

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
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**GLOBALSTAR LICENSEE LLC** )  
 )  
Application for Modification of License for ) File No. SAT-MOD-20080516-00106  
Operation of Ancillary terrestrial Component )  
Facilities )

**REQUEST FOR MODIFICATION OF WAIVER CONDITIONS**

**I. INTRODUCTION AND SUMMARY**

Globalstar Licensee LLC (“Globalstar”)<sup>1/</sup> hereby requests that the Commission modify certain conditions set forth in the 2008 Order and Authorization<sup>2/</sup> under which Globalstar was permitted to offer broadband Mobile Satellite Service (“MSS”) Ancillary Terrestrial Component (“ATC”) services to rural areas prior to the deployment of its second-generation MSS satellite constellation. In particular, as set forth below, Globalstar seeks an extension of the deadlines by which it must come into compliance

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<sup>1/</sup> Globalstar Licensee LLC is the authorized licensee of the Globalstar satellite constellation (call sign S2115). An affiliated company, GUSA Licensee LLC, holds licenses for Globalstar’s earth station gateways located in the United States and a blanket license for the operation of Globalstar mobile earth station terminals, and is responsible for the provision of Globalstar MSS services to end users in the United States. For purposes of this application, Globalstar Licensee LLC and GUSA Licensee LLC are referred to collectively as “Globalstar.”

<sup>2/</sup> See Globalstar Licensee LLC – Application for Modification of License for Operation of Ancillary Terrestrial Component Facilities, *Order and Authorization*, 23 FCC Rcd 15975 (2008) (“*WiMAX ATC Order*”). The Commission initially authorized Globalstar to provide ATC services in 2006. See Globalstar LLC, Request for Authority to Implement an Ancillary Terrestrial Component for the Globalstar Big LEO Mobile Satellite Service (MSS) System, *Order and Authorization*, 21 FCC Rcd 398 (2006) (“*Globalstar 2006 ATC Order*”).

with certain of the ATC “gating criteria” as a result of unforeseeable circumstances beyond Globalstar’s control: First, the unanticipated and historic collapse of the global financial markets during the past two years led to a temporary delay in Globalstar’s ability to complete financing for its second-generation system,<sup>3/</sup> and second, an earthquake in Italy in April 2009 significantly damaged the facility at which essential components for Globalstar’s second-generation satellites are being produced. The combined result of these unforeseeable circumstances has been a delay in the full commercial operation of Globalstar’s first 24 second-generation satellites.<sup>4/</sup> Although Globalstar is moving forward as quickly as possible – and indeed has every reason to do so given the severely negative impact that the degraded constellation has had on its voice and duplex data revenue – as a result of these events, it seeks a 16-month extension of the deadlines by which it must come into compliance with certain of the ATC “gating criteria.”

Grant of this extension would serve the public interest. Early this year, Globalstar’s terrestrial partner, Open Range Communications Inc. (“Open Range”),

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<sup>3/</sup> Like all operators, Globalstar anticipated using a substantial amount of service revenue to fund its second generation infrastructure improvements. When the satellites began to degrade severely in early-2007, voice and duplex service revenue diminished, and it became necessary to seek debt and equity financing for a larger portion of the second generation infrastructure. Service revenue declined from \$92 million in 2006, the last full year of an undegraded constellation, to \$78 million in 2007 and \$62 million in 2008.

<sup>4/</sup> Globalstar’s original application for authority to deploy its second-generation constellation and U.S. ground station network was filed in September 2008. *See* Modification Application of Globalstar Licensee LLC, FCC File No. SAT-MOD-20080904-00165 (filed Sept. 4, 2008) (“*Modification Application*”). Globalstar will be amending that application in the next several days to reflect certain changes to its deployment plans.

received a \$267 million loan from the Agriculture Department's Rural Utilities Service ("RUS") and \$100 million in equity funding to provide high-speed wireless broadband service to rural communities that are unserved or underserved. As of the end of November, Open Range had launched its WiMAX MSS/ATC service in 5 markets and will have launched in 32 markets by April 2010 and 129 by July 2010. It would harm consumers and undermine the Commission's broadband goals to delay or interrupt such progress by declining to extend the deadlines in the WiMAX ATC Order.

## II. BACKGROUND AND SCOPE OF RELIEF REQUESTED

*The WiMAX ATC Order.* On October 31, 2008, the Commission granted Globalstar's application for modification of its previously-granted ATC authority to permit Globalstar to offer broadband MSS/ATC services using the WiMAX air interface protocol.<sup>5/</sup> In doing so, the Commission granted Globalstar a temporary waiver of certain of the requirements contained in section 25.149(b) of the Commission's rules to allow Globalstar and Open Range to provide MSS/ATC services to certain rural areas before Globalstar's second-generation satellite constellation is launched and its ground network becomes operational.<sup>6/</sup> In granting the waivers, the Commission concluded that authorizing Globalstar and Open Range to deploy service prior to Globalstar coming into full compliance with these requirements would best promote the public interest by enabling the companies to begin offering WiMAX broadband services to more than 500 rural communities, many of which are unserved or underserved, as quickly as possible,

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<sup>5/</sup> WiMAX ATC Order at ¶ 1.

