

**Higher Prices, Less Content and A Monopoly:
Good For The Consumer?**

**The Proposed
Sirius-XM Merger**

**Its Harmful Impact on
Consumers,
Content Providers and
Performing Artists**

A White Paper, Published In Early April 2007

Researched, analyzed and written by:

The Carmel Group
P.O. Box 4225
Carmel-By-The-Sea, CA 93921
Tel: (831) 643-2222
Fax: (831) 645-1055
Website: www.carmelgroup.com

Primary Contact:
Jimmy Schaeffler, Senior Analyst, Chairman & CSO
E-mail: jimmy@carmelgroup.com



**THE
CARMEL
GROUP**

The Carmel Group was retained by the National Association of Broadcasters to review the proposed merger, given our company's long history of providing analysis related to telecommunications issues on a global scale.

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY2
B. BACKGROUND: COMPETITIVE LANDSCAPE.....3
C. IMPACT ON CONSUMERS.....5
D. IMPACT ON CONTENT PROVIDERS AND PERFORMING ARTISTS8
E. CONCLUSION9
F. APPENDICES10

“We will give people more choice than they had before and lower prices and less confusion.”
- Sirius CEO, Mel Karmazin, on February 28, 2007, before the U.S. House Judiciary Committee Antitrust Task Force

A. Executive Summary

- Presently, the U.S. satellite radio duopoly of New York City-based Sirius Satellite Radio ¹ and Washington, DC-based XM Satellite Radio ² are attempting to “merge” into a single satellite radio monopoly service and product.
- If this merger were approved, every subscriber would be beholden to a single satellite radio monopoly, resulting in less service, less affordability, less diversity, and less choice in content and hardware. America can’t let Mel Karmazin sell it, *“Less Is More.”*
- The main claims of Sirius and XM since announcement of the merger proposal on Monday, February 19, 2007, include 1) the merger is not anti-competitive, 2) the merger is in the public interest. This study outlines the opposition to and the dire consequences from this so-called “merger,” ³ especially as it impacts consumers, content providers and performing artists. ⁴ This paper also contains numerous alternative recommendations for these companies and the future of satellite radio. ⁵

¹ **Sirius** is one of only two U.S. satellite radio services that hold spectrum. It delivers 125+ radio channels directly to consumers from satellites in space. Sirius launched its service in mid-2002, claims approximately six million subscribers as of this writing, has 30 OEM vehicle partnerships, and offers employment to over 600 people, mostly at its New York City headquarters. Sirius also has an agreement with Hertz for distribution in rental cars. OEM, in this context, refers to Original Equipment Manufacturers, such as Ford and Daimler Chrysler, installing a satellite radio into their vehicles as part of the factory process.

² **XM** is the other U.S. satellite radio service. It launched its service in late-2001, delivers 170+ channels, claims approximately eight million subscribers as of this writing, has 16 in-vehicle OEM deals, and offers employment to over 700 people, mostly at its Washington, DC headquarters. XM also has agreements with Avis, Alamo, National, and Zipcar for distribution in rental cars.

³ **Appendix A** summarizes the top five arguments behind this merger and the positions, pro and con.

⁴ **The Carmel Group** was retained by the National Association of Broadcasters to review the proposed merger, given our company’s long history of providing analysis related to telecommunications issues, on a global scale. Moreover, The Carmel Group has a consistent record of opposition to anti-competitive mergers under conditions similar to those presented in this Sirius-XM scenario. For example, The Carmel Group was instrumental in compiling data and developing arguments in the government’s review during 2002-2003 of the proposed merger of EchoStar and DirecTV. This includes the well-known and respected “ping-pong” chart that clearly indicated the robust competition and action-reaction sequences in the open market place between EchoStar and DirecTV. This March 2007

