

WT 08-60

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**DOCKET FILE COPY ORIGINAL**

**FCC 601**  
Main Form

**FCC Application for Radio Service Authorization:  
Wireless Telecommunications Bureau  
Public Safety and Homeland Security Bureau**

Approved by OMB  
3060 - 0798

See instructions for  
public burden estimate

1) Radio Service Code: <b>LS</b>	1a) Existing Radio Service Code:
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**General Information**

2) (Select only one) ( EX )	
NE - New MD - Modification AM - Amendment	RO - Renewal Only RM - Renewal/Modification CA - Cancellation of License
AU - Administrative Update WD - Withdrawal of Application DU - Duplicate License	NT - Required Notifications EX - Requests for Extension of Time RL - Registered Location/Link
3a) If this application is for a <u>D</u> evelopmental License, <u>D</u> emonstration License, or a <u>S</u> pecial Temporary Authorization (STA), enter the code and attach the required exhibit as described in the instructions. Otherwise enter ' <u>N</u> ' (Not Applicable).	( <input checked="" type="checkbox"/> <u>D</u> <input type="checkbox"/> <u>M</u> <input type="checkbox"/> <u>S</u> <input type="checkbox"/> <u>N/A</u> )
3b) If this application is for Special Temporary Authority due to an emergency situation, enter 'Y'; otherwise enter 'N'. Refer to Rule 1.915 for an explanation of situations considered to be an emergency.	( <input type="checkbox"/> <u>Y</u> <input checked="" type="checkbox"/> <u>No</u> )
4) If this application is for an Amendment or Withdrawal, enter the file number of the pending application currently on file with the FCC.	File Number
5) If this application is for a Modification, Renewal Only, Renewal/Modification, Cancellation of License, Duplicate License, or Administrative Update, enter the call sign of the existing FCC license. If this is a request for Registered Location/Link, enter the FCC call sign assigned to the geographic license.	Call Sign
6) If this application is for a New, Amendment, Renewal Only, or Renewal/Modification, enter the requested authorization expiration date (this item is optional).	MM / DD
7) Is this application "major" as defined in §1.929 of the Commission's Rules when read in conjunction with the applicable radio service rules found in Parts 22 and 90 of the Commission's Rules? (NOTE: This question only applies to certain site-specific applications. See the instructions for applicability and full text of §1.929).	( <input type="checkbox"/> <u>Y</u> <input checked="" type="checkbox"/> <u>No</u> )
8) Are attachments (other than associated schedules) being filed with this application?	( <input checked="" type="checkbox"/> <u>Y</u> <input type="checkbox"/> <u>No</u> )

**Fees, Waivers, and Exemptions**

9) Is the Applicant exempt from FCC application fees?	( <input type="checkbox"/> <u>N</u> <input checked="" type="checkbox"/> <u>Yes</u> <input type="checkbox"/> <u>No</u> )
10) Is the Applicant exempt from FCC regulatory fees?	( <input type="checkbox"/> <u>Y</u> <input checked="" type="checkbox"/> <u>Yes</u> <input type="checkbox"/> <u>No</u> )
11a) Does this application include a request for a Waiver of the Commission's Rule(s)? If 'Yes', attach an exhibit providing rule number(s) and explaining circumstances.	( <input type="checkbox"/> <u>Y</u> <input checked="" type="checkbox"/> <u>Yes</u> <input type="checkbox"/> <u>No</u> )
11b) If 11a is 'Y', enter the number of rule sections involved.	Number of Rule Section(s):
12) Are the frequencies or parameters requested in this filing covered by grandfathered privileges, previously approved by waiver, or functionally integrated with an existing station?	( <input type="checkbox"/> <u>Y</u> <input checked="" type="checkbox"/> <u>Yes</u> <input type="checkbox"/> <u>No</u> )

**Applicant Information**

13) FCC Registration Number (FRN): <b>0003943453</b>			
14) Applicant/Licensee legal entity type: (Select One)			
<input type="checkbox"/> Individual	<input type="checkbox"/> Corporation	<input type="checkbox"/> Unincorporated Association	<input type="checkbox"/> Trust <input type="checkbox"/> Government Entity
<input type="checkbox"/> Consortium	<input type="checkbox"/> General Partnership	<input checked="" type="checkbox"/> Limited Liability Company	<input type="checkbox"/> Limited Liability Partnership
<input type="checkbox"/> Limited Partnership <input type="checkbox"/> Other (Description of Legal Entity)			
15) If the licensee name is being updated, is the update a result from the sale (or transfer of control) of the license(s) to another party and for which proper Commission approval has not been received or proper notification not provided?			( <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
16) First Name (if individual):	MI:	Last Name:	Suffix:
17) Legal Entity Name (if other than individual): <b>Progeny LMS, LLC</b>			
18) Attention To: <b>Carson Agnew</b>			
19) P.O. Box:	And/Or	20) Street Address: <b>2058 Crossing Gate Way</b>	
21) City: <b>Vienna</b>		22) State: <b>VA</b>	23) Zip Code: <b>22181</b>
24) Telephone Number: <b>(703)716-0841</b>		25) FAX:	
26) E-Mail Address: <b>cagnew@progenylms.com</b>			