<sup>6/</sup> *Id.*

and by allowing Open Range to make use of a \$267 million loan commitment from the RUS that might otherwise expire.<sup>7/</sup>

Under the terms of the WiMAX ATC Order, Globalstar and Open Range may proceed with offering their combined MSS/ATC rural broadband service to customers, but must temporarily cease providing service in the future if certain conditions have not been met. First, Globalstar and Open Range must suspend service as of July 1, 2010, unless at that time Globalstar has launched and placed into operation a sufficient number of its second-generation satellites to ensure that its two-way MSS service meets the coverage requirements of section 25.149(b)(1)(iii) of the Commission's rules and that it has at least one in-orbit spare capable of operating in the S-band.<sup>8/</sup> Second, Globalstar and Open Range must suspend service as of July 1, 2011, unless at that time Globalstar is providing two-way MSS service to customers via a dual-mode MSS-ATC terminal.<sup>9/</sup> The WiMAX ATC Order also imposes certain deadlines by which Globalstar and Open Range must transition from their first-generation to their second-generation MSS/ATC WiMAX terminal: (a) beginning in early 2010, Globalstar and Open Range may only market or distribute terminals that are capable of being upgraded to incorporate a high-speed MSS capability,<sup>10/</sup> and (b) after early 2011, and upon availability in production quantities of an MSS chipset, Globalstar and Open Range must make available to those customers with upgradeable terminals a chipset that provides high-speed MSS

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<sup>7/</sup> *Id.* at ¶¶ 1, 7.

<sup>8/</sup> *Id.* at ¶ 41.

<sup>9/</sup> *Id.*

<sup>10/</sup> *Id.*

capabilities, and from that point forward may only market or distribute MSS/ATC terminals that in fact provide such high-speed MSS service.<sup>11/</sup> Open Range will comply with the first condition by offering upgradeable terminals in early 2010.

The Commission's avowed objectives in imposing these conditions were to ensure that ATC service would remain ancillary to MSS service and to maintain the integrity of its ATC regulations adopted in January 2003.<sup>12/</sup> Under the circumstances presented here, extending the compliance deadlines will neither cause ATC service to eclipse MSS service in the Globalstar system nor undermine the integrity of the ATC regulations. On the other hand, by granting the requested extension, the Commission will allow Globalstar and Open Range to bring wireless broadband to rural areas immediately, while suspending service would jeopardize the viability of the current rollout and delay service to these users for, perhaps, two years because of the unavoidable delay in Globalstar's full compliance with certain of the ATC gating criteria.

***Globalstar/Open Range Progress in Deploying MSS/ATC Services.*** Even before the release of the WiMAX ATC Order, Globalstar had made substantial progress in the deployment of its second-generation constellation and ground segment. As previously disclosed,<sup>13/</sup> in December 2006, Globalstar executed an approximately \$940 million (at the current Euro/Dollar conversion rate) contract with Thales Alenia Space ("Thales") for

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<sup>11/</sup> *Id.*

<sup>12/</sup> *Id.* at ¶¶ 10-12.

<sup>13/</sup> *See, e.g.,* Globalstar Licensee LLC, Application for Modification of Nongeostationary Mobile Satellite Service System License (S2115) To Launch a Second-Generation System, FCC File No. SAT-MOD-20080904-00165 (filed Sept. 4, 2008) at 14-16.

the design, manufacture, and delivery of its second-generation replacement satellites.<sup>14/</sup> Since October 2007, when production first began, progress on the satellites has continued steadily. When the WiMAX ATC Order was released, the satellite Bus and Payload designs were substantially complete, the antenna subsystems were undergoing testing, and Thales had begun production assembly, integration, and testing of the first two flight model satellites. As of early December 2009, the qualification model satellite and one flight model has been mated, five additional payloads are being integrated at the Thales facility in Toulouse, the buses and structures for the first six flight model satellites are being completed in Rome, and the contractor is on schedule to deliver production spacecraft beginning in May 2010. Finally, Globalstar has invoked the provisions in its contract with Thales requiring that Thales accelerate delivery of the satellites in exchange for additional payment.

Globalstar also has entered into a \$210 million contract with Arianespace for the first four launches of the second-generation replacement satellites, and the first launch is now scheduled to occur in the third quarter 2010.<sup>15/</sup> In addition, Globalstar has executed a separate \$13 million contract with Thales for the design and construction of the second-generation ground network infrastructure, including satellite operations control centers (“SOCC”), telemetry command units (“TCU”), and in-orbit test equipment that will

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<sup>14/</sup> See “Globalstar, Inc. Signs Contract with Alcatel Alenia Space for Second-Generation LEO Satellite Constellation” (Dec. 4, 2006), *available at* [http://www.globalstar.com/en/news/pressreleases/press\\_display.php?pressId=426](http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=426) (last visited Dec. 14, 2009).

