

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington D.C. 20554

In the Matter of)	
Revision of the Commission's Rules To Ensure)	CC Docket No. 94-102
Compatibility with Enhanced 911 Emergency)	
Calling Systems)	
)	
Missouri RSA No. 7 Limited Partnership)	
Petition For Waiver of Section 20.18(c) of the)	
Commission's Rules and the Deadlines Established)	FCC 00-436
in the Fourth Report and Order)	

To: The Wireless Telecommunications Bureau

**PETITION OF MISSOURI RSA NO. 7 LIMITED PARTNERSHIP dba MID-MISSOURI
CELLULAR FOR WAIVER OF SECTION 20.18(C) OF THE COMMISSION'S RULES
AND THE DEADLINES ESTABLISHED IN THE FOURTH REPORT AND ORDER**

Missouri RSA No. 7 Limited Partnership dba Mid-Missouri Cellular ("MMC"), by its attorneys, pursuant to Section 1.3 of the Commission's Rules, 47 C.F.R. §1.3, hereby requests a waiver of the deadline in the *Fourth Report and Order*¹ in the above-captioned proceeding, and of Section 20.18(c) of the Commission's Rules, 47 C.F.R. §20.18(c), with respect to the December 31, 2001 deadline for carriers operating digital systems to obtain all software upgrades and equipment necessary to make their systems capable of transmitting 911 calls from TTY devices, and the June 30, 2002 deadline for operators of digital wireless systems capable of transmitting 911 calls from individuals with speech or hearing disabilities through means other than mobile radio handsets, e.g., through the use of Text Telephone Devices ("TTY").²

¹ In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Fourth Report and Order*, CC Docket No. 94-102, 15 Fcc Rcd 25216, 65 Fed. Reg. 82293 (December 28, 2000), ("*Fourth Report and Order*").

^{2/} See 47 C.F.R. § 20.18(c).

I. BACKGROUND AND INTRODUCTION

The *Fourth Report and Order* established December 31, 2001 as the deadline for carriers operating digital wireless systems to obtain all software upgrades and equipment necessary to make their systems capable of transmitting 911 calls from TTY devices. It further established June 30, 2002 as the deadline for carriers to integrate, test and deploy the technology in their systems.

Pursuant to the quarterly reporting requirements set forth in the *Fourth Report and Order* in CC Docket No. 94-102, MMC has periodically informed the Commission of its status on meeting these deadlines and the various technological solutions aimed toward attaining that goal. MMC has continually advised the Commission that matters beyond its control might well impede its ability to meet these deadlines. As detailed below, both software availability and major technological changes announced by other major wireless carriers, all matters beyond MMC's control, have combined to create circumstances that make compliance with the present December 31, 2001 deadline impossible and the June 2002 service date unduly burdensome. As MMC will show below, waiving the December 31, 2001 deadline will not frustrate the Commission's intent in setting that interim deadline on the way to TTY/E911 compliance, and waiver of the June 2002 deadline is not likely to result in the denial of TTY/E911 access to any customers. Accordingly, MMC herein seeks a waiver of those deadlines.

MMC provides analog and digital TDMA CMRS wireless service in the Missouri 7 - Sedalia RSA.³ As with most small rural carriers, the decision on which digital technology to deploy was essentially mandated by the technology decision of its primary roaming partners in the nearby major markets. In MMC's case, its RSA lies between the Kansas City and the Columbia, Missouri MSAs.

³ Station KNKN595 (CMA510B) and KNKR207 (CMA024B-2).

At the time that MMC began rollout of its digital migration, its primary roaming partners, the B-side licensees in each market (Southwestern Bell, now Cingular Wireless in the Kansas City market and US Cellular in the Columbia market) had already deployed TDMA digital.

