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September 28, 2001

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Filed Electronically Via ECFS

Ms. Magalie Roman Salas, Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, DC 20554

Attn: Patrick Forster, Senior Engineer – Room 3-A104
Wireless Telecommunications Bureau / Policy Division

Re: Montana Wireless, Inc.
Request for Temporary Waiver of Rule Section 20.18(g)
CC Docket No. 94-102

Dear Ms. Salas:

Attached below is a request for temporary waiver of the Commission's Rules for implementing E911 Phase II Service which we are filing on behalf of Montana Wireless, Inc. ("MWI").

Please direct any questions or correspondence regarding this filing to the undersigned counsel.

Very truly yours,

John A. Prendergast
D. Cary Mitchell
Counsel to Montana Wireless, Inc.

Att.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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
	)	

To: Chief, Wireless Telecommunications Bureau

MONTANA WIRELESS, INC. PETITION FOR WAIVER OF E911 PHASE II LOCATION TECHNOLOGY IMPLEMENTATION RULES

Montana Wireless, Inc. ("MWI"), pursuant to Section 1.3 of the Commission's Rules, hereby requests a temporary waiver of Section 20.18(g) of the Commission's Rules to allow it to delay the phase-in of its deployment of a handset-based ALI technology in meeting the Enhanced 911 ("E911") Phase II implementation rules.

MWI (TRS No. 818046) is a wholly-owned subsidiary of Blackfoot Telephone Cooperative, Inc. ("Blackfoot"), a rural telephone cooperative that provides local exchange telephone and other telecommunications services in Missoula, Montana. MWI is the licensee of station WPOI210 in the Broadband Personal Communications Service ("PCS"). Station WPOI210 is a license partitioned from the 30 MHz A-Block license for the Spokane-Billings Major Trading Area ("MTA"). On November 1, 1996, the Commission approved MWI's application to partition the Missoula and Kalispell Basic Trading Areas ("BTAs") from the Spokane-Billings MTA and Powell County from the Butte BTA. MWI utilizes Nortel's CDMA equipment for its PCS network.

In its E911 technology implementation report filed on November 9, 2000, MWI notified the Commission of its plans to implement a handset-based solution to provide E911 Phase II capability.

While MWI indicated that it planned to adhere to the implementation schedule established in the Commission's *Fourth Memorandum Opinion and Order*, 15 RCC Rcd 17442 (2000), it stated that its ability to do so would depend, in large part, on the ability of its equipment suppliers to have their products operational and delivered on time. As of its November 9, 2000 filing, none of MWI's handset suppliers were forthcoming with information about their development of ALI-capable handsets, and none had been able to commit to a firm schedule for the delivery of these devices. Nortel, at the time, had not yet provided information about the availability of the needed feature sets for Base Transceiver Station, Base Station Controller and the DMS 100 Dual-Load Switch, citing the lack of standards for E911 Phase II compliance.

MWI Has Demonstrated Its Commitment to Achieving Compliance

Since filing its E911 technology selection report last November, MWI has been diligent in pursuing deployment of E911 Phase II capability in a timely manner. In addition to maintaining close contact with its equipment suppliers and contacting its handset suppliers on a regular basis to keep abreast of product availability, MWI's network manager and staff hold periodic meetings to assess developments concerning E911 Phase II technologies and deployment. MWI has also learned that none of the PSAPs in its operating territory are even close to having E911 Phase II capability. MWI has received no requests for Phase I E911 service, let alone inquiries from local PSAPs regarding its implementation of Phase II ALI technology.

Despite its best efforts, and due to circumstances beyond its control, MWI now recognizes that it will not be able to meet the ALI-compliant handset phase-in schedule established in the Commission's *Fourth Memorandum Opinion and Order* and embodied

in Section 20.18(g) of the Commission's Rules.

Request for Waiver of Rule Section 20.18(g)

Accordingly, MWI requests a waiver of Rule Section 20.18(g)(1), to allow it to delay by nine months each of the handset activation deadlines therein; and a waiver of Rule Section 20.18(g)(2), to defer the requirement for upgrading its infrastructure and begin delivering E911 Phase II service to a requesting PSAP pursuant to the revised schedule described herein.