<sup>15/</sup> See “Globalstar Signs Second-Generation Satellite Constellation Launch Contract With Arianespace – Satellite Service Provider Finalizes Agreements For Deployment Of New Satellite Network With Launches Scheduled To Begin In The Summer Of 2009” (Sept. 4, 2007), *available at* [http://www.globalstar.com/en/news/pressreleases/press\\_display.php?pressId=456](http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=456) (last visited Dec. 14, 2009).

function in conjunction with the replacement constellation. Thus far, Thales has delivered the penultimate release of the SOCC software, has delivered five TCUs (seven are on order), and has provided interim deliveries of the in-orbit test equipment software with final acceptance scheduled for April 1, 2010. Globalstar also has executed a \$100 million contract with Hughes Network Systems to design, supply, and implement the second-generation Radio Access Network and to design and supply satellite interface chips for the next-generation user terminals,<sup>16/</sup> and a \$23 million contract with Ericsson Federal Systems to supply the ground interface network to be installed in the gateways.<sup>17/</sup> Globalstar anticipates that these chips and/or a circuit board containing these chips will be delivered to Open Range beginning in April 2012 (in the case of the chips) and June 2012 (in the case of the circuit board) for inclusion in its next generation MSS/ATC subscriber equipment. Finally – and most significantly – on July 1, 2009, Globalstar completed a financing of approximately \$738 million which will fund the manufacture,

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<sup>16/</sup> See “Globalstar Signs Contract with Hughes To Pave Way for Next Generation Advanced Satellite Services – New Internet Protocol (IP) Based Ground Network Will Provide Ability To Continuously Refine And Update Satellite Voice And High-Speed Data Offerings As Standards Evolve For Developing Technologies” (May 19, 2008), available at [http://www.globalstar.com/en/news/pressreleases/press\\_display.php?pressId=487](http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=487) (last visited Dec. 14, 2009).

<sup>17/</sup> See Globalstar Signs Second-Generation Ground Core Network System Agreement with Ericsson – Contract Provides Globalstar With Telephony And Internet Access For Next-Generation Of Advanced Satellite Services (October 16, 2008), available at [http://www.globalstar.com/en/news/pressreleases/press\\_display.php?pressId=512](http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=512) (last visited Dec. 14, 2009).

delivery, and first four launches of its second-generation, Globalstar 2.0 satellite constellation and ground facilities.<sup>18/</sup>

For its part, Open Range similarly has made substantial progress in the deployment of the terrestrial component of the Globalstar/Open Range MSS/ATC service offering. As of late-November, Open Range has launched service in five markets in Colorado and is beta-testing in three others.<sup>19/</sup> As noted above, the current deployment schedule projects that service will be available in 32 rural markets by the end of the first quarter of 2010, and 129 rural markets by the end of the second quarter. Open Range also has been working diligently to deploy its terrestrial infrastructure beyond these markets to expand its coverage as rapidly as possible. According to 2000 census data, Open Range will have in place facilities capable of serving 123,000 subscribers by the end of 2009; 667,000 subscribers by the end of the first quarter of 2010; and 2.9 million subscribers by the end of the second quarter.

***The Global Financial Crises, the Italy Earthquake, and Resulting Delays in the Availability and Launch of Globalstar's Second-Generation Satellites.*** As described above, in the approximately one year since the WiMAX ATC Order was released, Globalstar and Open Range each have worked diligently to ensure the rapid deployment of the first phase of their planned rural MSS/ATC offering. During this period, however,

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<sup>18/</sup> See “Globalstar Completes \$738 Million Financing – Financing Fully Funds Globalstar 2.0 Second-Generation Satellite Constellation and IP-Based Ground Segment” (July 1, 2009), available at [http://www.globalstar.com/en/news/pressreleases/press\\_display.php?pressId=549](http://www.globalstar.com/en/news/pressreleases/press_display.php?pressId=549) (last visited Dec. 14, 2009).

<sup>19/</sup> See, e.g., “New Broadband, Digital Phone Service for Southern Weld,” The Greeley Tribune (Sept. 22, 2009) (“A Greenwood Village company will soon bring broadband Internet and digital phone service to Frederick, Platteville, and Fort Lupton.”); “Internet Service At Home Along the Open Range,” Northern Colorado Business Report (Sept. 25, 2009).



Globalstar has been confronted with two unforeseeable occurrences that have led to a temporary delay in the deployment of Globalstar's second-generation constellation and ground station infrastructure. First, in the months following the release of the WiMAX ATC Order, the collapse of the global financial markets made it virtually impossible for Globalstar (like almost every other borrower) to access the credit markets and secure the funding necessary to complete its second-generation system. Although, as noted, Globalstar ultimately was successful in obtaining approximately \$738 million in new financing, over a period of several months in late 2008 to early 2009 before these funds became available Thales slowed its work on the satellites commensurate with Globalstar's reduced cash flow and consequent inability to fund the work on its original schedule. Thus, while work on certain key constellation components, such as satellite thrusters, on-board processors, and momentum wheels continued during this time, the reduced funding level resulted in a several-month delay of the project.

