

THE BIRDS' EYE VIEW:
AN ANALYSIS OF THE UNITED STATES DEPARTMENT OF JUSTICE'S POSITIONS ON THE 2002 PROPOSED
SATELLITE TELEVISION MERGER AND THE 2007 PROPOSED SATELLITE RADIO MERGER

By

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On March 24, 2008, the United States Department of Justice (DOJ) announced that it was closing its investigation of the proposed merger between Sirius Satellite Radio Inc. (*Sirius*) and XM Satellite Radio Holdings Inc. (*XM*), the only two satellite radio providers in the United States.¹ In essence, the closing of the investigation cleared one legal hurdle to completing the merger.

Just six years earlier, on October 31, 2002, the DOJ announced it was filing a lawsuit to block the proposed merger of EchoStar Communications Corporation (*EchoStar*) and Hughes Electronics Corporation (*Hughes*). Hughes was a subsidiary of General Motors Corporation (*GM*). EchoStar owned DISH Network and Hughes owned DirecTV. These were the only two Direct Broadcast Satellite (*DBS*) television networks operating within the United States.² In December 2002, facing opposition by the DOJ and FCC, EchoStar and Hughes canceled their merger plans.³

On the surface these two decisions appear to be inconsistent. Both incidents involved a segment of the high-tech entertainment industry with only two competitors. Each industry had significant barriers to entry for new competitors. Both segments served less than 10% of the broader entertainment market. Were these two DOJ positions consistent?

Satellite Radio Company Histories

CD Radio Inc. was incorporated on May 17, 1990. Nine years later the company's name was changed to Sirius Satellite Radio Inc.⁴ In 1997 Sirius paid more than \$83 million to the United States government for the rights to provide satellite radio services, including operating two geostationary satellites. The permit was later modified by the Federal Communications Commission (*FCC*) to provide for three non-geostationary satellites.⁵ However, it was not until February 2002 that Sirius started limited broadcasts. By July 2002 Sirius was broadcasting nationwide.⁶

At the end of 2006 Sirius served approximately 6 million subscribers with more than 130 different channels of music, entertainment, news, talk and sports. In addition to its primary business, satellite radio, Sirius also provides Internet radio service to subscribers, music channels to some DISH satellite television subscribers and limited music channels to select Sprint PSC subscribers.⁷

Sirius estimated that the company by March 2007 had invested more than \$5 billion into the business. This investment included technology, marketing and programming. The company had a network of terrestrial repeaters in areas that the satellite signal may be hindered, an uplink station in New Jersey, earth stations in Panama and Ecuador and a contract to design and build a geostationary satellite.⁸

XM Satellite Radio's roots date back to 1988 when a consortium formed to obtain a satellite broadcast license for telephone, fax and data transmissions. The consortium formed a joint venture named *American Mobile Satellite Corporation*, later XM Satellite Radio Holdings, Inc. In 1997 XM obtained the second FCC-issued license for satellite radio broadcast.⁹ The company paid approximately \$90 million for its license and took to the airways in September 2001.¹⁰

XM had approximately 7.6 million subscribers and offered 170 channels of audio entertainment in December 2006. XM currently provides Internet streaming of some of its channels to subscribers and music channels to select DirecTV, Alltel (cell phone), AT&T (wireless) and AOL radio subscribers.¹¹

To date XM has invested approximately \$5 billion in technology, marketing, programming and other business expenses. XM currently has four geostationary satellites for broadcasting its signals to the forty-eight contiguous states and parts of Alaska. It also has a network of repeaters in select areas to boost signals that may otherwise be blocked. The company has created redundant uplink and control facilities with encryption capabilities.¹²

Sirius-XM Proposed Merger

The proposed merger agreement, dated February 19, 2007, involves three entities, Sirius Satellite Radio, Inc., Vernon Merger Corporation, a direct wholly-owned subsidiary of Sirius Satellite Radio, Inc., and XM Satellite Radio Holdings Inc. All three entities are incorporated under the laws of the state of Delaware. XM Satellite Radio Holdings Inc. will be the surviving entity upon completion of the merger.¹³

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Public Interest Benefits (The Companies' Perspective)

The two satellite radio providers argued that the merged entity would provide several public interest benefits without producing harm to consumers. As a result of synergies created by the merger, they argued that consumers would receive more programming choices at lower prices; although they admitted consumers would have to purchase new radios to receive this full benefit. Consumers could continue using current radios to receive their current content.¹⁴

According to the FCC Application, consumers would ultimately benefit through:

- the ability to purchase one or more programming packages for less than the current \$12.95 per month subscription rate;
- à la carte programming;
- current programming at current subscription rates;
- access to popular content that previously was the exclusive programming of the other satellite service;
- accessing all programming options for a lower fee than the current \$25.90 per month (the cost currently to subscribe to both Sirius and XM) once interoperable radios are commercially available; and
- receiving a credit if the subscriber blocks adult content.¹⁵

By eliminating current redundancies, 12 identical channels and 75 overlapping channels, the combined company could provide more programming options to subscribers. This additional programming could focus on foreign language broadcasts, children's programming, minority and underserved population based content, and public-safety and homeland security programs. Without the merger, the companies individually do not have the capacity to expand because of the need to maintain the mainstream programming (the redundant channels).¹⁶

The companies asserted that the merger will result in greater efficiencies and therefore offer advanced technology sooner than otherwise would occur. Two such advancements are real-time traffic and rear-seat video. Because of the combined engineering standards and protocols, the companies believe more third-party manufacturers will become involved.¹⁷

Another public-interest benefit will be the emergence of interoperable radios. Although current subscribers can continue to use their current radios to receive similar service at a similar price, interoperable radios will allow the subscriber to receive the combined signals. Current interoperable radios are more expensive, require more power and are larger than current radios in use by the two individual companies. The companies, without the merger, have little incentive, according to the application, to develop a commercially feasible interoperable radio.¹⁸

The creation of operational efficiencies will ensure that satellite radio remains an ongoing service is another benefit set forth by the companies. Sirius and XM identify five particular efficiencies that may result in lower subscription rates:

- combining the efforts of the programming staffs to program the commercial-free channels while eventually reducing redundancies;
- reducing the costs of infrastructure to broadcast and transmit radio programming;
- combining the marketing and advertising efforts and not having to focus on brand awareness to eliminate confusion;
- increasing research and development with less total investment because of the lack of duplicative efforts
- reducing duplicative administrative and general expenses.¹⁹

The companies estimate that the short term savings as a result of increased synergies will be \$200-400 million per year. In the long term the merger will result in several billion dollars worth of savings. The savings will be passed on to consumers through lower prices and increased service.²⁰

