Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In re	)	
	)	
SATELLITE CD RADIO, INC.	)	
	)	File Nos. 8-DSS-MISC-91(2)
For Conditional Authority to	)	49/50-DSS-P/LA-90
Construct, Launch and Operate a	)	58/59-DSS-AMEND-90
Space Station in the Satellite	)	
Sound Broadcasting Service	)	

NATIONAL ASSOCIATION OF BROADCASTERS'
PETITION TO DENY

The National Association of Broadcasters ("NAB"),[1/] pursuant to § 309(d)(1) of the Communications Act of 1934, as amended, and § 73.3584(a) of the Commission's rules, hereby petitions the Commission to deny the above referenced request of Satellite CD Radio, Inc. ("Satellite CD") for conditional authority to begin construction of a satellite system. In support hereof, NAB respectfully states as follows:

I. PRELIMINARY MATTERS

A. Standing

NAB is a voluntary nonprofit incorporated association of radio and television broadcast stations and networks. NAB member radio stations are licensed to serve communities in virtually all areas of the United States. Satellite

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1/ NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

CD's proposed private satellite sound broadcasting system will compete directly with NAB member stations for listening audience. Because the stations' revenues depend on the size of their listening audience, the loss of listening audience to Satellite CD will adversely affect the stations economically.[2/] Thus, all such stations would have standing in this proceeding as individual parties in interest,[3/] and NAB has standing as their trade association representative.[4/]

B. Summary of NAB's Comments Addressing Satellite CD Petition and Application and the Notice of Inquiry.

In June 1990 Satellite CD Radio, Inc. submitted a Petition for Rule Making ("Petition") that sought to allocate spectrum for a hybrid space satellite and terrestrially-delivered digital audio broadcasting service.[5/] The National

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2/ "Since advertiser support is dependent upon the local station's programs being received by the public, the loss of any substantial number of viewers may cause a diversion of revenue from the local station with possible serious affect [sic] on the station . . . ." Rust Craft Broadcasting Co., 36 FCC 1556, 1561, 2 RR 2d 908, 915 (1964).

3/ FCC v. Sanders Brothers Radio Station, 309 U.S. 470 (1940).

4/ National Motor Freight Association, Inc. v. U.S., 372 U.S. 246 (1963) (association of motor carriers has standing to challenge agency order that will aggrieve individual members of the association); Hunt v. Washington Apple Advertising Commission, 432 U.S. 333, 343 (1977) (association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue their own right); United Telephone Co. of Ohio, 26 FCc 2d 417, 418, 20 RR 2d 602, 604 (1970) (association of common carriers has standing to file petition to deny where two of its members are in direct economic competition with applicant).

5/ See Public Notice, "Office of the Secretary: Petitions for Rule Making Filed," June 18, 1990; see also FCC July 9, 1990 Public Notice "Office of the Secretary: Petition for Rule Making Filed," acknowledging Satellite CD's filing of a June 22, 1990 supplement to request for rule making.

Association of Broadcasters that summer filed comments in response to the Satellite CD petition for rulemaking, asking that the FCC dismiss or simply defer consideration of the petition as premature and as infirm, as to both policy and technical matters.[6/] Satellite CD filed an application to construct, launch and operate a DAB service.[7/] NAB filed comments opposing the application, which addressed virtually the identical substantive issues in the petition. NAB has also filed comments in response to the FCC's Notice of Inquiry with regard to a Digital Audio Broadcasting ("DAB") service, there opposing the provision of a satellite delivered DAB service. Copies of the earlier NAB pleadings are attached hereto as Appendix I, and their contents and arguments are incorporated herein by reference. Most recently, Satellite CD filed a Request for Conditional authority to begin construction of a satellite DAB system. We strongly urge, for the reasons stated below, that the request be denied.

II. IT IS PREMATURE AND PREJUDICIAL IN THE EXTREME TO GRANT THIS REQUEST BEFORE PRELIMINARY ESSENTIAL QUESTIONS REGARDING DAB HAVE BEEN RESOLVED

Satellite CD requests authority to begin construction of its proposed DAB satellite system, with that authority to be conditioned on Satellite CD's "assumption of the entire risk that permanent authorization either may not be granted or be granted with technical or regulatory parameters different from

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6/ See Comments of NAB (RM-7400), filed Aug. 20, 1990.

7/ See comments filed by NAB in Gen. File No. 49/50-DSS-P/LA-90, filed Nov. 30, 1990.

those proposed in its application." NAB maintains, however, that the risk here of early authorization is not just Satellite CD's risk. The risk is, rather, to the listening public, to other applicants for DAB service, to other parties in interest, to sound FCC processes and decision-making and ultimately, of course, to the public interest. For, here, to authorize early construction of a hundreds-of-millions of dollars system where the basic, preliminary questions of "if, where and how" have not yet been answered would seem to be pure folly.

A. It is Premature To Grant This Request Before On-going Proceedings Have Answered Critical Questions, Including Whether There Should Be a Satellite DAB Service.

While the real risk in granting this "early construction" request belong to the Commission and to the public interest, the "real" facts here are: 1) the Commission has as of yet made no decisions about the nature or shape of a DAB service, including the decision basic to Satellite CD's entire service, i.e. whether it is in the public interest to here authorize a satellite DAB service, 2) there are not as of yet any proposed rules for a DAB service, with the Commission's proceedings still at the Inquiry stage, and 3) there are still outstanding proceedings and undecided positions concerning the United States' preferred positions on DAB issues to be presented internationally at WARC '92.

The Commission has received comments in response to its Notice of Inquiry concerning DAB, but it has not made even the most basic decisions about a DAB service for the United States and has not yet considered, in proposed

rules, what form that service might take, what parties might be eligible to participate, whether the service should be limited to a terrestrial one, as NAB urges, how much spectrum should be devoted to such a service, where that spectrum should be, or a host of other issues basic to a DAB service. It could not be more premature for a construction permit, conditional or otherwise, to be issued.

Satellite CD cites as precedent for its request the issuance of conditional construction permits in the Direct Broadcast Satellite ("DBS") service. The issuance of conditional permits there is not at all relevant to the situation with Satellite CD. There, the Commission had proposed, albeit interim, rules to give shape and direction to the new service. Before the conditional permits were issued, the Commission had adopted interim rules for DBS and, therefore, knew what it intended and what it wanted for this fledgling service.[8/] Here, it knows none of that. It has proposed nothing. Satellite CD would have the Commission, essentially, grant it a waiver of licensing rules and technical requirements that are not yet set -- nor even proposed.

