



Consumer Federation of America

**Consumers  
Union**  
Nonprofit Publisher  
of Consumer Reports



November 26, 2007

**Mr. Marlene H. Dortch, Secretary  
Federal Communications Commission  
Office of the Secretary  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554**

**RE: Written Ex Parte in Connection with the Consolidated  
Application for Authority to Transfer Control in Connection with  
the Sirius/XM Merger, as Amended (MB Docket No. 0757)**

**Dear Ms. Dortch:**

The Consumer Federation of America, Consumers Union and Free Press hereby submit the attached Supplemental Comment in Opposition to the XM-Sirius merger.

Respectfully submitted,

A handwritten signature in black ink that reads 'Mark Cooper'.

Mark Cooper  
Director of Research  
Consumer Federation of America

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

**In the Matter of** )  
 )  
**Consolidated Application for Authority** ) **MB Docket No. 07-57**  
**To Transfer Control of XM Radio Inc.** )  
**And Sirius Satellite Radio Inc.** )

**Supplemental Comment in Opposition of the**  
**Consumer Federation of America, Consumers Union and Free Press**

## INTRODUCTION

Since the Consumer Federation of America, Consumers Union and Free Press filed their opposition to the XM-Sirius merger,<sup>1</sup> there have been hundreds, if not thousands of pages of expert testimony filed by XM-Sirius and opponents to the merger.<sup>2</sup> The back and forth between expert economists has been particularly intense. At the end of the day, nothing in the record contradicts our original conclusion with actual data.

- This is a merger to monopoly that will unleash the market power of the satellite digital radio service providers at the expense of the public.
- The offer of a regulatory fix, an ill-defined and deceptive a la carte pricing program of unspecified duration and value does not and cannot compensate consumers for the loss of competition.
- Nothing in the regulatory proposal will protect artists or retailers from the exercise of market power.

The merger parties continue to rest their hopes on convincing the responsible Federal authorities (Federal Communications Commission and the Department of Justice) to completely abandon their traditional framework for merger review and adopt a radical new approach that has no grounding in empirical reality. The merging parties are driven to this plea for the agencies to abandon all precedent and principle for one simple reason. The framework for analysis that has been applied in the U.S. for the past 25 years simply will not

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<sup>1</sup> Petition to Deny of the Consumer Federation of America, Consumers Union and Free Press, ., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, July 9, 2007

<sup>2</sup> Joint Opposition to Petition to Deny and Reply Comments of Sirius Satellite Radio, Inc. an XM Satellite Radio Holdings Ins., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, July 24, 2007; ;CRA International, Economic Analysis of the Competitive Effects of the Sirius-XM Merger, Exhibit A, Attached to Joint Opposition to Petition to Deny and Reply Comments of Sirius Satellite Radio, Inc. an XM Satellite Radio Holdings Ins., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, July 24, 2007; The Consumer Coalition for Competition in Satellite Radio Reply to Joint Opposition, ., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, August 3, 2007; J. Gregory Sidak, Second Supplemental Declaration, ., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, August 27, 2007; J. Gregory Sidak, "Third Supplemental Declaration," ., In the Matter of XM Satellite Radio Holdings, Inc. *Transferor* and Sirius Satellite radio Inc., *Transferee*, Consolidated Application for Authority to Transfer Control of XM Radio Ind. And Sirius Satellite Inc., MB Docket No. 07-57, October 1, 2007.

allow this merger to monopoly. Applying the market structure framework that both the FCC and the DOJ have relied on in numerous merger reviews in recent years reveals the following:<sup>3</sup>

- Satellite radio is a clearly identifiable product in a market with high barriers to entry and only two competitors.
- Reflecting the fact that the two competitors in a high fixed cost industry are expanding their subscriber base and moving rapidly toward profitability, the merging parties do not claim a failing firm justification for the merger.
- The inevitable anticompetitive, anti-consumer effects of a merger to monopoly are abundantly clear in the economic studies entered into the record, as well as the reports of the Wall Street analysts who follow the industry.

The evidence presented in our petition has not been successfully challenged with empirical data. The market power analysis stands. The merger will enhance the profit of the satellite radio company at the expense of the public. The anti-competitive effects of the merger are readily apparent including the

- elimination of consumer choice – from two to one.
- reduction of competitive offerings – e.g. fewer offerings in individual formats such as country and western;
- a dramatic decline in spending on competitive rivalry in the industry – e.g. advertising and R&D;
- the exercise of monopsony power – reduced spending on talent and retail;
- reduction in capacity – e.g. from 260 total channels to 160;
- without any discussion of price cuts, outside of a regulatory solution.<sup>4</sup>

Now that the dust has settled in the war of words between the economists, this analysis briefly explains why the merging parties have failed to change our minds and should not fool the Federal authorities into thinking that the merger is in the public interest.