No Harm to Competition (The Companies' Perspective)

Approximately 14 million people subscribed to either XM or Sirius as of December 2006. Industry projections estimate that the number of subscribers could reach 25 million by 2010. Terrestrial radio (free AM and FM broadcasts) has approximately 230 million weekly listeners. Internet radio is heard by approximately 72 million people each week. Arbitron Inc.²¹ estimates that satellite radio accounts for approximately 3.4% of all radio listeners.²²

Terrestrial radio is the dominant force in the audio entertainment industry. Over the past ten years terrestrial radio has seen a 14% growth in the number of licensed radio stations to approximately 14,000. The companies noted one study that found 89% of Americans aged 15-24 cited terrestrial radio as their primary source of music listening. Other research shows that about half of the teenage and college-aged MP3 players also wanted access to terrestrial radio stations.²³

A new competitor in the audio entertainment industry is high definition (HD) radio. Approximately 1,200 HD radio stations are already operating with hundreds more having licensed the HD technology. It is estimated that the number of operating HD stations will more than double in the next few years. Many manufacturers are producing HD radios and the radios are becoming more available.²⁴ In their FCC application XM and Sirius cited examples of terrestrial radio executives and trade organizations who indicated that satellite radio is a direct competitor.²⁵

Another competitor is Internet radio. More than one third of Americans aged 15-24 mentioned online streaming as a primary source of music in 2006. Approximately 20% of Americans above 12 years old listened to Internet radio at least once a week, and the number of providers and services provided over the Internet is growing.²⁶

MP3 players provide high quality sound and portability. Owners are able to program music to their individual preferences. The MP3 player can also be used to download and listen to podcasts. Podcasts cover a broad range of topics and include independent talk shows and other television and radio programming. By mid-2006 more than 9.2 million podcasts had been downloaded. More than 116 million MP3 players have been sold. The number of MP3 players is estimated to triple by 2009.²⁷

Cell phones present another growing competitor to satellite radio. Almost three in four Americans own a cell phone. Several carriers currently offer audio entertainment to subscribers for a monthly fee. Audio capable phones are becoming more popular. Cell phone companies are spending considerable funds in research and development of high-speed data services, such as audio streaming and music downloading. In 2006 the wireless carriers spent \$234 million promoting audio capable phones and music downloading services.²⁸

The final competitor identified by the satellite radio companies was CD players. The CD player was seen by the FCC as a competitor to terrestrial radio, and the FCC, when first considering satellite radio, used CD players to estimate the impact satellite radio may have on terrestrial radio.²⁹

Because satellite radio listenership is such a small portion of the audio entertainment market, 3.4% of all radio listeners, a merged company could not exercise power to the detriment of consumers. Further the array of alternatives, some potentially more attractive and less expensive than satellite radio, prevents the merged company from being dominant in the market. Many of these alternatives provide an array of audio entertainment similar to what satellite radio provides. Both Sirius and XM have priced their product in a manner that reflects the audio entertainment industry. The companies have made changes in their service to respond to market forces. The combined company would compete with these other forms of audio entertainment and thus could not dominate the market.³⁰

The merger would not bar new entrants into the audio entertainment market. Existing companies are expanding their services and new companies are entering the market. For example, wireless carriers (cell phone companies) are expanding the audio entertainment options for subscribers. Internet radio companies are exploring delivering their product using WiFi and WiMAX technology.³¹ There appears to be no barriers or limits to the growth of Internet radio and podcasting. Audio entertainment can also be provided by Wireless Communication Services.³² At least one provider of 2GHz Mobile Satellite Service (MSS)³³ has applied for a license to provide service similar to satellite radio; although the FCC rejected the application. Two other MSS providers have indicated a desire to provide services similar to satellite radio.³⁴

Department of Justice Position

On March 24, 2008, the DOJ issued a media release indicating that it was closing its investigation into the proposed satellite radio merger. DOJ stated that it found no evidence that the merger would substantially lessen competition or that it would harm consumers. The merger will not allow the company to increase subscription prices because of 1) the lack of competition between the parties even without the merger, 2) competitive alternatives available to consumers, 3) anticipated technological changes that will make alternatives more attractive and 4) efficiencies that will benefit consumers.³⁵

Because the equipment purchased to listen to XM or Sirius can only be used for the particular service, the two companies are not likely to compete against each other even in the absence of the merger, according to the DOJ. Interoperable radios, ones that can receive both signals, are not available on the commercial market. The likelihood of such radios being introduced in the near future is slim. Because of engineering limitations, an interoperable radio cannot currently be installed in motor vehicles. Customers are not likely to switch from one satellite carrier to the other because of the necessity to purchase new radios.³⁶

To garner new customers the two companies have contracted with manufacturers to install their radios in new cars. This market channel accounts for substantial growth in the subscribers for each company. Because of these contracts, according to DOJ, there will be little competition in this market channel between the two satellite radio companies for four years or more. Likewise, the DOJ found no evidence that the automobile consumers make the purchase decision based on the satellite radio installed in the car. The DOJ also found that subscribers are not going to switch carriers in their automobiles because it would necessitate an aftermarket radio.³⁷

Although acknowledging that Sirius and XM compete in the retail channel to acquire the new satellite radio customer, this was of little consequence to the DOJ. Rather the DOJ stated that the evidence did not support defining the relevant market to just satellite radio without including the remainder of the audio entertainment market. Finally, the DOJ anticipated future technological advances that would possibly bring new competitors to the audio entertainment industry.³⁸

Efficiencies from the merger will be significant according to the DOJ. The savings in variable costs will likely be passed on to customers. The merger will allow the elimination of duplicative costs through economies of scale. These efficiencies undermine an inference of competitive harm.³⁹

The DOJ found no reason to continue investigating the merger. Their finding was that the merger would not create a monopoly or harm consumers.⁴⁰

Satellite Television Company Histories

EchoStar Communications Corporation was founded in 1980. In 1987 EchoStar filed an application with the FCC to obtain a license to provide DBS television services.⁴¹ Authority was granted in 1992. In September 1996 EchoStar launched its first satellite.⁴² On March 16, 1996, EchoStar's DISH Network began broadcasting to subscribers. Within four months DISH Network had more than 100,000 subscribers. By December 1997 DISH had surpassed 1 million subscribers.⁴³