- Overall opposition to this merger is significant and growing. It comes from consumer groups, trade groups, the media, legislative representatives, and the public.
- Among the consuming public, concern resonates around the very idea of a merger-to-monopoly and its inherently anti-competitive aspects.
- Among content providers and performing artists, the key element involves less choice. This means less choice in the negotiation process, fewer vendors and providers, loss of existing and future employment, and more market power used against them by a huge monopoly in a “closed market.”
- True supporters of this merger appear to be few in number. Other than the companies themselves, suggested or actual support comes from but a scattering of Wall Street bankers and related analysts; additionally, one consumer group, Public Knowledge, did mention approval, but only based upon extremely restrictive and unrealistic conditions.
- Neither company is approaching dire financial straights. In essence, this merger proposal amounts to corporate and financial greed by an impatient Sirius and XM.
- In sum, nowhere in this equation is there a significant benefit provided to the consumer, content provider or performing artist, as a result of this proposed merger.

B. Background: Competitive Landscape

- **Inaccurate Definition** Sirius and XM make an argument that is critical to the success of this proposed merger. They state that their competitive landscape presently includes *all* forms of terrestrial radio (i.e., analog AM and FM, digital HD and Internet radio), as well as digital services such as MP3 devices and music-to-cellular telephones. This position is ludicrous. In fact, nothing could be further from the truth.
- **Accurate Definition** At best, satellite radio competes against a sphere of competitors no broader than today’s analog AM and FM broadcasters. Yet, for antitrust purposes, even this view is overstated, because everyone realizes -- even Sirius and XM -- that the AM and FM broadcasters across the U.S. do not compete in the national market against the national satellite radio broadcasters. The true measure must look to services that can *substitute* for satellite radio, viewed as of March 2007, the merger filing date.⁶ Contrary to their joint supposition, neither Sirius nor XM are competent to unilaterally redefine decades of established federal public policy.
- **Redefining Standards** Sirius’ and XM’s argument that they compete against these digital services and devices is based upon their vision that those services and devices *may one day* offer substantial substitutable competition. Nonetheless, this is not the policy standard under which the government

chart also indicated the market place and the consumer value of such industry *competition*. This same type of industry competition (and negative consumer impact from a merger) exists in this scenario involving Sirius and XM.

⁵ See bottom, page 7, and top, page 8.

⁶ The FCC’s **long-term, consistent policy** has been to look at the competitive landscape *at the time of the filing*. Notes FCC chairman Kevin Martin, “But our definition of a market is based upon—in the context of any particular transaction—is based upon the market as it exists now and what is the evidence of that competition actually occurring... We’ll analyze any application when it comes in but, on the other hand, I’m not sure what them (sic) or anyone is describing as new competition in the radio space. The most direct analogy is what we’ve done on the satellite television context, where we said the marketplace that was relevant was the video marketplace and I think we were including cable but we weren’t including things like DVRs or DVDs. We didn’t include either of those in the video marketplace. We were talking about the *delivery mechanism* and I think that’s the best analogy I have.” (emphasis supplied) As suggested by freelance media writer, Staci D. Kramer, the exclusion of DVDs and DVRs from the video marketplace would *seem to preclude iPods and MP3 players as part of the audio marketplace*. Finally, in no other case has the FCC turned over an entire radio spectrum to one operator, as proposed here.

agencies operate. As such, Sirius and XM try, in a typically disingenuous fashion, to broadly define a *future* competitive landscape as one that exists today (and thus redefine this merger's review standard), in order to meet their own, one-time, selfish needs.

