

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

Application of	)	
	)	
SIRIUS XM RADIO INC.	)	IBFS File No. SAT-STA-20081027-00210
For Special Temporary Authority to Operate	)	
Twenty SDARS Terrestrial Repeaters in the	)	
Commonwealth of Puerto Rico	)	
	)	

**ORDER AND AUTHORIZATION**

**Adopted: September 11, 2009**

**Released: September 11, 2009**

By the Chief, Satellite Division, International Bureau:

**I. INTRODUCTION**

1. In this Order, we grant the application of Sirius XM Radio Inc. (Sirius XM) for special temporary authority (STA) to operate twenty Satellite Digital Radio Service (SDARS) terrestrial repeaters in the Commonwealth of Puerto Rico (Puerto Rico) for a period of 180 days. We also deny the Petition to Deny that was filed by the Radio Broadcasters Association of Puerto Rico (Association) against Sirius XM's application, for the reasons set forth below. Grant of Sirius XM's application will serve the public interest by allowing Sirius XM to enhance the reliability of satellite-delivered SDARS service to the public in Puerto Rico.

**II. BACKGROUND**

2. Sirius XM is the sole provider of SDARS in the United States. It was formed when the Commission approved the merger of Sirius Satellite Radio Inc. (Sirius) and XM Radio Inc. (XM) in August 2008.<sup>1</sup> Sirius and XM purchased their licenses at auction in 1997,<sup>2</sup> successfully launched their satellite systems in 2000 and 2001,<sup>3</sup> and commenced commercial service to the public soon after the launch of their satellite systems.<sup>4</sup> Currently, there are over 19 million SDARS subscribers in the United States.<sup>5</sup>

3. SDARS is commonly referred to as "satellite radio" and offers hundreds of channels of music, entertainment, news and sports programming, as well as weather and data information services for maritime,

<sup>1</sup> Applications for Consent to the Transfer of Control of Licenses XM Satellite Radio Holdings Inc., Transferor, to Sirius Satellite Radio Inc., Transferee, *Memorandum Opinion and Order and Report and Order*, MB Docket No. 07-57, 23 FCC Rcd 12348 (2008) (*SDARS Merger Order*).

<sup>2</sup> See Public Notice, "FCC Announces Auction Winners for Digital Audio Radio Service," 12 FCC Rcd 18727 (1997).

<sup>3</sup> *SDARS Merger Order*, 23 FCC Rcd at 12350 ¶ 2.

<sup>4</sup> XM Radio commenced nationwide commercial service on November 12, 2001. Sirius began commercial service on February 14, 2002.

<sup>5</sup> News Release, "SIRIUS XM Radio Reports Fourth Quarter and Full Year 2008 Results," released Mar. 10, 2009, available at <http://investor.sirius.com/releases.cfm>.

aeronautical and other purposes.<sup>6</sup> SDARS radio receivers are used in cars, trucks, boats, aircraft and homes, and are available for portable use. The Commission's rules define SDARS as "[a] radiocommunication service in which audio programming is digitally transmitted by one or more space stations directly to fixed, mobile, and/or portable stations, and which may involve complementary repeating terrestrial transmitters, telemetry, tracking and control facilities."<sup>7</sup> Thus, SDARS is primarily delivered to subscribers directly via satellite, although the Commission's rules contemplate the use of terrestrial-based transmitters to complement the satellite-delivered service in certain situations.

4. In order to establish fully a nationwide radio service, Sirius XM operates terrestrial repeaters in areas where it may be difficult to receive signals transmitted by a satellite. In particular, repeaters are used to re-transmit the same signals provided by satellites directly to subscribers in order to maintain adequate signal power available to the end user. These areas include "urban canyons" between tall buildings, heavily foliated areas, tunnels and other places where obstructions could limit satellite visibility and cause multi-path interference from reflected signals. Currently, there are no Commission rules governing the use of terrestrial repeaters, although a rulemaking proceeding is ongoing to adopt such rules.<sup>8</sup> For this reason, Sirius XM operates all terrestrial repeaters pursuant to grants of STA, which authorize the operations of terrestrial repeaters while the SDARS repeater rulemaking proceeding is pending.<sup>9</sup> Currently, neither Sirius nor XM operate repeaters outside the 48 contiguous United States.<sup>10</sup>