High definition broadcasts came to DISH in January 2006. At this point in time DISH has more than 3 million subscribers. In the year 2000 DISH added more than 1 million subscribers in reaching the 5 million mark on November 14, 2000. By October 2001, having more than 6 million subscribers, EchoStar announced its proposed merger with Hughes. In December 2002 DISH Network surpassed the 8 million subscriber mark and eight days later, December 10, 2002, announced the termination of the proposed merger with Hughes.⁴⁴

Hughes Electronics Corporation, which operates DirecTV, is a wholly-owned subsidiary of General Motors Corporation. Hughes Electronics owns 100% of the stock in DirecTV Enterprises, Inc., the FCC DBS license holder. Between 1993 and 1999 Hughes launched or took control of five satellites for the purpose of its DBS service. At the time the FCC application was filed, DirecTV had approximately 10.3 million subscribers in the United States.⁴⁵

DirecTV launched its service on a limited basis in June 1994. By October of that year, its DBS service was available nationwide. Just over one year later in November 1995, DirecTV signed its one millionth customer.⁴⁶

Hughes owned approximately 81% of the voting interest in PanAmSat at the time of the proposed merger. PanAmSat was a publicly traded, Delaware Corporation. PanAmSat held certain FCC licenses. PanAmSat was one of the largest private operators of satellites, with 21 satellites in 2000.⁴⁷

EchoStar – Hughes Proposed Merger

The merger would be completed under a series of agreements. First, EchoStar would purchase Hughes' 81% interest in PanAmSat whether or not the merger is successfully completed.⁴⁸

Hughes had to be recapitalized. At the time of the application, GM Class H common stock was available on the New York Stock Exchange. This stock was a tracking stock and returns were based on the performance of Hughes. However, all capital stock, and thus ownership of Hughes, was owned by GM. Hughes had to be recapitalized before the stock could be distributed to GM's stockholders to accomplish the separation of Hughes from GM. The details were set forth in the Separation Agreement.⁴⁹

Although Hughes, or a newly formed holding company, would have been the surviving company in the proposed merger, the merged entity would have been known as EchoStar Communications Corporation. PanAmSat would also become a subsidiary of the new merger corporation; provided the merger was approved.⁵⁰

Public Interest Benefits (The Companies' Perspective)

The multichannel video programming distribution (MVPD) market was dominated by the cable industry in 2001. Satellite TV used limited bandwidth from orbital locations that were not optimal for digital transmissions. The limited bandwidth problem was heightened by the duplicative channels that the two satellite television providers had to carry. To compete with cable television systems, the satellite carriers had to offer similar channels, thus the significant overlap in programming between the two DBS providers. Because of digital technology, satellite television providers were able to squeeze more channels into the limited bandwidth with a superior quality to analog cable signals.⁵¹

The spectrum issue became more problematic due to satellite mandatory carriage obligations⁵² and the increased threat posed by digital cable systems. Although the Satellite Home Viewer Improvement Act of 1999 (SHIVA) removed some of the legal disparity between DBS and cable, it did so at a significant cost to the satellite broadcasters. Because a satellite provider must carry all local channels in a market in which it desires to carry at least one of the local channels, more bandwidth had to be dedicated to local channels. In late 2001, DirecTV provided local channels in 41 areas and DISH served 36. Out of those local areas 35 were served by both companies.⁵³

Cable companies were upgrading their systems to digital signals that allowed for expanded channels and better quality. These upgrades countered the DBS initial advantages against cable, as DBS already used digital technology. The digital cable companies did not have the same bandwidth limitations faced by satellite providers.⁵⁴

Cable companies, with the use of digital technology, were now able to bundle cable television and high-speed Internet services for customers. Cable companies also were able to start offering video on demand services for premium movies. These changes strengthened cable's market dominance. As of August 2001 three out of four MVPD subscribers subscribed to cable television.⁵⁵

The merged companies would be able to eliminate the duplicative services the two individual companies were providing. This would create substantial efficiencies that would better allow DBS to compete with cable. The FCC had a longstanding policy favoring the elimination of duplicative services as being a more efficient use of a broadcast spectrum.⁵⁶

The increased spectrum efficiency would directly result in the following consumer benefits: 1) more local channels to more local markets, 2) more high definition stations, 3) better service to rural and remote areas (such as Alaska and Hawaii), and 4) broader availability satellite-based Internet services. As in the past, cable operators would have been expected to respond with advancements in their systems to counter the new advantages that the satellite industry would have developed. This would result in more competition between cable and satellite.⁵⁷

Because of the additional bandwidth that would result from the merger, the number of local markets served with local channels would more than double. In late 2001, 42 markets were served by either DirecTV or DISH, 35 of those markets being served by both. The merged company would be able to serve 100 local markets, at least one in each state. The lack of local channels had been recognized by Congress and the FCC as a severe limiting factor in the ability of DBS to successfully compete with cable.⁵⁸

The merged company would also have the ability to carry more programming choices. The merged company would be able to eliminate the duplicate channels that both companies provided their subscribers. Eliminating the duplication increased available bandwidth to allow for more high definition programming, pay-per-view options and more video-on-demand services. This would allow the merged company to better compete with those services being offered by the cable companies.⁵⁹

Internet service was another consumer advantage if the companies had been allowed to merge. It would take significant research and development for the DBS providers to also provide the necessary two-way communication for Internet service. Both DISH and DirecTV have had third-party partnerships to supply the satellite Internet services, but these have not been popular with customers.⁶⁰

Another consumer benefit to the merger would have been better service to rural areas and Hawaii and Alaska. Subscribers in Alaska and Hawaii would have been able to have service comparable to mainland subscribers with the additional bandwidth availability. The resources also would have been available to provide non-CONUS western orbital slots for better satellite coverage to Alaska and Hawaii. Rural customers would also benefit from the national pricing model used by DBS, as opposed to the local pricing rural cable providers charge.⁶¹

Having more bandwidth after eliminating duplication, the merged company would have been able to provide more ethnic and foreign language stations. Educational programming also could have been increased through the merger.⁶²

Another efficiency that would be accomplished through the merger dealt with the satellites. The merger would have allowed the alignment of the combined satellite fleet to the demands of the market. The cost synergies from the merger would reduce subscriber acquisition costs, reduce customer turnover, improve signal security, reduce programming costs and eliminate duplicative overhead.⁶³

No Harm to Competition (The Companies' Perspective)

The merger would have increased competition within the MVPD market. The companies argued that the relevant market for the purposes of antitrust regulations was the multichannel video programming distribution industry. Within the MVPD market the ability to raise prices depends on the consumers' perception of the services and benefits. The cable industry will limit the ability of a merged DBS provider to raise prices. This is further supported by the fact that both companies have the stated goal of taking customers away from cable. The DOJ and FCC have both defined cable and DBS as substitutes for the other.⁶⁴