As the Commission is well aware, during the past twelve months, the two major carriers utilizing TDMA technology (Cingular and AT&T) announced their plans to migrate their TDMA deployments to a totally different, non-compatible digital technology. Just this week, US Cellular reported having decided to migrate its remaining TDMA markets to CDMA digital technology. The Cingular/AT&T decisions led to the announcements by virtually all major cellular infrastructure providers, including Nortel (MMC's infrastructure provider), of plans to cease development of new features and functionalities for their TDMA infrastructure equipment. Moreover, most handset providers have ceased development of new TDMA handsets to include features such as those needed to provide handset-based E911 Phase II location technologies; the only location technology which appears to provide an economical means of meeting the E911 Phase II requirements in rural areas. While the handset providers have made it clear that there will be no E911 Phase II ALI-compatible handsets for TDMA, less clear is whether there will be a TTY compatible TDMA handset (since development of that handset began prior to the Cingular and AT&T announcements but the size of the potential market for such TDMA handsets now appears to be extremely limited) and, if so, at what cost.

II. DISCUSSION

A. Basis For a Waiver of the December 31, 2001 Deadline

The Commission may grant a waiver for "good cause shown," if it is deemed in the public interest, or if there are unique factual circumstances that render application of the rule inequitable

or particularly burdensome.⁴ Citing *WAIT Radio*, the Commission has stated that it 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.’”⁵ As shown below, the instant petition complies with all the waiver standards articulated in the above-cited rules and decisional precedent.

Nortel has announced the availability of the software required for TTY/E911 compatibility. However, MMC was advised that that software will only operate with base software load MTX10. The problem arises in that MTX10 includes significant 3G upgrades and requires a processor replacement before it can be installed. The cost of the processor upgrade alone is substantial.⁶ In addition, unlike previous MTX load upgrades, MMC was advised that the upgrade to MTX10 cannot be accomplished from any software load below MTX09. At the time, MMC was running MTX07.

^{4/} 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).

^{5/} “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 at page 4.

^{6/} MMC is prohibited under non-disclosure agreement with Nortel from releasing pricing information but MMC can make that information available to the Commission for *in camera* inspection, should the Commission so request.

In preparation for the MTX10 upgrade, MMC has upgraded its base software load to MTX09, the highest software load that could run on the MMC switch with its then-current processor, and has recently completed the upgrade to the minimum processor needed to support MTX10.

Significantly, the MTX10 software load is also required in order for carriers to comply with the Commission's CALEA, E911 Phase II and wireless local number portability ("WLNP") requirements, as well as the TTY/E911 compatibility requirement. The end result is that virtually *every* Nortel CMRS switch will require the MTX10 base load software upgrade. Implementation of that upgrade requires both advanced preparation by the carrier and an over-night process run directly by Nortel. The carrier-alone *cannot* implement the MTX10 base load software upgrade.

MTX 10 only became available for general release the first week of December. Nortel has advised MMC that with the current backlog, estimated lead time associated with the MTX10 upgrade is six to eight weeks. In light of the foregoing, there is simply no way that MMC can obtain the MTX10 load needed to run the TTY/E911 feature software by the December 31, 2001 deadline. MMC submits that the unavailability of MTX10 in sufficient time to allow implementation by the deadline is beyond its control. Moreover, the fact that MMC has implemented MTX09 and installed the switch processor upgrade needed to run MTX10 which, in turn, is needed to run the TTY/E911 feature demonstrates good faith on MMC's part to meet this deployment deadline.

The purpose of instituting the December 31, 2001 deadline was to allow time for carrier testing before the June 2002 deadline. MMC submits that the TTY digital compatibility requirement, unlike the E911 Phase II location which has market-specific accuracy issues, is a function of compatible network hardware, software and handsets. If a particular configuration works in one deployment of a vendor's infrastructure, it should work equally well in any other deployment. This is a compatibility requirement; the network is either compatible or not and MMC understands

that testing is already underway by Nortel. Significantly, if a software problem is found in another Nortel deployment, that the same software “patch” simply would be deployed in all Nortel systems operating that feature. Accordingly, a delay in MMC’s deployment of the requisite software should not frustrate the purpose underlying the rule.