E911 Implementation Details

1. Required Switch Components and Availability Dates

MWI uses a Nortel DMS100 wireless switch to route traffic in its broadband PCS network. According to MWI's latest information, Nortel Networks LWW007 (the new software load) is based on the MTX09 wireless generic software release and does not provide the core network capability for E911 Phase II service. Correspondence that MWI recently received from Nortel (attached hereto) indicates as follows:

> The E911 technology for use with the DMS-MTX platform requires a combination of hardware and software which Nortel Networks has designed to operate in accordance with the E911 applicable J-STD-036 standard. The functional elements that constitute the Nortel Networks E911 technology are switch software, RF Access system software, Mobile Positioning Center (MPC) and Positioning Determining Entity (PDE).
>
> Nortel Networks will make the E911 technology elements generally available according to the following schedule.

Component	Role	GA Date
MTX10	Switch software	Q4 2001
NBSS10.1	RF access subsystem	Q4 2001

> Nortel Networks will make its combined MPC/PDE generally available in Q2 2002. Because the functions performed by the MPC/PDE are standards based, carriers using the Nortel Networks MTX platform may procure the necessary technology from other vendors and need not wait until Nortel Networks makes its MPC/PDE available to deploy E911. Finally, IOS version 4.0 must be deployed in carriers' networks with equipment from multiple vendors. The IOS software will become generally available in Q1 2002.

This schedule represents Nortel Networks' current plan. This plan could be altered by a number of factors, including unavailability of handsets for testing and resolution of technical issues identified through interoperability testing of the E911 technology with other vendors' technology contributions.

Even after general availability, carriers will need time to deploy the solution across the portions of their networks covered by validated PSAP requests.

Standards

As noted, the E911 technology is standards based. Applicable standards were only approved and published last year. Generally, 18 to 24 months are needed between standard adoption and development of compatible technology. As you will note from the discussion in the above section entitled "Required Components and Availability Details", Nortel Networks has bested or equaled the usual timelines for delivery of functionality after a standard is published.

Field Trial

Nortel Networks endorses an end-to-end field trial before a more extensive roll-out of the E911 technology takes place. The end-to-end field trial is important because, to address the overall goal of the delivery of location information to a PSAP, the E911 technology must successfully interwork with the E911 components supplied by other vendors as well as technologies supplied by other necessary parties, such as the location technology provider and the Local Exchange Carrier.

The successful conclusion of the trial will provide a validated solution across all necessary technologies and parties. To deploy a solution without an end-to-end field trial could lead to remedying the same issues multiple times in a serial fashion. Nortel Networks does not have the resources to deploy the E911 technology simultaneously prior to completion of individual trials and then correct issues that may well be identical. Other necessary parties, such as the location solution vendors and Local Exchange Carriers and even wireless carriers, may have similar limitations.[1]

This correspondence from Nortel is significant because MWI must rely on Nortel to provide it with the software upgrades and network elements necessary to provide Phase II capability, and MWI has indicated that its combined MPC/PDE will not be generally available until at least Q2 of 2002. While MWI is free to shop for another vendor's MPC/PDE solution, MWI will nevertheless need Nortel's IOS software installed before it can utilize these elements. Nortel has indicated that the IOS software will not become generally available until Q1 2002. In light of these facts, and because none of the PSAPs in our area will be capable of utilizing Phase II data before the Nortel

[1] Correspondence dated August 22, 2001, from Mr. Chris Horning of Nortel Networks. This correspondence cites Mr. Tony Smith, Director, Wireless Regulatory Affairs, as an appropriate contact for further information.

solution is scheduled to be available, MWI believes it is best to avoid any potential equipment interoperability issues and to plan on installing the end-to-end Nortel E911 Phase II solution after it becomes generally available.

2. ALI-Capable Handset Availability Dates

MWI currently provides its customers with a selection of 1900 MHz CDMA wireless handsets from Nokia, Motorola and Kyocera. Because of the low volume of handset orders that MWI is able to place at any given time, MWI has little leverage in its negotiations with these handset manufacturers concerning its purchase of their products, and no ability to influence the product development cycle. In recent correspondence, MWI has learned that Motorola believes assisted GPS (or "AGPS") is currently the most viable solution for providing ALI functionality. However, Motorola's timetable for developing AGPS-capable handsets is currently Q3 2002, and the actual platform, costs and method of implementation have yet to be determined.[2] Through a sales agent for QCP, Inc., MWI has learned that Kyocera plans to have two GPS-enabled products in development and slated for release in Q2 2002.[3] MWI has yet to hear from Nokia in response to its August 31 letter requesting further information on availability of E911 Phase II compliant 1900 MHz CDMA phones.