The companies argued that the FCC had found that 96% of all American households have access or potential access to cable television. Within the MVPD market, cable operators hold approximately 80% of the market. As stated above, the merged company would be better able to compete with cable due to the increased efficiencies, improved and expanded programming choices, and new services to subscribers. Sparsely populated areas are currently being served by C-band satellite operators. These services provide 500+ channels to subscribers. These services are popular in areas where dish size is not a concern.⁶⁵

In areas not served by cable companies, potential subscribers benefit from the national pricing policies used by the DBS providers. The subscription fees are uniform nationwide, so the areas without cable access benefit from the cable-DBS competition in other markets.⁶⁶

The merger would result in more programming choices for subscribers as a result of the spectrum efficiencies. Opportunities for existing and new non-cable affiliated programmers would have expanded by the merger, as there would have been additional bandwidth to show their programs.⁶⁷

The resources of the combined company could have been used for the deployment of advanced, two-way broadband services to the entire country, including rural areas. These high-speed Internet services would have competed with cable, DSL and modems in populated areas and would have provided reliable high-speed Internet service to rural areas. At the time of filing the application, the subscription fees for satellite Internet service was high because of the lack of subscribers. Having more subscribers would have created economies of scale to make the price more affordable. The quality of service to this market would improve when new satellite technology is developed and deployed. The combined company would have had the necessary resources available to complete this project sooner.⁶⁸

Department of Justice Position

On October 31, 2002 the DOJ, along with 23 states, the District of Columbia and Puerto Rico (collectively *Plaintiffs*), filed a lawsuit in the Federal District Court for the District of Columbia to block the merger of EchoStar and Hughes. In their complaint, Plaintiffs allege the following facts:

1. Over 80% of U.S. households subscribe to MVPD;
2. Hughes and EchoStar are the only two nationwide MVPD providers; the only other provider for most people is their local cable company;
3. Millions of American households do not have the ability to subscribe to cable television;
4. Hughes and EchoStar compete vigorously against each other, as well as against cable;
5. The merger would significantly harm competition in the MVPD market by reducing most consumers' choice from three providers to two providers; for some consumers the merger would create a monopoly; this would lead to higher prices and lower service quality.⁶⁹

The Plaintiffs argued that the relevant market is the MVPD industry. The Plaintiff acknowledged that programming can be delivered in a variety of methods, but only those distributing video through digital or analog signals have seen commercial success. The MVPD industry is described as providing 1) a large number of channels, 2) programming not available over-the-air (i.e. ESPN, CNN, USA, HBO, Showtime, etc), and 3) a monthly subscription fee. MVPDs generally have tiered levels of services available to subscribers. Cable providers usually include local channels for the basic fee. DBS providers charge additional money for local channels in the markets that local channels are available.⁷⁰

Although cable and satellite signals are delivered using different technologies, according to the plaintiffs, the two are seen by the public as similar and to some extent substitutes. Digital cable is a closer substitute to satellite television than analog cable systems.⁷¹

The DOJ argued that over-the-air (*OTA*) broadcasts were not a substitute for DBS because OTA did not provide the number of channels, popular services or premium channels. Despite OTA being free, subscribers were willing to pay several hundred dollars a year for MVPD. A price increase in MVPD service would not be made unprofitable by viewers switching to OTA.⁷²

Finally, the Plaintiffs contend that C-band satellite systems are not a competitor because of the dish size (4-8 feet in diameter) and the costs associated with C-band systems. Further, according to the Plaintiffs, C-band is losing customers and a price increase in DBS would not increase C-band subscriptions.⁷³

Next the Plaintiffs argued that cable systems are limited in their availability to reach consumers because franchise rights must be acquired from local governmental entities. DBS, on the other hand, can be delivered to any location with an unobstructed view to the satellite in the sky. Because of the franchise limitations, consumer choice in MVPD suppliers is limited to three options. Only 5% of American households have four choices of MVPD supplier.⁷⁴

Millions of households did not have access to cable television according to the plaintiffs. Thus the merger would have left only one MVPD supplier. In the other markets analog cable existed which was not a good substitute to the digital DBS broadcasts because of the lack of programming choices and lower sound and video quality.⁷⁵

Less than 5% of U.S. households were served by multichannel multipoint distribution services (*MMDS*) (wireless cable) or very high speed digital subscriber lines (*VDSL*). Therefore millions of households would be served by a monopoly and tens of millions would be served by a duopoly if the merger was approved.⁷⁶

Approximately 30% of DBS customers did not have cable service and therefore would be placed in a monopoly situation if the merger were allowed. This would have given the merged company the incentive to create a different pricing strategy to substantially increase the monthly price to these customers. Likewise the merged company could discriminate against these customers by running promotions that would exclude them or decrease service quality.⁷⁷

According to the Plaintiffs, DBS services price closer to each other than they do to cable. The merger would have resulted in higher prices and lower quality because of the lack of competition between EchoStar and Hughes, even in markets with a cable provider.⁷⁸

The Plaintiffs also alleged that the lack of competition between DISH and DirecTV would have eliminated or reduced:

- Competition to offer attractive programming prices
- Competition to offer attractive programming packages
- Competition to offer programming variety
- Competition to make technological improvements in channel capacity
- Competition to make low equipment prices available to consumers
- Competition on installation pricing
- Competition to provide local channels
- Competition targeting each other's customers.⁷⁹

It was claimed that entry or expansion of alternatives to DBS was not likely in a timely manner. The interest in alternatives had not been successful. It would be too difficult for a new DBS competitor to emerge if the merger had been approved.⁸⁰

Analysis of the DOJ Decisions

Table 1 compares and contrasts the Department of Justice positions.

Table 1
Department of Justice Positions Compared

	Satellite Radio Merger	Satellite Television Merger
Relevant market	Audio Entertainment Industry [terrestrial radio, Internet radio, cell phones, MP3 players, Compact Disks (CDs)]	Cable and satellite television
% of relevant market companies combined at time of application	3.4%	20%
Competition between companies	Little	Considerable
Economic efficiencies created by merger	Allow merged entity to compete better	Give monopoly powers
Anticipated technological advancements	Considered	Minimized

Probably the most striking difference between the two DOJ positions was the definition of the relevant market. In the satellite radio merger, the market was defined very broadly. The entire audio entertainment industry was seen as competitors to satellite radio. In the satellite television merger, the market was defined very narrowly to include only cable and satellite television.