**27) Demographics (Optional):**

<b>Race:</b>	<b>Ethnicity:</b>	<b>Gender:</b>
<input type="checkbox"/> American Indian or Alaska Native	<input type="checkbox"/> Hispanic or Latino	<input type="checkbox"/> Male
<input type="checkbox"/> Asian	<input type="checkbox"/> Not Hispanic or Latino	<input type="checkbox"/> Female
<input type="checkbox"/> Black or African-American		
<input type="checkbox"/> Native Hawaiian or Other Pacific Islander		
<input type="checkbox"/> White		

**Real Party in Interest**

28) Name of Real Party in Interest of Applicant (if different from applicant):	29) FCC Registration Number (FRN) of Real Party in Interest:
--------------------------------------------------------------------------------	--------------------------------------------------------------

**Contact Information (If different from the applicant)**

30) First Name: <b>Bruce</b>	MI: <b>A</b>	Last Name: <b>Olcott</b>	Suffix: <b>Esq</b>
31) Company Name: <b>Squire, Sanders &amp; Dempsey L.L.P.</b>			
32) Attention To: <b>Bruce Olcott</b>			
33) P.O. Box:	And /Or	34) Street Address: <b>1201 Pennsylvania Avenue, NW, Suite 500</b>	
35) City: <b>Washington</b>		36) State: <b>DC</b>	37) Zip Code: <b>20004</b>
38) Telephone Number: <b>(202)626-6615</b>		39) FAX:	
40) E-Mail Address: <b>bolcott@ssd.com</b>			

**Regulatory Status**

41) This filing is for authorization to provide or use the following type(s) of radio service offering (enter all that apply):
( <input type="checkbox"/> ) Common Carrier ( <input type="checkbox"/> ) Non-Common Carrier ( <input type="checkbox"/> ) Private, internal communications ( <input type="checkbox"/> ) Broadcast Services ( <input type="checkbox"/> ) Band Manager

**Type of Radio Service**

42) This filing is for authorization to provide the following type(s) of radio service (enter all that apply):
( <input type="checkbox"/> ) Fixed ( <input type="checkbox"/> ) Mobile ( <input type="checkbox"/> ) Radiolocation ( <input type="checkbox"/> ) Satellite (sound) ( <input type="checkbox"/> ) Broadcast Services
43) Interconnected Service? ( <input type="checkbox"/> ) Yes No

**Alien Ownership Questions**

44) Is the applicant a foreign government or the representative of any foreign government?	( <input type="checkbox"/> ) Yes No
45) Is the applicant an alien or the representative of an alien?	( <input type="checkbox"/> ) Yes No
46) Is the applicant a corporation organized under the laws of any foreign government?	( <input type="checkbox"/> ) Yes No
47) Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	( <input type="checkbox"/> ) Yes No
48a) Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country?	( <input type="checkbox"/> ) Yes No
48b) If the answer to the above question is 'Y', has the applicant received a ruling(s) under Section 310(b)(4) of the Communications Act with respect to the same radio service involved in this application?	( <input type="checkbox"/> ) Yes No
If the answer to 48b is 'N', attach to this application a date-stamped copy of a request for a foreign ownership ruling pursuant to Section 310(b)(4) of the Communications Act.	

**Basic Qualification Questions**

49) Has the applicant or any party to this application had any FCC station authorization, license or construction permit revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission?	( <input type="checkbox"/> ) Yes No
50) Has the applicant or any party to this application, or any party directly or indirectly controlling the applicant, ever been convicted of a felony by any state or federal court?	( <input type="checkbox"/> ) Yes No
51) Has any court finally adjudged the applicant or any party directly or indirectly controlling the applicant guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement, or any other means or unfair methods of competition?	( <input type="checkbox"/> ) Yes No

**Aeronautical Advisory Station (Unicom) Certification**

52) ( <input type="checkbox"/> ) I certify that the station will be located on property of the airport to be served, and, in cases where the airport does not have a control tower, RCO, or FAA flight service station, that I have notified the owner of the airport and all aviation service organizations located at the airport within ten days prior to application.
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**Broadband Radio Service and Educational Broadband Service Cable Cross-Ownership**

53a) Will the requested facilities be used to provide multichannel video programming service?	( <input type="checkbox"/> ) Yes No
53b) If the answer to question 53a is yes, does applicant operate, control or have an attributable interest (as defined in Section 27.1202 of the Commission's Rules) in a cable television system whose franchise area is located within the geographic service area of the requested facilities?	( <input type="checkbox"/> ) Yes No

**Note:** If the answer to question 53b is 'Y', attach an exhibit explaining how the applicant complies with Section 27.1202 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.