5. As part of the merger, Sirius XM voluntarily committed to provide the Sirius satellite radio service to Puerto Rico using terrestrial repeaters. Specifically, as a condition to the merger, Sirius XM agreed to file, within three months of the consummation of the merger, "the necessary applications to provide the Sirius satellite radio service to the Commonwealth of Puerto Rico using terrestrial repeaters and ... upon grant of the necessary permanent authorizations, promptly introduce such satellite radio service to the Commonwealth."<sup>11</sup> The Commission found that the public interest would be served by the merged

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<sup>6</sup> *SDARS Merger Order*, 23 FCC Rcd 12348 at 12351 ¶ 2.

<sup>7</sup> 47 C.F.R. § 25.201.

<sup>8</sup> See Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754 (1997) (*1997 SDARS Order and FNPRM*); Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, *Second Further Notice of Proposed Rulemaking*, IB Docket No. 95-91, 22 FCC Rcd 22123 (2007) (*2007 Second Further Notice*).

<sup>9</sup> Sirius Satellite Radio, Inc., Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters, *Order and Authorization*, 16 FCC Rcd 16773 (Int'l Bur. 2001) (*Sirius 2001 STA Order*); XM Radio, Inc., Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters, *Order and Authorization*, 16 FCC Rcd 16781 (Int'l Bur. 2001) (*XM Radio 2001 STA Order*). Since 2001, both Sirius and XM have submitted additional STA requests seeking to modify their repeater networks or to add new repeaters. A full list of SDARS STA requests are available through the International Bureau Filing System (IBFS), which is available online at <http://fjallfoss.fcc.gov/myibfs/welcome.do>.

<sup>10</sup> Sirius sought authority to operate terrestrial repeaters in Alaska and Hawaii in 2006; that request remains pending. See Sirius Satellite Radio Inc., *Request for Special Temporary Authority to Operate Four Satellite DARS Terrestrial Repeaters in Alaska and Hawaii*, IBFS File No. SAT-STA-20061107-00131, filed Nov. 11, 2006. Nothing in this Order affects the disposition of that request, since the facts and circumstance of SDARS operations in Hawaii and Alaska may differ from those presented for operations in Puerto Rico. In addition, both Sirius and XM operate terrestrial repeaters in Canada through affiliated Canadian subsidiaries, but these repeater operations are conducted pursuant to authorizations from the Canadian government, not through Commission authorizations.

<sup>11</sup> *SDARS Merger Order*, 23 FCC Rcd at 12435, Appendix B.

company's voluntary commitment to provide service to Puerto Rico.<sup>12</sup> Three months after the merger was consummated, on October 27, 2008, Sirius XM filed the present application for STA to operate terrestrial repeaters in Puerto Rico for 180 days. The STA request was placed on public notice on April 27, 2009.<sup>13</sup>

6. On June 5, 2009, the Association filed a petition to deny Sirius XM's STA application.<sup>14</sup> The Association states that it represents approximately 90% of the AM and FM broadcasters in Puerto Rico and that the service proposed by Sirius XM in its application will directly compete with such broadcasters for listeners in Puerto Rico.<sup>15</sup> It argues that Sirius XM's application to operate terrestrial repeaters in Puerto Rico is procedurally suspect and that grant of this application would be contrary to law and policy.<sup>16</sup> The Association asks that processing of the application be stayed pending resolution of the concerns raised by its petition to deny.<sup>17</sup>

7. On June 18, 2009, Sirius XM filed an opposition to the Petition.<sup>18</sup> Sirius XM states that the Association's petition to deny is based on factual inaccuracies, misstatements regarding the Sirius XM merger and repeater rulemaking proceedings and competitive concerns that the Commission previously considered and dismissed.<sup>19</sup> Accordingly, Sirius XM asks that the Commission dismiss the Association's petition and grant Sirius XM's application to operate terrestrial repeaters in Puerto Rico.