The DOJ specifically excluded terrestrial television as a competitor to satellite television. In the Complaint filed with the United States District Court the Plaintiffs stated:

Standard over-the-air broadcast television does not include the variety of programming services that are available to MVPD subscribers: it does not provide nearly the number of channels; it does not provide access to popular services such as ESPN, CNN, TNT; and it does not permit access to premium services such as HBO or Showtime. Thus, most consumers do not consider broadcast television an acceptable substitute for cable and DBS services.⁸¹

However, cannot the same be said about terrestrial radio when compared to satellite radio? In the New York City area, one of the country's largest media markets, there are 71 terrestrial radio stations (49 FM and 28 AM).⁸² Whereas, the satellite radio providers have approximately twice as many channels. XM currently has 170 channels⁸³ and Sirius provides 130 channels.⁸⁴ Not all terrestrial stations can be received in the entire metropolitan area because of signal strength. Although there are a variety of formats among the terrestrial radio stations in New York City, both satellite radio stations provide a greater variety of formats from which the listener may choose. Terrestrial radio does not provide specialized programming such as BBC World Service News, CNBC, CNN, CNN Headline News, Fox News Channel, EWTN, NFL Radio, and NASCAR Radio. Likewise, satellite radio can offer premium service, such as The Playboy Channel, which cannot be offered on terrestrial radio. Another distinction is the lack of FCC regulation of satellite radio. Therefore, satellite radio does not have the language restrictions associated with terrestrial radio. For example, Howard Stern was fined frequently by the FCC for the content of his radio show on terrestrial radio, but when Stern moved to Sirius he was able to continue his show without fear of FCC penalties for content. This also allows for satellite radio to provide uncensored comedy, talk and other programming.

The FCC in a 2003 report listed several competitive technologies regarding video programming. These technologies included cable systems, direct-to-home satellite services (DBS and HSD),⁸⁵ broadband service providers, wireless cable systems, private cable operators,⁸⁶ broadcast television, LEC,⁸⁷ Internet video, and home video sales and rentals (DVDs and VHS tapes).⁸⁸ In the report, the FCC acknowledged that broadcast television had a 49 share of prime time viewing and a 45 share regarding all day viewing.⁸⁹ A share is the number of households watching particular programming as compared to the number of households watching television at the time expressed as a percentage.⁹⁰ A 49 share for broadcast television means that just under half of the televisions being watched were tuned to broadcast television. Because satellite television only has 20% of the remaining viewers, its overall share was approximately 10%.

In its 2002 Annual Report (Form 10-K) Time-Warner identified several competitors to its cable operations. Those competitors included DBS, overbuilds (second cable franchises in an area), SMATV, wireless cable, over-the-air television, broadcast reception, live events, movie theaters, home video products and the Internet.⁹¹

The DOJ chose to ignore all these competitors when considering the satellite television merger. The DBS audience share for all video programming would have been smaller if the other forms of video entertainment had been included in the market analysis, as all forms of audio entertainment were included in the satellite radio analysis.

Although CDs were seen as a competitor to satellite radio, the DOJ did not include the home video market as a competitor. In 2002 the home video market industry topped \$20 billion in sales and rental fees, an increase of 20% over 2001.⁹² As will be discussed below, the combined revenue for DBS providers in 2002 was \$7.7 billion. Compare home video sales to CD sales at the time the satellite radio merger was under consideration. CDs have experienced years of decreased sales. *The New York Times* reported that album sales, CDs, cassettes, LPs and other formats, were down 9.5% in 2007 as compared to 2006.⁹³

The DOJ chose to include the declining CD market as a suitable substitute for satellite radio but refused to recognize the growing home video market as a suitable substitute for satellite television. This action also was contrary to the report issued by the FCC listing the home video market as a substitute. The DOJ did not explain why the satellite radio industry was different than the satellite television market in this regard.

Using cell phones as a competitor of satellite radio is misleading. Sirius provides 18 channels of its programming to Sprint/Nextel customers.⁹⁴ XM provides 25 channels of service to Cingular (AT&T)⁹⁵ and Alltel⁹⁶ subscribers. Table 2 below shows subscribers for the five major, national wireless phone providers at the end of 2007. The satellite radio companies provide programming to 60% of this market.

Table 2
Cell Phone Subscribers (2007)

Provider	Number Subscribers	% of Market among National Providers	XM or Sirius Programming
Cingular (AT&T)	71.0 million ⁹⁷	31%	XM
Verizon Wireless	65.7 million ⁹⁸	28%	
Sprint/Nextel	53.8 million ⁹⁹	23%	Sirius
T-Mobile	28.7 million ¹⁰⁰	12%	
Alltel	12.8 million ¹⁰¹	6%	XM
Total	232 million	100%	

In justifying the expanded audio entertainment industry as competition, the satellite radio companies used market demographics regarding the 15-24 year old market. This too is misleading, as satellite radio does not attract the 15-24 demographic. Studies show that the typical satellite radio listener might be described as a well-educated, upper middle-class, white, middle-aged male. Here are some demographic findings regarding the satellite radio listener:

- 73% with family income of \$50,000+
- 63% male
- 55% one or more college degrees
- 76.1% are 35+
- 48.5% are 45+
- 29% proprietor/managers; 17% professional/technical; 17% blue collar; 11% retired¹⁰²

Regarding the competition between the companies, the DOJ found little competition between Sirius and XM. The DOJ noted that both providers have exclusive contracts with automobile manufacturers. The DOJ wrote switching radio providers would have the additional disadvantage of requiring an aftermarket radio.¹⁰³ The DOJ provided no support for this statement. However, the aftermarket car stereo industry appears to be large in this country. Major electronics retailers, such as Best Buy and Circuit City, carry a large selection of aftermarket car radios and provide installation services for those purchased. Cities across the country have local auto sound shops that sell and install aftermarket car radios. It would appear that the DOJ position is simply an assumption to support its position.

Another contention regarding the non-competitive nature between Sirius and XM was the unique receiver used by each service. The lack of an interoperable receiver was seen by the DOJ in the satellite radio merger as an indication that the two companies do not compete. However, the DOJ found that the two satellite television companies competed heavily with each other despite the fact that the satellite television hardware was not interoperable. Further, the two satellite radio providers listed as one of their cost savings no longer having to compete for brand recognition in their marketing efforts. This would be an indication that Sirius and XM competed against each other in acquiring customers. The exclusive programming, such as Howard Stern, was also a means of competing. The DOJ's position that Sirius and XM do not compete, while DISH and DirecTV competed vigorously just cannot be explained.