The Commission is in no position to grant the request here made. The course for DAB is not yet steady or sure enough for grants of construction authority -- grants that well may prejudice the issues awaiting decision and direction.

8/ See, Memorandum Opinion and Order, In re Application of Satellite Television Corporation for authority to Construct an Experimental Direct Broadcast Satellite System, File No. DBS-81-01, 91 FCC 2d 953 (1982).

B. Critical Issues Determining the Future of DAB in the United States, including Those of "If, Where and How", May Be Prejudiced By a Grant of the Request.

Should Satellite CD be permitted to begin construction of its proposed DAB satellite system, even at its own peril, the Commission will be unlikely later to ignore that grant in making the yet undecided but critical issues as to the future and shape of DAB in the United States.

Even, and most particularly, the basic issue of whether DAB in the United States should be a satellite service (or, as NAB maintains, whether DAB should be the long-needed "upgrading" of the U.S. terrestrial radio service, with available spectrum going to serve this "need") would be prejudiced by early construction of even the beginning stages of a satellite system. Critical rulemaking and decision making simply could not be made on a "clean slate".

Spectrum issues, similarly, would be prejudiced, once a satellite provider had begun to expend millions of dollars for a system designed for a particular spectrum location and premised on a minimum amount of spectrum space.

Other applicants, currently awaiting the outcome of the inquiry and the to-come rulemaking on DAB, would be prejudiced as to a grant, should spectrum be limited to that expected by Satellite CD. They would most certainly be denied the "leg-up" given Satellite CD.

Even the FCC's and the United States' positions for the upcoming WARC '92 international sessions allocating spectrum would be prejudiced and influenced by the presence of a conditional grant of authority to construct a

satellite DAB system. Such a grant puts the Commission behind a decision to authorize satellite DAB and to authorize it at a particular spectrum location. U.S. preparations for WARC are currently pending and those decisions, as well as those for U.S. implementation, should be given the room to be formulated, adjusted and advocated without the albatross of a premature, unripe grant affecting those positions.

To assert that a conditional grant to begin to construct a proposed system will likely prejudice critical decision making is only common sense. No decisions as to a U.S. DAB service have yet been make. No proposals have been proffered by the Commission. That much is clear. And, to expect prejudice of those decisions by an early grant is obvious and to be expected. As was said in a Commission case many years ago:

> "Ordinary human experience tells us that these factors have a force which cannot always be set aside by the triers no matter how sincere their effort or intent. The Commission realistically concedes that if the grant is ultimately made to appellant rather than to intervenor, 2 1/2 or 3 years hence, the latter's market to dispose of its large temporary investment in a going television station is one man, i.e., the successful applicant. In that eventuality the losing party faces the problem of salvaging whatever he can on a distress market. To argue, as appellant does, that this may weigh in the balance of an otherwise close question is not a challenge to the good faith or integrity of the triers; it is a recognition that they are mortal men."[9/]

9/ Community Broadcasting Co. v. FCC, 274 F.2d 753, 761 (1960).

Once a grant is made, even conditionally, the Commission would be unlikely to decide issues contrary to Satellite CD's position. And it would be unlikely as well to later "pull the plug" on that particular applicant. To proceed with such a grant would be patently unfair to all involved, to both parties and to principles like the "public interest".

IV. CONCLUSION

For the reasons stated herein and in NAB's comments in preceding inquiries, NAB urges the Commission to deny the above-captioned Satellite CD request. To grant the request is against the public interest and undermines the ability to develop the best digital audio system possible.

Respectfully submitted,

NATIONAL ASSOCIATION OF
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March 18, 1991

CERTIFICATE OF SERVICE

I, Brenda Fillman, do hereby certify a true and correct copy of the foregoing "National Association of Broadcasters' Petition to Deny" was sent, via first class mail, on this date, March 18, 1991, to the following:

Peter Dolan, President
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Counsel for Satellite CD Radio, Inc.

Brenda Fillman

Brenda Fillman

APPENDIX I

Comments of the National Association of Broadcasters

in Response to RM-7400

1. I do not see the need to allocate additional spectrum for radio broadcasting. I feel that once allocated, the subscription nature of the band suggested is not viable, and that spectrum space would become commercial and regressively competitive. Technically, we can implement improvements in technology in the bands currently assigned. We need to improve our existing system, and not create another.

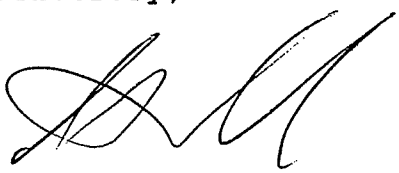
2. Localism, definitely in the public interest, will be significantly undermined by additional non-local signals, dividing listenership and reducing local station profitability. Local small businesses would lose their last best cost effective means of advertising, and could further negatively impact the economy by going out of business.

3. Local radio stations will not be even marginally operational financially. This action will cause many stations to go dark, further reducing media service.

4. This plan seems better suited to the large corporate broadcaster, which would reduce local diversity of ownership in the media.

Most probable, this action being considered would put myself and hundreds of other broadcasters (marginally viable, and existing out of a sense of mission) out of business. I suppose some larger broadcaster would take our place eventually, but how can they possibly be interested in the communities we represented as separate entities, as so many smaller broadcasters have been for years? You have required us to make decisions and take actions that have been in the public interest for many years. This satellite DAB action the FCC is considering is not in the public interest. The FCC would destroy much of what has been built across the nation in our local media if this proposal is approved.

Sincerely,



Ralph H. McBride

President,

Voice Broadcasting, Inc.

CERTIFICATION OF SERVICE

I, Susan Stephenson, hereby certify that on this 9th day of November, 1992, I have served a copy of the foregoing "Opposition Comments of Ralph McBride"
on the Following:

Robert Briskman
Satellite CD Radio, Inc.
1001 22nd St. N. W. 6th Floor
Washington, D.C. 20037-1817

Susan Stephenson

Susan Stephenson

AFFIDAVIT

I, Ralph H. McBride, hereby attest to the accuracy of the allegations of fact contained in the Petition to deny, of which I have personable knowledge.

Ralph McBride, Manager

11/9/92
Date

CHERRY CHRISTIAN
Notary Public, State of Texas
My Commission Expires
JANUARY 16, 1996.