**Broadband Radio Service and Educational Broadband Service (Part 27)**

54) (For EBS only) Does the applicant comply with the programming requirements contained in Section 27.1203 of the Commission's Rules?	( <input type="checkbox"/> ) Yes No
<b>Note:</b> If the answer to item 54 is 'N', attach an exhibit explaining how the applicant complies with Section 27.1203 of the Commission's Rules or justifying a waiver of that rule. If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	
55) (For BRS and EBS) Does the applicant comply with Sections 27.50, 27.55, and 27.1221 of the Commission's Rules?	( <input type="checkbox"/> ) Yes No
<b>Note:</b> If the answer to item 55 is 'N', attach an exhibit justifying a waiver of that rule(s). If a waiver of the Commission Rule(s) is being requested, Item 11a must be answered 'Y'.	

**General-Certification Statements**

- 1) The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application.
- 2) The applicant certifies that grant of this application would not cause the applicant to be in violation of any pertinent cross-ownership or attribution rules.\*  
\*If the applicant has sought a waiver of any such rule in connection with this application, it may make this certification subject to the outcome of the waiver request.
- 3) The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.
- 4) The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to §5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. This certification does not apply to applications filed in services exempted under §1.2002(c) of the rules, 47 CFR § 1.2002(c). See §1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of "party to the application" as used in this certification.
- 5) The applicant certifies that it either (1) has current required ownership data on file with the Commission, (2) is filing updated ownership data simultaneously with this application, or (3) is not required to file ownership data under the Commission's rules.
- 6) The applicant certifies that the facilities, operations, and transmitters for which this authorization is hereby requested are either: (1) categorically excluded from routine environmental evaluation for RF exposure as set forth in 47 C.F.R. 1.1307(b); or, (2) have been found not to cause human exposure to levels of radiofrequency radiation in excess of the limits specified in 47 C.F.R. 1.1310 and 2.1093; or, (3) are the subject of one or more Environmental Assessments filed with the Commission.
- 7) The applicant certifies that it has reviewed the appropriate Commission rules defining eligibility to hold the requested license(s), and is eligible to hold the requested license(s).
- 8) The applicant certifies that it is not in default on any payment for Commission licenses and that it is not delinquent on any non-tax debt owed to any federal agency.

**Signature**

56) Typed or Printed Name of Party Authorized to Sign

First Name: <b>Carson</b>	MI:	Last Name: <b>Agnew</b>	Suffix:
57) Title: <b>President</b>			
Signature: <b>Carson Agnew</b>		58) Date: <b>05/01/2008</b>	
<b>FAILURE TO SIGN THIS APPLICATION MAY RESULT IN DISMISSAL OF THE APPLICATION AND FORFEITURE OF ANY FEES PAID.</b>			
Upon grant of this license application, the licensee may be subject to certain construction or coverage requirements. Failure to meet the construction or coverage requirements will result in termination of the license. Consult appropriate FCC regulations to determine the construction or coverage requirements that apply to the type of license requested in this application.			
WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, §1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, §312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, §503).			

Schedule for Waiver  
Request for Extension of Time for Wireless Services

1) Purpose

The purpose of this submission: Enter one purpose only - 1, 2, 3, 4, I, or S ( 1 ) See below and refer to instructions.

**Buildout/Coverage Requirements (Market-based services and State License Radio Service (SL) only)**

- 1 Extension of Time to meet 1st buildout/coverage requirements. (List call signs in 3a)
- 2 Extension of Time to meet 2nd buildout/coverage requirements. (List call signs in 3a)
- 3 Extension of Time to meet 3rd buildout/coverage requirements. (List call signs in 3a)
- 4 Extension of Time to meet 4th buildout/coverage requirements. (List call signs in 3a)
- I Extension of Time to meet tribal lands buildout/coverage requirements. (List call signs in 3a)

**Construction Requirements (Site-licensed services only)**

- S Extension of Time to meet construction requirements (List, as applicable, call signs, locations or paths, and frequencies in Item 3.)

2) New Buildout/Coverage/Construction Expiration Date

Enter date (mm/dd/yy) requested: <b>07/19/2012</b>	Attach exhibit describing circumstances/justification.
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3) Call Signs/Locations or Paths/Frequencies

3a) Call Sign	3b) Location Number	3c) Path Number (Microwave only)	3d) Center (Assigned) or Lower Frequency (MHz)	3e) Upper Frequency (MHz)
WPQP845				

Attachment(s):

Type	Description	Date Entered
W	<u>Request for Waiver and Limited Extension of Time</u>	05/01/2008

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
Request of Progeny LMS, LLC )  
For Waiver and Limited Extension of Time )  
To: The Commission )

File No. \_\_\_\_\_

**REQUEST FOR WAIVER AND  
LIMITED EXTENSION OF TIME**

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(202) 626-6615

Its Attorneys

May 1, 2008

## SUMMARY

Progeny LMS, LLC ("Progeny") herein requests a four-year extension of its current five-year construction deadline and a four-year extension of its ten-year construction deadline. Progeny will require a four-year extension of its current construction deadlines in order to design, develop and deploy its M-LMS network and meet the service requirements.