Second, the earthquake in Italy on April 6, 2009, drastically compounded the delay. The earthquake, which measured 6.3 in magnitude, struck in and around L'Aquila, Italy, where a key production facility of Thales is located, killing one Thales employee and significantly damaging the Thales facility at which a crucial component of the second-generation satellites – hybrid microelectronic circuits – is being manufactured.<sup>20/</sup> Since the earthquake, the facility remained closed for safety reasons until the first week of December, and Thales was forced to cease all production of the hybrid microelectronic

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<sup>20/</sup> See, e.g., "Earthquake in L'Aquila – Thales Alenia Space communicates," Press Release, *available at* [http://www.thalesgroup.com/Press\\_Releases/Earthquake\\_in\\_L\\_Aquila\\_-\\_Thales\\_Alenia\\_Space\\_communicates/?pid=1650](http://www.thalesgroup.com/Press_Releases/Earthquake_in_L_Aquila_-_Thales_Alenia_Space_communicates/?pid=1650) (last visited October 20, 2009). See also Globalstar, Inc. Form 10-Q, filed with the U.S. Securities and Exchange Commission on November 6, 2009, at 24.

circuits, which are vital inputs to the satellites and are not currently available from any other source. These specialized units, which require an extensive design and production cycle, are used in the satellites' (1) L-band low noise amplifiers in the L-band active antennas; (2) Frequency Generation Units; (3) telemetry transmitters; and (4) C-band low noise amplifiers used in the uplink receive chain. Although Thales investigated the possibility of producing the hybrid units in other facilities following the earthquake, it concluded that the production schedule would only be further delayed if it elected to do so.

Although Thales anticipated rebuilding and reopening the L'Aquila facility as early as October 2009,<sup>21/</sup> its efforts were delayed due to safety concerns and negotiations with the Italian government and insurers regarding the responsibility for payment and reconstruction of buildings in the stricken area. Thales re-opened its facility on December 1, 2009 – eight months after the earthquake hit. While Thales might have made up much of the time lost during the period of reduced funding once Globalstar received its loan guarantee from Coface, the earthquake precluded that opportunity. Further, as a result of the earthquake, Globalstar lost approximately two and a half of the anticipated four months' acceleration for which it had paid Thales in 2007.<sup>22/</sup> Thales had completed fabrication of components for the first five satellites before the earthquake

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<sup>21/</sup> See, e.g., "L'Aquila: Thales Alenia Space presents the industrial project of its new plant," Press Release, available at [http://www.thalesgroup.com/Press\\_Releases/space\\_pr\\_laquila\\_project\\_210709/?pid=1575](http://www.thalesgroup.com/Press_Releases/space_pr_laquila_project_210709/?pid=1575) (last visited October 20, 2009).

<sup>22/</sup> See Globalstar, Inc. For 10-K filed with the U.S. Securities and Exchange Commission on March 31, 2009, at 73.

struck; however, completion of the satellites for the second through fourth launches will be delayed for up to eight months.

The delays described in the preceding paragraphs also have caused an unavoidable delay in the launch campaign. Because of the lead time required to identify and contract for satellite launch windows (approximately one year) and the uncertainty concerning when Thales will be able to complete production of the hybrid microelectronic components, Globalstar was, for many months, unable to establish a definitive revised launch campaign. Globalstar's launch provider, Arianespace, has now scheduled the first launch window for July 5 – October 5, 2010. Unfortunately, however, Globalstar's ability to accelerate the second through fourth launches is further delayed because of the production rate at the new L'Aquila facility and the available launch windows thereafter. In light of these constraints, the second through fourth launch windows are tentatively scheduled to open December 5, 2010, February 5, 2011, and April 5, 2011, respectively, with the final window closing in July 2011. As such, the fourth launch is now estimated to be delayed by at least 12 months from the schedule used in generating the July 2011 milestone date. Additionally, Globalstar must establish the constellation, so that in the event of a launch failure, it would retain the flexibility to establish a balanced constellation of 24 functioning satellites. Such a temporary constellation of 24 satellites would enable Globalstar to continue to provide service and meet the global and domestic coverage requirements contained in section 25.143(b)(2) of the Commission's rules while it prepares for future satellites launches. Establishing the 32 satellite constellation in this way requires an additional four months than originally planned because of the need for each newly-launched satellite to drift into its specified

orbital location.<sup>23/</sup> After those launches are complete and successful, and the newly-launched satellites become operational – which Globalstar estimates will be November 2011 – Globalstar will have in place a 32-satellite constellation (including the eight replacement satellites it launched in 2007) that will provide the service quality that duplex voice and data customers expect.<sup>24/</sup> Globalstar currently anticipates that one or two of its first generation satellites will still be available to serve as spares to either a 24- or 32- satellite configuration.