- **Not Substitutable** *Neither MP3s, nor Internet radio, nor HD terrestrial radio, nor music-to-cell phones are substitutable for satellite radio.* For example, as is true of any MP3 device, an iPod is a storage device, not a receiver. An iPod cannot access live or new music, sports, comedy, news and talk shows which are compiled, chosen and distributed by a third party, without any effort to collect that music on the part of the listener. This further limits the extremely broad definition Sirius and XM would give to the competitive field of this proposed merger defines. Plus, Internet radio and music-to-cell phones are rarely if ever featured as offerings in vehicles. In addition, like today's HD terrestrial radio, Internet radio and music-to-cell phones are merely delivery devices, and are yet to become full-fledged content services unique from any other. Thus, MP3 devices, Internet radio, HD terrestrial radio and music-to-cell phones remain in the category of audio services that are not substitutable with the services of the only two national satellite radio providers, Sirius and XM.
- **Historical Comparison** By example, in EchoStar's 2002-03 attempt to purchase rival satellite video service DirecTV, those duopolists made a similar argument that video competition included future video plans by telephone providers, such as Verizon and AT&T. Yet the FCC refused to look forward years into an amorphous telecom crystal ball, rejecting that claim and instead measuring the competitive subscription video marketplace *at the time of the filing* to include a single primary opponent, i.e., the U.S. cable industry.
- **Limited Competition # 1** In our 12 years of intimately following the global satellite radio industry, The Carmel Group is hard-pressed to find any instance where Sirius and/or XM acted in a competitive manner against their so-called digital competitors defined above. Facts show that a majority of satellite radio users utilize their services within the motor vehicle.⁷ Further, according to Sirius and XM, the majority of their subscribers and revenues come from in-vehicle subscriptions. ***Thus, today, undoubtedly the most critically important competitive environment where this merger impacts consumers will be in their motor vehicles.***
- **Limited Competition # 2** In fact, Sirius and XM have so successfully branded and sold their new digital subscription audio services that, presently, there are few or no other subscription audio devices being installed into new automobiles. Also, there are few or no other national subscription audio services being sold at retail.
- **The Real Market** Satellite radio is a relatively new service. Both Sirius and XM are less than six years old. In many ways, the service is a victim of its own remarkable success. Satellite radio has created and defined a unique industry, and one that does particularly well what quite arguably none other does: it delivers, one-way, to a national audience, hundreds of subscription channels of multi-varied, unregulated content, via two competitive services, using a high-quality digital format.⁸
- **Solid Financials** Financially, there is no liquidity crisis on the horizon for satellite radio. XM ended '06 with \$221 mil. cash on the balance sheet, plus it netted an additional \$288 mil. on the sale and lease back of its latest satellite, totaling \$462 (after a \$44 mil. mortgage pay down). Sirius had year-end '06 available cash of \$409 mil. *Their combined year-end 2006 cash balances reside at \$871 mil.*

⁷ Sirius' and XM's financial filings show a minimum of four out of ten satellite radio subscribers are using factory-installed OEM units today. The **percentage of in-vehicle radios is substantially enhanced** if one adds consumers' after-market installation of radios obtained at retail.

⁸ Another layer of **satellite radio's uniqueness** lies in the fact that both satellite radio companies deliver separate signals into every one of U.S. radio's almost 300 U.S. Designated Market Areas (DMAs). Yet the same local stations in each DMA do not send their signals across the U.S. to compete in other locales against satellite radio. Further, *a satellite radio merger removes one very viable radio competitor in each of these almost 300 DMAs.*
March 2007 The Carmel Group's Opposition To The Sirius-XM Merger 4

Under current business models, this war chest is adequate to reach cash flow breakeven for both by year-end 2008. And both Sirius and XM have enough cash to support their current business models. At most, in the foreseeable future, they may need very modest amounts to follow certain growth avenues (which, for both, should remain relatively easy to attain, in spite of their merger distractions). This success is founded in the very competitive market space they now bemoan.

- **True Woes** Further, it is ludicrous to suggest, as both Sirius and XM have done, that any financial concerns they may have exist because of competition from the other digital providers in the digital audio market place, i.e., HD terrestrial and Internet radio, MP3 devices and music-to-cell phones.