### III. DISCUSSION

8. We find that grant of Sirius XM's application to operate terrestrial repeaters in Puerto Rico serves the public interest and is consistent with Commission rules and policies. The Communications Act of 1934, as amended, gives the Commission authority to grant temporary authority to operate radiocommunication stations in extraordinary circumstances where such temporary operations are in the public interest and where delay in operation would prejudice the public interest.<sup>20</sup> Similarly, the Commission's rules governing satellite facilities permit grants of special temporary authority, for a period not to exceed 180 days, under extraordinary circumstances.<sup>21</sup> We have previously found that extraordinary circumstances justify the grant of STA to operate terrestrial repeaters while the rulemaking to establish rules governing the use of such

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<sup>12</sup> *SDARS Merger Order*, 23 FCC Rcd at 12415 ¶ 147. The Commission also strongly encouraged the merged entity to expand service to Alaska, Hawaii, the U.S. Virgin Islands, and other territories of the United States, where technically feasible and economically reasonable to do so. *Id.*

<sup>13</sup> Public Notice, Policy Branch Information, Report No. SAT-00599 (April 27, 2009). On July 13, 2009, Sirius XM filed a request for the Commission to designate this proceeding as permit-but-disclose under the Commission's rules governing ex parte communications. *See* 47 C.F.R. § 1.1200 *et seq.* This request was granted on July 22, 2009. *See* Public Notice, Actions Taken, Report No. SAT-00619, DA No. 09-1594, (July 24, 2009).

<sup>14</sup> Radio Broadcasters Association of Puerto Rico, Petition to Deny, filed June 5, 2009 (Petition to Deny). We note that the Association's Petition was late-filed, as oppositions in this proceeding were due on May 27, 2009. On May 27, 2009, the Association filed a request for extension of time until June 5, 2009, in order to file its Petition. The Commission did not act on that request, but the Association nonetheless filed its Petition on June 5, 2009.

<sup>15</sup> Petition to Deny at 1.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

<sup>18</sup> Sirius XM, Opposition to Petition to Deny, filed June 18, 2009 (Opposition).

<sup>19</sup> Opposition at 1.

<sup>20</sup> 47 U.S.C. § 309(f).

<sup>21</sup> 47 C.F.R. § 25.120.

repeaters is pending<sup>22</sup> and have granted numerous STAs to allow such operations.<sup>23</sup> In addition, the Commission has already stated, when it approved the Sirius XM merger, that the public interest would be served by the provision of service to Puerto Rico and the filing of applications to operate terrestrial repeaters.<sup>24</sup> Accordingly, we find under these extraordinary circumstances that the public interest supports the grant of Sirius XM's STA request.<sup>25</sup> None of the arguments raised by the Association contradicts this finding. We address each of the Association's arguments in turn below.

9. *Service to Puerto Rico.* The Association argues that authorizing Sirius XM to operate repeaters in Puerto Rico would constitute an expansion of Sirius XM's service outside of its authorized satellite coverage area – a possibility it argues the Commission did not contemplate when it initiated the SDARS terrestrial repeater rulemaking.<sup>26</sup> We disagree, however, and believe that this argument is factually inaccurate. The engineering exhibit that accompanied Sirius XM's application demonstrates the Sirius XM has the ability to provide service to Puerto Rico at signal levels that allow subscribers to receive transmissions where there is an unobstructed view of Sirius XM space stations, but that this signal level is not as powerful as the signal over the 48 contiguous United States.<sup>27</sup> As is the case in the 48 contiguous United States, reception of Sirius XM transmission to Puerto Rico may be attenuated by the interposition of obstructions such as dense foliage, tall buildings, and other topographical features that could block the signal. Because of the weaker signal strength over Puerto Rico, reception of Sirius XM's signal is subject to more frequent interruptions from such obstructions.<sup>28</sup> Sirius XM's repeaters are designed to fill in the holes in its coverage where these obstructions exist – a use explicitly contemplated by the Commission.<sup>29</sup> Thus, the function of Sirius XM's repeaters is no