Waiver Standards

In its *Fourth Memorandum Opinion and Order*, the Commission indicated that the Phase II rules are intended to be applied in a manner that takes into account practical

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[2] Letter of September 5, 2001, from Motorola Senior National Business Manager Glenn Adams, to Mike McCue of Blackfoot Communications (*attached hereto*).

[3] Electronic mail correspondence of August 31, 2001, from Heidi Swanson of QCP, Inc. (representing Kyocera Wireless Corp.) to Mike McCue of Blackfoot Communications (*attached hereto*).

and technical realities.[4] Recognizing that practical and technical realities might delay Phase II implementation, the Commission established a general approach in dealing with possible requests for waiver of the Phase II requirements.[5] Thus, the Commission provided that its rules may be waived for good cause shown, consistent with Rule Section 1.3.[6] It recognized, in the case of E911, that there could be instances where technology-related issues or exceptional circumstances may mean that deployment of Phase II may not be possible by October 1, 2001.[7] The Commission cautioned that waiver requests should be specific, focused and limited in scope, with a clear path to full compliance; and should document the efforts aimed at compliance.[8]

MWI Has Met the Waiver Standards

As shown above, MWI has met the Commission's standards for obtaining the requested waiver of Rule Section 20.18(g). While Section 20.18 of the Commission's Rules imposes E911 Phase II obligations only on Commission licensees (by reason of limitations on the Commission's statutory authority), the Commission has repeatedly acknowledged the obvious, namely that achieving full compliance requires the cooperative efforts of carriers, equipment manufacturers and suppliers and government officials responsible for public safety activities. As a service provider only, MWI would be unable to achieve compliance with the Commission's Phase II requirements without the availability of necessary equipment and the readiness of the public safety answering points in its area. The simple truth is that there is no technology currently available that

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4 15 FCC Rcd 17442, at para. 22.

5 *Id.*, at paras. 42-45

6 *Id.*

7 *Id.*

8 *Id.*

will satisfy the Commission's Phase II accuracy requirements within the established deadlines.[9] It is only recently that automatic location technology has advanced to the point where Phase II compliance can become a reality. However, once compliant equipment hits the market, it will undoubtedly be several more months before MWI will be able to order and obtain delivery of this equipment. As a small market carrier, MWI simply does not have the buying power of the national carriers let alone the clout to influence equipment design and development. If the past is prologue, MWI will have to wait until the initial handset requirements of the national carriers are satisfied before it will be able to obtain Phase II compliant handsets.

The deadline extensions herein requested are in the public interest. They will afford MWI the additional time needed to upgrade and test its equipment, once the equipment is available, in an orderly manner that is likely to lead to a successful result in providing Phase II service. They will not adversely affect the PSAPs in the area or the public served since none of the PSAPs in the area served by MWI will be ready for Phase II service for the foreseeable future.

It is, therefore, clear that MWI has been diligent in pursuing implementation of Phase II but that it is unable to do so due entirely to matters that are beyond its ability to control. The instant waiver request is specific and focused. It details the unavoidable delays MWI has encountered through no fault of its own. It sets out a clear path to compliance once the necessary equipment becomes available. Moreover, it demonstrates that the public interest will not be harmed by the proposed brief extension, since the PSAP will not be able to utilize the E911 Phase II location information by the October 1,

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[9] *See Petition for Waiver*, filed August 3, 2001, CC Docket 94-102, by Triton PCS License Company, L.L.C., at pp. 4-5.

2001 deadline, even if MWI was somehow able to achieve compliance by that date. Moreover, a waiver grant would recognize the unique obstacles faced by rural telephone companies participating in the deployment of advanced technologies in small communities and surrounding rural areas. As both a rural telephone company and a small business, MWI and its parent face a limited budget, higher buildout costs due to low population density in its license area, and an inability to place the high volume handset orders that would be given a priority by the equipment vendors. The same cost considerations no doubt are slowing the PSAP's Phase II deployment. Therefore, a waiver grant would be consistent with Section 309(j) of the Communications Act of 1934, as amended, by helping to facilitate the participation of a rural telephone company (and a small business) in the provision of advanced telecommunications services, and by helping to bring such services to all Americans, including those in Montana.

Based on information currently available, MWI believes that it will be able to comply with the following benchmarks:

- July 1, 2002 – Begin selling and activating location capable handsets;
- By September 30, 2002 – Ensure that at least 25 percent of all new handsets activated are location-capable;
- By March 30, 2003 – Ensure that at least 50 percent of all new handsets activated are location-capable;
- By September 30, 2003 - Ensure that all new handsets activated are location-capable;
- By September 20, 2006 – Achieve 95 percent penetration of location-capable handsets among its subscribers;

- By October 1, 2002 or within six months of receiving a PSAP request, whichever is later – Begin delivering E911 Phase II service to the PSAP.