Progeny has been a proponent of M-LMS technology and services since the 1980s, holds the largest number of M-LMS licenses, and has actively participated in the Commission's open proceeding to revise the M-LMS rules. The Commission has previously recognized the public benefits in allowing the M-LMS equipment market to develop and generally recognizes that the public interest favors granting licensees extensions to deploy advanced technologies.

Progeny's five-year construction deadline was extended by three years in 2006 because no suitable M-LMS equipment was available. As recently as last year, the Commission recognized that no M-LMS licensees were providing service and that no viable M-LMS equipment is available in the United States. At that time, the Commission also granted second extensions of the five-year and ten-year construction deadlines to several other M-LMS licensees. Further, last month the Commission granted a four-year extension to Local Multipoint Distribution Service licensees due to the lack of viable and affordable equipment.

Currently, the necessary M-LMS equipment remains unavailable for deployment in the United States, despite Progeny's diligent efforts to pursue manufacture of such equipment. The difficulties with procuring such equipment recognized by the Commission remain unchanged as well—the development and rapid deployment of Global Positioning Satellite services including E-911 equipped mobile phones, the unique sharing requirements of the band, and the strict testing requirements imposed on M-LMS licensees. These impediments are beyond the control

of Progeny (and any other M-LMS licensee) and strict application of the construction deadlines would be inequitable and unduly burdensome under these circumstances.

At the same time, the unique sharing requirements of the 902 – 928 MHz band means that the band is currently used by numerous services and will remain so, even if M-LMS licensees require extensions of the construction deadlines. The spectrum is not lying fallow. The commission therefore does not risk under-utilization of the spectrum through the grant of a further extension request.

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of )  
Request of Progeny LMS, LLC )  
For Waiver and Limited Extension of Time )  
To: The Commission )

File No. \_\_\_\_\_

**REQUEST FOR WAIVER AND  
LIMITED EXTENSION OF TIME**

Progeny LMS, LLC ("Progeny"), by its attorneys, hereby submits this request for waiver pursuant to Section 1.925 of the Commission's Rules,<sup>1</sup> and limited extension of time pursuant to Section 1.946(e) of the Commission's Rules,<sup>2</sup> to meet the construction deadlines for its 900 MHz Multilateration Location and Monitoring Service ("M-LMS") Economic Area ("EA") licenses as required by Section 90.155(d) of the Commission's Rules ("Extension Request").

Progeny requests an additional four years to meet its five-year construction deadline and an additional four years to meet its ten-year construction deadline. As discussed herein, an extension of time is in the public interest, the necessary equipment to provide service is not available, and the spectrum will not lie fallow due to the unique sharing requirements of the band.

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<sup>1</sup> See 47 C.F.R. § 1.925.

<sup>2</sup> See 47 C.F.R. § 1.946(e).

## I. INTRODUCTION

Progeny successfully competed in Auction 21 in 1999, securing 226 B and C block licenses in 113 EAs and A block licenses in two additional EAs.<sup>3</sup> The original construction deadlines imposed pursuant to Section 90.155(d) of the Commission's Rules were July 19, 2005 for the five-year build-out and July 19, 2010 for the ten-year build-out. On February 15, 2006, Progeny filed a request for limited waiver of the five-year build-out deadline, and on May 24, 2006, the Commission granted Progeny a three-year extension largely because the lack of M-LMS equipment made construction impossible.<sup>4</sup>

In its order on reconsideration, adopted on January 31, 2007, the Commission denied a Warren Havens ("Havens") petition for reconsideration of the extensions granted to Progeny and FCR, Inc.<sup>5</sup> In addition, on its own motion, the Commission granted Havens an additional two years to meet the five-year construction deadline and two years to meet the ten-year construction deadline.<sup>6</sup> These two extensions were in addition to the three-year extension previously granted

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<sup>3</sup> See *Location and Monitoring Service Auction Closes, Winning Bidders in the Auction of 528 Multilateration Licenses in the Location and Monitoring Service*, Public Notice, DA 99-05 (March 8, 1999).

<sup>4</sup> See *In the Matter of Request of Progeny LMS, LLC for a Three-Year Extension of the Five-Year Construction Requirement for its Multilateration Location and Monitoring Services Economic Area Licenses*, Memorandum Opinion and Order, DA 06-1094 (2006) ("*Progeny Extension Order*").

<sup>5</sup> See *In the Matter of Multilateration Location and Monitoring Service Construction Requirements*, Order on Reconsideration and Memorandum Opinion and Order, DA 07-479 (2007) ("*M-LMS Reconsideration Order*").