### **Purpose of the supplemental comment**

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<sup>3</sup> Consumer Group Petition, pp. 14-39

<sup>4</sup> Consumer Group Petition, pp. 42-53

This *ex parte* does not restate the case against the merger, which has been amply laid out by the Consumer Commenters and others. Rather, here we focus on new data introduced into the record. We show that

(1) The offer to volunteer to be regulated by breaking the big bundles in which satellite radio services have been offered into a series of smaller bundles is ill defined, fails to significantly enhance consumer value and does not address a host of other anti-competitiveness issues that the merger raises.

(2) Evidence on price competition between satellite and cellular services shows that cellular is not a good substitute for satellite.

(3) The use of internal data to try to show that satellite competes with terrestrial radio is inconsistent with publicly available data.

**CONSUMER WELFARE: THE “A LA CARTE” OFFER PROVIDES LITTLE CONSUMER BENEFIT, CANNOT COMPENSATE FOR THE LOSS OF COMPETITION AND OPENS PROFOUND QUESTIONS ABOUT THE OVERSIGHT OF THE INDUSTRY**

**Language**

Before we address these issues, we must briefly look at the offer made by XM-Sirius, we must first raise a red flag about such promises.

XM-Sirius bristle at the assertion that they are dishonest,<sup>5</sup> but their reply to their opposition demonstrates that, whether we call it dishonesty or disingenuousness, they are not to be trusted.

The primary dispute centers on the question of interoperable radios. XM-Sirius admit that Sirius’ license contains a condition that Sirius certify “that its final receiver design is interoperable with respect to XM’s final receiver design and XM’s license contains virtually

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<sup>5</sup> Joint Opposition, pp. 94-95.

the same condition.”<sup>6</sup> Now those words get parsed: they claim to “Have fully complied with the Commission’s requirement by certifying to the agency that they have completed a design for **an** interoperable radio.”

How silly of the FCC to have thought that the final design would be the one the satellite radio companies would deploy. The 14 million satellite radio receivers out there are obviously “interim.” This is a distinction that makes a difference and there are many other instances in which the language XM-Sirius use raises great concern.

### **A Pig in a Poke**

Above all, the offer of regulatory oversight of pricing does not change our conclusion for two reasons.

First, the offer is itself a fraud – at best a pig in a poke. The unknowns about the a la carte choices XM-Sirius put forward to ensure that the merger promotes the public interest are so profound that it is impossible to conclude that it will do consumers much, if any good.

When does the offer start?

When does it end?

What is included?

How much will the equipment cost?

The Commission would have to engage in detailed regulation of the XM-Sirius product offerings to answer these questions so that it could claim it was promoting the public interest.

What will be in the package is entirely up in the air, as the merging parties claim that “they are bound by exclusive programming agreements.” Just as they weaseled out of their obligation to provide interoperable radio, it will be all too easy for them to weasel out of their

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<sup>6</sup> Joint Opposition, p. 95.

commitment to provide good programming in the new bundles by claiming they could not get out of their exclusives.

The equipment necessary to purchase at least some of the tiers of service will, of necessity, have to be interoperable. This may finally be the final design, but the pricing of that equipment is of some significance. Will the equipment be priced so high as to make it unattractive? They only said they would make the bundles available, they did not say they would price them to actually attract customers. What about the suckers who bought the interim equipment. They have a severe switching cost barrier, having to pay a second time. The FCC will have to pay close attention because it is far too easy for XM-Sirius to ensure the failure of *a la carte* and take back any consumer welfare gains that it might have promised.

### **Little Consumer value**

Second, even if the above questions are answered in a consumer friendly manner, as proposed, the XM-Sirius *a la carte* offer may give consumers a little more choice, but it does not give them much more value. Consumers end up paying more on a per channel basis and even a total monthly bill basis. Because the benefits to consumers are so small, if indeed there are any, the commission cannot conclude that consumers would be better off with the merger.

Language again plays a role. XM-Sirius chides the consumer commenters for failing to appreciate that “*consumers who want less will be able to pay less.*”<sup>7</sup> However, they repeatedly refer to their bundles a price decreases, but in fact the consumer is paying a lot more per channel. The following paragraphs complete the misleading partial picture that XM-Sirius painted

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<sup>7</sup> Joint Opposition, p. 17.

“An a la carte Package of 50 channels for \$6.99 per month. This represents a 46 percent decrease from the currently available standard subscription package,”<sup>8</sup> but it also represents a 62% to 75% reduction in content from the currently available standard subscription package.

