

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

In the Matter of	)	
Revision of the Commission's Rules	)	CC Docket No. 94-102
To Ensure Compatibility with Enhanced	)	
911 Emergency Calling Systems	)	
	)	
Iowa RSA 2 Limited Partnership	)	DA 98-2631
Petition For Limited Waiver of Section	)	
20.18(g) of the Commission's Rules	)	

**IOWA RSA 2 LIMITED PARTNERSHIP E911 PHASE II REPORT AND PETITION  
FOR LIMITED WAIVER OF SECTION 20.18(g) OF THE COMMISSION'S RULES**

Iowa RSA 2 Limited Partnership ("Iowa 2"), by its attorneys and pursuant to Section 1.3 of the Commission's Rules, 47 C.F.R. §1.3 and the Public Notices in the above-captioned proceeding,<sup>1/</sup> hereby provides its supplemental E911 Phase II Report and requests a limited waiver of Sections 20.18(g) of the Commission's Rules, 47 C.F.R. §20.18(g), with respect to the deadline for implementing Phase II E911 service.<sup>2/</sup> Until the second quarter of 2002, Iowa 2's CDMA digital service was provided by Lucent Technologies, Inc. ("Lucent") cell sites that were deployed and switched by Verizon Wireless ("Verizon"). As such, Iowa 2 was party to the waiver request and was subject to the requirements contained in the *Verizon Waiver Order*.<sup>3/</sup> In April 2002, Iowa 2

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<sup>1/</sup> "Wireless Telecommunications Bureau Provides Guidance on Filings By Small and Mid-Sized Carriers Seeking Relief From Wireless E911 Phase II Automatic Location Identification Rules," CC Docket No. 94-102, *Public Notice*, DA 01-2459 rel. Oct. 19, 2001; and "Wireless Telecommunications Bureau Outlines Guidelines For Wireless E911 Rule Waivers For Handset-Based Approaches To Phase II Automatic Location Identification Requirements," DA 98-2631, released December 24, 1998 (hereinafter "Wireless E911 Waiver PN").

<sup>2/</sup> To the extent necessary, Iowa 2 respectfully requests a limited waiver of any other sub-section of Section 20.18 (e.g., 20.18(e) and (h), which require licensees to provide Phase II E911 service in accordance with quantified accuracy standards) that the Commission deems necessary and relevant to extending the October 1, 2001 deadline stated in Section 20.18(g)(1).

<sup>3/</sup> In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Request for Waiver by Verizon Wireless, CC Docket No. 94-102, (continued...)

completed its transition from Verizon's host switch to a different Lucent Host switch. Because Iowa 2 is no longer being switched or managed by Verizon, it now requests the instant waiver on its own behalf. Although Iowa 2 remains committed to a handset-based solution, Phase II-compliant handsets and corresponding upgrades to cellular (and other mobile) switching systems remain commercially unavailable to Iowa 2 at this time making it impossible, for reasons wholly beyond Iowa 2's control, to comply with the Commission deadlines for commencing sale of Automatic Location Identification ("ALI")-compatible handsets.

Thus, Iowa 2 respectfully requests: (1) an extension of time up to and including October 1, 2002 in which to begin selling Phase II-compliant handsets and to complete corresponding upgrades to its cellular switch; and (2) approval of the following revised deadlines for implementing Phase II-compliant handset activations: 25% of new activations by December 31, 2002; 50% of new activations by June 30, 2003, 100% of new activations by December 31, 2003; and 95% of embedded base by December 31, 2006. In support of this petition, Iowa 2 respectfully states as follows:

#### **I. STATEMENT OF FACTS**

Iowa 2 provides analog cellular service and has deployed a service area overlay of CDMA-based cellular service in early 2002, in Iowa RSA 2 - Union, Market No. CMA 413B, which comprises Union, Clark, Lucas Ringgold, Decatur and Wayne counties in the south of Iowa.<sup>4/</sup> These counties are relatively large and are sparsely populated. As a result, Iowa 2 utilizes a cell layout in which large sections of Iowa RSA 2 are served by a single transmitting station site (or cell). In this

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<sup>3/</sup>(...continued)  
Order, FCC 01-299, rel. Oct. 12, 2001 ("*Verizon Waiver Order*").

<sup>4/</sup> Iowa 2 provides cellular service under Call Sign KNKN492.

design, cell contour overlap is typically limited to areas where “hand-off” from one cell coverage area to another is essential for continuous, uninterrupted communications. Based upon its network configuration, Iowa 2 determined that a network-based wireless E911 location solution that depends on triangulation from multiple cell sites to satisfy the Commission’s accuracy standards cannot be economically deployed in Iowa RSA 2.