***Deployment of MSS/ATC Mobile Devices.*** The WiMAX ATC Order requires that Globalstar and Open Range begin marketing and distributing the second-generation MSS/ATC user terminal – a device that provides two-way MSS services – no later than July 1, 2011.<sup>25/</sup> However, it has become clear that the anticipated delay in the first four launches of the second-generation satellites will also make it pointless for Globalstar to begin the deployment of its second-generation ground segment and associated end-user equipment – including the second-generation MSS/ATC terminal – far in advance of the constellation availability. It would make no sense (and indeed likely would confuse customers) and would cause unnecessary expense for Globalstar to deploy the second-

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<sup>23/</sup> Under the constellation establishment plan, the last one or two satellites from the fourth launch must drift over three planes from the launch plane, as opposed to one plane for the satellites from the earlier launches; this will take approximately seven months (which is four months longer than originally planned). While the new satellites carry slightly more fuel than the first generation satellites, Globalstar must conserve enough fuel for long-term station keeping and eventual disposal of decommissioned satellites.

<sup>24/</sup> As noted, a balanced configuration of 24 satellites would meet the Commission’s coverage requirements. However, 32 satellites are required for satellite diversity and service quality purposes, particularly if the system were to experience occasional temporary satellite outages.

<sup>25/</sup> WiMAX ATC Order at ¶ 41.

generation ground and end-user equipment when that equipment's new, second-generation space capabilities cannot be used. As a result, based on the tentative revised schedule for the second-generation launch campaign, Globalstar does not anticipate delivery by Hughes in production quantities of the chipset that will be used in the second-generation Globalstar/Open Range terminals to provide two-way MSS capability until mid-2012, instead of early 2011, as anticipated in the WiMAX ATC Order.<sup>26/</sup>

**Extension Request.** In light of the foregoing, Globalstar seeks modification of three of the milestone conditions contained in the WiMAX ATC Order by extending the deadlines by which Globalstar must come into compliance with the ATC gating criteria. As noted above, no extension is requested regarding compliance with the first milestone in the Order, inasmuch as Open Range will begin distributing upgradeable end-user terminals in early 2010. Although Globalstar is hopeful that the 16-month extension it seeks here will prove to be longer than needed, out of an abundance of caution Globalstar requests that the Commission extend the milestone deadlines as follows:

<b><u>Condition</u></b>	<b><u>Existing Date</u></b>	<b><u>Proposed Date</u></b>
Compliance with coverage requirements contained in 25 C.F.R. § 149(b)(1)(iii) and existence of in-orbit spare	July 1, 2010	November 1, 2011
Availability in production quantities of chipset for MSS-ATC terminals that provides high-speed MSS	After early 2011	After September 15, 2012

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<sup>26/</sup> *Id.* at ¶ 7. Globalstar anticipates that once at least 12 new satellites have been launched, the quality of Globalstar's voice services will return to the level that existed before the first-generation satellites began degrading. At that time, Globalstar intends to resume marketing its Qualcomm model 1700 phone and model 1720 duplex data modem. Approximately 100,000 of these units are contractually committed and scheduled for delivery between October 2010 and January 2012.

Provision of two-way MSS service  
using dual-mode MSS/ATC  
terminals

July 1, 2011    November 1, 2012

### **III. THE REQUESTED EXTENSIONS WOULD SERVE THE PUBLIC INTEREST**

In the WiMAX ATC Order, the Commission concluded that, although Globalstar does not currently comply with certain of the ATC gating criteria, “unique facts” exist that justify an interim waiver of those criteria.<sup>27/</sup> Specifically, the Commission found that authorizing Globalstar and Open Range to proceed with the deployment of service prior to the launch of Globalstar’s second-generation constellation would serve the public interest because it would “facilitate broadband deployment” by “extend[ing] wireless broadband coverage... to rural areas of the country.”<sup>28/</sup> The Commission also found that allowing Globalstar and Open Range immediately to deploy service was “consistent with [the RUS’s] \$267 million loan commitment” to Open Range and the Commission’s “stated policy objective” of “harmonize[ing] its rules, regulations, and processes

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<sup>27/</sup> See WiMAX ATC Order at ¶ 13.

<sup>28/</sup> *Id.* at ¶ 21. See also Statement of Commissioner Michael J. Copps (“[T]he rural communities at issue here would not be able to benefit from the Department of Agriculture’s \$267 million rural broadband loan [absent the waiver] . . . . In my view, the problems of broadband unavailability in America’s rural areas are just too pressing and too grave to accept delay.”); Statement of Commissioner Jonathan Adelstein (“[A] limited waiver of certain of our gating criteria and technical rules will greatly serve the public’s interest by allowing for the deployment of a broadband service to millions of rural Americans who now have little or no access to broadband . . . . This limited waiver furthers the Commission’s goals of facilitating the provision of broadband service to rural areas of the country consistent with the \$267 million loan commitment from Department of Agriculture’s Rural Development Utilities Program.”); Statement of Commissioner Deborah Taylor Tate (“[T]his conditioned and time-limited waiver helps the Commission advance one of our most crucial and also most challenging public policy goals: the deployment of broadband, especially for rural Americans.”).

whenever possible' to maximize the benefits of USDA loans granted to promote development of telecommunications infrastructure in rural America."<sup>29/</sup> Accordingly, the Commission decided to temporarily waive the ATC gating criteria at issue until the launch and placement into operation of the first 24 satellites of Globalstar's second-generation constellation, which Globalstar reasonably believed at the time would occur by June 2010.<sup>30/</sup>