C. Impact on Consumers

- **Critical Competition # 1** Contrary to the inconsistent and contradictory pontifications of Mr. Karmazin, should the government sanction the proposed Sirius-XM merger, it would result in a *loss of a critical competitive dynamic that is not in the public interest*.
- **Critical Competition # 2** Competition is the critical underpinning of the United States' open market economy. As the FTC's chair, Deborah Platt Majoras, noted on *NBC's Nightly News*, March 8, 2007, "What benefits you as a consumer is a competitive marketplace. And when these companies are entering into these agreements, they're trying to take out the competition aspect."⁹
- **Valuing Competition** Why do consumers benefit from continued competition in the entire digital subscription services industry? A perfect example comes from the cable side of the multichannel subscription business: a recent study by the Phoenix Center for Advanced Legal and Economic Public Policy, shows that annual savings for U.S. households through cable competition is expected to total \$8 billion.¹⁰
- **Telecom Monopolies** Within the telecom industry, a prime example of a monopoly gone bad is General Instrument (GI) (now a Motorola subsidiary). In 1986, GI became the *de facto* exclusive standard for encryption and conditional access for the C-Band satellite dish and receiver subsector. Prices for decoder modules went from \$176 in 1986 to \$336 in 1993, a seven-year increase of 90+%.
- **EchoStar-DirecTV Similarity** Today's Sirius-XM competition is quite similar to the 11-year-old intra-industry competition that exists between satellite video providers, DirecTV and EchoStar, which was proven, just four years ago, during their proposed merger in 2002-03, to so substantially benefit yesterday's, today's and tomorrow's consumers. That EchoStar-DirecTV merger proposal was soundly rejected, 5-0, by the FCC's commissioners.
- **Duopolists Compete** As indicated by the "ping-pong, action-reaction" chart below, competition, even in a duopoly, forces improvements in service, choice and pricing. (See, **Appendix B**, below, "Sirius vs. XM Ping-Pong Chart: A Sampling of Competitive Actions and Reactions," for numerous examples of historical and existing competition between Sirius and XM). Thus, not unlike a similar chart exhibited in the EchoStar-DirecTV proposed merger, this chart shows consumers benefit when Sirius and XM compete to do a better job to earn and retain their subscriptions. Most if not all of this benefit would be lost in a market devoid of satellite radio competition.
- **Relevant Market?** If, as Sirius and XM now first claim, the relevant market for the services they offer includes all HD digital terrestrial and Internet radio, MP3s, and music-to-cell phones, then how can Sirius and XM be the only two within that broader definition that 1) have exclusive deals with

⁹ Note that Ms. Platt's comments were not made while addressing the proposed Sirius-XM merger.

¹⁰ From an article dated September 28, 2006, in *The Wall Street Journal*, written by James K. Glassman.

most vehicle manufacturers bringing in millions of potential new customers annually, 2) charge a monthly fee for the 100s of channels they provide, 3) deliver to a national audience, 4) offer consumers an exclusive blend of one-of-a kind in-house produced and “outside” programming, 5) offer consumers all of their news, comedy, talk, sports, and music formats together on one service and device, 6) are primarily ad-free, and 7) offer content that is not regulated by the government? Thus, it is easy to say: as competition, no other service today is substitutable with that of Sirius and XM.

- **Competitive Programming** Plus, as it relates to a “larger competitive environment” advocated by Sirius and XM, neither company programs against these so-called competitors. Rather, Sirius and XM program only against each other.¹¹
- **Lower Prices?** Mr. Karmazin also suggests lower prices? No company is going to lock itself down to more than a few years of price restrictions. What about after that? Especially if there continues to be no comparable in-vehicle music, news, comedy, sports, data and video service automatically installed in every new auto reaching the U.S. consumer, how can the consumer expect prices to remain at government-controlled levels? Further, the imposition of programming tiers allows Sirius and XM to dodge the harm done to them and substantially negate the value of price restrictions.
- **Government Controls?** And is a government–mandated price control system any way to run a business? Going forward, shouldn’t an open-market competitive economy, and the laws of supply and demand, be the preferable business model for these companies, and every similar digital service?¹²
- **Consumer Confusion?** Mr. Karmazin also touts less consumer confusion? First, what confusion is he referring to? Is there evidence that consumers today are having problems with the difference between XM and Sirius? Second, when will “less confusion” ensue? Will it come after the two companies, via this merger, have already driven off hundreds of thousands (or millions) of potential consumers because of the deal’s complexity and the idea that many satellite radios may no longer be as accessible once a merger is approved? (See, *The Wall Street Journal*, article entitled, “How Sirius-XM Deal Would Affect Listeners,” February 21, 2007). *In fact, the longer this deal play continues, the more it hurts the consumer.*
- **Cost Savings?** Mr. Karmazin and his team have also championed the cost savings expected from the proposed merger. Yet, like other key claims, the amount of and timing of these so-called cost cuts are seriously questioned, both by the media and Wall Street.¹³ Plus, even if there are such cost savings, they do not accrue to the consumer, but rather to the companies’ shareholders. In fact, from the very beginning, hasn’t this shareholder benefit theme been the only true motivation behind this merger?
- **Big OEM Installations** As an example of the kinds of 2007 numbers we are addressing, XM management recently noted it expects to be installed in 140 models overall; it expects GM to produce 1.8 million and American Honda to produce 650,000 vehicles with factory-installed XM.
- **Technical Nightmares** Because the proposed merger necessitates a fairly complex technical upgrade plan, many millions of consumers will suffer through costly, confusing and unnecessary hardware changes and switch-outs.¹⁴