“An a la carte Package of 100 channels – which would include access to the “best of” programming offered by the other satellite provides – for \$14.99 per month. For this modest premium over the existing price, subscribers would have the ability to craft an individuals line-up that includes some of the most popular and appealing programming currently offered by the other provider,”<sup>9</sup> but it also represents a 23% to 41% reduction in content from the currently available standard subscription package.

“The “best of both” packages will each be available for \$16.99 – a decrease of 34 percent from the current standard subscription price of \$25.90 that consumers must pay to obtain content from both companies,”<sup>10</sup> but it also represents a 40% to 54% reduction in content from the currently available standard subscription package.

A “Mostly Music package, which includes commercial-free music as well as several family oriented and religious channels, and emergency alerts for \$9.99 per month. This represents a 23 percent decrease from the currently available standard subscription price of \$12.95 per month,”<sup>11</sup> but it also represents a 50% to 62% reduction in content from the currently available standard subscription package.

A “News, Sports & Talk package, which includes various sports, talk and entertainment, family, news, traffic and weather, and emergency channels, for \$9.99 per month. This, too, represents a 23 percent decrease from the currently available standard subscription price of \$12.95 per month,”<sup>12</sup> but it also represents a 62% to 67% reduction in content from the currently available standard subscription package.

As Exhibit 1 shows, the per channel charges that would apply to the broadly defined *a la carte* offering. It is evident that consumers would be forced to pay a lot on a relative basis for a modicum of choice. Moreover, these are all fairly large bundles, and the only genuinely

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<sup>8</sup> Joint Opposition, p. 11

<sup>9</sup> Joint Opposition, p. 12

<sup>10</sup> Joint Opposition, p.12

<sup>11</sup> Joint Opposition, p. 13

<sup>12</sup>Joint Opposition, p. 13

*a la carte* aspect of the offer is quite expensive, approximately twice the cost per channel of the current bundle.

**Exhibit 1: Cost Per Channel Of Content  
(cents per Channel per month)**

	Sirius	XM
<u>Current</u>		
Single	10	7.6
Both	8.6	
<u>Post-Merger a la carte offerings</u>		
Pick 50	14	14
+ add a channel	25	25
Premium packages		
Stern/Opra	300	300
Sports	167	16.7
Pick 100	15	15
Everything	11.5	9.4
Family	10	9.4
Mostly Music	15.3	15.3
News, Sports & Talk	25.9	16.7

When the consumer must buy a big bundle, it is at best a weak form of *a la carte*. The wikitionary defines *a la carte* as follows: “By ordering individually priced items from the menu.” Here the consumer cannot buy individually priced items from the menu, but large bundles and we will pay more per item. In fact, using this mixed menu of bundles and true *a la carte*, it would cost the consumer between about \$43 to get what used to cost \$12.95

If the Commission allows this to pass as the structure of *a la carte*, its value to consumers is questionable and it may give the very idea of *a la carte* a bad name.

**The Broader Implications of Imposing Price Regulation**

Third, such regulation could only proceed under a natural monopoly theory of satellite radio. That is, the Commission would have to find that competition in the satellite radio space is unsustainable, a finding that it cannot make on the record. It would then have to conclude that there is inadequate intermodal competition to discipline the abuse of market power by the monopoly that would result from the merger. It would then impose regulation of the offering of the monopolist to protect the public from abuse and to claim that the merger is in the public interest.

Having concluded that this is a merger to natural monopoly with the monopolist possessing market power, the Commission must address the implications of that finding. A well-regulated *a la carte* offering only addresses the demand-side issues, temporarily. Without competition in the product space, pricing cannot be allowed to go unregulated at some time in the future. Moreover, other aspects of competition between satellite providers, including program choice, equipment design and price, and the amount of commercial time need to be addressed. Absent regulation, the monopolist will harm the public by exercising its market power over the other product attributes.

Without competition, supply-side issues arise as well. Retailers and talent will come under the thumb of the monopoly and must be protected from abuse. Without competition to regulate market behavior, long-term issues of capacity and utilization of the frequencies may also arise. The Commission has not typically allowed unregulated monopolists to run free in the markets subject to its jurisdiction, particularly when they use a public resource, like the air waves.

In short, the offer to subject itself to price regulation raises the most profound questions about the choice between competition and regulation and the Commission must

address all of them to ensure the public is not harmed by the exercise of market power by the newly minted monopoly. .