Notary

11/9/92
Date

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

In the Matter of	)	
	)	
Amendment of the Commission's Rules with Regard to the Establishment and Regulation of New Digital Audio Radio Services	)	Gen. Docket No. 90-357

COMMENTS OF THE NATIONAL ASSOCIATION OF BROADCASTERS

I. INTRODUCTION AND SUMMARY

The National Association of Broadcasters ("NAB")[1] hereby submits its comments in response to the Commission's Notice of Inquiry[2] in the above-captioned proceeding.

As world consumer markets increasingly embrace digital technology, it follows that the broadcasting systems of the world would also seek to take advantage of new and improved technical means for delivery of radio programs. The American broadcasting system is not unique in this regard. NAB, representing the vibrant, diverse and successful American broadcasting system, seeks to participate actively in the development of digital audio broadcasting ("DAB") policies. We support study of DAB; we support consideration of DAB implementation on terms that are minimally disruptive for existing AM and FM broadcasters, their communities and listeners; we support development of digital radio technologies and urge study of available spectrum; and,

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[1] NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major networks.

[2] Notice of Inquiry ("Notice") in Gen. Docket No. 90-357, 5 FCC Rcd 5237 (1990).

most importantly, we support technical improvement of radio service to listeners nationwide.

These comments underscore and expand upon the positions NAB already has taken in response to a petition for a rule making submitted earlier by Satellite CD Radio, Inc.[3] Here NAB again asks the Commission to give thorough, thoughtful study to digital audio broadcasting technology and related policies. This assessment should take place in this proceeding and the related proceeding the Commission has instituted to help prepare itself and the nation for the 1992 World Administrative Radio Conference.[4] During the pendency of this assessment, the Commission should not authorize digital audio broadcasting services until carefully reasoned rules and policies are adopted.

Concerning this choice between terrestrial and space satellite delivery, NAB again emphasizes its support for -- and the statutory basis for -- a terrestrial-only system, were digital audio broadcasting inaugurated in this country. Only through a terrestrial distribution mechanism would the Commission be able to foster concepts of broadcast localism and the delivery of radio service designed to be responsive to the needs, interests and problems of our many and diverse communities.[5] Indeed, satellite-delivered digital audio would do very little to foster these statutory goals.[6]

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[3] Public Notice, "Office of the Secretary: Petitions for Rule Making Filed," June 18, 1990. In this Public Notice the Commission asked for comment on the Petition for Rule Making (RM-7400) submitted by Satellite CD Radio, Inc. See also Comments of NAB in RM-7400, filed August 20, 1990. We incorporate by reference the position taken by NAB in these earlier comments.

[4] See Second Notice of Inquiry in Gen. Docket No. 89-554, 5 FCC Rcd 6046 (1990).

[5] See, e.g., § 307(b) of the Communications Act of 1934.

[6] See Remarks of Alfred C. Sikes before the National Association of Black Owned Broadcasters, Sept. 27, 1990, at 4. Here Chairman Sikes noted that with a satellite DAB service, "there is relatively little likelihood it would -- or could -- provide the kind of local

(continued...)

In response to the Commission's suggestions in the Notice,[7] we believe that any introduction of digital audio broadcasting in this country should be undertaken by providing digital audio opportunities to the licensees of existing AM and FM, commercial and non-commercial, radio broadcast facilities. This should be a necessary premise to the introduction of U.S. digital audio broadcasting. These broadcasters, with established track records of providing locally-oriented public service, should be given the opportunity to employ digital audio technology as yet another method of enhancing their public service operations. Such a policy would be similar to that the Commission has espoused for the "homesteading" of the expanded AM band.[8] It also is supported by relevant judicial precedent.[9]

A central focus of any agency inquiry into the prospects for DAB must hinge upon the availability of spectrum for such a service. As discussed in detail below, NAB has commissioned studies designed to answer these central questions. We also have appointed a blue ribbon task force of NAB Board members to address the myriad DAB issues evolving in government and industry. These studies and analyses will help the broadcasting industry and the Commission assess the various alternatives for implementing digital audio broadcasting. NAB's studies will examine a variety of spectrum segments with the potential to afford DAB opportunities for existing

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[6](...continued)
news, information, and public affairs upon which so much of our broadcast culture now rests."

[7]Notice, supra, note 2 at ¶11.

[8]See, e.g., Notice of Proposed Rule Making in MM Docket No. 87-267, 5 FCC Rcd 4381 (1990), ¶¶64-99.

[9]See, e.g., National Black Media Coalition v. FCC, 822 F.2d 277 (2nd Cir. 1987).

broadcasters. We also are examining allocation techniques which would attempt to replicate existing broadcast service areas. However, with regard to the prospective availability of UHF television spectrum, NAB continues to support the reservation of this spectrum for advanced television service in the United States.[10] UHF-TV spectrum should not be considered as an available alternative for digital audio broadcasting.

Additionally, NAB has reviewed many of the comments that already have been filed in the record of this proceeding.[11] Below, we respond to some of these filings, especially that filed by the Recording Industry Association of America ("RIAA"), NAB below offers its strongest possible opposition to RIAA's suggestion that the Commission adopt an artificial and unsound set of quasi-copyright rules and policies. Acceptance of these RIAA notions would be totally at odds with reasoned communications policy. As set forth below, NAB finds that RIAA, and those it represents, have several other alternatives for achieving their goals.

II. IN-DEPTH CONSIDERATION OF DAB IS IN THE PUBLIC INTEREST.

In the Notice, the Commission correctly suggests that digital radio technology could offer the potential for a significant improvement in the sound quality

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[10] See Tentative Decision and Further Notice of Inquiry in MM Docket No. 87-268, 3 FCC Rcd 6520 (1988).