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<sup>22</sup> Sirius Satellite Radio, Inc., *Order and Authorization*, 16 FCC Rcd 16773, 16775 ¶ 7 (Int'l Bur. 2001) (*Sirius 2001 Repeater STA Order*) (finding that it would be unfair to require Sirius to comply with required implementation milestones to provide service to the public on the one hand, but on the other hand force it to seriously delay initiation of such service because there are no final repeater rules); XM Radio, *Order and Authorization*, 19 FCC Rcd 18140 (Int'l Bur. 2004) (citing *Sirius 2001 Repeater STA Order* for finding that extraordinary circumstances exist for grant of STA to operate SDARS terrestrial repeaters).

<sup>23</sup> See, e.g., Sirius XM Radio Inc., Application for Special Temporary Authority to Operate Terrestrial Repeaters in Harrisburg, PA, IBFS File No. SAT-STA-20090324-00036 (granted May 13, 2009). A full list of SDARS STA grants are available through the International Bureau Filing System (IBFS), which is available online at <http://licensing.fcc.gov/myibfs/>.

<sup>24</sup> *SDARS Merger Order*, 23 FCC Rcd at 12415 ¶ 147.

<sup>25</sup> No party has raised any interference or other technical concerns regarding Sirius XM's proposed STA operations. We note that Sirius XM proposes to operate several of these repeaters at 2000 watts (average) equivalent isotropically radiated power (EIRP). The exact power levels at which SDARS terrestrial repeaters can be operated is part of the pending SDARS terrestrial repeater rulemaking. See footnote 8, *supra*. Accordingly, we will condition this STA grant – as we have done in prior STA grants – on operations being at the applicant's own risk and on a non-harmful interference basis to all permanently authorized radiocommunication facilities. We also stress that our action today shall not prejudice the outcome of the final rules adopted by the Commission in the SDARS terrestrial repeater rulemaking. See *infra*, paragraphs 14 (a) & (b). In addition, there is an open issue in the pending rulemaking whether the 2000 watt EIRP level should be computed using a peak power or average power methodology. Accordingly, we will condition this STA grant – as we have done in prior STA grants – on the condition that the issue concerning peak versus average EIRP raised by the WCS Coalition will be addressed in the SDARS terrestrial repeater rulemaking. See *infra*, paragraph 14 (a).

<sup>26</sup> Petition to Deny at 2.

<sup>27</sup> Opposition at 4.

<sup>28</sup> *Id.* Sirius XM also indicates that this lack of a uniformly reliable signal throughout the island is the reason it does not publicize its service or actively market to potential subscribers in Puerto Rico. *Id.*

<sup>29</sup> See *1997 SDARS Order and FNPRM*, 12 FCC Rcd at 5810 ¶ 138 (observing that SDARS applicants proposed to use terrestrial repeaters to “re-transmit the information from the satellite to overcome the effects of signal blockage and multipath interference.”).

different from other repeaters for which the Commission has granted numerous STAs in the past. We find that grant of the repeater STA request will neither extend Sirius XM's service area nor form an independent SDARS network, but will serve the public interest by enhancing the reliability of Sirius XM's existing satellite radio signal and by permitting Sirius XM to provide service to Puerto Rico that is more comparable to the service provided throughout the contiguous United States.<sup>30</sup>

10. *Procedural Defects.* The Association argues that the Commission's acceptance of Sirius XM's voluntary commitment to serve Puerto Rico is procedurally defective because Sirius XM's voluntary commitment to serve Puerto Rico through terrestrial repeaters was made more than a year after the merger proposal was originally filed and was made via a letter submitted under the Commission's rules governing *ex parte* communications.<sup>31</sup> The Association alleges that the Commission's acceptance of that voluntary commitment a little more than a month after its filing somehow departed from procedural standards and denied the public an open and participatory deliberative process.