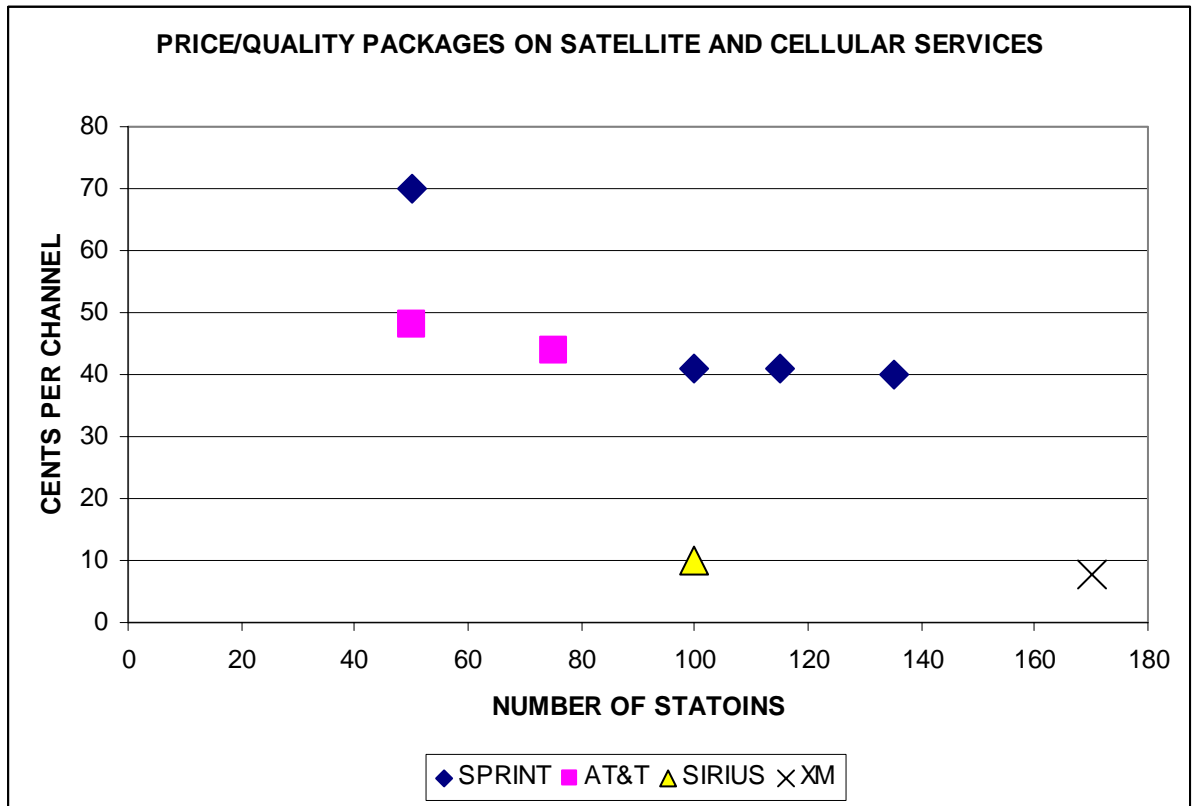
### **THE LACK OF COMPETITION ON PRICE**

In our initial comments we described in detail the origin of the lack of substitutability between audio products in great detail in our earlier comments. The products that XM-Sirius claim compete are very different. We will not repeat that analysis here. However, the reply to our opposition provides data to elaborate on one of the key elements of that analysis – a fundamental difference in price.

XM-Sirius provide data on the price of one of the mobile sources – cellular offerings – of claimed competition. Exhibit 2 shows that the price per channel in this offering is much higher than the cost per channel on satellite. The cost per channel is four times higher for the cellular offerings. There is simply no way that these alternatives can discipline the pricing power that XM-Sirius would possess, should the merger be allowed to go forward.

The fact that cellular cannot compete on price is important. It is one of the intermodal alternatives that possessed several of the other characteristics that could have made it a good substitute (mobility, ubiquity, lack of regulation). The fact that it is four times the price disqualifies it as a close substitute.

Exhibit 2:



Source: CRA International, Economic Analysis of the Competitive Effects of the Sirius-XM Merger, *Sirius-XM Joint Opposition*, MB Docket No. 07-57, July 24, 2007, pp. 22-24. The analysis includes \$15 to avoid usage charges. If the service were usage based, it would be fundamentally different from satellite.

**MARKET STRUCTURE ANALYSIS: EMPIRICAL EVIDENCE REFUTES THE CLAIM OF COMPETITION AND THE CALL TO ABANDON ANTITRUST PRINCIPLES AND PRACTICE**

**The Impotence of Intermodal Competition to Discipline Market Power in Satellite Radio**

The offer to submit to temporary price regulation is an implicit admission that the case for intermodal competition being sufficient to discipline the market power of the merged company has not been made. The fact that cellular has a much higher price than cable is another indication. The other evidence on the record affirms that conclusion.