[11] On Oct. 9, 1990, the Commission extended the date for the filing of comments in this proceeding. This extension of time was in response to a Joint Request for Extension of Comment Deadlines submitted October 5, 1990, by NAB, the Association of Independent Television Stations, the Association for Maximum Service Television, Inc., Bonneville International Corporation and Tribune Broadcasting Company. However, despite this extension of time, many parties already have submitted their initial comments in this proceeding.

of radio programming. Indeed, it is this pursuit of enhanced quality that has guided the Commission in several recent proceedings. Among these are proceedings dealing with AM Improvement[12] and advanced television.[13]

The Commission's statutory responsibility to study the uses of radio[14] supports reasonable pursuit of technological innovations that can be implemented in a fashion that will enhance, rather than negatively impact, existing communications service. Also, NAB believes that any pursuit of digital audio broadcasting by the Commission should not be at the expense of AM radio improvement. That is, NAB strongly supports the concept of improving the AM radio medium and, in addition to participating in FCC proceedings in this regard, has undertaken a series of industry-based steps aimed at complementing federal regulatory changes also aimed at improving AM radio.[15] The timetable and overall prospects for digital audio broadcasting are still indefinite. As such, the Commission should continue its ongoing efforts to improve conventional radio broadcasting services. Moreover, by strengthening the existing AM and FM radio system, the Commission will better equip these existing licensees with the resources needed to pioneer digital audio broadcasting.

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[12] See Notice of Proposed Rule Making in MM Docket No. 87-267, supra note 8.

[13] See Notice of Inquiry in MM Docket No. 87-268, 2 FCC Rcd 5125 (1987).

[14] See § 303(g) of the Communications Act of 1934, 47 USC § 303(g).

[15] For example, NAB was a partner, with the Electronic Industries Association ("EIA") in developing the several National Radio Systems Committee Standards for AM radio. We also are working with the EIA to develop a certification mark program for AM radio receivers.

A. Digital audio broadcasting should be considered as an "enhancement" of existing radio service.

As acknowledged by the Commission in its Notice, the FCC is presented with several, varied alternatives for introducing digital audio broadcasting in this country.[16] In addition to promoting a satellite, a terrestrial or a hybrid approach, these proposals also suggest use of common carrier regulatory approaches as well as more conventional Title III broadcast licensing.

We believe that DAB simply can be another in a series of enhancements of conventional AM and FM radio broadcast service. To the original AM and FM broadcast transmission service, the industry and FCC have added AM Stereo, FM Stereo, FM Subcarrier Authorizations, FMX technology, and assorted remote control and telemetry technologies. The broadcasting industry would like to consider enhancing the delivery of audio programs with DAB technology. The industry should be permitted technically to evolve and take advantage of superior transmission technologies without unduly disrupting the public's current receipt of radio service. If the FCC fails to treat DAB as an enhancement of existing radio service, the broadcasting industry will have less of an incentive to make available digital transmission technology as soon as possible. For these reasons, the Commission should not feel compelled to employ a radically new

[16] See, e.g., Petition for Rule Making (RM-7400), supra, and June 22, 1990, Supplement to Petition for Rule Making, each filed by Satellite CD Radio, Inc.; Application of Radio Satellite Corp. for Authority to Construct and Operate a 3.5 Meter KU-Band Transmit-Receive Earth Station, filed May 22, 1990; Application for Authority to Construct or Make Changes in an International or Experimental Broadcast Station, filed May 23, 1990, by Strother Communications, Inc. ("Strother"); and Petition for Rule Making filed by Strother on July 26, 1990. See also Satellite CD Radio, Inc. Application for a Digital Audio Radio Service Satellite System (File Nos. 49/50-DSS-P/LA-90, 58/59-DSS-Amend-90), FCC Public Notice No. D5-1015, released Oct. 19, 1990; Strother Supplement to Petition for Rule Making, filed Sept. 5, 1990.

regulatory approach toward implementation of digital audio service; the existing regulatory framework has worked well, and we see no reason to depart from established procedure, law and policy.

B. The Commission should analyze all aspects of DAB technology.

The Notice recognizes the need to obtain complete information on DAB through its solicitation of information on many DAB facets, including DAB's potential for improved quality and service, its impact on existing radio services, implementation scenarios and regulatory issues. NAB welcomes these Commission efforts to develop a full, wide-ranging record on DAB issues. A thorough discussion of these factors will help clarify the desirability and public interest benefits of DAB. NAB urges the Commission to give DAB the same careful scrutiny and study it would any other proposed new enhancement, weighing the appropriate costs and benefits associated with its potential implementation.

C. Performance Benchmarks Are Needed To Properly Evaluate DAB.

The Commission requests information on whether technical performance benchmarks should be used to judge the degree of improved audio quality provided by DAB.[17] NAB offers, in Table 1, below, some general comparisons of the technical quality provided by various audio services.

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[17] Notice, supra note 2, ¶9.

TABLE 1

Technical Comparison of Audio Services

Parameter	AM	FM	TV	CD	DAB
frequency response (Hz)	50-10k	50-15k	50-15k	20-20k	20-15k/20k*
stereo separation (dB)	40	50	30	80+	80+
dynamic range (dB)	50	60	60	80+	80+
signal/noise ratio (dB)	50	55	55	90+	90+
interference performance	poor	fair	fair	----	*
multipath performance	----	fair	good	----	good*
fading performance	fair	fair	fair	----	good*

* - system dependent

Source: NAB Science and Technology

From these general features, the greatest advantages DAB would offer the radio listener are its potentially greater frequency response, stereo separation, dynamic range, signal-to-noise ratio and multipath performance (for some systems) -- rivaling the listening experience provided by compact discs. The Commission should carefully consider all these factors in an assessment of DAB transmission technology.[18]

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[18] Some factors, such as multipath performance, are likely to be more important to broadcasters, especially FM broadcasters, than other factors, such as frequency response. Multipath interference is an acute problem, while few FM listener complaints are lodged because of poor frequency response, which should not be surprising. The actual listening environment for radio (often an outdoor location or automobile) often does not support full "CD" quality sound; and human sensitivity to high audio frequencies diminishes with age. International standards on hearing thresholds up to 6 kHz in frequency show more than 17 dB loss between the ages of 30 to 60 years. See International Standard "Acoustics - Determination of occupational noise exposure and estimation of noise-induced hearing impairment," ISO 1999:1990-01-15, at Annex B. More recent high frequency studies show a hearing loss of up to 30 dB in the frequency range of 15 kHz to 20 kHz between the ages of 18 to 26 years. See "High-frequency Audiometric Assessment of a Young Adult Population," Green, David M., et al., Journal of the Acoustic Society of America, February, 1987, Vol. 81, at 485-94.