The DOJ argued that the combined DBS companies would have monopoly power over the MVPD market. The DOJ acted like each local cable system was an entity of itself. The DOJ did not treat Cox Cable, Time-Warner and Comcast as major national companies. As stated above, at the end of 2002 EchoStar had 8 million subscribers and Hughes had 10.3 million subscribers. In terms of 2002 revenue, Hughes had \$6.4 billion¹⁰⁴ and EchoStar had \$1.3 billion in revenue.¹⁰⁵ In comparison, Comcast Corporation, the largest cable company at the time, had 21.3 million subscribers¹⁰⁶ with \$12.5 billion in revenue.¹⁰⁷ Time-Warner, at the end of 2002, had 14.6 million subscribers¹⁰⁸ and cable revenue of \$7 billion.¹⁰⁹ Cox Cable had revenues of \$5 billion¹¹⁰ with 10.2 million subscribers¹¹¹ according to its 2002 Annual Report. The combined customer base and revenue of the DBS providers (18.3 million subscribers, \$7.7 billion) were still less than the largest cable company, Comcast. Table 3 below summarizes this information.

Table 3
2002 Revenue and Subscribers for MVPDs

Provider	2002 Revenue	# 2002 Subscribers	% Cable Industry	% Combined Mkt.
Comcast	\$12.5 billion	21.3 million	46%	33%
Time-Warner	\$7 billion	14.6 million	32%	23%
Cox	\$5 billion	10.2 million	22%	16%
TOTAL Cable	\$24.5 billion	46.1 million	100%	72%
Provider	2002 Revenue	# 2002 Subscribers	% Satellite Industry	% Combined Mkt.
EchoStar (DISH TV)	\$1.3 billion	8 million	44%	12%
Hughes (DirecTV)	\$6.4 billion	10.3 million	56%	16%
Total Satellite	\$7.7 billion	18.3 million	100%	28%
Combined Total (cable + satellite)	\$32.2 billion	64.4 million		100%

Despite the DBS companies saying that the merger would result in lower prices, more programming selection and better quality, the DOJ took the opposite position. Without citing any evidence to support its position, the DOJ alleged that the merger would result in higher prices and lower service quality. The DOJ argued that a combined DBS provider would create a two-tier pricing system to raise prices in areas that had no cable service, approximately 4% of American households. The DOJ also discounts the C-band satellite services that serve the remote areas with 500+ channels. Although C-band's larger dish are seldom seen in urban and suburban areas, this technology works well in remote areas where dish size is not an issue.

Regarding the satellite radio merger, the DOJ accepted the representation by Sirius and XM that their prices would not be raised. Just as there are remote areas without cable television service, there are also areas with extremely limited or no terrestrial radio reception or high-speed Internet connectivity (except for satellite). The DOJ did not discuss the possibility that the merger of Sirius and XM would negatively impact these areas.

In the radio merger the DOJ stated, "Any influence of a competitive concern was further limited by the fact that a number of technology platforms are under development that are likely to offer new or improved alternatives to satellite radio."¹¹² The DOJ did not even consider technological advancements in the satellite television merger.

It appears that the DOJ tried to limit the market in the satellite television merger decision. It also tended to discard the representations made by the companies. The opposite was true for the satellite radio merger. The DOJ expanded the market as large as possible. It took every representation from Sirius and XM on face value.

So why the different treatment? After all, both decisions were made by the George W. Bush Administration. So, there cannot be an argument regarding different administrations' political views. Maybe the decision was based on factors that were not discussed in the documents.

An examination of the financial condition of the various companies at the time of the merger proposal may give some insight. Table 4 provides basic financial information concerning Hughes and EchoStar in 2001 and 2002. Table 5 provides similar information for Sirius and XM in 2006. As the data demonstrate both EchoStar and Hughes had significantly greater total assets than either Sirius or XM. Hughes had over \$9 billion in equity, although the other three companies had negative equity at the times the perspective mergers were proposed. The DBS companies also had substantially more revenue than the satellite radio companies.

Table 4
Comparative 2001 and 2002 Financial Data DBS Providers

	2002		2001	
	Hughes	EchoStar	Hughes	EchoStar
Total Revenue	\$8,394,900,000	\$4,820,800,000	\$8,264,000,000	\$4,001,100,000
Net Operating Income	(\$394,700,000)	\$421,300,000	(\$757,800,000)	\$212,300,000
Net Income	(\$891,100,000)	(\$881,700,000)	(\$621,600,000)	(\$215,500,000)
Total Assets	\$17,906,400,000	\$6,260,600,000	\$19,210,100,000	\$6,519,600,000
Equity	\$9,379,800,000	(\$1,205,600,000)	\$11,071,900,000	(\$777,772,000)

Sources: Hughes Electronics Corporation 2002 Annual Report (Form 10-K)/
EchoStar Communications Corporation 2002 Annual Report (Form 10-K)

Table 5
Comparative 2006 Financial Data Satellite Radio Providers

	2006	
	Sirius	XM
Total Revenue	\$637,235,000	\$933,417,000
Net Operating Income	(\$1,067,742,000)	(\$403,098,000)
Net Income	(\$1,104,867,000)	(\$718,872,000)
Total Assets	\$1,688,272,000	\$1,812,958,000
Equity	(\$539,476,000)	(\$659,861,000)

Sources: Sirius Satellite Radio, Inc. 2006 Annual Report (Form 10-K)/
XM Satellite Radio Holdings Inc. 2002 Annual report (Form 10-K)

Overall, in terms of size as measured by Total Revenue and Total Assets, a merger of Hughes and EchoStar might have appeared to represent more of a significant monopolistic threat to DOJ (roughly \$13 billion in combined Total Revenue and \$24 billion in combined Total Assets) than a merger of SIRIUS and XM (roughly \$1.6 billion in combined Total Revenue and \$3.5 billion in combined Total Assets). However, although Hughes/EchoStar would have had more “staying power” (i.e., the ability to survive financially) than SIRIUS/XM, neither pair demonstrated a particularly overpowering (long-term market threat) given their on-going net losses.

Conclusion

During the 1950s and 1960s, DOJ from time-to-time would raise the possibility of breaking up General Motors because of its market dominance (usually around 50%, or more of the domestic market), its great profitability, and sheer size in total assets. One scenario was that GM would be forced to spin-off Chevrolet, which accounted for about half of GM’s market share. Obviously DOJ never carried through with its threats.