Those same public interest findings hold equally true today and are bolstered by the fact that Open Range is *already* bringing wireless broadband to rural America. Initiatives by Congress, RUS, and the Commission since the issuance of the WiMAX ATC Order serve to reinforce the public interest benefits of allowing Globalstar and Open Range to proceed with the deployment of broadband service to rural areas as planned. The American Recovery and Reinvestment Act of 2009 ("Recovery Act"), which was signed into law on February 17, 2009, directs the RUS (along with the Department of Commerce's National Telecommunications and Information

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<sup>29/</sup> See WiMAX ATC Order at ¶ 21 (citing Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services; 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services; Increasing Flexibility to Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services, and to Facilitate Capital Formation, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 19078 (2004) at ¶ 44).

<sup>30/</sup> See WiMAX ATC Order at ¶ 23 n. 60 (citing Modification Application, Attachment 1 at 16). In the Modification Application, Globalstar stated that "[a]ccording to Globalstar's current actuarial predictions, by June 2010, the first 24 satellites that currently are under construction will have become operational and, when combined with the eight replacement satellites launched in 2007, there will be 32 fully operational satellites providing robust voice and two-way data services, and at least one satellite remaining from the first constellation that provides for L- and S-band service as an in-orbit spare." Modification Application, Attachment 1 at 16.

Administration) to make grants and loans to expand broadband deployment in unserved and underserved areas.<sup>31/</sup> The Recovery Act also directs the Commission to create a national broadband plan that “seeks to ensure that every American has access to broadband capability and establishes clear benchmarks for meeting that goal.”<sup>32/</sup>

In crafting that plan, the Commission has noted that it has “not yet met the challenge of bringing broadband to everyone” and that its “goal must be for every American citizen and every American business to have access to robust broadband services.”<sup>33/</sup> The Commission also has found that “[n]o national broadband strategy can be undertaken without due consideration to the rural broadband infrastructure” and that “[t]he likely success of rural initiatives is intimately linked to a sound national broadband policy that reflects the complex interdependencies of regulatory policies, economic issues, and technological innovations.”<sup>34/</sup> Finally, the Commission has recognized that “[s]atellite-based broadband services, with their near ubiquitous coverage...can provide a much-needed connection in rural areas, especially where other broadband solutions are not viable for technical or other reasons.”<sup>35/</sup> There can be no question that granting the extension of the waivers granted in the WiMAX ATC Order requested herein is consistent with these goals and would serve the public interest by enabling Globalstar and

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<sup>31/</sup> Pub. L. No. 111-5, 123 Stat. 115 (2009). *See also* A National Broadband Plan for Our Future, *Notice of Inquiry*, 24 FCC Rcd 4342 (2009) (“*Broadband NOI*”).

<sup>32/</sup> *See* *Broadband NOI* at ¶ 6.

<sup>33/</sup> *Id.* at ¶ 5.

<sup>34/</sup> *See* “Bringing Broadband to Rural America: Report on a Rural Broadband Strategy,” Report (May 22, 2009) at ¶ 8.

<sup>35/</sup> *Id.* at ¶ 10.



Open Range to provide broadband service to rural areas – many of which are unserved or underserved today – as quickly and as inexpensively as possible.<sup>36/</sup> Moreover, as noted above, Globalstar and Open Range have already begun providing service, making broadband available to customers in rural and remote areas that have never previously had access to such services. Given the heightened emphasis in the Commission’s broadband plan on the need to extend broadband services to such areas, it clearly would not be in those customers’ or the public interest to require Globalstar and Open Range to interrupt service they already will be providing as of July 2010.

At the same time, limited extensions of the milestones imposed in the WiMAX ATC Order will in no way jeopardize the primary purpose of the ATC gating criteria – to ensure that a satellite licensee’s ATC services remain ancillary to its MSS services.<sup>37/</sup> There is no question that – even under the revised deployment schedule proposed here – the ATC services Globalstar and Open Range will offer will be ancillary to Globalstar’s MSS services as the Commission envisioned. Globalstar has been providing MSS voice and data services since 2000, and has grown to become the largest MSS provider in the United States and one of the leading MSS providers abroad. As of September 2009,

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<sup>36/</sup> As the Commission has recognized, satellite providers can deploy broadband service to rural areas for significantly less cost than other platforms. *Id.* at ¶ 78. *See also* “FCC Broadband Team Member Assures Satellite Sector of Significance,” TRDaily (Oct. 16, 2009) (The FCC’s preliminary analysis “indicates that it would cost \$20 billion to ensure availability to basic broadband services for the three to six million Americans who don’t currently have it” whereas “satellite operators could provide service to those homes for about \$4 billion.”).

<sup>37/</sup> WiMAX ATC Order at ¶ 11 (citing Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, *Report and Order and Notice of Proposed Rulemaking*, 18 FCC Rcd 1962 (2003) (“ATC Report and Order”) at ¶ 72).