11. We find that the Association's arguments in this regard are without merit. As an initial matter, the Association cites no law or policy to support its argument that the Commission's finding that the public interest would be served by Sirius XM's commitment to serve Puerto Rico through terrestrial repeaters was procedurally defective. Notification of this commitment was made before the merger order was granted, and interested parties, including broadcasters, had the opportunity to comment on the proposed merger.<sup>32</sup> The Commission's finding in the merger proceeding came after consideration of comments on this issue made by a number of parties. Some of those comments were made prior to the filing of Sirius XM's voluntary commitment.<sup>33</sup> These comments included filings by members of the U.S. Congress, the Senate of Puerto Rico and other organizations that stressed the need for the merged company to treat Puerto Rico comparably to the contiguous United States for purposes of providing satellite radio service.<sup>34</sup> The Association's argument regarding procedural defects in the Commission's finding appears to be a *de facto* petition for reconsideration of the August 2008 *SDARS Merger Order*. As such, the Association's petition is itself procedurally defective, since the filing period for such petitions has long closed.<sup>35</sup>

12. *Impact on Competition.* The Association expresses its concern about the threat that a terrestrially-based SDARS service would pose to the "delicate competitive ecology" that exists in Puerto Rico and that "local Puerto Rico broadcasting will suffer and its ability to serve the Puerto Rican audience will be reduced in the face of that new and unpredictable competitive presence . . . because such a terrestrial repeater network has never before existed."<sup>36</sup> The Association also argues that a grant of Sirius XM's application would violate the Commission's emphasis on localism by allowing a purely terrestrial service to provide non-

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<sup>30</sup> See Letter from Kenneth D. McClintock, Secretary of State, Commonwealth of Puerto Rico, to the Hon. Julius Genachowski, FCC, dated August 13, 2009 (urging the Commission to grant the Sirius XM application "so that the people of Puerto Rico can begin to receive the same quality of service from Sirius XM that is received by consumers in the U.S mainland.").

<sup>31</sup> Petition to Deny at 3.

<sup>32</sup> We note that the U.S. national trade association for AM and FM broadcasters – the National Association for Broadcasters – was aware of the proposed voluntary commitments and did specifically comment on them. See, e.g., Letter from Lawrence A. Walke, National Association of Broadcasters, to Marlene H. Dortch, FCC, MB Docket No. 07-57, dated June 20, 2008.

<sup>33</sup> Opposition at 7.

<sup>34</sup> *Id.* at 2, citing *SDARS Merger Order*, 23 FCC Rcd at 12,416 ¶ 148.

<sup>35</sup> See 47 C.F.R. § 1.106(f) (requiring petitions requesting reconsideration of a final Commission action be filed within 30 days from the date of public notice of the final Commission action).

<sup>36</sup> Petition at 5.



local programming.<sup>37</sup> In sum, the Association's concerns center on the impact of potential competition from Sirius XM on the economic viability of AM and FM broadcasters that make up the Association's membership and the ability of such broadcasters to provide locally oriented programming. The Commission has already considered such arguments in previous proceedings and declined to find that the provision of SDARS will necessarily harm local broadcasters or their ability to provide locally oriented programming.<sup>38</sup> The Association's petition provides no data or empirical evidence to contradict these findings. Furthermore, we find that the grant of STA will not decrease the ability of Puerto Rican broadcasters through competition in the provision of locally oriented programming, since Sirius XM does not provide such programming and will not compete in the provision of such programming. Sirius XM is already prohibited from using terrestrial repeaters to distribute localized content that is distinct from that provided to subscribers nationwide via satellite<sup>39</sup> and all grants of SDARS repeater STA restrict the use of repeaters to the simultaneous retransmission of the complete programming, and only that programming, transmitted by the satellite directly to SDARS receivers.<sup>40</sup> We include this condition as part of the grant of this STA.