¹¹ **Audio Services:** XM is DirecTV’s sole audio service; EchoStar’s *DISH Network* airs Sirius together with another audio service produced by Muzak that is subscription-based. Neither is offered on other forms of radio that Sirius and XM say are substitutable competition. Moreover, almost without exception, Sirius’ and XM’s **websites mention only themselves as competitors**, via a news article or two written by others.

¹² Further, neither the FCC nor the DOJ want to be in the position of “**policing**” mandated government restrictions, as was made clear in the proposed 2002-2003 EchoStar-DirecTV merger.

¹³ See, “Cost-cutting Claims Raise Static For Satellite Radio Deal,” M. Rapoport, *Dow Jones*, March 4, 2007.

¹⁴ **Existing satellite radio-OEM agreements** are typically long term, e.g., in the case of XM, through 2017 with Toyota and through 2016 with Honda. These agreements make more costly and further complicate consumers’ understanding of this proposed merger and hardware and software switch-outs to a single satellite radio service.

- **Bad Precedent # 1** A most critical issue is, What kind of precedent the government would be setting if it defined the relevant market for satellite radio as all sources of music entertainment? The consumer would be decimated, just as the competitive marketplace would be, if more mergers like the Sirius-XM one were to become commonplace.
- **Bad Precedent # 2** Allowing this merger would set a precedent for similar merger requests by all of the so-called “competitors” that Sirius and XM flout. Approval of a Sirius-XM merger would invite mergers-to-monopoly by the MP3 players, Internet radio players, HD terrestrial radio and music-to-cell phone providers. In a similar vein, imagine the consumer impact if the government permitted a merger of wireless cellular telephone providers, Verizon and Cingular-AT&T?
- **Bad Precedent # 3** Further, can anyone today imagine the merger of any combination of Comcast, Time Warner or even Cox? Yet, allowing this Sirius-XM merger would recommend to the largest cable operators a similar move to merger and/or acquisition.
- **Bad Precedent # 4** Allowing this merger would also set the precedent for a merger, *today*, of DirecTV and EchoStar, well before any kind of sustainable and widespread telephone company video service has been created and well before their own competitive landscape has been further enlarged. That, too, would fly in the face of decades of established public and legal policies.
- **Stifling Competition** Allowing this merger would further create a single, behemoth satellite radio service. As such, this 800-lb. media gorilla would stifle the prospects for any and all new wireless services, for example, each of which would *like to, one day*, be competitive with satellite radio.
- **Bad Faith** A strong argument can be made that either together or apart, these satellite radio companies cannot be trusted. Both have been bad actors. For instance, they have repeatedly acted to intentionally interfere with broadcast stations’ frequencies and consumers’ clear reception of broadcast signals; they have ignored a government requirement that they manufacture and distribute consumer-friendly interoperable radios; and they have ignored the oversight authority of the FCC.¹⁵ What assurances can the same management team provide that under a single monopoly management they will not, even more aggressively, push their own selfish motives to the detriment of the overall public good? Moreover, granting this merger would then be perceived as a form of government reward for such bad acts.
- **Financial Impatience** Satellite video providers DirecTV and EchoStar have been operating for nearly 13 years and 11 years, respectively. Only recently did either turn the corner financially, yet both have. Their recent stock increases reflect their attractive financials. By comparison, XM has only been in national service five years since late-2001, and Sirius less than five years since mid-2002. Their premature rush-to-merger is not done on behalf of consumers, content providers or performing artists, but rather for shareholders and others seeking instant financial gain. Sirius and XM are merely showing the level of their impatience -- and greed -- by offering this merger proposal today.
- **Long-Term Survival** Both Sirius and XM can survive – and thrive – on their own. This is especially the case if they stop spending money like drunken sailors on individual talent.
- **Promising Base** Compared to satellite TV, with a core base of 111 mil. TV households, satellite radio’s core base is 210+ mil. registered U.S. automobiles, and millions more trucks, RVs, and boats. If one includes households and mobile applications, the sky becomes the limit when it comes to future potential subscribers for satellite radio. Five years into their businesses, Sirius and XM have just begun to understand and tap these dynamics. This is yet another reason why this merger is so premature, reflecting remarkable impatience (and, therefore, inappropriate timing and arguments).