As mentioned above, on November 9, 2000 Iowa 2 utilized the switching services of Verizon Wireless and thus was included as party to Verizon’s E911 Report, and was subject to the E911 Phase II deadlines imposed by the *Verizon Waiver Order*. However, as of April 2002, Iowa 2 has discontinued use of Verizon’s switching services and market management and now reports to the Commission that its switching services are being provided by Hawkeye Cellular which plans to deploy a network-assisted handset-based solution. However, the switch host has not yet deployed the network-based components required to make a handset-based solution operable.

The Commission may grant a waiver for “good cause shown,” if the waiver is deemed in the public interest, or if there are unique factual circumstances that render application of the rule inequitable or particularly burdensome.<sup>5/</sup> Citing *WAIT Radio*, the Wireless E911 Waiver PN stated (at 4) that the Commission may waive a rule “where waivers are founded upon an ‘appropriate general standard,’ ‘show special circumstances warranting a deviation from the general rule’ and ‘such deviation will serve the public interest.’” In its Fourth Memorandum and Order in this proceeding, the Commission concluded that there may be instances where waivers of Phase II E911

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<sup>5/</sup> 47 C.F.R. §§ 1.3, 1.925; *Northeast Cellular Telephone Co v. FCC*, 897 F. 2d 1164, 1166 (D.C. Cir. 1990); *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969) *cert. denied*, 409 U.S. 1027 (1972).

rules will be necessary, particularly if “technology-related issues” or “exceptional circumstances” preclude Phase II services from being deployed.<sup>6/</sup>

As shown below, the instant petition complies with all the waiver standards articulated in the above-cited rules, decisional precedent, and orders and public notices issued in CC Docket No. 94-102. Indisputably, Phase II-compliant handsets and corresponding switch upgrades are unavailable on a commercial basis to carriers the size of Iowa 2 for either analog or CDMA. This inescapable fact, which can be characterized both as an “exceptional circumstance” and a “technology-related issue”, renders adherence to the deadline impossible—not to mention “inequitable” and “particularly burdensome.” By allowing for the orderly implementation of Phase II compliant handsets, the limited waiver requested here will further the policy objectives animating Section 20.18(g) of the Commission’s Rules while serving the public’s interest in widely-available and accurate wireless E911 service. For this reason, Iowa 2's request should be granted.

## **II. DISCUSSION**

### **A. PHASE II COMPLIANT HANDSETS AND SWITCH UPGRADES ARE COMMERCIALY UNAVAILABLE**

ALI-capable handsets and related switch upgrades are, at present, commercially unavailable to small-market carriers. No remedy to this situation will occur anytime soon — an unavoidable fact that others have amply demonstrated in this proceeding,<sup>7/</sup> and independently verified by Iowa 2 in

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<sup>6/</sup> *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems* (Fourth Memorandum Opinion and Order in CC Docket No. 94-102), FCC 00-326, 15 FCC Rcd. 17442 ¶ 43 (2000), *recon. pending* (“Fourth MO&O”).

<sup>7/</sup> *See, e.g.*, Leap Wireless International, Inc. Petition for Partial Waiver of E-911 Phase II Implementation Milestones at 13-16 (August 23, 2001); Comments of AT&T Wireless Services, Inc. at 6 (August 20, 2001); Inland Cellular Telephone Col Petition for Limited Waiver of Sections (continued...)

discussions with its prospective CDMA handset suppliers and prospective switch vendors. Thus, for reasons beyond Iowa 2's control, it is unable to deploy its network-assisted handset based solution in accordance with the deadline imposed by Section 20.18(g)(1).

Relying on claims by handset and network equipment manufacturers, the Commission last year concluded that its original deadline for deploying E911 Phase II service was reasonable. According to the Commission, “ALI technologies are already, or will soon be, available” for carriers seeking to comply with Phase II requirements.<sup>8/</sup> This Commission prediction concerning equipment has proven to be unrealistic. To date, no handset vendor is willing or able to commit to provide Iowa 2 with the handsets to begin selling E911 Phase II compliant handsets, and Iowa 2's switch vendor has been unable to provide the Iowa 2 host switch with the necessary switch upgrades to enable Iowa 2 to provide Phase II E911 location service.