Besides technical issues, listener habits may also influence the Commission's consideration of system design. For example, if the intended DAB audience is primarily in automobiles or using portable receivers, then the ambient noise levels in those environments would greatly mask the desired DAB features of enhanced dynamic range and signal-to-noise ratio and, thereby, limit DAB's technical appeal. If, instead, the intended audience is primarily at indoor locations, then technical planning factors and assumptions could be defined (e.g., receiver performance, antenna characteristics, coverage areas and population, etc.) to properly design the desired technical performance objectives and maximize both quality and service to the public. Only 27.9% of the existing radio audience is in automobiles throughout all day-parts, with 47.6% listening at home and 24.4% at "other" locations (primarily in the office).[19]

Finally, features unique to DAB -- especially the potential for elimination of multipath and fading interference -- must become significant factors in the Commission's analysis; these features offer unique benefits and can be marketed in ways that enhance the prospects for rapid public acceptance of DAB. Thus, the Commission should view the establishment of a new DAB service based on an overall analysis of system design, with emphasis on the performance features unique to DAB.

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[19] See Radio Facts For Advertisers, 1989/1990, Radio Advertising Bureau, Inc., New York, N.Y.

D. Coverage estimates for digital systems must use more appropriate technical assumptions

The Commission requests information on predicting the coverage areas provided by DAB.[20] For the reasons discussed below, the Commission should revise its propagation curves and service assumptions prior to adopting rules that would enable prediction of the coverage of DAB systems.

NAB has performed initial work that estimates the power and coverage potential of a terrestrially based DAB system, using as a model the Eureka-147 DAB system -- a system that provides 14 stereo programming channels in a 3.5 MHz wide channel.[21] NAB's study shows that using a 1,000 watt effective radiated power will provide a maximum coverage radius of approximately 43 miles at 100 MHz, and 31 miles at 500 MHz. However, unlike AM, FM or TV signal degradation in the presence of increasingly weaker signal carrier-to-noise ratios, a digital signal may degrade abruptly once a signal level decreases below a threshold for an acceptable bit error rate. For prediction of digital audio broadcasting coverage, NAB's study suggests that use of higher probability location and time variability factors are warranted than are now assumed in the current F(50,50) propagation curves. This study also suggests that further work should include the study of frequencies above 1 GHz. Further details on these DAB coverage matters are provided at Appendix A to these comments.

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[20] Notice, supra note 2, ¶ 10.

[21] See Rau, M.C., Claudy, L.D., Salek, S., "Terrestrial Coverage Considerations for Digital Audio Broadcasting Systems," September 6, 1990, presentation to the fall Broadcast Symposium of the IEEE Broadcast Technology Society. This report appears at Appendix A to these Comments.

III. MANY FACTORS SUPPORT COMMISSION ESTABLISHMENT OF TERRESTRIAL-ONLY DAB SYSTEMS.

Establishing a new high quality sound broadcasting service via terrestrial-only methods has numerous advantages over satellite or satellite/terrestrial hybrid delivery systems. Below, NAB provides below a preliminary analysis of these policy, economic and technical considerations, and presents a rationale in favor of terrestrial digital audio broadcasting. As developed herein, satellite sound broadcasting -- direct-to-the-listener -- cannot, by its nature, provide programming oriented towards the needs of local communities. The provision of new sound broadcasting services would be far better implemented, from a policy, economic and technical view, through a terrestrially-based system. Thus, a terrestrial approach to DAB should be preferred by the Commission. "CD-radio" can be delivered terrestrially in less radio spectrum, with more program and ownership diversity, with the same technical quality as a satellite-delivered service, and without risking the viability of the entire U.S. radio industry.

A. Commission policies should favor local, free, over-the-air broadcasting.

The current radio broadcasting system in the United States is based on certain major policy premises that encourage (1) promotion of diverse locally-based programming that is only available on local terrestrial channels, and (2) the provision of the best technically available service. Accordingly, local or sub-regional coverage by terrestrially-based transmitters is limited in order to promote both spectrum efficiency and to advance this concept of "localism," resulting in programming of news, information and entertainment oriented to the unique needs of the community served.

National programming is today available via the national radio network industry. Many local stations are affiliates of one or more networks, and clear national news and special reports as part of their particular, market-driven mix of national and local programming. The network/local affiliate system works very well; the network supplies news that often is collected from affiliate stations. The existence of local affiliates strengthens the radio network and, in turn, the local affiliate receives quality national news and special programming.

Terrestrial broadcasting -- whether or not using advanced technologies -- better promotes the statutory goal of advancing broadcast localism than would a satellite service.[22] Unlike BSS (Sound) -- broadcast via satellite directly to the nation's homes and listeners -- local broadcast stations fulfill Congressional localism directives. These stations hold public interest obligations to provide responsive, locally-oriented programming to their respective audiences. Moreover, enhancement of local broadcast signals would provide even greater incentive for the public to access the local news and information provided by these local broadcasters. Under this policy and regulatory framework, existing radio broadcast stations today provide extensive service to the American public.[23] No change in the Commission's policy of promoting broadcast localism is warranted.

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[22] See Section 307(b) of the Communications Act of 1934, as amended.

[23] The American public is well served by the ever increasing number of over-the-air radio stations. The average U.S. county receives signals from 26.4 stations, with even the smallest counties (1,000 or less of population 12 years of age or older) receiving on average 10.5 stations. In the largest counties (i.e., more than 500,000 in 12+ population), the average number of stations received was 81.4. NAB National Radio Listening Study, November 2, 1988.

B. Commission DAB policies should be designed to minimize the economic impact on local radio stations and existing national networks.

Spectrum needs for any new satellite sound broadcasting service or terrestrially-based broadcasting service, using any number of intriguing new advanced technologies, have not yet been demonstrated definitively. Nor is the relative spectrum priority of any new digital audio broadcasting service vis-a-vis other communications services. However, if such a DAB satellite service were to be allotted precious spectrum resources, a critical aspect of the resulting policy that demands to be considered, at length, prior to any decision, is the potential economic impact of such a service on existing broadcast services.

Obviously, there is considerable uncertainty regarding the technical specifications and/or the regulatory framework that would apply to a new satellite sound broadcasting service -- both of which significantly would affect future market conditions. Consequently, any determination today of the economic impact of a new satellite service on current radio services only can be speculative. However, a few observations about possible market directions are possible at this time.

Generally, satellite applications in the 1990s will continue to be constrained by the limits of current technology (i.e., encouragement of general operations that offer point-to-multipoint services). Even with the pending launch of a new generation of satellites equipped with multiple, shaped spot beam capabilities, transmissions are likely to be geographically limited to footprint coverage areas greater than 500,000 square kilometers. As a result, satellite sound broadcasting services obviously are to be anchored on national or regional distribution architectures.