Globalstar had approximately 382,000 subscribers worldwide, and its services are available in all areas of the world, except eastern, central and southern Africa and the Indian subcontinent, areas in which Globalstar is in the process of negotiating to expand coverage. In October 2008, Globalstar began Simplex service in parts of Southeast Asia, via a gateway that has been installed in Singapore. In addition, on November 5, 2009, Globalstar began Simplex service in parts of western central Africa via a gateway that has been installed in Nigeria.

The steady growth in Globalstar's customer base over the last nine years provides ample marketplace evidence that Globalstar's services are highly valued, and that Globalstar has helped to fulfill the Commission's vision when it created the Big LEO service of fostering a variety of commercial and public safety MSS services that are available virtually anywhere in the world, including in particular in rural and remote areas.<sup>38/</sup> As demonstrated by its ongoing efforts to deploy new and innovative MSS services, such as the SPOT device, and its substantial investment in its next-generation constellation and ground segment, Globalstar has made and will continue to make intensive use of its spectrum to provide MSS services both up to and following the deployment of its second-generation system. Indeed, despite the degradation of the S-band antenna subsystems in Globalstar's first-generation satellites that has impaired Globalstar two-way voice and data services, in the 12 months from September 30, 2008, to September 30, 2009, Globalstar added 53,000 net new subscribers, largely due to the

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<sup>38/</sup> See Amendment of Section 2.106 of the Commission's Rules to Allocate the 1610-1626.5 MHz and the 2483.5-2500 MHz Bands for Use by the Mobile-Satellite Service, Including Non-Geostationary Satellites, *Report and Order*, 9 FCC Rcd 536 (1994) at ¶ 1.

popularity of the SPOT device.<sup>39/</sup> Globalstar forecasts continued growth in this area pending the replenishment of its constellation. Moreover, Globalstar has every incentive to expedite the deployment of its second-generation system, and is doing all that it can to ensure that its satellites are launched as quickly as possible, so that the full 16-month extension will not be necessary. As Globalstar has acknowledged, until the first 24 of its new satellites become operational, it cannot provide the same level of service that it did before its first-generation satellites began to degrade, and it risks the continued loss of high-revenue voice and duplex data customers.

Globalstar's request for extension of the milestone conditions imposed in the WiMAX ATC Order also is consistent with the relief contemplated in section 25.117(c) of the Commission's rules and with the Commission's consistent practice in granting extensions of licensing milestones necessitated by circumstances beyond a licensee's control. Section 25.117(c) of the rules expressly provides that milestones may be extended where additional time is required "due to unforeseeable circumstances beyond the applicant's control" or where "there are unique and overriding public interest concerns that justify an extension."<sup>40/</sup> In applying this rule, the Commission has granted milestone extensions "when the delay is due to circumstances beyond the control of the licensee" and recognized that "unanticipated technical problems encountered during physical

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<sup>39/</sup> See Globalstar, Inc. Form 10-Q, Third Quarter 2009 at 27. The SPOT device has received numerous awards since it was launched in late 2007, including the Good Housekeeping Innovative Product Award, the Wall Street Journal Technology Innovation Award and, most recently, the 2009 Mobile Satellite Users Association (MSUA) Innovation Award.

<sup>40/</sup> See 47 C.F.R. § 25.117(c).

construction of the satellite may justify a milestone extension.”<sup>41/</sup> In the MSS context in particular, the Commission repeatedly has concluded that extensions of milestones are warranted when “delay is due to circumstances beyond the licensee’s control, or when there are unique and overriding public interest concerns that justify an extension.”<sup>42/</sup>

As explained above, that is the case here. Globalstar and Open Range have been making good progress toward meeting the milestone conditions, but those efforts have been set back due two events that clearly were beyond their control – the earthquake and the collapse of the global financial markets. Although the Commission generally has stated that an “unfavorable business climate” does not warrant an extension of the licensee’s milestones,<sup>43/</sup> both the depth and scope of the recent financial crash are entirely unprecedented. As Chairman Genachowski has recognized, the ongoing global credit crunch was “an historic global financial crisis.”<sup>44/</sup> Because of this, in crafting its broadband plan, the Commission has specifically sought comment on the extent to which the “change in the financial markets” is having an impact on the “development of cutting

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<sup>41/</sup> See Intelsat LLC – Request for Extension of Milestone Dates for the INTELSAT 10-02 (INTELSAT Alpha-2) Satellite, *Memorandum Opinion and Order*, 19 FCC Rcd 5266 (2004) (citations omitted).

<sup>42/</sup> See New ICO Satellite Services G.P. – Application to Extend Milestones, *Memorandum Opinion and Order*, 22 FCC Rcd 2229 (2007) (citing 47 C.F.R. § 25.117(c); Intelsat LLC, *Order and Authorization*, 17 FCC Rcd 2391 (Int’l Bur. 2002)).

<sup>43/</sup> See, e.g., NETSAT 28 Company, LLC – Application for Modification of Ka-Band Space Station Authorization, *Memorandum Opinion and Order*, 19 FCC Rcd. 17722 (2004) at ¶ 14 (citation omitted).

