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	)	
	)	
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UNITED STATES CELLULAR CORPORATION QUARTERLY E911 IMPLEMENTATION REPORT

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QUARTERLY E911 IMPLEMENTATION REPORT

United States Cellular Corporation ("USCC"), by its undersigned attorneys, hereby submits its eighth quarterly E911 implementation report pursuant to the Commission's order staying certain E911 phase II deadlines for many non-nationwide wireless carriers.[1]

I. Introduction

USCC is a Tier II carrier under the *Order to Stay* issued by the Commission in 2002.[2] As a wireless carrier with systems serving many small markets, USCC faces particular challenges in upgrading its technology and interacting with a wide variety of PSAPs across its service area. To meet these challenges, USCC has dedicated substantial financial and personnel resources to accelerate the deployment of E911 service throughout its service area.

USCC personnel are in regular communication with PSAPs that are at varying levels of readiness in the provision of E911 service. In addition, USCC closely monitors its

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[1] *See Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Phase II Compliance Deadlines for Non-Nationwide CMRS Carriers*, Order to Stay, 17 FCC Rcd 14841 (2002) ("*Order to Stay*").

[2] *Id.* ¶ 23.

E911 vendors to ensure the progress of E911 deployment to all requesting PSAPs. In the past quarter, USCC became the first carrier to begin phase II deployment to PSAPs in both Wisconsin and Maine. USCC also proactively contacted every PSAP in its newly-acquired markets in order to coordinate the timely deployment of E911 service as USCC builds out these markets.

II. Status of Phase I Requests

USCC and its E911 vendor, TeleCommunication Systems, Inc. ("TCS"), actively work with all requesting PSAPs to deploy phase I E911 service throughout USCC's service area. In numerous cases, USCC has proceeded with deployment despite the fact that a particular PSAP request does not amount to a valid request for service under the Commission's rules, including in some markets where the PSAP made only an oral request. In addition, in USCC's newly-acquired markets, USCC has proceeded with phase I or phase II roll-out to the entire market despite, in some cases, no formal request from a particular PSAP within that market.

To date, USCC has received 726 requests for phase I service and successfully deployed phase I service to 612 PSAPs. Of the remaining 114 phase I requests, 82 have been pending less than six months. Attached as Appendix A is a spreadsheet identifying those PSAPs requesting phase I service and the markets where USCC has deployed phase I.

USCC has 32 PSAP requests for phase I service that have been pending for more than six months. Of these requests, five have been delayed by factors outside of USCC's control. USCC has a written extension from each of these five PSAPs. In these cases, phase I deployment has been delayed because either the PSAP does not have the appropriate equipment to receive and implement phase I service, or the PSAP has encountered technical difficulties involving the LEC. In each of these cases, USCC is ready to drive-test in the market and

remains in close contact with the PSAP to ensure an expeditious roll-out of phase I service as soon as the PSAP resolves any remaining obstacles.

The remaining 27 of USCC's phase I requests outstanding for more than six months are from PSAPs in markets that USCC has acquired within the last year. On August 1, 2003, USCC acquired the St. Louis, Missouri market, which covers PSAPs in several counties in Illinois, including Madison County and St. Clair County. USCC is in the process of building out all of these markets and will deploy phase I service to PSAPs that have the ability to receive and utilize the information around the time that each cell cite in the market is activated. USCC estimates that the newly-acquired markets in Illinois will be active by the end of September 2004. In all of its new markets, USCC proactively contacted the PSAPs soon after the acquisition to coordinate the E911 roll-out.

III. Status of Phase II Requests

USCC continues to deploy phase II E911 service as required by the Commission's *Order to Stay*. To date, USCC has received 332 PSAP requests for phase II service. USCC has successfully deployed phase II E911 service to 185 PSAPs in its service area and currently has 147 outstanding PSAP requests for phase II service. Of these outstanding requests, 118 have been pending less than six months. The attached spreadsheet identifies those PSAPs requesting phase II service and the markets where USCC has deployed phase II.

