# Before the
# Federal Communications Commission

## Washington, D.C. 20554

In the Matter of

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| Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems | ) | CC Docket No. 94-102 |
| WTB Seeks Comment on Wireless E911 Phase II Waiver Request Filed by ALLTEL Communications | ) | DA 01-1866 |

**COMMENTS OF MOTOROLA, INC.**

Motorola, Inc. ("Motorola") herein submits comments in support of the limited waiver request submitted by ALLTEL Communications. As is discussed in more detail in these comments, Motorola is committed to meeting the handset and switch implementation schedule presented by ALLTEL, and strongly encourages the Commission to approve the requested waiver of its rules.

## I. INTRODUCTION

On July 25, 2001, ALLTEL submitted a Petition for Waiver of Sections 20.18(e) and (g) of the Commission's Rules[1]. This request was subsequently placed on public notice by the Commission on August 6, 2001.[2] In this waiver request, ALLTEL seeks slight modification to the handset-based Phase II technology activation timeline as follows:

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[1] *See* ALLTEL Communications, Inc., Petition for Waiver of Sections 20.18(e) and (g) of the Commission's Rules; filed July 25, 2001 ("ALLTEL Waiver").

- A nine months deferral of each of the penetration benchmarks in Section 20.18(g)(1)(i),(ii), (iii) and (iv)[3]
- A waiver until the end of 1Q2001 for its Lucent switches; the end of 2Q2001 for its Nortel switches; and the end of 4Q2002 for its Motorola switches.

Motorola, as a provider of both handset and infrastructure products to ALLTEL, strongly supports ALLTEL's request for waiver. Motorola is committed to the timelines for activation of location-enabled handsets provided in the ALLTEL request and, with further explanation, also supports the switch infrastructure implementation schedule specified for Motorola switches in the ALLTEL network.

## II. MOTOROLA SUPPORTS THE HANDSET ACTIVATION SCHEDULE PROPOSED BY ALLTEL.

ALLTEL selected the A-GPS solution for its CDMA network[4]. Motorola currently supplies ALLTEL with a significant volume of its handsets and is committed to provisioning A-GPS handsets to ALLTEL. Specifically, our plans are to supply ALLTEL with A-GPS/AFLT handsets utilizing the Qualcomm 5100 chipset. Our timeframe for having commercially available A-GPS handsets with the Qualcomm 5100 chip is in the third quarter of 2002. Handsets in limited quantities for testing purposes

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[2] *See* Public Notice, "WTB Seeks Comment on Wireless E911 Phase II Waiver Request Filed by ALLTEL Communications, Inc.," DA 01-1866, rel. August 6, 2001.

[3] The Commission's rules require carriers who use handset-based location technology to (1) begin selling and activating location-capable handsets no later than October 1, 2001; (2) ensure that at least 25 percent of all new handsets activated are location-capable no later than December 31, 2001; (3) ensure that at least 50 percent of all new handsets activated are location-capable no later than June 30, 2002; and (4) ensure that 100 percent of all new digital handsets activated are location-capable no later than December 31, 2002. *See* 47 C.F.R. § 20.18(g). .

[4] *See* E-911 Phase II Technology Report of ALLTEL Communications, Inc., filed November 9, 2000.

will be available in the second quarter or early in the third quarter of 2002. This is consistent with the data set forth in ALLTEL's waiver request.[5]

## III. MOTOROLA CONCURS WITH THE SWITCH UPGRADE SCHEDULE PROPOSED BY ALLTEL

In addition to deployment of enhanced handsets, an A-GPS location solution requires modification to the network components of the wireless carrier's underlying infrastructure.

As noted by ALLTEL in its waiver,[6] ALLTEL is just now deploying the migration to ANSI-41 throughout its network. ANSI-41 capability in the network is necessary before up-grades for J-STD 036 can be deployed.

For Motorola switches in the ALLTEL network, the key network component is the switch itself or Mobile Switching Center ("MSC"). Each MSC communicates with several Centralized Base Station Controllers ("CBSCs") that handle the mobility aspects of a wireless call, such as handoffs between cell sites. Each of the CBSCs in turn connect with numerous Base Transmission Site ("BTS") facilities that consist of the radio gear located at each individual base site. To enable A-GPS/A-FLT in a network, a Position Determining Entity ("PDE") and Mobile Positioning Center ("MPC") must be integrated with the MSC/CBSC/BTS infrastructure. The MPC connects directly with multiple MSCs to enable the MSC to determine the handset location. The PDE connects to the MPC, which provides a current "reference" of GPS signals.

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5 *See* ALLTEL Waiver at pages 13-14.

6 *See* ALLTEL Waiver at 3.

With this understanding of the critical network components as background, Motorola notes that the timeline listed in the ALLTEL Waiver Request for Motorola's infrastructure capabilities is accurate. Motorola will have its MSC software available for carriers to conduct a first office application ("FOA") in very early 2002.[7] This switch software release (EMX S16.1) is truly the gating factor for the general availability of Motorola's network components. The current cell site software, or the software that enables the CBSC and BTS to function properly, will be generally available prior to the general availability of the MSC switch software.[8] Accordingly, Motorola fully expects to be able to deploy, with general availability, a complete release for Phase II A-GPS/A-FLT enabled network infrastructure in the Second Quarter of 2002.

Motorola notes that these general availability dates are based upon the use of an A-GPS solution interfacing with a SignalSoft MPC and SnapTrack PDE. In its waiver request, ALLTEL indicates that it has selected Lucent's MPC/PDE. Use of the Lucent MPC/PDE solution by ALLTEL will add significant additional software development work for Motorola and will push back considerably a first office application of Motorola's network components to a later release in the end of 2002 or early in year 2003.[9]

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[7] Each carrier typically conducts its own FOA on its own network. This is because there are differences in the networks, even if carriers may use the same air interface. Motorola is currently working out its FOA schedule with ALLTEL.

[8] The CBSC radio access network software releases are Motorola's software release 15.0, which is generally available this month (August 2001) or CBSC software release 16.0 which will be ready for initial first office application in October 2001. Both of these radio access network software releases will support E911 Phase II with the addition of the S16.1 software on the MSC.

[9] Motorola is currently working out its schedule with ALLTEL given its selection of the Lucent MPC/PDE.

## IV. CONCLUSION

Motorola urges the Commission to grant the waiver request of ALLTEL Communications. It is clear that the underlying goals of the Commission's wireless E911 requirements would not be frustrated by the implementation schedule that has been carefully developed by ALLTEL. Motorola is committed to implementing the necessary products to support ALLTEL's A-GPS solution and believes that the timelines outlined are achievable with the exception noted. Motorola believes that an expeditious grant of this waiver will enable the public to benefit in the most accurate, efficient manner possible and would clearly meet the stringent requirements established by the Commission for an E911 waiver.

Respectfully submitted,

Mary E. Brooner
Director, Telecommunications Strategy
& Regulation
MOTOROLA, INC.
1350 I Street, N.W.
Washington, D.C. 20005
202-371-6900