Conclusion

In view of the foregoing, the waiver herein requested is in the public interest and should be granted.

Respectfully submitted,

Montana Wireless, Inc.

By: Bill Squires

Bill Squires
Senior Vice President –
General Counsel
Blackfoot Companies
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Missoula, MT 59808
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Counsel to Montana Wireless, Inc.

Dated: September 28, 2001

August 22, 2001

Mr. Dave Martin
Blackfoot Telephone Cooperative, Inc.
1112 N. Russell St.
Missoula, MT 59808

Re: E911 Phase 2 core network technology and CALEA punch list functionality

Dear Mr. Martin,

As communicated by Nortel Networks, the last DMS100 Wireless software release is LWW0007 that is based on NA013 wireline and the MTX09 wireless generic software releases. As communicated by Nortel Networks, LWW007 does not provide the core network software for E911 Phase 2 and CALEA (FBI punch list) assistance capability requirements. Nortel Networks is anxious to work with the DMS100 Wireless service providers to achieve compliance with these two regulatory requirements through either an upgrade of the existing DMS100 Wireless equipment to generic software release MTX10 or installation of a separate MTX switch with generic software release MTX10 accompanied by migration of current wireless infrastructure to the MTX switch.

Following is a discussion of the Nortel Networks plans for making E911 Phase 2 core wireless technology (E911 technology) and the CALEA punch list functionality available. Please note that your company's compliance may not correspond to the general availability dates. The general availability dates set the earliest times that your company could consider the transition from a DMS100 Wireless operation to the MTX10 generic software releases, assuming that all the other transition tasks required prior to a transition from the DMS100 Wireless to a customary MTX release have been accomplished.

E911

Nortel Networks is committed to its part in enabling an end-to-end, E911 Phase 2 location information solution. As explained in this letter, Nortel Networks will supply the E911 technology enabling wireless carriers using its DMS-MTX switch, when interworking with other parties and technologies, to convey location information to the Public Safety Answering Point (PSAP).[1] Despite diligent development efforts, the E911 technology will be made generally available after October 1, 2001 as detailed in this letter.[2]

[1] The Nortel Networks DMS-MTX switch is generally used by carriers to support TDMA and CDMA wireless protocols. Note that the E911 technology does not support Satellite Assisted Mobile Positioning Systems (SAMPS) based TDMA handset solutions. This handset solution is not supported because Nortel Networks understands that no handset vendor plans market introduction of a SAMPS enabled handset.

[2] By generally available, Nortel Networks means that the product has been adequately tested, any corrections made and offered commercially to all carriers desiring to purchase or license the product or software.

Required Components and Availability Details

The E911 technology for use with the DMS-MTX platform requires a combination of hardware and software which Nortel Networks has designed to operate in accordance with the E911 applicable J-STD-036 standard. The functional elements that constitute the Nortel Networks E911 technology are switch software, RF Access system software, Mobile Positioning Center (MPC) and Positioning Determining Entity (PDE).

Nortel Networks will make the E911 technology elements generally available according to the following schedule.

Component	Role	GA Date
MTX10	Switch software	Q4 2001
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Nortel Networks will make its combined MPC/PDE generally available in Q2 2002. Because the functions performed by the MPC/PDE are standards based, carriers using the Nortel Networks MTX platform may procure the necessary technology from other vendors and need not wait until Nortel Networks makes its MPC/PDE available to deploy E911. Finally, IOS version 4.0 must be deployed in carriers' networks with equipment from multiple vendors. The IOS software will become generally available in Q1 2002.

This schedule represents Nortel Networks' current plan. This plan could be altered by a number of factors, including unavailability of handsets for testing and resolution of technical issues identified through interoperability testing of the E911 technology with other vendors' technology contributions.

Even after general availability, carriers will need time to deploy the solution across the portions of their networks covered by validated PSAP requests.

Standards

As noted, the E911 technology is standards based. Applicable standards were only approved and published last year. Generally, 18 to 24 months are needed between standard adoption and development of compatible technology. As you will note from the discussion in the above section entitled "Required Components and Availability Details", Nortel Networks has bested or equaled the usual timelines for delivery of functionality after a standard is published.

