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January 5, 2007

**Ex Parte**

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

*RE: Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 Frequency Band, IB Docket No. 95-91, GEN Docket No. 90-357, RM No. 8610*

Dear Ms. Dortch:

XM Radio Inc. (“XM”) supports the rules that Sirius Satellite Radio Inc. (“Sirius”) has recently proposed in this docket and encourages the Commission to request public comment on that proposal.<sup>1</sup> These proposed rules, which would govern Satellite Digital Audio Radio Service (“SDARS”) terrestrial repeaters and Wireless Communications Service (“WCS”) transmitters operating in the 2.3 GHz band, represent an important step toward resolving the impasse between SDARS and WCS licensees that has impeded the Commission’s efforts to adopt final rules governing SDARS repeaters. XM is encouraged that the WCS Coalition has announced its conceptual support for the proposal and has not objected to the proposed power flux density limit of -44 dBm.<sup>2</sup> XM believes all interested parties should build on this proposal during the recently revived negotiations pertaining to the Part 25 and Part 27 Rules.

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<sup>1</sup> See Sirius Satellite Radio Inc., Petition for Rulemaking, and Comments, IB Docket No. 95-91 (filed Oct. 17, 2006) (“Petition”).

<sup>2</sup> See Letter from Paul J. Sinderbrand, Counsel to the WCS Coalition, to Marlene H. Dortch, IB Docket No. 95-91 (filed Nov. 7, 2006) (“WCS Coalition Letter”).

The final rules should be careful not to allow harmful interference to satellite radio users, particularly by relaxing the well-considered and long-established limits on mobile and portable operations by WCS user equipment. These limits were at the heart of the discrepancy in auction prices for the two services and any relaxation of those rules now would only provide a windfall to speculators at the expense of satellite radio listeners.

Satellite radio consumers in the mobile environment depend on receiving a constant, uninterrupted, high-quality signal from satellites thousands of miles above the Earth. Even in urban areas where repeaters fill gaps in satellite coverage, much of the coverage is by satellite. Despite the extraordinarily fragile and demanding technical requirement of ubiquitous satellite coverage, XM is justifiably proud of the high quality of the listening experience it currently provides its customers. For the sake of our customers and our business, it is absolutely critical that this high quality is maintained.

It is, therefore, essential that the rules the Commission adopts reflect the shared regulatory history of SDARS and WCS services and that such rules not unduly disturb the protection the Commission has crafted for SDARS. In particular, the final rules should take into account the well-established hazard that terrestrially-based services can pose to adjacent band satellite services.<sup>3</sup>

The Commission recognized the threat of cross-service interference when it first established the WCS service, imposing significant “limitations on out-of-band emissions by equipment operating on WCS spectrum [in order] to protect against interference with

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<sup>3</sup> The rules also should recognize the flexibility that SDARS licensees need to continue to operate some repeaters at power levels well above 2 kW EIRP, as they have been permitted to do under STA authority since 2001. The record shows unopposed plans for SDARS operators to use terrestrial repeaters at power levels as high as 40 kW EIRP beginning as early as 1990, when Sirius’ predecessor filed its original SDARS application. *See* Application of Satellite CD Radio, Inc., File No. SAT-LOA-19900518-00037, at 21 (May 18, 1990). From then on, through the SDARS rulemaking, Sirius and XM filed numerous documents demonstrating plans for significant numbers of repeaters operating at power levels as high as 20-40 kW. *See e.g.*, Letter from William Garner, American Mobile Radio Corporation, to Rosalee Chiara, FCC (filed Nov. 14, 1997); Letter from Robert D. Briskman, CD Radio, Inc. to Rosalee Chiara, FCC (filed Nov. 14, 1997); Supplemental Comments of XM Radio Inc. (filed Dec. 17, 1999); Supplemental Comments of Sirius (filed Jan. 8, 2000); Consolidated Reply of XM Radio Inc. (filed Mar. 8, 2000); Supplemental Reply Comments of Sirius (filed Mar. 8, 2000). As XM has demonstrated, operating repeaters at power levels above 2 kW EIRP significantly reduces the number of repeaters that SDARS licensees need and similarly reduces the network’s potential to cause interference. *See* Letter from Bruce D. Jacobs, Counsel for XM Radio Inc., to Ms. Magalie Roman Salas, FCC, IB Docket No. 95-91 (August 29, 2001), at 15-20; Letter from Lon C. Levin, XM Radio Inc., to Ms. Magalie Roman Salas, FCC, IB Docket No. 95-91 (September 14, 2001), at 17-18. The SDARS licensees also designed their repeater network architectures to reduce out of band emissions by transmitting only in the center SDARS frequencies, thereby providing a natural “guard band” to WCS licensees.

sensitive satellite DARS reception.”<sup>4</sup> In fact, responding to SDARS operators’ comments demonstrating that the proposed WCS emissions limits would not adequately protect satellite service, the Commission ultimately tightened those restrictions to “ensure that WCS operations do not cause harmful interference or disturbance to adjacent satellite DARS reception.”<sup>5</sup> Due to the greater likelihood that mobile or portable WCS equipment will be used near an SDARS receiver, the rules distinguish between WCS user equipment operating in a fixed environment and WCS user equipment operating in a mobile or portable environment, and impose tighter limits on the latter.<sup>6</sup>