XM-Sirius continue to fail to provide clear evidence of the substitutability of the products with which they claim to be competing, for satellite radio. They provide no credible evidence on the cross-price elasticity of demand with any other products. Rather, they present evidence on the shares of listening time in a market where total listening is increasing.<sup>13</sup> This data is generally consistent with alternative explanations, entry of an entirely new product and even compleментарities between products. To the extent that the analysis shows a negative relationship between satellite radio and alternative products, they are based on poorly specified econometric models<sup>14</sup> that do not test the right hypotheses<sup>15</sup> and the effects are small and not likely to suggest underlying cross elasticities that are sufficient to discipline the exercise of market power.

### **Substitution In Use**

Having failed to present any empirical evidence on substitution with their first two economic consultants, they have tried again. Sidak points out that the comparisons they offer to claim that terrestrial radio competes with satellite are irrelevant and in some cases the results of improperly specified econometric models. All of their arguments try to make the simple point that “as satellite usage increases, terrestrial radio usage declines.”

We can cut through the clutter with a simple and straightforward observation from an independent source, Arbitron, which shows that the XM-Sirius claim is simply wrong.

According to Arbitron’s *The Infinite Dial 2007: Radio’s Digital Platforms: Online Satellite HD Radio and Podcasting*,

**Contrary to commonly held beliefs, people who listen to digital radio platforms do not spend less time listening to AM/FM radio.** Some industry

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<sup>13</sup> Sidak, Third Supplemental, p. 20.

<sup>14</sup> Sidak, Third Supplemental, p. 22.

<sup>15</sup> Sidak, Third Supplemental, p. 21.

insiders assume that people who use new digital platforms listen less to AM/FM radio. Once again, we find that people who use digital radio platforms do NOT listen less to AM/FM radio. Among respondents in our study, the average time listening per day to AM/FM radio was 2 hours, 37 minutes compared to 2 hours, 45 minutes a day among those who use radio's new digital platforms (listened to online radio in the last month, or subscribe to satellite radio, or have ever listened to an audio podcast). Despite the growth reported in alternatives, such as the iPod, online radio and satellite radio, the time spent listening to AM/FM radio by users of digital radio platforms has not changed versus a year ago.<sup>16</sup>

The above quote says "once again" because the finding has been repeated year after year.<sup>17</sup> This finding is consistent with the argument that digital platforms are complements to satellite or are new products that find a new market among those who are particularly intense users of radio. This finding completely undermines the XM-Sirius analyses based on percentage of time spent with radio, since it shows that the radio pie is likely growing.

The Statistical Abstract of the United States indicates that percentage of the population that reports using radio was virtually constant between 2001 and 2005 (declining a mere .3 percent). This independent data suggests that satellite has not been reducing terrestrial radio listening significantly. To the extent that the apparently intense uses of music by digital devotees does not lead to cut backs on the use of terrestrial radio, we might ask, where does the apparent decline in radio listening come from? It is likely the less intense users, who are not adding digital services, have moved to other forms of entertainment.

### **Radio Station Counts**

Because the underlying premise of the third XM Sirius economic analysis is wrong, their analysis does not demonstrate that there is competition between satellite and terrestrial

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<sup>16</sup> Bill Rose and Joe Lenski, *The Infinite Dial 2007: Radio's Digital Platforms: Online, Satellite, HD Radio and Podcasting*, p. 13.

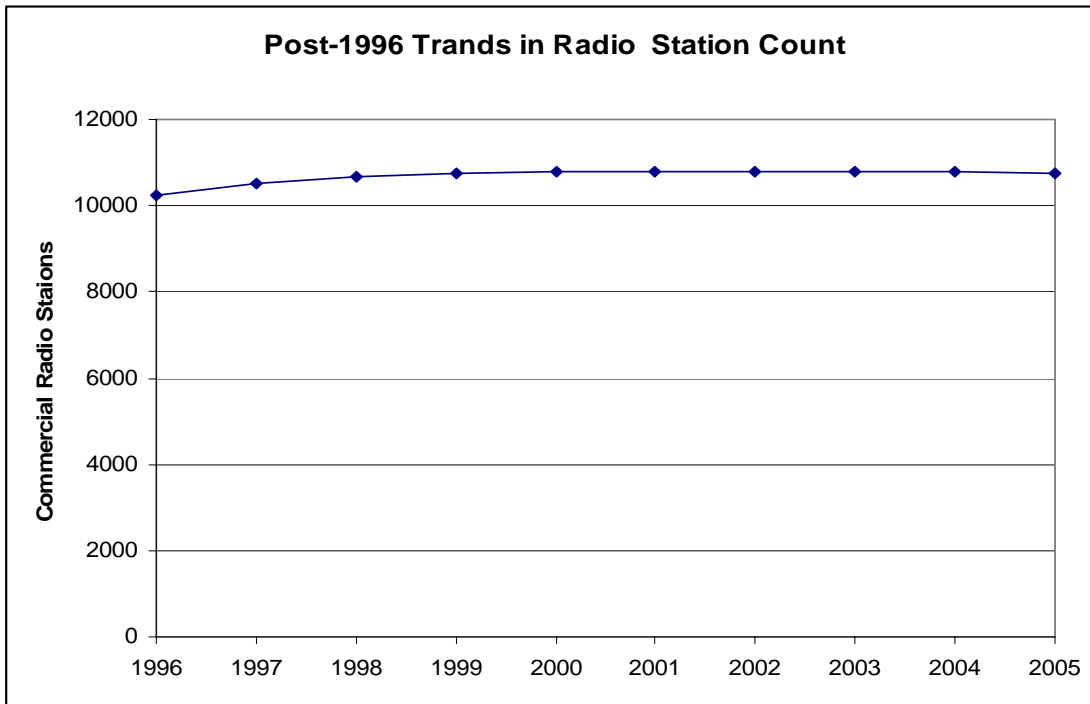
<sup>17</sup> Bill Rose and Joe Lenski, *Internet and Multimedia 2006: On-Demand Media Explodes*, p.31.