Field Trial

Nortel Networks endorses an end-to-end field trial before a more extensive roll-out of the E911 technology takes place. The end-to-end field trial is important because, to address the overall goal of the delivery of location information to a PSAP, the E911 technology must successfully interwork with the E911 components supplied by other

vendors as well as technologies supplied by other necessary parties, such as the location technology provider and the Local Exchange Carrier.

The successful conclusion of the trial will provide a validated solution across all necessary technologies and parties. To deploy a solution without an end-to-end field trial could lead to remedying the same issues multiple times in a serial fashion. Nortel Networks does not have the resources to deploy the E911 technology simultaneously prior to completion of individual trials and then correct issues that may well be identical. Other necessary parties, such as the location solution vendors and Local Exchange Carriers and even wireless carriers, may have similar limitations.

CALEA

Nortel Networks will make six punch list items available in generic software release MTX10. Each item will be individually toggled. As noted above, the MTX10 generic software release will become generally available in Q4 2001, shortly after the initial FCC compliance date of Sept. 30, 2001. Any hardware necessary to achieve compliance with the punch list requirements is available now.

Nortel Networks has moved diligently to develop the CALEA punch list functionality since the standards were adopted for the punch list items in April 2000. Nortel Networks will begin trials of the CALEA software later this summer with several customers. Nortel Networks plans to test the MTX10 CALEA software with the FBI later this year.

Nortel Networks plans to shortly provide the FCC with its delivery schedule for E911 technology and the CALEA punch list functionality. The FBI will be presented with a copy of the Nortel Networks presentation for purposes of demonstrating when the punch list features will be made available. Your company may want to contact the FBI about CALEA flexible deployment and seek an extension from the FCC in light of the availability of MTX10 after the Sept. 30 CALEA compliance date.

If you should have any questions, please contact Tony Smith, Director, Wireless Regulatory Affairs, Nortel Networks at (972) 685-8779.

Sincerely,

Chris Homing
Nortel Networks

MOTOROLA

September 5, 2001

Mr. Mike McCue
Blackfoot Communications
1221 North Russell
Missoula, MT 59808

Dear Mike,

The following is the response from our Carrier Insights & Commitments Group in regards to your request for information regarding handset-assisted technology to meet Phase II requirements of Enhanced 9-1-1 (E911). If you have any questions, please give me a call.

Motorola is working to provide Blackfoot Communications terminals and accessories that will provide location functionality per FCC requirements. At this time, it is the opinion that AGPS is the most viable solution to this issue. Motorola's timeframe for developing AGPS equipped / capable terminals is currently the 3Q2002. The actual platform, costs, and method of implementation (via accessory or built-in) are all to be determined. Motorola encourages Blackfoot Communications to offer its observations and inputs to the many aspects of this design.

Sincerely,

Glenn Adams

Glenn Adams
Sr. National Business Manager
Motorola
(817) 245-4636

Bill Squires

From: Dave Martin
Sent: Friday, August 31, 2001 3:30 PM
To: Bill Squires
Subject: FW: E911 Phase II

FYI
-----Original Message-----
From: Mike McCue
Sent: Friday, August 31, 2001 3:08 PM
To: Dave Martin
Subject: FW: E911 Phase II

Here's the first response.
-----Original Message-----
From: Heidi Swanson [mailto:hbrand@qcpi.com]
Sent: Friday, August 31, 2001 3:01 PM
To: Mike McCue
Subject: Re: E911 Phase II

Mike:

Everyone is asking me this question today...the FCC must be inquiring with all carriers.

Currently we have two products in our roadmap that are slated to launch with MSM 5100 in 2Q02 which has GPS capabilities.

Let me know if you have any questions.

Thanks!
Heidi

At 11:42 AM 8/31/01 -0600, you wrote:

> Heidi,
> I sent the following letter to you in the mail and am sending it to you by email as well in hopes that you may be able to respond quicker:
>
> > Blackfoot Communications is planning to implement a handset-based solution of the E911 Phase II requirements and needs information from Kyocera on product availability. Specifically, when will Kyocera have available for our purchase E911 Phase II compliant 1900MHz CDMA phones? As this information is of critical importance, please respond to me by September 14, 2001. You may reply to me at my email address (mmccue@blackfoot.com) or at the address below.<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />
> > Thank you for your help in this matter.

Please contact me if you have any questions.

Thanks,

Mike McCue
Wireless Product Manager
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e mmccue@blackfoot.com