Any success of satellite-based audio broadcast services would likely be at the expense of local broadcast stations, in that satellite services would affect the amount of advertising placed on local radio stations, and the related cost of air time on the station's rate card. Due to the inherent non-local nature of satellite-distributed services, if commercial satellite audio broadcasting services were to be based on advertising, rather than on subscription fees, a substantial percentage of the revenues would likely come from existing national and/or regional advertisers. Consequently, the existing foundation of advertising revenues, supporting current local radio services, would be affected, perhaps significantly.

The radio industry's share of all U.S. advertising expenditures is estimated at 6.7 percent for 1990, fluctuating in the 1980s within a range from 7.0 percent in 1982 to 6.6 percent in 1987 and 1988.[24] Current radio advertising revenues total $8,420 million annually, with almost one-fifth -- 18.2 percent -- coming from national and regional advertisers.[25]

Should radio's national/regional advertising revenues migrate to new satellite-delivered audio services, conceivably this could translate into a potential loss of almost a fifth of the total economic base of the entire radio broadcasting industry in the United States. While total loss of all national/regional revenues is possible, a more likely scenario is a loss of an increasing percentage of national/regional ad dollars. The

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[24] McCann-Erickson, Robert Coen, 1990 advertising estimates.

[25] Radio advertising revenues for 1989 totalled $8,420 million, divided by source as $1,530 million national/regional (spot) (18.2%), $6,463 million local (76.8%) and $427 million network (5.0%). Radio Facts For Advertisers, 1990, Radio Advertising Bureau, New York, NY.

negative effects of incremental losses cannot, and should not, be minimized as they very quickly also could lead to severe deficits for radio.

Financial profits for the entire radio broadcasting industry would drop to zero if less than a third of radio's present national/regional advertising revenues were diverted to a satellite-delivered service. Considering that radio's national/regional advertising revenues for 1989 totalled $1,530 million, loss of only 30 percent of these revenues ($459.0 million) would more than negate the entire $450.5 million profit realized by the radio industry in 1989.[26]

The viability of local radio stations in the United States could be seriously threatened by major advertising market realignments caused by communications policies promoting two rival radio distribution markets -- one local, and one national/regional. The effect of heavy losses in national/regional revenues would not likely be evenly distributed among local broadcasting stations. The impact would most likely fall hardest on the class of stations most vulnerable at this time -- AM stations.

The already fragile economic condition of AM stations makes them acutely vulnerable to bottom-line pressures that could result from major media advertising shifts prompted by the availability of direct satellite audio services. The fragility of AM already is well recognized, as about 1 in 20 licensed AM stations -- about five percent of all AMs -- are listed as dark, according to the FCC's own Mass Media Bureau.[27]

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[26] 1990 NAB/BCFM Radio Financial Report, National Association of Broadcasters, Washington, DC.

[27] Federal Communications Commission, Mass Media Bureau, reported the number of stations dark as: 246 AM, 17 FM, 20 UHF-TV, 0 VHF-TV, Broadcasting, October 1, 1990.

In 1989, the profit margin of the average radio station was a modest 5.35 percent, down from 6.9 percent in 1988. In separate categories, the average profit margin in 1989 for FM stations was 5.1 percent; for AM/FM stations the average profit declined to 3.9 percent, and for AM daytimers the average profit margin dropped precipitously to a negative 5.4 percent.[28] With this as the baseline financial outlook today, the potential impact of considerable revenue losses from new satellite radio broadcasting services is of major concern for the nation's AM stations, as well as for many FM stations.

Some discussion is warranted regarding the suggestion that "new" advertising sources will somehow surface with the introduction of a satellite-delivered radio service. Proponents of satellite-delivered DAB assert that a whole "new" segment of advertisers will emerge and, therefore, the economic viability of satellite-based advertiser-supported radio services will not be at the expense of local radio broadcasting services.

Today, total advertising revenues from all media sources in the United States continue to expand, although this expansion has been at a much slower rate in recent years. From 1980 to 1985, total U.S. advertising revenues increased at a compound annual rate of 12.1 percent. However, the rate of growth declined by almost half to 6.9 percent in the 1985-1990 period. This general pattern applies also to radio

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[28] 1990 NAB/BCFM Radio Financial Report, National Association of Broadcasters, Washington, DC.

advertising revenues where the compound annual rate growth was 11.9 percent in the early 1980s, dropping to only 6.4 percent in the last five years.[29]

In terms of absolute dollars, the total U.S. media advertising pie continues to grow. But the recent declining rate counters suggestions that advertising dollars entering the market from "new" advertisers will be robust. Rather, the amount of advertising expenditures from "new" sources is likely to be fairly limited, if such sources emerge at all. One final point: given the overall financial outlook for the foreseeable future, a tightening economic market also may mean lower financial margins for all businesses. In such a climate, existing advertising sources as well as budgets may constrict, and new entrants in the advertising market are not apt to materialize to support untested new media. Thus, with the advent of a satellite-audio service configured on a nationwide distribution model, financial support is more likely to be siphoned from radio's national advertising base rather than from new, unknown and unidentified sources.

In comparison to new satellite-based audio broadcasting services, however, new local terrestrially-based digital audio broadcast services could be expected to share, and perhaps enhance, the existing pool of advertising revenues available now to radio broadcast stations. Quantification of the economic impact of new local terrestrial digital radio stations will require future study. Such digital radio operations could technically improve the delivery of local broadcasting services. And, as complementary services, terrestrial operations would comprise less of a threat to the economic viability of existing stations than national/regional satellite radio services. Indeed, were current terrestrial

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[29] Id.

stations able to operate in the digital mode, these stations' economic viability likely would increase -- perhaps significantly.

C. Consumer expectations/demands should be assessed carefully.

Much has been made of the growing consumer demand for higher quality audio products and services, with digital-based technologies being the primary force behind these consumer demands. Digital compact disc players are now in 22 percent of all U.S. households, rising from a mere 2 percent household penetration level in 1986. Digital audio tape ("DAT") equipment, only recently available in the U.S., also is poised for rapid consumer acceptance.