¹⁵ **Spending Priorities?** While in 10 years approximately \$25 mil. was invested by both XM and Sirius developing interoperable radios, \$700 mil. was invested by one company on the services -- for five years -- of a single talk radio personality. Is this an indication of the companies’ intentions to take FCC mandates seriously in the future development and growth of their products and services?

- **Niche Subscribers** Competitive programming is an optimal way to access more and more niche audiences. This, in turn, is but one of many optimal ways to grow the satellite radio industry. Yet, as an example, neither satellite radio company has developed the lush foreign language programming community, in a way similar to that of the satellite video providers.
- **Buy Others** If Sirius and XM truly believe that they are in earnest competition with these other digital providers, then why doesn't each of them instead proceed to purchase or "merge with" those digital competitors? Wouldn't consumers be better served?
- **Status Quo** For consumers, maintenance of the status quo means that *the existing two separate satellite radio companies* deliver more compression, which results in more channels, and more content. Both have stated that, in their present form, they expect to also deliver more storage, video, and inevitably lower prices, across the board.
- **Good Policy** During the last decade, consumer control, choice, interactivity and accessibility have been the key competitive driving forces in growing the digital media marketplace. Public and legal policy should continue to encourage those outcomes.

D. Impact on Content Providers and Performing Artists

- The FCC and Congress created two slots for separate independent license holders of satellite radio. Their clear intent in having two licensees was to create and maintain a competitive incentive for Sirius and XM to diversify programming and provide more unique content and more jobs for performing artists.
- Among content providers, most would prefer many more than even two satellite radio providers. If this deal receives government approval, they would no longer have any competitive arena within which to operate, inasmuch as there will be but one company with which to bargain: a satellite radio monopoly. If a negotiation is stalled or terminated, there will be no access to a competitive product or bidder. None.
- The same holds true for the impact of this proposed deal on the current jobs and security of hundreds, or thousands, of union and non-union performing artists, in centers like Washington, DC, New York City and Nashville, TN. This includes singers, instrumentalists, studio technicians, local air and production staffs, programmers, news anchors and other on-air talent, as well as the executive management teams of both Sirius and XM (and their families).
- Because there will be fewer channels and programs operated by a combined monopolistic entity, there will be less demand for innovation and a fresh supply of creative new talent and material. Plus, consumers will have less access to new content and new performers.
- A perfect example of the value of a competitive environment is the satellite video experience, where EchoStar puts continuous pressure on all content providers to reduce licensing fees. Plus, in the video arena today, every content provider and performing artist has numerous choices among EchoStar, DirecTV, the local cable operator and, most recently, the telco video operator.
- The impact of this potential merger on content providers and performing artists is the paradigm for why anti-trust laws and FCC competitive mandates were enacted in the first place: robust competition between rivals in defined business segments is nearly always favored, especially because of its ability to lower prices, enhance service and create more choices.
- If one were to include advertisers within the list of content providers and performing artists, one would add tens of thousands to the above lists of negatively impacted industry personnel.