It is difficult to understand how DOJ could argue that Hughes/EchoStar could ever become anything like a GM *presence* in its/their market, however contemporaneously defined, and given the ever-changing definition of its/their *market*. The merger almost certainly never would have resulted in a serious monopolistic threat. In the case of Sirius and XM quite possibly the underlying presumption was that unless they were allowed to merge, neither was likely to survive. Their respective 10-Ks clearly cite many on-going threats to their survival, especially those involving the amount of their debt and the need to refinance. One does not get a similar impression about Hughes and EchoStar, although one cannot help but wonder how the merger would be viewed today in terms of GM spinning off Hughes, given GMs weakened financial condition – a far cry from where it was back in 2002!

Footnotes

¹ Media Release, United States Department of Justice, Statement of the Department of Justice Antitrust Division on its Decision to Close its Investigation of XM Satellite Radio Holdings Inc.’s Merger with Sirius Satellite Radio Inc.: *Evidence Does Not Establish that Combination of Satellite Radio Providers Would Substantially Reduce Competition* (March 24, 2008) (Available at http://www.usdoj.gov/opa/pr/2008/March/08_at_226.html)

² Media Release, United States Department of Justice, Justice Department Files Suit to Block EchoStar’s Acquisition of Hughes Electronics: Merger of DirecTV and DISH Network Direct Broadcast Satellite Television Systems Would Harm Consumers Across the United States (October 31, 2002) (Available at http://www.usdoj.gov/atr/public/press_releases/2002/200412.htm)

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- ³ Press Release, General Motors Corporation, Hughes Electronics Corporation and EchoStar Communications Corporation, Hughes and EchoStar Terminate Proposed Merger Agreement: EchoStar Pays Hughes \$600 Million; Hughes to Keep PanAmSat Interest (December 10, 2002) (on file with author).
- ⁴ Sirius Satellite Radio, Inc., <http://investor.sirius.com/faq.cfm> (last visited May 18, 2008) [hereinafter Sirius website].
- ⁵ Consolidated Application for Authority to Transfer Control at p. 2-3, In the Matter of XM Satellite Radio Holdings Inc. and Sirius Satellite Radio Inc. FCC, MB Docket No. 07-57 (March 20, 2007) [hereinafter *Sirius-XM FCC Application*]. Available at <http://www.fcc.gov/transaction/xm-sirius.html#appdocs> (hyperlink Consolidated Application)
- ⁶ Sirius website, *supra*.
- ⁷ Sirius-XM FCC Application, *supra* at 3.
- ⁸ *Id.* at 3-4.
- ⁹ Funding Universe, <http://www.fundinguniverse.com/company-histories/> (search XM Satellite Radio) (last visited May 18, 2008).
- ¹⁰ Sirius-XM FCC Application, *supra* at 4-5.
- ¹¹ *Id.* at 5.
- ¹² *Id.* at 5-6.
- ¹³ Agreement and Plan of Merger Dated as of February 19, 2007 by and among Sirius Satellite Radio Inc., Vernon Merger Corporation and XM Satellite Radio Holdings Inc., located in Proposed Merger Proxy Statement, Annex A at A-1, available at http://investor.sirius.com/downloads/BNY37192BNY058_BITS_N_1106.pdf.
- ¹⁴ Sirius-XM FCC Application, *supra* at 9-10.
- ¹⁵ *Id.* at 11-12.
- ¹⁶ *Id.* at 12-14.
- ¹⁷ *Id.* at 14-15.
- ¹⁸ *Id.* at 15-16.
- ¹⁹ *Id.* at 17-18.
- ²⁰ *Id.* at 18.
- ²¹ Arbitron Inc. is a media and marketing research firm. One of its core functions is to measure national and local-market radio audiences across the United States. (see www.arbitron.com)
- ²² Sirius-XM FCC Application, *supra* at 20-22.
- ²³ *Id.* at 25-26.
- ²⁴ *Id.* at 26-28.
- ²⁵ *Id.* at 39-40.
- ²⁶ *Id.* at 28-29.
- ²⁷ *Id.* at 31-34.
- ²⁸ *Id.* at 34-37.
- ²⁹ *Id.* at 37-38.
- ³⁰ *Id.* at 40-45.
- ³¹ “WiMAX is a wireless digital communications system, also known as IEEE 802.16, that is intended for wireless “metropolitan area networks”. WiMAX can provide broadband wireless access (BWA) up to 30 miles (50 km) for fixed stations, and 3 - 10 miles (5 - 15 km) for mobile stations. In contrast, the WiFi/802.11 wireless local area network standard is limited in most cases to only 100 - 300 feet (30 - 100m).” (Source: <http://www.wimax.com/education>. Last visited May 21, 2008)
- ³² “The Wireless Communications Service (WCS) may provide fixed, mobile, radiolocation or satellite communication services to individuals and businesses within their assigned spectrum block and geographical area. The WCS is capable of providing advanced wireless phone services which are able to pinpoint subscribers in any given locale. The WCS is most likely used to provide a variety of mobile services, including an entire family of new communication devices utilizing very small, lightweight, multi-function portable phones and advanced devices with two-way data capabilities. WCS systems are able to communicate with other telephone networks as well as with personal digital assistants, allowing subscribers to send and receive data and/or video messages without connection to a wire.” (Source: http://wireless.fcc.gov/services/index.htm?job=service_home&id=wcs. Last visited May 21, 2008)
- ³³ Mobile Satellite Service is capable of providing mobile voice, data, Internet access and other new satellite communications services to all parts of the country, from urban areas to remote rural communities. (Source: http://www.fcc.gov/ib/sd/2ghz_mss/. Last visited May 21, 2008)
- ³⁴ Sirius-XM FCC Application, *supra* at 45-47.
- ³⁵ Press Release, United States Department of Justice, Statement of the Department of Justice Antitrust Division on its Decision to Close its Investigation of XM Satellite Radio Holdings Inc.’s Merger with Sirius Satellite Radio Inc. (March 24, 2008) (available at http://www.usdoj.gov/opa/pr/2008/March/08_at_226.html) (hereinafter *DOJ Press Release*).
- ³⁶ *Id.*
- ³⁷ *Id.*
- ³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ DISH Network, <http://www.dishnetwork.com> (hyperlink About Us; hyperlink Company Profile Learn More; hyperlink Our History Learn More) (last visited May 21, 2008) (hereinafter DISH website)

⁴² Consolidated Application for Authority to Transfer Control at p. 10, In the Matter of Application of EchoStar Communication Corporation, General Motors Corporation, Hughes Electronics Corporation, FCC, CS Docket NO. 01-348 (December 3, 2001) (hereinafter *EchoStar-Hughes FCC Application*).

⁴³ DISH Website, *supra*.