Despite the introduction of these and other non-broadcast audio and video services, the overall level of radio listenership has remained fairly steady.[30] However, the introduction of a new, national radio broadcast competitor could be expected to have a more direct effect on audiences and advertisers than any of today's non-broadcast media services. The system and concept of broadcasting is well-known and understood by American audiences. Due to this familiarity factor alone, satellite-delivered digital audio services may have an edge in competing with non-broadcast distribution media. And more to the point, services that generally sound, operate, and are received over-the-air, "just like radio," on automobile, home stereo, and portable receivers, might attract specific segments of the listening audience (i.e., especially those in mobile vehicles) and thus affect local broadcasting stations much more than do CDs, DAT or new cable audio services.

[30] The Arbitron Co. reports the level of radio listening per day for audiences ages 12 years old and over as: Spring 1989 - 3 Hrs:42 minutes,; Summer 1989 - 3:39, Fall 1989 - 3:31, Winter 1989 - 3:40, and Spring 1990 - 3:30.

Again, the burden is not likely to be evenly divided; it would likely fall on stations located in very rural or mountainous regions of the country, as well as on those in smaller markets, many of which are now providing the only local services available to the communities they serve.

As a national sound broadcasting service, satellite systems would have no incentive for programming news, information, or entertainment oriented towards serving the needs of a local community. Such local service is an integral element, and a statutorily-mandated regulatory responsibility, of all terrestrial broadcast stations in the United States. Broadcast licenses are awarded for local operations, contingent upon a demonstration of providing continuing service directed to meeting the needs of the community served.

Without such broadcast obligations, it would be a "free ride" for satellite "broadcast" services. To exploit 50 years of audience familiarity with American radio broadcasting, and second, to cream skim and/or cherry pick among lucrative advertisers and key audience segments, would all be at the expense of, and with detriment to, one of the proudest traditions in U.S., and world communications -- free, local radio broadcasting.

D. DAB spectrum requirements deserve in-depth study.

The spectrum requirements for a new satellite, satellite/terrestrial hybrid, or terrestrial-only broadcasting system are far from certain. However, some assumptions can be made at this time regarding terrestrial-only delivery methods.

A terrestrial-only method could re-use frequencies nationwide, since coverage and interference limitations could be well-defined, thus maximizing ownership diversity and program voices. If, for example, a DAB system were conceived to be a "replacement" system, accommodating all existing radio broadcast stations, technology exists to permit terrestrial DAB to operate with a total bandwidth that would be much less than full CONUS satellite service, which may require up to 60 MHz nationwide, with no U.S. frequency re-use possible.[31] NAB is giving further study to total spectrum requirements for terrestrial DAB. (See Appendix B.) Additionally, satellite radio systems likely would require gap-fillers, or terrestrial repeaters, to ensure broadcast-quality reception in urban or shadowed areas, adding to the expense of satellite audio systems. These satellite/terrestrial hybrid systems would require extensive use of terrestrial repeaters, perhaps totaling in the thousands, in all major urban areas.

NAB has initiated a study of the spectrum requirements for digital audio broadcasting, limiting it to: (1) use of the technology developed by the Eureka project No. 147 consortium; (2) terrestrial DAB applications; (3) application of DAB technology for existing AM and FM stations; and (4) locations in the spectrum where terrestrial DAB technology can be implemented. This study will presume that available DAB facilities will be segregated into an appropriate number of classes of facilities, in approximate proportion to the existing classes of AM/FM broadcast stations, and will analyze total spectrum requirements, frequency bands up to 2500 MHz, and compare these requirements with those proposed for domestic and international satellite digital broadcasting technologies. This study is scheduled for completion by the end of 1990.

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[31] See Satellite CD Petition for Rule Making, supra note 16, at 26-29.

NAB intends to supplement the record of this inquiry proceeding with the result of this study. For the Commission's information, a copy of NAB's request for proposals in this study is attached as Appendix B.

Historically, one of the principal benefits of satellite distribution of broadcast signals is the increased quality that results from a well-designed satellite and its link budget. However, the technical quality of terrestrial digital radio systems can equal that of a digital radio satellite system. With the technology now available for digital broadcasting, it is not necessary to use satellites to deliver CD-quality audio. In brief, "CD-radio" can be delivered terrestrially, in less radio spectrum, with more program diversity, with the same technical quality as a satellite-delivered service and consistent with the localism policies of established communications law. In NAB's view, satellite digital radio is not needed by the United States and would not serve this country in the efficient manner as would terrestrially-delivered DAB. The Commission has full discretion to reject satellite-delivered DAB. And, while Section 307(b) of the Communications Act and the localism policies which have developed under this statutory direction may not totally bar the FCC from embracing satellite-delivered DAB,[32] they certainly point instead to the comparative merits of a terrestrial-only system.

IV. EXISTING RADIO BROADCASTERS SHOULD HAVE PREFERRED ACCESS TO DAB.

In the Notice, the Commission asks for public comment on whether it should provide existing terrestrial audio broadcasters with a "migration or transition

[32] See, e.g., National Association of Broadcasters v. FCC, 740 F.2d 1190, 1197-98 (DC Cir. 1984).

priority" in a new digital audio service.[33] NAB strongly supports this concept of existing station migration to DAB technology were DAB implemented in this country.

As noted above, NAB believes that the move toward digital audio broadcasting technology should be achieved in a fashion similar to that which has governed other enhancements to radio broadcast service. American broadcasters and this country's listening public each have a substantial stake in the existing broadcast system -- a system that should not be faced with substantial dislocation under any move toward digital audio broadcasting technology. Thus, the Commission should rely upon existing radio broadcasters to bring about these technological advances, an approach that is lawful[34] and similar to the Commission's policy that grants certain existing AM broadcasters a preference in vying for new FM facilities[35] and which the Commission has proposed for allowing existing AM broadcasters to "homestead" the expanded AM band.[36] In the event that this country will employ digital audio broadcasting domestically, then we urge the Commission to adopt policies that will take advantage of existing local programming expertise and the existing "revenue streams" of current

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[33] See Notice, supra note 2, ¶ 11.

[34] The Commission is not barred from adopting this migration scenario by the Supreme Court's Ashbacker Radio Corp. v. FCC decision, 326 U.S. 327 (1945). The Supreme Court has held, in United States v. Storer Broadcasting Co., 351 U.S. 192 (1952), that the Commission may establish substantive criteria for applicants and dismiss ineligible applicants without holding a hearing. Id. at 193-97. The Commission, thus, has full authority to categorize existing AM and FM licensees as those parties qualified to apply for DAB facilities. See also Hispanic Information & Telecommunications Network, Inc. v. FCC, 865 F.2d 1289, 1294 (D.C. Cir. 1989).