13. *Terrestrial Repeater Rulemaking.* The Association asserts that the terrestrial repeater rulemaking must be resolved prior to granting Sirius XM's Puerto Rico STA application. We find that this request is unfounded. The Commission has granted numerous terrestrial repeater STAs that are similar in nature to the Puerto Rico STA. The Association has provided no basis for departing from the Commission's normal practice of addressing the pending nature of the rulemaking proceeding through appropriate conditions on the STA grant.<sup>41</sup> Thus, the Association's argument that XM Sirius's Puerto Rico STA application must be held in abeyance until the terrestrial repeater rulemaking is resolved is unpersuasive.

#### IV. ORDERING CLAUSES

14. ACCORDINGLY, IT IS ORDERED that the application filed by Sirius XM Radio Inc., IBFS File No. SAT-STA-20081027-00210, IS GRANTED. Accordingly, Sirius XM Radio Inc. IS AUTHORIZED to operate twenty Satellite Digital Radio Service (SDARS) terrestrial repeaters for a period of 180 days at various locations in the Commonwealth of Puerto Rico with an Effective Isotropically Radiated Power of up to 2,000 watts in accordance with the parameters set forth in its application and subject to the conditions below.

- a) Any actions taken as a result of this STA are solely at the applicant's own risk. This STA shall not prejudice the outcome of the final rules adopted by the Commission in IB Docket No. 95-91. The issue concerning EIRP raised by the WCS Coalition will be addressed in that proceeding. Operations prior to such action will be subject to condition b below.
- b) Operation of these terrestrial repeaters is authorized pursuant to this STA on a non-interference basis with respect to all permanently authorized radiocommunication facilities. Sirius XM Radio Inc. shall provide the information and follow the process set forth in paragraphs 14 and 17 in 16 FCC Rcd 16773 (Int'l Bur. 2001) and 16 FCC Rcd 16781 (Int'l Bur. 2001), as modified by 16 FCC Rcd 18481 (Int'l Bur. 2001) and 16 FCC Rcd 18484 (Int'l Bur. 2001).
- c) The terrestrial repeaters are restricted to the simultaneous retransmission of the complete programming, and only that programming, transmitted by the satellite directly to SDARS

<sup>37</sup> *Id.* at 6.

<sup>38</sup> *SDARS Merger Order*, 23 FCC Rcd at 12383 ¶ 74; *1997 SDARS Order and FNPRM*, 12 FCC Rcd at 5763-69 ¶¶ 18-34.

<sup>39</sup> *Id.* at 12419 ¶ 155.

<sup>40</sup> *Id.*, citing *Sirius STA Order*, 16 FCC Rcd at 16780 ¶ 18.

<sup>41</sup> *See supra*, footnote 25.

subscribers' receivers.

- d) Coordination of the operations of the terrestrial repeaters shall be completed with all affected Administrations prior to operation, in accordance with all applicable international agreements including those with Canada and Mexico.
- e) The terrestrial repeaters shall comply with Part 17 of the Commission's rules – Construction, Marking, and Lighting of Antenna Structures.
- f) The terrestrial repeaters shall comply with Part 1 of the Commission's rules, Subpart I – Procedures Implementing the National Environmental Policy Act of 1969, including the guidelines for human exposure to radio frequency electromagnetic fields as defined in Sections 1.1307(b) and 1.1310 of the Commission's rules.
- g) The terrestrial repeaters' out-of-band emissions shall be limited to  $75 + 10\log(\text{EIRP})$  dB less than the transmitter EIRP.
- h) This STA expires after 180 days, or on the date on which permanent rules governing repeater operations become effective, whichever occurs first.

15. IT IS FURTHER ORDERED that the Petition to Deny filed by Radio Broadcasters Association of Puerto Rico IS DENIED.

16. IT IS FURTHER ORDERED that Sirius XM Radio Inc. is afforded thirty days from the date of the release of this Order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

17. This Order is issued pursuant to Section 0.261 of the Commission's rule on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

FEDERAL COMMUNICATIONS COMMISSION

Robert G. Nelson  
Chief, Satellite Division  
International Bureau