E. Conclusion

With all due respect, this proposed merger should not be approved -- under any conditions -- by the U.S. government.

F. Appendices

APPENDIX A

Key Arguments Behind The Sirius-XM Merger Proposal		
Issue/Argument:	Sirius-XM Claim:	Reality:
Competitive Market Definition:	Competitive market is defined by what <u>will be</u> someday, i.e., digital HD terrestrial and Internet radio, MP3s and music-to-cell phones.	As it stands on filing date of March 2007, none of those competitors cited by Sirius and XM are <u>relevant</u> competitors to national satellite radio.
Lower Prices:	Government can require us to keep our prices fixed for no more than 4 years.	Lower prices, longer term, are unlikely, and short-term government price fixing and policing is impractical. Any savings go to shareholders, not consumers.
More Choice:	Having fewer offerings means more consumer choice.	When Sirius and XM combine spectrum, they will eliminate channels, innovation and jobs.
Less Confusion:	Consumers will be told their radios will always work, and <u>someday</u> we'll get them all onto one platform.	The mere filing of this merger enhances confusion multifold. The questions of interoperable radios and continued signal reception are but a pair of significant concerns, e.g., who pays for all the new hardware?
Better Service:	A single satellite radio provider will be motivated to maintain strong customer service.	Just look at the cable industry in the late 1980s before competition from video satellites. Do monopolies mean better service?
© 2007 Property of The Carmel Group. All Rights Reserved.		

APPENDIX B

Sirius vs. XM Ping-Pong Chart: A Sampling of Competitive Actions and Reactions			
TYPE OF ACTION	ACTION	Time Lapse	REACTION
<i>Programming Coup</i>	January 06, 2000 XM announced a strategic alliance to create the nation's first 24-hour, 7-day-a-week, all-NASCAR radio channel exclusively for XM Radio.	5 years later	February 22, 2005 Sirius announced an agreement to give Sirius North American satellite radio rights to broadcast NASCAR racing and events.
<i>Satellite Plans</i>	January 8, 2001 XM launches two geostationary orbiting satellites.	5 years later	June 8, 2006 Sirius, recognizing the superiority of signals delivered from a geostationary satellite, purchases its first geostationary satellite. Sirius had initially launched three elliptical orbiting satellites from Loral in 2000.
<i>Retail Promotion</i>	December 2002 XM launches 1st portable satellite radio.	5 months later	May 2003 Sirius introduces its 1st portable device.
<i>Consumer Promotion</i>	April 10, 2003 XM offers a "family discount." XM subscribers can receive a discounted rate of \$6.99 per radio per month.	41 days later	May 21, 2003 Sirius offers a "Preferred Plan," whereby an additional subscription is only \$6.99 a month.
<i>Consumer Promotion</i>	September 3, 2003 XM launches sweepstakes for new Cadillac SRX.	19 days later	September 22, 2003 Sirius offers sweepstakes with \$1 million prize.
<i>Programming Coup</i>	December 16, 2003 Sirius announced a seven-year agreement for SIRIUS to broadcast all NFL games live nationwide.	10 months later	October 10, 2004 XM announced an 11-year, \$650 million agreement enabling XM to broadcast games of every Major League Baseball (MLB) team nationwide.
<i>Programming Coup</i>	August 05, 2004 XM announces "shock jocks" Opie & Anthony will return to its service.	2 months later	October 6, 2004 Sirius signs blockbuster deal with "shock jock" Howard Stern.
<i>Programming Coup</i>	April 2005 Sirius announces exclusive Martha Stewart channel.	9 months later	February 2006 XM signs Oprah.
<i>Holiday Promotion</i>	November 7, 2005 Sirius launches holiday promotion with \$50 mail-in rebate.	7 days later	November 14, 2005 XM launches marketing campaign highlighting price and content.
© 2007 Property of The Carmel Group. All Rights Reserved.			