<sup>6</sup> *Id.*, ¶ 12. The Commission also granted a second extension to FCR, Inc., which is discussed further below.

to Havens with respect to the five-year build-out requirement. Again, the reason for a second extension was the lack of M-LMS equipment.<sup>7</sup>

**II. THE COMMISSION SHOULD GRANT A FOUR-YEAR EXTENSION OF PROGENY'S CONSTRUCTION DEADLINES**

Pursuant to Section 1.925 of the Commission's Rules, the Commission may grant a request for waiver if it is shown that:

- the underlying purpose of the rule would not be served and granting the waiver would be in the public interest, or
- application of the rule would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>8</sup>

Further, pursuant to Section 1.946(e) of the Commission's Rules, an extension request may be granted if "the licensee shows that failure to meet the construction or coverage deadline is due to...causes beyond its control."<sup>9</sup>

**A. Granting Progeny an Extension of Time is in the Public Interest**

The first test for granting a waiver is that it would serve the public interest. In its first extension request, Progeny demonstrated its longstanding commitment to providing M-LMS services, dating back to the 1980s.<sup>10</sup> This commitment continues unabated. In addition,

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<sup>7</sup> *Id.*

<sup>8</sup> *See* 47 C.F.R. § 1.925(b)(3).

<sup>9</sup> *See* 47 C.F.R. § 1.946(e).

<sup>10</sup> Progeny LMS, LLC Request for Waiver, 11-13 (filed Feb. 15, 2005).

Progeny has been an active participant in the Commission's open proceeding to revise and improve the M-LMS rules.<sup>11</sup>

In granting extension requests for Progeny and the other M-LMS licensees, the Commission has found that extending the construction deadlines was in the public interest. Specifically, the Commission granted a second extension to Havens last year by finding that strict application of the construction requirement would be contrary to the public interest, and that granting additional time would be in the public interest.<sup>12</sup>

The public benefits involved in allowing Progeny and other licensees sufficient time to provide services for homeland security and other important applications that require a high degree of service reliability remain unchanged. Progeny has had discussions with the Department of Homeland Security and critical infrastructure entities regarding location monitoring services, and remains committed to developing innovative public safety and security M-LMS services that promote the highest and best use of the 902 – 928 MHz band.

The Commission has a demonstrated interest in promoting the highest and best use of licensed spectrum, even when it is not for homeland security and public safety. In the Commission's *WCS Extension Order*, the Commission agreed with the WCS licensees that the most viable business model for the spectrum was advanced wireless services and that it would not be in the public interest for the licensees to build stop-gap systems intended to preserve their

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<sup>11</sup> See *Amendment of the Commission's Part 90 rules in the 904-909.75 and 919.75-928 MHz Bands*, WT Docket No. 06-49, Notice of Proposed Rulemaking, 21 FCC Rcd 2809 (2006).

<sup>12</sup> See *M-LMS Reconsideration Order*, ¶ 11.

licenses.<sup>13</sup> Likewise, in the *FCI 900, Inc. Extension Order*, the Commission extended the five-year construction deadline to allow the licensees to deploy advanced digital services using equipment that was not yet available, rather than deploying existing analog facilities.<sup>14</sup>

With regard to M-LMS, there is a similar value in allowing M-LMS licensees to deploy advanced technologies when they become available. As explained below, however, there are no stop-gap solutions based on less advanced technologies that are available to deploy. The need for an extension of time is therefore more compelling for M-LMS licensees in order to permit manufacturers to complete development of equipment that can be used to provide beneficial M-LMS services on a shared basis with other users of the 900 MHz M-LMS spectrum band.

**B. The Necessary M-LMS Equipment is Not Available**

In considering whether to grant a waiver of its rules, the Commission not only examines whether the public interest would be served, but also considers whether application of the rule would be inequitable, and unduly burdensome,<sup>15</sup> and whether the applicant has no reasonable alternative due to causes beyond its control.<sup>16</sup>

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<sup>13</sup> See *Consolidated Request of the WCS Coalition For Limited Waiver of Construction Deadline for 132 WCS Licenses; Request of WCS Wireless, LLC for Limited Waiver of Construction Deadline for 16 WCS Licenses; Request of Cellutec, Inc. for Limited Waiver of Construction Deadlines for Stations KNLB242, KNLB216 in Guam/Northern Mariana and American Samoa*, WT Docket No. 06-102, Order, 21 FCC Rcd 14134, 14140-41, ¶ 13 (2006) (“*WCS Extension Order*”).

<sup>14</sup> See *FCI 900, Inc. Expedited Request For 3-Year Extension of 900 MHz Band Construction Requirements and Neoworld License Holdings, Inc. Request For Waiver of 900 MHz Band Construction Requirements and Petition for Declaratory Rulemaking*, Memorandum Opinion and Order, 16 FCC Rcd 11072, 11075, 11076-77, ¶¶ 5-6 (2001).

<sup>15</sup> See 47 C.F.R. § 1.925(b)(3).

<sup>16</sup> See 47 C.F.R. § 1.946(e).

As demonstrated below, it is primarily the inability to procure M-LMS equipment, and the causes of that inability, that makes application of the construction deadline inequitable and unduly burdensome. Further, the absence of M-LMS equipment is due to causes beyond Progeny's control, and leaves Progeny no alternative but to request this extension.