⁴⁴ *Id.*

⁴⁵ EchoStar-Hughes FCC Application, *supra* at 12-13.

⁴⁶ DirecTV, <http://www.directv.com> (hyperlink About Us, hyperlink Company Profile) (last visited May 26, 2008) (hereinafter *DirecTV website*).

⁴⁷ General Motors, <http://www.gm.com> (search PanAmSat, hyperlink GM Sustainability: Sustainability and GM: Corporate Profile ...) (last visited on May 26, 2008) (hereinafter GM website).

⁴⁸ EchoStar-Hughes FCC Application, *supra* at 16.

⁴⁹ *Id.* at 17.

⁵⁰ *Id.* at 18-19.

⁵¹ *Id.* at 22-24.

⁵² Mandatory carriage obligation refers to the FCC requirement that a DBS provider must carry and offer to its customers all local channels in a market in which the satellite carrier offers at least one local television channel.

⁵³ EchoStar-Hughes FCC Application, *supra* at 24-25.

⁵⁴ *Id.* at 25-26.

⁵⁵ *Id.* at 26-27.

⁵⁶ *Id.* at 27.

⁵⁷ *Id.* at 27-28.

⁵⁸ *Id.* at 28-29.

⁵⁹ *Id.* at 29-30.

⁶⁰ *Id.* at 30-32.

⁶¹ *Id.* at 32-34.

⁶² *Id.* at 34-35.

⁶³ *Id.* at 35-36.

⁶⁴ *Id.* at 37-39.

⁶⁵ *Id.* at 40-41.

⁶⁶ *Id.* at 42.

⁶⁷ *Id.* at 42-43

⁶⁸ *Id.* at 43-46

⁶⁹ United States of America, et al., v. EchoStar Communications Corp, et al, No. 1:02CV02138 (D.D.C. October 31, 2002) (Complaint at 5-6) (hereinafter *EchoStar Complaint*).

⁷⁰ *Id.* at 12-13.

⁷¹ *Id.* at 13.

⁷² *Id.* at 13-14.

⁷³ *Id.* at 14.

⁷⁴ *Id.* at 14-15.

⁷⁵ *Id.* at 15-16.

⁷⁶ *Id.* at 16-17.

⁷⁷ *Id.* at 17-18.

⁷⁸ *Id.* at 18-19.

⁷⁹ *Id.* at 19-21.

⁸⁰ *Id.* at 22-23.

⁸¹ *Id.* at 13.

⁸² <http://www.nyradioguide.com/>

⁸³ XM website, *supra*.

⁸⁴ Sirius website, *supra*.

⁸⁵ HSD uses lower power and larger antennas as compared to DBS.

⁸⁶ Private cable operators or SMATV use similar technologies as cable companies but do not use public right-of-ways.

⁸⁷ LEC providers use telephone lines and VDSL to provide video programming.

⁸⁸ Tenth Annual Report at 8-11, In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, FCC, MB Docket 03-172 (January 28, 2004) (hereinafter *Tenth Annual Report*).

⁸⁹ *Id.* at 11.

⁹⁰ <http://www.nielsenmedia.com/FAQ/ratings.html> (last visited May 29, 2008). Nielsen Media is the nation's leading media research firm concerning viewer's habits.

⁹¹ Time-Warner Inc., 2002 Annual Report (Form 10-K) at 11-12 (March 28, 2003).

⁹² <http://www.videobusiness.com/article/CA617238.html> (last visited May 29, 2008).

⁹³ U.S. Album Sales Fell 9.5% in 2007, N.Y. Times, January 4, 2008 (available at <http://www.nytimes.com/2008/01/04/business/media/04music.html>).

⁹⁴ Sprint Nextel Corporation, Sprint Power Vision User Guide, 23 (n.d.) (available at <http://www1.sprintpcs.com/media/Assets/ueContent/Sprint-Power-Vision-Guide.pdf>)

⁹⁵ <http://www.wireless.att.com/source/music/mobilemusic/> (last visited May 31, 2008)

⁹⁶ http://www.alltel.com/wps/portal/AlltelPublic/c1/04_SB8K8xLLM9MSSzPy8xBz9CP0os3hnP2-DoCBDAwN_HxcnAyNLZ0PLIE9DIN9MPxykA0mFu3eokYFRgFOwWZi7i5GBgQFE3gAHcDTQ9_Plz03Vj9SPMsdpj7u uJfmROanpicq-QXZ2mnO6oiIAUfiTyw!!/dl2/d1/ (last visited May 31, 2008)

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⁹⁷ <http://www.wireless.att.com/about/>

⁹⁸ <http://news.vzw.com/news/2008/01/pr2008-01-28.html>

⁹⁹ http://newsreleases.sprint.com/phoenix.zhtml?c=127149&p=irol-newsArticle_newsroom&ID=1097849&highlight=

¹⁰⁰ [http://www.t-](http://www.t-mobile.com/Cms/Files/Published/0000BDF20016F5DD010312E2BDE4AE9B/0000BDF20016F5DE0117C70CF8824224/file/TMUS%20Q4%20%20YE%202007%20Customer%20Release%20FINAL.pdf)

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¹⁰¹ Alltel Corporation, 2007 Annual Report (Form 10-K) a 1 (March 20, 2008). (Available at <http://ccbn.10kwizard.com/cgi/image?repo=tenk&ipage=5549079&doc=32&fdl=1&cik=65873&odef=8&rid=12&quest=1&dn=2>)

¹⁰² News Release, The Media Audit, Satellite Radio Attracts a Few Good Men -- Very, Very Few (May 6, 2005) (available at <http://www.themediiaudit.com/>).

¹⁰³ DOJ Press Release, *supra*.

¹⁰⁴ Hughes Electronics Corporation, 2002 Annual Report (Form 10-K), at 2 (March 11, 2003)

¹⁰⁵ Press Release, EchoStar Communications Corporation, EchoStar Reports Fourth Quarter 2002 Financial Results; EchoStar's DISH Network Adds 400,000 Net New Subscribers (March 4, 2003) (available at <http://investor.echostar.com/releasedetail.cfm?releaseid=243661>).

¹⁰⁶ Comcast Corporation, 2002 Annual Report (Form 10-K), at 2 (March 20, 2003).

¹⁰⁷ *Id.* at 21.

¹⁰⁸ Time-Warner Inc., 2002 Annual Report *supra* at 8-9.

¹⁰⁹ *Id.* at F-13.

¹¹⁰ Cox Cable, 2002 Annual Report 2 (2002)

¹¹¹ *Id.* at 6.

¹¹² DOJ Press Release, *supra*.