radio. Sidak has demonstrated why the analyses presented are irrelevant in the world of the review of merger, but again, we can make the point in a simple manner.

XM Sirius argue that the penetration of satellite is responsive to number of radio stations in a market and visa versa. If XM-Sirius were actually stealing listeners from terrestrial radio – 14 million of them – we would expect the number of radio stations to be declining. In fact, data recently compiled by the FCC shows that in the period between 2002 and 2005, when satellite became available and added 9 million subscribers, the number of radio stations actually increase by 327, or 2.4 percent. The number of commercial radio stations was essentially flat at just over 10,700.

Exhibit 3 shows the trend of commercial radio station counts since 1996, when the passage of the Telecommunications Act of 1996 changed the market structure. It shows a

**Exhibit 3:**

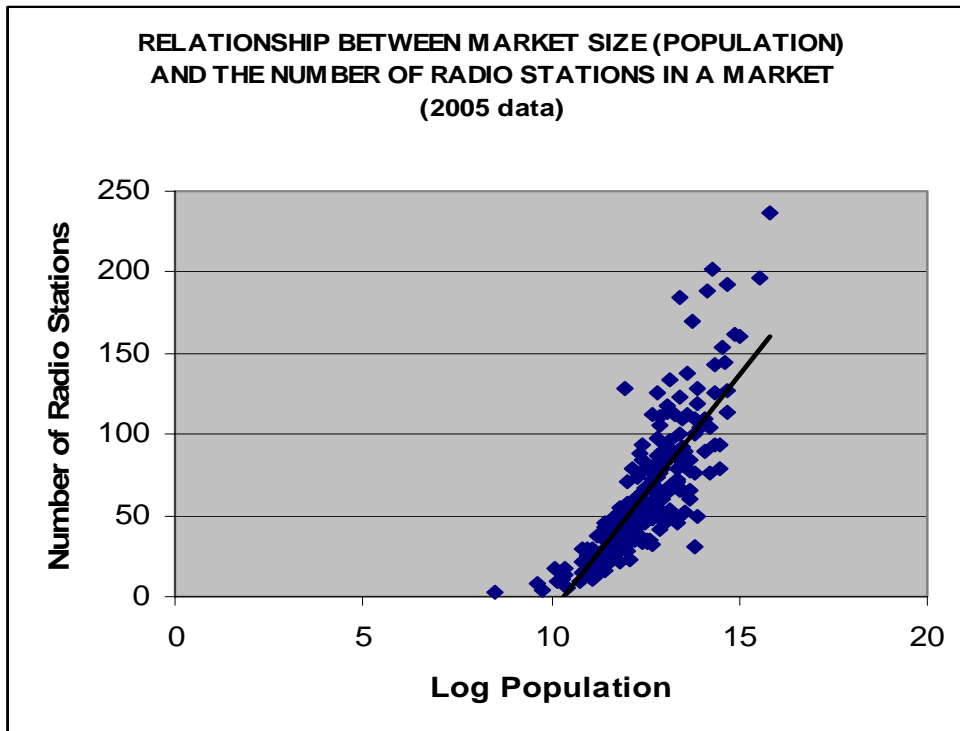


Source: Federal Communications Commission, Review of the Radio Industry, 2001, 2002, 2003; Media Ownership Studies, Study No. 2 database.

slight increase in the count of radio stations through 2000 but then a drop in 2001 and stabilization. The aggregate data do not indicate a substantial impact of satellite radio on terrestrial radio.