The Commission fully understood that the limits it imposed on WCS licensees to protect SDARS users would restrict the scope of WCS-band services and would require WCS operators to use “more costly” equipment that “meet[s] technical standards higher than those used for similar purposes on comparable bands.”<sup>7</sup> The Commission specifically recognized and cautioned potential WCS auction bidders that these tight restrictions would “severely limit, if not preclude, most mobile and mobile radiolocation uses.”<sup>8</sup>

These technical constraints were well known to all interested parties long before the WCS auction in 1997. Indeed, the FCC admonished potential bidders to carefully assess the restrictions on the service because they were likely to “have significant cost or service implications for WCS.”<sup>9</sup> Thus, when the initial WCS licensees bid on their licenses, the prices they paid for their licenses – a total of \$13 million for 30 MHz – reflected the significant limitations the Commission imposed on service offerings in the WCS band in order to protect SDARS.<sup>10</sup> By contrast, Sirius and XM paid more than \$170 million for their combined 25 MHz of SDARS spectrum -- prices paid with knowledge of FCC

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<sup>4</sup> *Amendment of the Commission’s Rules to Establish Part 27, the Wireless Communications Service*, Report and Order (“*WCS Report and Order*”), 12 FCC Rcd. 10785, 10833 (¶ 89) (1997); *see also id.* at 10787 (¶ 3).

<sup>5</sup> *Id.* at 10854 (¶ 136).

<sup>6</sup> Compare 47 C.F.R. § 27.53(a)(1) with 47 C.F.R. §§ 27.53(a)(2) and (a)(9).

<sup>7</sup> *WCS Report and Order* at 10798 (¶ 25).

<sup>8</sup> *WCS Report and Order*. Thus, the WCS Coalition incorrectly characterizes the WCS band as being authorized for two-way “cellularized” services, if by “cellularized,” the WCS Coalition means to imply the band could be used to provide mobile service. WCS Coalition Letter at 2.

<sup>9</sup> *WCS Report and Order* at 10855 (¶ 138); *see also id.* at 10788, 10800 (¶¶ 9, 32).

<sup>10</sup> *See* George Gilder, *Free Markets for Telecom*, WALL ST. J., Sept. 16, 1997, at A22 (“The so-called Wireless Communications Service auction in April saw licenses in St. Louis, Minneapolis, Milwaukee, Des Moines, Iowa, and Omaha, Neb., go for just \$1 per person -- a fraction of 1% of the value of previous licenses.”). In fact, in each of these cases, winning bidders in the WCS auction paid only \$1 for the entire market.

decisions to restrict WCS license holders from impacting our effective use of spectrum for mobile listeners.

In the years since the 1997 WCS auction, it became increasingly clear that most initial WCS licensees placed their bids without a business or technical plan, largely failed to invest in the development of equipment or service, and deployed *hardly any* facilities.<sup>11</sup> Recently, new WCS licensees have largely acquired their licenses at escalated prices with hopes pinned on the unsupported claim that the Commission got it wrong ten years ago and they can obtain changes to those rules permitting them to provide exactly the services the Commission warned would not be permissible.<sup>12</sup>

The original WCS licensees knew what they were bidding on at the spectrum auction and the new WCS licensees knew what they were buying when they purchased their licenses; the Commission should not provide an unjustified windfall that would permit them to cause harmful interference to satellite radio listeners. What the Commission recognized ten years ago remains true today: absent the technical restrictions that the Commission imposed on the WCS service, portable and mobile WCS transmitters would jeopardize the satellite radio service that millions of consumers now receive. Moreover, these restrictions do not limit WCS licensees' ability to deploy fixed services (as the Commission contemplated when the licenses were issued) or consumers' access to an abundant selection of other mobile and portable services for which the Commission has set aside a significant amount of spectrum in other bands. As evidenced by the Petition, which provides significant additional flexibility for WCS system design and deployment, the SDARS providers are open to accommodating rule modifications which support practical and economic development of the WCS licenses, consistent with the SDARS' interest in preventing interference with the reception of their more than 12 million subscribers. But XM is opposed to any effort to recast history, redefine the usage and interference rules of the respective bands, and allow speculative economic gain at the expense of heightened interference for SDARS listeners.

For these reasons, the Commission should ensure that the final terrestrial repeater rules reflect the well-established relationship between WCS and SDARS operations and the reasonable expectations of participants in the WCS and SDARS spectrum auctions. The

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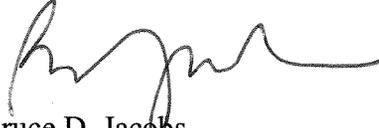
<sup>11</sup> Although BellSouth is not historically a spectrum speculator and has taken some concrete steps to test potential WCS services, other WCS licensees lack both a history of providing service and a record demonstrating a genuine intent to develop spectrum.

<sup>12</sup> See Reply Comments of the WCS Coalition at 11-12, WT Docket No. 06-102 (filed June 23, 2006); see also WCS Coalition Extension Request at 4 n.9, WT Docket No. 06-102 (filed March 22, 2006). When XM tried to acquire a WCS license holder, it had a business plan that was fully compliant with the current rules governing that service. See, e.g., Application for Assignments of Authorization and Transfers of Control, WT Docket No. 05-256 (filed July 15, 2005).

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next step towards this end would be for the Commission promptly to issue a Public Notice inviting comment on the Petition. XM encourages the Commission to take this step.

Respectfully submitted,



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