<sup>44/</sup> See Prepared Remarks Of Chairman Julius Genachowski, “Global Opportunities and Challenges,” International Telecommunications Union Global Symposium for Regulators, 2009 WL 3749402 (FCC) (Nov. 10, 2009).

edge technologies in the U.S..”<sup>45/</sup> The unique circumstances surrounding the financial crisis and, in particular, its effect on credit markets place it well outside a mere “unfavorable business climate.” And, in any case, there are “unique and overriding public interest concerns” that justify an extension in this case.<sup>46/</sup> As Globalstar has demonstrated, the substantial public interest benefits that will flow from allowing Globalstar and Open Range to continue deployment of their rural broadband service (and not requiring that they interrupt service to those customers they serve as of July 2010) justify the extension Globalstar has requested.

Finally, the 16-month extension of the milestone conditions in the WiMAX ATC Order Globalstar requests also is consistent with the scope of relief the Commission has granted to other licensees where events beyond their control have led to delays in construction,<sup>47/</sup> and will not result in spectrum being warehoused or otherwise going unused – the primary purpose behind the Commission’s imposition of milestones in the

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<sup>45/</sup> See Broadband NOI at ¶ 79.

<sup>46/</sup> See 47 C.F.R. § 25.117(c).

<sup>47/</sup> See, e.g., WB Holdings 1 LLC – Application for Extension of Launch and Operation Milestone, *Memorandum Opinion and Order*, 20 FCC Rcd 10846 (2005) (granting a 12-month milestone extension); Loral SpaceCom Corporation, Debtor-in-Possession – Request for Extension of Milestones and Waiver or Petition for Reconsideration, *Memorandum Opinion and Order*, 18 FCC Rcd 21851 (2003) (granting a 15 month milestone extension); Assignment of Orbital Locations to Space Stations in the Domestic Fixed-Satellite Service and the Applications of GE American Communications, Inc., *Memorandum Opinion, Order and Authorization*, 2000 FCC LEXIS 4812 (2000) (granting a ten month milestone extension); Application of Earthwatch Inc. for Modification of Its Authorization to Construct, Launch and Operate a Remote Sensing Satellite System, *Order and Authorization*, 12 FCC Rcd 19556 (1997) (granting a two year milestone extension); AMSC Subsidiary Corporation – Application for Modification of Construction Permit and License for the AMSC-1 Satellite, *Order and Authorization*, 10 FCC Rcd 3791 (1995) (granting a ten-month milestone extension).

satellite licensing context generally.<sup>48/</sup> Unlike those instances where the Commission has extended a satellite *construction* milestone to grant a licensee additional time before commencing operations, in this case Globalstar’s MSS system already is operational. There thus is no possibility of Globalstar warehousing spectrum if the requested relief is granted. To the contrary, by extending the limited waivers provided for in the WiMAX ATC Order, the Commission will make it possible for Globalstar, along with its partner Open Range, to make even more efficient use of Globalstar’s spectrum pending the launch of Globalstar’s second-generation constellation by continuing to provide and further rolling out broadband service to rural customers throughout the country. In contrast, a denial of the instant request – with the practical result that deployment of MSS/ATC service would be delayed an additional one-to-two years (and quite possibly cancelled entirely, if the RUS were to terminate Open Range’s loan) – would contravene rather than support the important public interest goal of ensuring that licensees make the most efficient, intensive use of their assigned spectrum.

#### **IV. CONCLUSION**

For all of the foregoing reasons, Globalstar respectfully requests that the Commission modify the terms of the temporary waiver granted in the WiMAX ATC Order as set forth herein to authorize Globalstar and Open Range to continue the provision and deployment of WiMAX MSS/ATC services pending the launch and

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<sup>48/</sup> See, e.g., TMI Communications and Company, Limited Partnership and TerreStar Networks, Inc. Application for Review and Request for Stay, *Memorandum Opinion and Order*, 12 FCC Rcd 12603(2004) at ¶ 2 (“Milestone schedules are designed to ensure that licensees will proceed with construction and launch their satellites in a timely manner, and that spectrum resources will not be “warehoused” by licensees who are unable or unwilling to proceed with their plans.”).

operation of Globalstar's second-generation satellite constellation. Grant of the requested modification would serve the public interest by ensuring that Globalstar and Open Range are able to provide broadband service to residents of otherwise unserved and underserved rural communities on schedule and consistent with the terms of the financing provided by the Department of Agriculture's Rural Utilities Service.

Respectfully submitted,

/s/ William F. Adler

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*Counsel for Globalstar Licensee LLC*

December 14, 2009

**Engineering Certification**

I hereby certify under penalty of perjury that I am the technically qualified person responsible for preparation of the engineering information contained in the foregoing “Request for Modification of Waiver Conditions” (“Modification Request”); that I am familiar with the relevant sections of the FCC’s rules referred to in the Modification Request; and that the technical information set forth in the Modification Request is true and correct to the best of my knowledge and belief.

Signed this 14th day of December, 2009

/s/ Paul A. Monte

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Paul A. Monte,  
Vice President, Engineering & Product Development  
Globalstar, Inc.