**1. Widespread Introduction and Use of GPS Receivers Has Obviated Much of the Need for Multilateration Systems and Made Manufacturers Reluctant to Invest in Such Equipment**

As the Commission is well aware, several changes in the communications landscape beyond Progeny's control have occurred that have made the development of M-LMS equipment more difficult. The introduction of Global Positioning Satellite ("GPS") location services just a few months after the Commission adopted rules for M-LMS, the removal of Selective Availability just a few months after the auction at which Progeny bought its licenses,<sup>17</sup> and the Commission's E-911 requirements for wireless carriers (that greatly expanded adoption of GPS technology in mobile phones), have obviated much of the need for multilateration systems and made manufacturers reluctant to invest in such equipment.

This reality is similar to the situation in the *MariTEL Extension Order*, wherein the Commission granted an extension of time to meet the five-year construction requirement in part because the widespread availability of cellular and PCS services to the maritime community drastically reduced the demand for MariTel's proposed VHF Public Coast service.<sup>18</sup>

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<sup>17</sup> See *Statement by the President Regarding the United States' Decision to Stop Degrading Global Positioning System Accuracy*, Office of Science and Technology Policy (May 1, 2000), [http://www.gpsforvfr.com/white\\_house.htm](http://www.gpsforvfr.com/white_house.htm).

<sup>18</sup> See *MariTEL, Inc.; Request to Extend Construction Deadline for Certain VHF Public Coast Station Geographic Area Licenses*, Memorandum Opinion and Order, 22 FCC Rcd 14074, 14076, ¶ 3 (2007).

**2. There is Currently No M-LMS Equipment Available for Purchase and Use in the United States**

The Commission has recognized as recently as last year that there is no M-LMS equipment available for use in the United States, which renders construction and operation of an M-LMS service impossible. In the 2007 *M-LMS Reconsideration Order*, the Commission determined that “no M-LMS licensee provides service today” and “the record before us confirms that no viable M-LMS equipment is available for deployment in the United States today.”<sup>19</sup>

Havens recently filed an *ex parte* letter in the M-LMS rulemaking docket claiming that Intelligent Transportation Service (“ITS”) wireless technology is available, and equipment can be developed if the appropriate time and resources are spent.<sup>20</sup> Specifically, Havens points to TETRA, a technology developed by the European Technical Standards Institute, as the answer for ITS service.

There are two important reasons why Progeny, or any other M-LMS licensee, cannot use TETRA to provide M-LMS service in the United States. First, as stated in Havens’ own filing, “TETRA...to date is still not sold in the US due to Motorola’s assertions that it will sue, for patent infringement, entities...that buy and use TETRA in the US.”<sup>21</sup> Second, also as stated in

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<sup>19</sup> See *M-LMS Reconsideration Order*, ¶ 5.

<sup>20</sup> See *Ex Parte of ATLAS Wireless LLC, Telesaurus VPC LLC, AMTS Consortium LLC, Telesaurus Holdings LLC, Skybridge Spectrum Foundation, Intelligent Transportation Wireless LLC*, WT Docket No. 06-49 (March 7, 2008).

<sup>21</sup> *Id.* at 2.

Havens' own filing, TETRA does not address M-LMS multilateration radiolocation technology.<sup>22</sup>

Havens filed a second *ex parte* letter recently in the rulemaking docket in which he touts pseudolites as "the essential technology for the multilateration component of LMS-M systems" and includes an article on the technology.<sup>23</sup> Havens, however, admits in his filing that the use of pseudolites is in its infancy.<sup>24</sup> Furthermore, pseudolites are technically incompatible with the M-LMS spectrum band plan<sup>25</sup> and service rules.<sup>26</sup> Finally, pseudolites are not currently available as M-LMS equipment, and therefore do not bear on this Extension Request.

The early stage of all the developments cited by Havens and the spectral occupancy issue are in fact the crucial flaws in his arguments. Just because tests have been conducted with equipment occupying 20 MHz of bandwidth and operating under Part 15 of the Commission's

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<sup>22</sup> *Id.* at 2, n.4. Havens claims to be working on legal solutions to the Motorola patent infringement issue and claims to be developing multilateration technology. Neither of these claims, however, allows M-LMS licensees such as Progeny to build-out their networks and provide service at this time or for several years to come.

<sup>23</sup> See *Ex Parte of ATLAS Wireless LLC, Telesaurus VPC LLC, AMTS Consortium LLC, Telesaurus Holdings LLC, Skybridge Spectrum Foundation, Intelligent Transportation Wireless LLC*, WT Docket No. 06-49 (March 17, 2008).

<sup>24</sup> See *id.* at 3.

<sup>25</sup> Pseudolites are basically out-banded GPS hardware and thus generate a 20 MHz carrier centered on 915 MHz. Clearly, a 20 MHz carrier cannot fit within any of the blocks assigned to M-LMS service, thus making pseudolites, as currently available, useless for implementation in the M-LMS band segments.