Of course, other factors may have been affecting the number of radio stations, so one might argue that the radio count would have grown more, had satellite not come on the scene. The XM-Sirius analysis leaves out the most important variable affecting the number of radio stations, the size of the market. An FCC dataset includes data on the single most important variable that affects the number of radio stations, the population in the market.<sup>18</sup> A simple regression of the log of the population on then number of radio stations explains approximately two-thirds of the variable in radio stations, as the following figure suggests (as Exhibit 4 shows).

**Exhibit 4:**



<sup>18</sup> This data set was made available on the Media Bureaus web site, as study No. 2, on the Research Studies page.

The data set contains a number of variables, in addition to the population, that are related to the number of relationship is highly statistically significant and quite stable across the 2002-2005 period.<sup>19</sup> The model explains about three-quarters of the variance in the number of stations. Exhibit 5 shows the results for all radio stations. Exhibit 6 shows the results for commercial stations only.

**Exhibit 5: OLS Model of Radio Station Count**

OLS on Number of Station	Struct03, no cluster	Struct03, cluster market	Struct04, no cluster	Struct04, cluster market	Struct05, no cluster	Struct05, cluster market	Struct03_04_05, no cluster	Struct03_04_05, cluster market
logpop	35.153	35.153	34.684	34.684	35.454	35.454	34.715	34.715
	[1.404]***	[1.898]***	[1.482]***	[2.080]***	[1.537]***	[2.145]***	[1.010]***	[1.935]***
poppercentblack	-0.304	-0.304	-0.26	-0.26	-0.269	-0.269	-0.286	-0.286
	[0.086]***	[0.119]**	[0.089]***	[0.124]**	[0.088]***	[0.124]**	[0.061]***	[0.118]**
poppercenthispanic	-0.091	-0.091	-0.014	-0.014	0.066	0.066	-0.016	-0.016
	[0.093]	[0.129]	[0.099]	[0.137]	[0.097]	[0.136]	[0.066]	[0.124]
dmapercapitaincome	-0.004	-0.004	-0.003	-0.003	-0.001	-0.001	-0.003	-0.003
	[0.003]	[0.004]	[0.003]	[0.004]	[0.003]	[0.004]	[0.002]	[0.003]
incsqd	0	0	0	0	0	0	0	0
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]*	[0.000]
dbshouseholdsratio	66.065	66.065	60.582	60.582	52.092	52.092	57.249	57.249
	[17.467]***	[21.610]***	[19.675]***	[27.638]**	[18.537]***	[25.200]**	[12.462]***	[22.201]**
cablehouseholdsratio	-31.679	-31.679	-28.407	-28.407	-20.426	-20.426	-26.589	-26.589
	[12.044]***	[16.392]*	[14.301]**	[20.124]	[13.943]	[17.756]	[9.095]***	[16.290]
broadbandsubscriptionra	-111.934	-111.934	-101.033	-101.033	-120.41	-120.41	-114.446	-114.446
	[19.915]***	[25.779]***	[15.907]***	[21.789]***	[15.490]***	[20.377]***	[12.164]***	[20.261]***
struct03	0.567	0.567					0.577	0.577
	[0.199]***	[0.142]***					[0.182]***	[0.122]***
struct04			0.293	0.293			0.948	0.948
			[0.190]	[0.122]**			[0.211]***	[0.227]***
struct05					0.529	0.529	1.467	1.467
					[0.189]***	[0.100]***	[0.246]***	[0.320]***
Observations	419	419	420	420	420	420	839	839
Adjusted R-squared	0.74996	0.74996	0.74461	0.74461	0.73875	0.73875	0.7453	0.7453
Robust standard errors in brackets								
* significant at 10%; ** significant at 5%; *** significant at 1%								

<sup>19</sup> Demographics on race and income are from BIA Financial, a proprietary, but widely available data set.

