using this patch, but Lucent will not certify the software for use with live end-user customers. In September 2001, Lucent provided Sprint with a more mature version of the CDMA E911 Phase II software which is being tested by Sprint.<sup>45</sup> Lucent's target date for their software upgrade is now November 9, 2001.<sup>46</sup> Sprint's states that its initial projection for completing Phase II deployment in Lucent markets was based on the assumption that the software would be ready for deployment by October 1, 2001. Nortel, however, pushed back the delivery date until July of 2001 because it had not finished working on the software.<sup>47</sup> Sprint states that Nortel has only recently made the initial release of MTX 10, the software necessary for providing network support for Sprint's GPS-enabled phones available for testing.<sup>48</sup>

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

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<sup>42</sup> *Sprint Request* at 14; *Sprint September 20<sup>th</sup> Supplemental Report* at 3.

<sup>43</sup> *Sprint Request* at 14-15.

<sup>44</sup> *Id.*

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

<sup>46</sup> *Id.*

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

<sup>48</sup> *Sprint September 20<sup>th</sup> Supplemental Report* at 3.

<sup>49</sup> *Sprint Request* at 27.

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

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

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

21. ***A Clear Path to Full Compliance.*** We conclude that Sprint's implementation plan and its request for relief provides a clear and full path to compliance. In terms of ALI-handset deployment, Sprint states that it intended to begin selling location-capable handsets by October 1, 2001, and it plans to meet the 100% activation rate by December 31, 2002.<sup>57</sup> Overall, Sprint intends to sell five million new

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<sup>50</sup> *Id.*

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

<sup>52</sup> *Sprint Request* at 3.

<sup>53</sup> *Sprint Request* at 9-12.

<sup>54</sup> *Sprint Request* at 3, 5.

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

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

<sup>57</sup> *Sprint Request* at 5.

GPS-enabled handsets before December 31, 2002.<sup>58</sup> We generally approve Sprint's proposed deployment plan for location-capable handsets, and grant limited relief regarding the Commission's Phase II requirements for handset-based solutions. Sprint seeks relief from the Commission's Phase II interim benchmarks and activation rates (25% of all new handsets by December 31, 2001 and 50% of all new handsets by June 30, 2002).<sup>59</sup> However, Sprint proposes, alternatively, to meet activation levels of 10% by December 31, 2001 and 30% by June 30, 2002 if other carriers are also required to do so.<sup>60</sup> We require Sprint to meet a 25% interim activation level by July 31, 2002, which matches the 25% interim benchmark that we impose on Verizon Wireless, the other nationwide CDMA carrier.<sup>61</sup>

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

23. In spite of the vendor delays, Sprint's implementation plan and its request for relief also provide a clear and full path to compliance for upgrading its network to support Phase II. While Sprint will not be able to meet the October 1, 2001, requirement, it has estimated that based on current vendor commitments, deployment of the necessary switch upgrades in all markets will be completed by August 1, 2002.<sup>64</sup> Indeed, Sprint has committed to make all these upgrades regardless of whether it has a valid outstanding PSAP request.<sup>65</sup> We believe the record supports the requested extension of time beyond October 1, 2001.

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

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<sup>58</sup> *Sprint Request* at 5-6; *Sprint Reply Comments* at 6.

<sup>59</sup> *Sprint Request* at 5-6.

<sup>60</sup> *Sprint Reply Comments* at 12.

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

<sup>62</sup> Public Safety Organizations Comments at 2.

<sup>63</sup> *E911 Fourth Memorandum Opinion & Order* at 13-14.

<sup>64</sup> *Sprint September 20<sup>th</sup> Supplemental Report* at 5.

<sup>65</sup> *Id.*

<sup>66</sup> See, para. 12, *supra*.



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

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

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

## **B. Additional Conditions of Relief Granted**

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

28. Specifically, the Quarterly Reports must include the following information:<sup>71</sup>

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

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

<sup>68</sup> Public Safety Organizations Comments at 4-5.

<sup>69</sup> Sprint Reply Comments at 4.

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

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

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

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

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

<sup>73</sup> See [www.fcc.gov/e911](http://www.fcc.gov/e911).

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

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

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

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

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

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

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

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<sup>76</sup> E911 Fourth Memorandum Opinion and Order, 15 FCC Rcd at 17458.

the other conditions of the Order and applicable Phase II rules.<sup>77</sup>

### C. Summary of Conditional Relief Granted

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

October 1, 2001:	Begin selling and activating A-GPS-capable handsets; Sprint must ensure that at least one entry-level A-GPS-capable handset model is available;
July 31, 2002:	Ensure that at least 25% of all new handsets activated are A-GPS-capable;
December 31, 2002:	Ensure that 100% of all new digital handsets activated are A-GPS-capable;
December 31, 2005:	95% of all subscriber handsets in service are A-GPS-capable.

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

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

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

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

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

<sup>80</sup> *Id.*

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

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

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

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

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

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

#### **IV. PROCEDURAL MATTERS AND ORDERING CLAUSES**

##### **A. Paperwork Reduction Analysis**

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

##### **B. Further Information**

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

##### **C. Ordering Clauses**

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

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

<sup>83</sup> *Sprint Request* at 6.

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

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas  
Secretary