B. Basis For a Waiver of the June 30, 2002 Deadline

As the Commission is aware, vendors have decided to no longer support TDMA in light of AT&T's and Cingular's abandonment of the technology - a situation CLEARLY beyond MMC’s control. Moreover, it is still unclear as to whether or not TDMA TTY-compatible handsets will be made commercially available and, if so, at what price - a situation also beyond MMC’s control. Finally, even if such handsets are available, with the well-publicized move away from TDMA, it is doubtful that an end-user looking to invest in a TTY-compatible digital phone would elect to do so through a TDMA carrier. From MMC’s experience, in its more than a decade of operation, it is not aware of a single TTY subscriber on its analog network that utilizes a TTY device. However, even if there were such a subscriber, nothing in this waiver would impede its ability to continue operating its current analog handset with its TTY device. Finally, even if the MMC TDMA digital network were made fully TTY compatible, if a subscriber approached MMC to purchase a TTY-compatible digital phone (assuming such a phone were available) MMC would be constrained to advise that potential TDMA handset purchaser that, as set forth more fully below, MMC might not be supporting that handset in the long-term and that that handset would not be supported long-term in the digital mode in either Kansas City or Columbia. The likelihood of any potential subscriber proceeding with such a purchase under these circumstances, is extremely remote.

Significantly, the press of other Commission mandates, most significantly the E911 Phase II location requirements, is forcing small rural TDMA carriers to evaluate entire digital network replacements inasmuch as there does not appear to be an economical network-based E911 Phase II solution that will meet the FCC's accuracy requirements. Accordingly, MMC is currently exploring and obtaining vendor quotes for a change-out of its digital technology. MMC does not foresee any alternative to such a digital technology swap out and expects to implement an alternate technology within the next 24 months. Accordingly, any and all monies spent on obtaining the requisite software to make its TDMA network TTY compatible would be lost investment.

Most significantly, even if MMC were to spend the capital on meeting this obligation, as set forth above, there is very little likelihood that any MMC subscriber would ever use it. Moreover, MMC submits that it is unlikely that any roamers would use the service either. As previously discussed, both Cingular and US Cellular already have announced their migration away from TDMA, making it far more likely that any Cingular or US Cellular subscriber looking to acquire a TTY-compatible digital phone would select a unit compatible with the digital technology to which those carriers are migrating rather than a unit compatible with TDMA technology. In addition, Cingular has acquired MMC's direct competitor in RSA 7 (Ameritech) and has been moving its roaming traffic off of MMC's network and onto its own. Accordingly, a Kansas City Cingular subscriber is most likely now to roam on the Ameritech system in RSA 7, not on MMC's network.

As might be expected, the Cingular competitor in Kansas City (the A-side cellular licensee) faces the opposite situation. With Cingular, its Kansas City cellular competitor owning the RSA 7 system, the A-side Kansas City cellular carrier has been migrating its roaming traffic to MMC instead of the Cingular A-side licensee in RSA 7. However, the A-side carrier in Kansas City utilizes CDMA digital technology. Accordingly, all roaming from that carrier's digital Kansas City

handsets currently takes place on MMC's analog network. Therefore, even if MMC were to deploy TDMA TTY-compatible software, no Kansas City CDMA digital mobile would ever be served on the MMC digital network. Instead, that roamer would revert to the analog mode, as it does today, and be readily able to use its TTY device in that analog mode.

When MMC makes its migration to a new digital technology, MMC will deploy that technology in a mode fully compatible with TTY devices. Accordingly, MMC will have TTY capabilities in place, assuming that hardware and software is available to have such. In light of the fact there appears to be no likelihood that a digital TTY mobile would ever be used on the MMC TDMA network, it is respectfully submitted that requiring implementation of TTY compatibility on the current TDMA network would be unduly burdensome. Moreover, denial of the waiver does not appear to increase the likelihood that any actual TDMA TTY device would be used on the MMC network within the next 24 months. Finally, grant of the waiver would not preclude access to 911 services by TTY devices as those devices could still continue to be used in the analog mode, as they would have needed to be used for the past two decades on all cellular networks.