<sup>26</sup> Pseudolites do not comply with the definition of M-LMS, which requires at least three separate receive stations to identify the location of a device through the use of time and/or angle of arrival. See 47 C.F.R. § 90.155(e).

Rules, does not mean that equipment embodying this technology can be easily transferred to a commercial network deploying under the M-LMS rules.<sup>27</sup>

The availability of M-LMS equipment has not changed since last year when the Commission recognized the fact that equipment was not available and granted Havens and FCR, Inc. second extensions of time to meet the construction requirements. This fact makes compliance with the construction deadline an impossibility and imposition of the deadline inequitable and unduly burdensome.

**3. The Sharing Regime Imposed in the Band and Strict Testing Requirements Imposed on M-LMS Services Have Hindered Development of M-LMS Equipment**

The Commission has recognized that the unique sharing regime imposed on the band has caused difficulty for the manufacture of M-LMS equipment. In the *Progeny Extension Order*, the Commission stated that its reasons for granting the Havens extension applied equally to the Progeny request for an extension.<sup>28</sup> One of the reasons recognized by the Commission was “spectrum sharing in the M-LMS band—among government radiolocation systems; Industrial, Scientific, and Medical (ISM) devices; amateur radio operations; unlicensed devices; and

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<sup>27</sup> The Commission reached a similar conclusion last month when it granted licensees in the Local Multipoint Distribution Service (“LMDS”) a four-year extension of their build out deadlines. The Commission concluded that such an extension was warranted even though LMDS equipment may soon become available. *See Applications Filed by Licensees in the Local Multipoint Distribution Service (LMDS) Seeking Waivers of Section 101.1011 of the Commission’s Rules and Extensions of Time to Construct and Demonstrate Substantial Service, DA 08-54; Petition of Members of the Rural LMDS Group for Waiver of Section 101.1011 of the Commission’s Rules and Extension of Construction Deadline; Request by Members of the LMDS Coalition for Waiver and Limited Extension of Deadline for Establishing Compliance with Section 101.1011(a) LMDS Substantial Service Requirements; Petition of IDT Spectrum, LLC for Waiver and Extension of Time to Meet Substantial Service Requirements Found in Section 101.1011 of the Commission’s Rules, Memorandum Opinion and Order, DA 08-867, ¶ 25 (rel. Apr. 11, 2008) (“LMDS Extension Order”).*

<sup>28</sup> *Progeny Extension Order*, ¶ 13.

licensed M-LMS operations—has hindered the ability of licensees to secure equipment.”<sup>29</sup> This sharing regime remains an impediment to procuring suitable M-LMS equipment.

In addition, Section 90.353(d) of the Commission’s rules requires that an M-LMS licensee demonstrate in field tests that its equipment does not interfere with unlicensed services in the band.<sup>30</sup> This requirement is very difficult for manufacturers to address when considering the design and manufacture of M-LMS equipment. Unlicensed devices, regulated under Part 15 of the Commission’s Rules, can emit and receive many different power levels, modulations, and signal characteristics. These propagation values and the number of devices using them change constantly, as new unlicensed devices are type approved. As a result, there is no way to accurately predict by computer analysis and simulation, whether equipment will be marketable prior to fully developing it.

In its order granting a three-year extension of the ten-year construction requirement for WCS licensees, the Commission was persuaded that the “relatively restrictive [out-of-band emission] limits may have impeded the development of WCS equipment and have contributed to the unique circumstances of the band.”<sup>31</sup> A similar situation exists in the M-LMS band with respect to the testing requirements described above.

**4. Other M-LMS Licensees Face Similar Difficulties Prompting the Commission to Grant Second Extensions to Complete Construction**

Progeny is not alone in its inability to secure the necessary M-LMS equipment to build-out its system and begin providing service. As discussed above, in the 2007 *M-LMS*

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<sup>29</sup> *Id.*

<sup>30</sup> *See* 47 C.F.R. § 90.353(d).

<sup>31</sup> *WCS Extension Order*, ¶ 10.

*Reconsideration Order*, the Commission determined that “no M-LMS licensee provides service today....”<sup>32</sup> All M-LMS licensees have received at least one extension of the construction deadlines, and Havens and FCR, Inc. have received two. Several licensees now have five-year construction deadlines in 2009 and ten-year construction deadlines in 2011.

There is Commission precedent for considering the common fate of licensees in granting extensions of construction requirements. In the *MariTEL Extension Order*, the Commission granted an extension, relying in part on the fact that it was not presented “with a situation in which a licensee’s request for additional time to construct authorized facilities is undermined by the fact that similarly situated licensees have managed to meet the same construction deadline.”<sup>33</sup> In fact, no M-LMS licensee has yet met the five-year construction deadline. In the *MariTel Extension Order*, the Commission tied this fact closely to whether the licensee’s failure to construct is due to circumstances within the licensee’s control.<sup>34</sup>

The fact that similarly situated licensees face the same hardships as Progeny and have not met the construction requirements provides compelling evidence that the inability to construct an M-LMS system is due to circumstances beyond Progeny’s control and argues in favor of granting this Extension Request. To impose the current construction requirements on Progeny would be inequitable and unduly burdensome.