As others have noted, small rural carriers like Iowa 2 face a specific disadvantage in attempting to obtain location-capable equipment and technology from manufacturers. As compared to urban carriers or large regional and nationwide carriers, rural carriers, whose subscriber numbers are comparatively small and geographically dispersed, are unable to negotiate directly with handset manufacturers and typically acquire their handsets from distributors. Relative to carriers with regional or nationwide footprints, rural licensees will have the least negotiating leverage to secure

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<sup>7/</sup>(...continued)

20.18(e) and (g) of the Rules at 3 (July 30, 2001); Qwest Wireless, LLC and TW Wireless, LLC's Petition for Extension or Time or Waiver of Section 20.18 of the Rules at 8 (July 23, 2001); and South Canaan Cellular Communications Company L.P. Petition for Waiver of Section 20.18(g) of the Rules at 2 (August 31, 2001).

<sup>8/</sup> Fourth MO&O, 15 FCC Rcd. 17442 at ¶ 44.

any priority in obtaining new handsets even when they do become commercially available. As succinctly described by Inland Cellular Telephone Co. in its recent Phase II waiver request:

Smaller carriers in smaller markets are at the ‘end of the line’ for product distribution. It is accepted industry practice that [General Availability] dates are availability dates for large market carriers only and that small carriers can expect significant delays. It is Inland’s experience that it often takes anywhere from six to nine months *after* the General Availability (“GA”) date for Inland to receive its equipment.<sup>9/</sup>

Iowa 2 vigorously echoes these sentiments. Lacking the market power that induces manufacturers to engage in direct negotiations, Iowa 2 must deal with intermediaries that face no regulatory consequences if Phase II-compliant handsets are unavailable by any given deadline. As a result, Iowa 2 and other rural carriers opting for the handset approach to E911 Phase II compliance are compelled to pursue a limited waiver of Section 20.18(g)(1).

**B. SMALL AND RURAL CARRIERS FACE UNIQUE ISSUES  
IN MEETING THEIR E911 PHASE II OBLIGATIONS**

Iowa 2 and other small, rural carriers advised the Commission in November 2000 of their plans not to deploy a network-based solution for meeting the E911 Phase II requirements set forth in Section 20.18(e)(h). Iowa 2 selected the network-assisted handset-based approach because the costs associated with a network-based deployment were intolerably high for a small, rural carrier that has only a relatively modest number of subscribers over which to spread the costs of complying not only with E911 Phase II, but such other federal mandates as CALEA, wireless number portability, *etc.* In addition, there was (and is) substantial uncertainty as to whether a network-based solution will provide the location accuracy quantified in Section 20.18(h) in non-urban environments with

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<sup>9/</sup> Inland Cellular Telephone Co. Petition For Limited Wavier Of Sections 20.18(e) and (g) Of The Rules, dated July 30, 2001, at 6 (emphasis in the original).

an expansive geographic area served by the minimum number of cell sites needed to provide reliable coverage to a sparse and diffuse population. Moreover, in many cases, topographical features impede radio propagation.

For the foregoing reasons, the unique attributes of providing wireless communications in rural areas in many cases eliminated the network-based approach as a viable option for carriers seeking to comply with their E911 Phase II obligation. Many rural carriers like Iowa 2 thus determined that network-based solutions were economically infeasible. Having no real alternative but to select the network-assisted handset approach, Iowa 2 and similarly-situated carriers, for reasons wholly beyond their control, now find themselves unable to obtain ALL-capable handsets or network-based solutions that can meet Section 20.18(h) accuracy standards.

**C. GRANTING A LIMITED WAIVER TO Iowa 2 WILL SERVE THE PUBLIC INTEREST WITHOUT PREJUDICE TO PSAPS**

Granting the limited waiver sought by Iowa 2 here will serve the public interest without prejudice to PSAPs, the public safety community, or the general public. Specifically, the proposed waiver will still promote the Commission's paramount objective of rapidly deploying Phase II E911 service by allowing Iowa 2 to extend to its customers and to the public in Iowa RSA 2 the most accurate location technology at the earliest possible date. Assuming the limited waiver is granted, Iowa 2 will continue to consider proposals for network-based approaches during the extended compliance period, notwithstanding its inability, to date, to find any such proposal whose costs are reasonable and whose vendor will guarantee compliance with the accuracy requirements of Section

20.18(h) in Iowa 2's rural service area.<sup>10/</sup> A waiver will thus afford Iowa 2 maximum flexibility to determine the optimum solution for its unique circumstances as a rural wireless carrier.