USCC has 29 phase II requests that have been pending more than six months. Thirteen of these 29 phase II requests are from markets that USCC acquired on August 1, 2003 and has not yet activated a cellular network. As discussed above, USCC is proceeding to build

out these markets and expects to be able to deploy E911 around the time that each cell site in the market is activated.

For the remaining 16 PSAPs with phase II requests pending more than six months, delays in roll-out have been beyond the control of USCC. Delays in these markets have been due to delays in receipt and installation of the appropriate equipment by the PSAPs and, in one market, the PSAP has experienced problems with its mapping software. In all of these markets, the requesting PSAP has granted USCC an extension whereby USCC agrees to deploy phase II service within 60 days of the PSAP notifying USCC of its readiness. In these cases, USCC and its vendors have completed all the necessary steps toward phase II deployment and are waiting for the PSAPs to make the necessary corrections to or upgrade their systems.

In CDMA jurisdictions where new phase II requests have been received, USCC continues the process of installing necessary software loads on its switches to provide phase II service and upgrading all the trunking between these switches and the Mobile Positioning Center of its E911 vendor, TCS. USCC and TCS continually integrate the CDMA switches serving these new phase II markets with the TCS equipment and the phase II software. USCC is also continually updating the Base Station Almanac (BSA) for all its cell sites serving CDMA markets where it has received a phase II request. The BSA helps to improve the accuracy of location information provided to PSAPs.

As noted in earlier Implementation Reports, USCC has contracted with Marconi Corporation to do the necessary calibration, accuracy and drive testing to ensure that USCC's phase II service meets the Commission's accuracy requirements. Marconi has conducted testing on USCC's CDMA switches that are serving PSAPs with live phase II deployments. These tests

have been conducted using the CDMA location-capable mobile phones currently available to USCC's customers. Marconi's accuracy test results confirm that USCC is meeting the Commission's requirement that 67 percent of the calls are accurate to within 50 meters and 95 percent of the calls are accurate to within 150 meters.[3] Marconi performs a complete accuracy test every six months on every USCC switch that has PSAPs deployed phase II.

IV. Status of Handset Deployment

USCC remains in substantial compliance with the applicable handset deployment benchmarks.[4] In order to increase its penetration rates, in May 2004, USCC pulled back all non-E911 enabled phones still in inventory at all of its retail locations in CDMA markets. In July 2004, over 97 percent of the total handsets sold by USCC had E911 capability.

Currently, USCC has eleven GPS-enabled handsets available for sale in its CDMA markets: Kyocera KE-434, Kyocera KE-414, Kyocera SE-47 (to be replaced by the Kyocera SE-44 upon inventory depletion), Nokia 6585, LG VX-4400, LG VX-6000, LG VX-5550, Motorola C343, Motorola T731, Audiovox CDM-8900, and Audiovox CDM-8410. USCC no longer places any purchase orders for non-E911 capable CDMA handsets nor does it restock non-E911 capable CDMA handsets sold at USCC's retail locations.

USCC will continue to track its sales of GPS-enabled phones in order to ensure compliance with the penetration benchmarks in the Commission's *Order to Stay*. In the last quarterly reporting period, USCC did not meet the May 31, 2004 deployment benchmark that 100 percent of new activations be GPS-enabled handsets. Instead, 95 percent of new handset

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[3] 47 C.F.R. § 20.18(h).

[4] *See Order to Stay* ¶ 27.

activations in CDMA markets were GPS-compliant. The primary reason USCC did not meet the 100 percent benchmark in May 2004 is because the final part of its CDMA overlay has not yet been completed in a few rural markets. The CDMA overlay was completed for markets in Idaho on or around July 1, 2004, and is scheduled to be completed on or around October 1, 2004 for the California markets. Once the overlay is complete in any market, USCC will offer only GPS-enabled phones for sale in that market.

V. Conclusion

As demonstrated above, USCC continues to make significant progress in deploying E911 phase I and phase II service throughout its service area. The commitment of significant financial and personnel resources has enabled USCC to move closer to its goal of meeting or exceeding the Commission's implementation deadlines for E911 deployment.

Respectfully submitted,

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