## Exhibit 6: OLS Model of Commercial Radio Station Count

OLS on Number of Commercial Stations	Struct03, no cluster	Struct03, cluster market	Struct04, no cluster	Struct04, cluster market	Struct05, no cluster	Struct05, cluster market	Struct03_04_05, no cluster	Struct03_04_05, cluster market
logpop	28.661	28.661	28.01	28.01	28.481	28.481	28.076	28.076
	[1.202]***	[1.626]***	[1.245]***	[1.750]***	[1.275]***	[1.779]***	[0.848]***	[1.628]***
poppercentblack	-0.187	-0.187	-0.141	-0.141	-0.135	-0.135	-0.163	-0.163
	[0.072]***	[0.099]*	[0.073]*	[0.102]	[0.073]*	[0.102]	[0.050]***	[0.098]*
poppercenthispanic	-0.042	-0.042	0.023	0.023	0.089	0.089	0.015	0.015
	[0.079]	[0.109]	[0.083]	[0.115]	[0.081]	[0.113]	[0.055]	[0.106]
dmapercapitaincome	-0.001	-0.001	-0.001	-0.001	0	0	-0.001	-0.001
	[0.002]	[0.003]	[0.002]	[0.003]	[0.002]	[0.002]	[0.001]	[0.002]
incsqd	0	0	0	0	0	0	0	0
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
dbs_householdsratio	62.292	62.292	57.84	57.84	50.33	50.33	54.557	54.557
	[15.009]***	[18.576]***	[16.899]***	[23.755]**	[15.701]***	[21.368]**	[10.633]***	[18.977]***
cable_householdsratio	-26.212	-26.212	-22.394	-22.394	-15.027	-15.027	-21.217	-21.217
	[10.142]**	[13.838]*	[12.053]*	[16.959]	[11.421]	[14.507]	[7.573]***	[13.576]
broadbandsubscriptionratio	-94.251	-94.251	-83.801	-83.801	-100.825	-100.825	-95.14	-95.14
	[17.130]***	[22.318]***	[13.577]***	[18.676]***	[12.949]***	[17.063]***	[10.268]***	[17.297]***
struct03	0.445	0.445					0.444	0.444
	[0.170]***	[0.124]***					[0.152]***	[0.105]***
struct04			0.227	0.227			0.737	0.737
			[0.158]	[0.104]**			[0.179]***	[0.195]***
struct05					0.417	0.417	1.152	1.152
					[0.154]***	[0.083]***	[0.209]***	[0.273]***
Observations	419	419	420	420	420	420	839	839
Adjusted R-squared	0.73068	0.73068	0.72636	0.72636	0.72278	0.72278	0.7273	0.7273
Robust standard errors in brackets								
* significant at 10%; ** significant at 5%; *** significant at 1%								

In both cases, the model explains about three quarters of the variance in the station count. In both cases, population is the most important determinant of the number of radio stations. Using the smallest coefficient for the log of the population and the increase in the number of households, if terrestrial radio had actually lost millions of listeners to satellite radio, we would expect the number to be declining sharply. With an increase of 8-9 million subscribers for satellite between 2002 and 2005, the coefficients predicts **a reduction of over 300 stations.**

The models also include variables that interact year and population. If satellite were altering the market structure in a manner that constrains the ability of radio stations to attract audiences, we would expect the sign on this variable to be negative. It is not. All are

positive, all but one are statistically significant. The coefficients are growing larger across time.

Much more sophisticated models of radio station deployment can be built, but this analysis suggests that the model offered by XM-Sirius is wholly inadequate. It leaves out the single most important factor in determining the number of radio stations and several other important ones. Its claim for a correlation between satellite penetration and the number of terrestrial radio stations is suspect both in its significance and magnitudes.

Building an independent model of radio stations counts based on widely available data provides little evidence that substantial intermodal substitution between satellite and terrestrial radio is taking place. The internal data proffered by XM-Sirius does not comport with the generally available evidence; its tests are incorrectly specified for merger review analysis, and its theory predicts results that are contradicted by reality.

### **CONCLUSION: THE PUBLIC INTEREST IS NOT SERVED BY THE MERGER**

Once the claim of intermodal competition is disproved the XM-Sirius claim that the merger serves the public interest collapses. The trickle down model of enriching producers and hoping the gains will be passed on to consumers does not work. Without significant competition, the monopolist pockets the gains.

This is precisely why XM-Sirius have asked the Federal authorities to abandon the fundamental principles and practice of merger review. On two of the most fundamental aspects of merger review, the third set of economic comments adds little to the debate, except as Sidak points out contradictions.<sup>20</sup> The claim that the merger review authorities should

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<sup>20</sup> Sidak, Third Supplemental, pp. 59-67.

abandon the direct analysis of near term demand side substitutes is not supported by the single reference given.<sup>21</sup> The effort of the first XM-Sirius economist to abandon the consumer welfare standard in favor of a total welfare standard is thoroughly rejected by the third XM-Sirius economist.<sup>22</sup>

This is a merger to monopoly. That was apparent on day one and it is still apparent today after thousands of pages of comments. The would be monopolists first tried to wrap the merger in a theory of intermodal competition that could not stand scrutiny. They then shifted to an attempt to convince regulators to abandon a century of principle and practice in merger review. Finally, they produced internal data that asks the wrong questions and is contradicted by publicly available data.

They tried to sweeten the pot with an offer of price regulation that adds little value for consumers and is riddled with uncertainties, which, given their track record they will likely exploit to the detriment of the public, and fails to address a broad range of competitive concerns beyond price.

Federal regulators should reject the merger.

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<sup>21</sup> Sidak, Third Supplemental, p. 40.

<sup>22</sup> Sidak, Third Supplemental Declaration, pp. 59-63.