This flexibility will entail no delay, increased cost or other prejudice to PSAPs or the public safety community in Iowa 2's service territory. Indeed, no PSAP has requested that Iowa 2 initiate Phase II implementation, and no network-based solution would be deployed by Iowa 2 until it has received such a request. Regarding deployment of a network-assisted handset-based approach, no delay will ensue from grant of the limited waiver proposed here. Commercial unavailability of Phase II handsets and switch upgrades are causing the delay; the multiple waivers which the Commission has received are merely the unavoidable consequence (not the cause) of the unfortunate delay in Phase II deployment. Thus, the modest extension in the original deadline proposed here will prejudice neither PSAPs, the public safety community, Iowa 2's subscribers, nor the general public.

In sharp contrast, denial of the waiver will serve no purpose. Handsets simply are not yet available to Iowa 2 at this time making it impossible to comply with the current handset-based solution deadlines. Similarly, Iowa 2 continues to be unable to identify a viable network-based solution that can meet the Commission's accuracy requirements when deployed in Iowa 2's market with its sparsely populated rural service area and network configuration. It is clear that denial of this waiver would neither hasten the availability of E911 service to the market nor serve any other public interest.

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<sup>10/</sup> Iowa 2 remains skeptical that a network-based solution can be economically deployed and, at the same time, achieve Commission accuracy criteria. Accordingly, at present, Iowa 2 cannot change its decision that a network-assisted handset-based approach is its only viable means for achieving Phase II compliance. If, as a result of its ongoing evaluations, Iowa 2 learns of an economically feasible and sufficiently accurate network based system, then it will amend its determination and advise the FCC that it will deploy such a solution within 6 months of a PSAP request.

**D. PROPOSED COMPLIANCE SCHEDULE**

Iowa 2 respectfully requests: (1) an extension of time up to and including October 1, 2002 in which to begin selling Phase II-compliant handsets and to complete corresponding upgrades to its cellular switch; and (2) approval of the following revised deadlines for implementing Phase II-compliant handset activations: 25% of new activations by December 31, 2002; 50% of new activations by June 30, 2003, 100% of new activations by December 31, 2003; and 95% of embedded base by December 31, 2006. These dates are based upon current projected deliverable dates by Iowa 2's prospective handset suppliers and Iowa 2 may require a further extension of these deadlines if the handsets continue to be unavailable.

The proposed compliance schedule is necessitated by the present commercial unavailability of Phase II-compliant handsets and corresponding switch upgrades. It is further compelled by the discrimination customarily faced by small, rural carriers with respect to wireless equipment that is in high demand. The demands of the large urban carriers would quickly exhaust the initial supply. Several additional months will pass before product "trickles down" to small rural carriers like Iowa 2. In this context, the extension represented by Iowa 2's proposed compliance schedule is eminently reasonable, appropriate and necessary.

Further, if such equipment becomes commercially available earlier than expected, Iowa 2 will proceed to implement E911 Phase II promptly and will so advise the Commission of its progress related to this matter via its required quarterly report. By the same token, whether and when ALI-capable handsets are available is completely outside of Iowa 2's control. Therefore, if as Iowa 2's revised deadline approaches, Phase II-compliant handsets and necessary upgrades to cellular switching systems are still unavailable commercially, Iowa 2 will so advise the Commission.

Additionally, Iowa 2 has queried handset vendors regarding the anticipated cost of the yet unavailable ALI-capable handsets. It has received estimates for the cost of ALI-capable handsets varying anywhere from \$10.00 to \$200.00 more per telephone than that of currently utilized Iowa 2 handsets. This handset cost uncertainty makes it difficult to project whether consumers will be willing to spend extra money to purchase a handset with ALI capability; whether Iowa 2 will be able to absorb the cost difference without operating at a loss; and ultimately raises further questions related to Iowa 2's ability to meet the Commission's percentage thresholds for selling and activating ALI-capable handsets. If, once ALI-capable handsets are generally available and the cost of those handsets becomes known, Iowa 2 finds that it is unable to sell ALI-capable handsets in numbers which would meet the required penetration percentages, it reserves the right to request a further waiver of the Commission's rules at that time.

### III. CONCLUSION

The foregoing demonstrates and explains the technology-related issues and special circumstances that satisfy the general requirements to waive a Commission rule, as well as the more detailed requirements to waive the E911 Phase II rules set forth in the Fourth MO&O. Accordingly, there is good cause to grant the limited waiver requested herein.

Respectfully submitted,

IOWA RSA 2 LIMITED PARTNERSHIP

By: /s/ Lisa L. Leibow

Michael K. Kurtis  
Jerome K. Blask  
Lisa L. Leibow  
*Its Attorneys*  
Kurtis & Associates, P.C.  
2000 M Street, N.W. Suite 600  
Washington, D.C. 20036  
(202) 328-4500

Dated: June 27, 2002