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<sup>32</sup> See *M-LMS Reconsideration Order*, ¶ 5.

<sup>33</sup> *MariTEL Extension Order*, ¶ 9.

<sup>34</sup> *Id.*

**5. Progeny Has Engaged in Diligent Attempts to Procure M-LMS Equipment**

In the *Progeny Extension Order*, the Commission found that Progeny had “sought to develop equipment and applications for its M-LMS spectrum, but, like Mr. Havens and FCR, has been unsuccessful.”<sup>35</sup> The Commission recognized that Progeny had “retained third parties to explore equipment and applications development, contacted numerous entities itself regarding such development, and consulted various equipment vendors and developers.”<sup>36</sup>

Since its first extension was granted, Progeny has continued to make diligent efforts to procure M-LMS equipment in order to construct its system and provide service. For example, beginning in 2006, Progeny has sponsored research at Purdue University to study uses of the M-LMS band and assess the Enhanced Position Location technology developed by Dr. Rajendra Singh, for which a patent application has been filed.<sup>37</sup> In addition, Progeny has undertaken other development efforts that are described in Attachment A, which are proprietary and confidential, and filed under seal with the Commission.

**C. A Full Four-Year Extension of Progeny’s Construction Deadlines is Necessary**

Progeny requests a four-year extension of its construction deadlines because it must design, develop and deploy its own equipment in order to provide M-LMS service. Progeny must also extensively test its system according to the burdensome rules discussed above. An

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<sup>35</sup> *Progeny Extension Request*, ¶ 5.

<sup>36</sup> *Id.*

<sup>37</sup> See *Progeny LMS Taps Purdue University for Wireless Telecommunications Study*, BNET Business Network (Dec. 11, 2006), [http://findarticles.com/p/articles/mi\\_m0EIN/is\\_2006\\_Dec\\_11/ai\\_n16911022](http://findarticles.com/p/articles/mi_m0EIN/is_2006_Dec_11/ai_n16911022).

extension of any period less than four years will be inadequate for Progeny to accomplish these tasks and provide sufficient service to satisfy its construction requirements.

In a comparable situation, last month the Commission recognized that the lack of “viable, affordable equipment” available to licensees in another wireless service, the LMDS, warranted the grant of a four-year extension of the licensees’ construction deadline.<sup>38</sup>

Progeny’s request for a four-year extension of its five-year construction deadline would extend the deadline to July 19, 2012, which is two years after its license renewal deadline of July 19, 2010. The Commission has previously extended the first build-out deadline of wireless licensees beyond the end of their initial license term. In the *WCS Extension Order*, the Commission granted a three-year extension of the ten-year construction deadline for WCS licensees.<sup>39</sup> The original ten-year construction deadline for WCS licensees coincided with their renewal deadline. The three-year extension therefore delayed the build-out deadline until three years after the license renewal date.

If this Extension Request is granted, like the WCS licensees, Progeny will be required to file a renewal application, but will not be required to have met build-out requirements before that time. Instead, any renewal that is granted by the Commission to Progeny can be conditioned on its subsequent compliance with its construction requirements.

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<sup>38</sup> See *LMDS Extension Order*, ¶ 24.

<sup>39</sup> See *WCS Extension Order*, ¶ 9.

**D. Due to the Unique Sharing Requirements of the Band, the Spectrum Will Not Lie Fallow**

The Commission historically has legitimate concerns about spectrum lying fallow due to failure to meet construction requirements. As discussed above, however, the Commission has recognized the unique sharing requirements of the M-LMS band. In addition to the fact that this sharing regime causes difficulties for manufacturing M-LMS equipment, it also means that the 902 – 928 MHz band is not currently, and will not be, under-utilized. M-LMS licensees share the band with Federal Government radiolocation systems, ISM devices, licensed amateur radio operations and unlicensed Part 15 equipment. The Commission has determined that “the 902 – 928 MHz band is already heavily used by other licensed and unlicensed services for a wide variety of purposes. Consequently, even if a multilateration LMS licensee fails to build-out its system, the possibility that the spectrum will go under-utilized is negligible.”<sup>40</sup> The normally important Commission concern regarding under-utilization of public spectrum is not an issue in this Extension Request. As discussed further above, however, the Commission should remain committed to adding the important M-LMS services that will be offered by Progeny to the band.

**III. CONCLUSION**

The Commission should grant this Extension Request, as it has done for other similarly situated M-LMS licensees, because application of the current construction deadlines would be inequitable and unduly burdensome, and an extension is in the public interest.

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<sup>40</sup> *Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems*, PR Docket No. 93-61, Second Report and Order, 13 FCC Rcd 15182, 15197-15298, ¶ 30 (1998).

As the Commission has recognized, no M-LMS equipment is currently available and the band remains heavily used due to the unique sharing regime imposed so the spectrum is not being under-utilized.

Respectfully submitted,

**PROGENY LMS, LLC**

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