3. Scope of Waiver Requested

MMC respectfully requests a waiver of the December 31, 2001 software deadline in its entirety. MMC will proceed to implement a migration to MTX10 before the June 30, 2002 deadline for TTY compatibility inasmuch as this base software load is required for certain CALEA compliance requirements, as well as E911 Phase II support and WLNP. MMC understands that the only additional feature required for TTY/E911 access would be the application-specific TDMA TTY compatibility software. Significantly, the Nortel software feature required for TTY compatibility in a different digital technology, such as CDMA, is a separate and distinct software feature from that

required for TTY compatibility in the TDMA network. Accordingly, any monies spent to deploy that specific feature would be lost with the network conversion to another digital technology.

With respect to the June 30, 2002 full implementation deadline, MMC respectfully requests a waiver until December 31, 2003. This will enable MMC to complete its digital technology migration prior thereto. Of course, as set forth above, as the migration is completed, the MMC digital network would be compatible with TTY devices.

D. Grant of the Instant Waiver Requests Will Serve the Public Interest.

MMC submits that grant of this waiver would serve the public interest by allowing the conservation of limited resources to be better used to move toward meeting the other three Commission-mandated system upgrades; E911 Phase II (which also appears to require a full digital network switch out in rural markets) CALEA and WLNP. Significantly, while each of these service requirements further legitimate public needs, to a small rural carrier, such as MMC, collectively they represent a capital outlay of millions of dollars and are not envisioned to be revenue producing. Accordingly, it clearly would serve the public interest by freeing carriers, such as MMC, from meeting the TTY compatibility requirements on TDMA. It is far from certain that there will ever be a TDMA TTY compatible phone available in commercial quantities and, even if there are, it is doubtful that an end user would make the investment to purchase such a phone which is only compatible with a technology that appears to have been universally abandoned by all of its original large-carrier proponents. Thus, small, rural carriers are being forced to migrate to alternate technologies in order to meet the other impending regulatory mandates.

Further, MMC will continue to provide the Commission with quarterly updates on the status of development and deployment, throughout the entire waiver period until such time as its new

TTY-compatible digital network is deployed. Specifically included in such reports, in addition to handset availability matters, will be a full disclosure of any requests for TTY-compatible handsets received during the quarter. Significantly, if MMC is incorrect on its assertions, MMC, having implemented the requisite MTX10 base software load upgrade, would be in a position to move quickly to deploy the TDMA TTY-compatibility feature should an actual need arise and a *bona fide* user be willing to proceed to purchase a TDMA TTY compatible handset understanding that MMC intends to move away from the TDMA technology before the close of 2003.

III. CONCLUSION

MMC submits that, in the short-run, it is unable to obtain the requisite software upgrades by December 31, 2001 to comply with that deadline for having installed all required TTY compatibility software. Moreover, from the longer-term perspective, MMC will be unable to obtain the necessary ongoing vendor (infrastructure and handset) support for its existing TDMA digital network to allow it to meet such regulatory requirements as E911 Phase II and therefore plans to migrate its TDMA network in the near future to an alternate digital technology. All of these realities are based upon circumstances not of MMC's making and certainly beyond its control. Moreover, as demonstrated above, even if MMC spent the capital needed to upgrade its TDMA digital network to full TTY compatibility, it is extremely unlikely that TDMA TTY handsets (even if made available in commercial quantities) would ever actually try to access the MMC network. As such, MMC submits that it would be unduly burdensome, with little likelihood of any real public benefit flowing from requiring MMC to meet the June 30, 2002 full implementation deadline.

In light of the foregoing, MMC respectfully submits that good cause has been shown for the grant of the limited waiver sought herein.

Respectfully Submitted,

Missouri RSA No. 7 Limited Partnership dba
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