[35] See Second Report and Order in MM Docket No. 84-231, 101 FCC 2d 638 (1985); NBMC v. FCC, supra note 9.

[36] See, e.g., Notice of Proposed Rule Making in MM Docket No. 87-267, supra note 8.

broadcast stations. As noted above, NAB is conducting technical studies to determine the technical and allocations policy aspects of affording each existing terrestrial radio broadcast station a digital audio broadcasting opportunity. Assuming that such studies will result in positive conclusions, then we recommend that the Commission, at least for the initial licensing of DAB operations, grant existing broadcasters the opportunity to occupy the band.[37]

Such an approach makes good communications policy sense. Established broadcasters with knowledge of local communities will best be able to provide enhanced broadcast service to the listening public. Also, because it may be many years before enough DAB-capable receivers are in the hands of the listening public, prompt inauguration of DAB service, operating at the licensee's choice, and on a "simulcast" basis with the existing facility, will provide an orderly transition from analog to digital reception by the listening public.

At this juncture, at the inquiry stage of this initial assessment of digital audio broadcasting, it is not necessary for the Commission to consider the position it should take regarding continued AM and FM station operation. We take this view in large part because of the basic uncertainty as to the future of DAB. Our initial perception is that the strength of AM broadcasting -- the provision of radio service over wide geographic areas -- merits continued AM operation in this country. Similarly, because of the American public's substantial investment in current AM and FM

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[37] NAB notes that this position also has been taken in comments filed in this proceeding by, among others: Mount Wilson FM Broadcasters, Inc., filed Oct. 9, 1990; United Broadcasting Co., filed Oct. 11, 1990; and Universal Broadcasting Corp., filed Oct. 22, 1990.

receiving equipment, the Commission should be very hesitant in any consideration of whether to withdraw such broadcast service.

Insofar as the characteristics of DAB service areas are concerned, NAB currently is exploring the technical possibilities. That is, it may be that there would be sufficient spectrum to allow the Commission to "replicate" service areas of existing facilities, either through the use of higher powered DAB transmitters or through the use of multiple DAB transmitters to provide roughly the same service areas that existing licensees offer to listeners.[38]

Finally, regarding existing broadcaster pioneering of DAB service, NAB would support the notion of existing non-commercial licensees having similar opportunities with digital facilities. Such a mechanism could amount to a "set aside" of certain DAB frequencies or, instead, the Commission could, were adequate spectrum provided, afford non-commercial as well as commercial broadcast licensees digital opportunities, regardless of the digital frequency ultimately assigned to each licensee.

V. SPECTRUM REQUIREMENTS AND SELECTION OF FREQUENCY BAND NEED FURTHER STUDY.

As discussed, supra, NAB is studying the total spectrum requirements needed to implement a terrestrial DAB system, including appropriate frequency bands. We expect to have the results of this study by the end of this year and, in the interim, we urge the Commission not to rush to any decisions on the critical issue of spectrum

[38] Under one scenario, an existing licensee operating a wide area, analog station, could afford DAB service through a network of DAB transmitters that, as in cellular radio, would provide service to fixed and mobile listeners.

requirements and preferred frequency bands without establishing an extensive record upon which to base such decisions. Judgments about preferred frequencies for terrestrial DAB must be based on an overall analysis of system design, that includes performance tradeoffs among its various elements, including transmission antenna size and gain; coverage objectives; attenuation (free space, building, foliage); receive antenna size and gain; receiver performance assumptions; and, importantly, the technical features (modulation, encoding, interference impact, etc.) of the system to be used. Until these elements are studied further and defined, and mindful of the overall performance objectives to be achieved, NAB urges the Commission to keep open its options for preferred frequency bands.

However, one option proposed by the Commission for DAB -- using the UHF-TV band in the 728-788 MHz (television channels 57-66) range -- deserves discussion at this time.[39] Almost 100 existing television stations operate on these channels, distributed more or less uniformly throughout the United States.[40] These frequencies are critically needed to implement advanced television service to the public. Such availability must be preserved pending further developments in MM Docket No. 87-268,[41] dealing with implementation of advanced television service in the United States. NAB urges the Commission to continue to reserve allocated UHF-TV spectrum for the needs of advanced television.

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[39] See Second Notice of Inquiry, Gen. Docket No. 88-554, supra note 4, ¶ 100.

[40] See Broadcasting Yearbook, at C-95 (1990).

[41] See Notice of Inquiry in MM Docket No. 87-268, supra note 13; see also, Tentative Decision and Further Notice of Inquiry in MM Docket No. 87-268, supra note 10.

VI. THE COMMISSION SHOULD REJECT RIAA'S INVITATION TO ADOPT QUASI-COPYRIGHT AND/OR PROGRAMMING RESTRICTIONS ON DIGITAL AUDIO.

In its comments, the RIAA requests, inter alia, that the Commission condition the grant of digital audio broadcast licenses on requiring that licensees will "fully protect" copyright interests.[42] Specifically, RIAA urges the FCC to

> 1) prohibit digital audio services from transmitting more than an individual selection from a particular album during a limited time period unless consent of the record owner is obtained;
>
> 2) require digital audio services to acquire licenses from the copyright owners of sound recordings they retransmit;
>
> 3) recommend to Congress that it grant public performance rights in sound recordings;
>
> 4) require digital audio services to transmit all subcode information embodied in recordings in usable form.

At the outset, NAB submits that much of what RIAA proposes is either clearly outside the FCC's jurisdiction and/or is of dubious constitutional validity. NAB is unaware of any provision of the FCC's jurisdictional mandate that would permit it, solely on the copyright rationale set forth by RIAA, to impose a requirement on a broadcast station limiting it to playing one cut from a disc or cassette, or which would require a broadcast station to acquire a license from the copyright owner of a digital audio sound recording prior to retransmitting it. As the Supreme Court held in Sony Corporation v. Universal City Studios, Inc., 464 U.S. 417, 431 (1984), "it [is] settled that the protection given to copyrights is wholly statutory [and that the] remedies for

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[42] See Comments of RIAA in Gen. Docket No. 90-357, filed Oct. 12, 1990, at 8.

infringement 'are only those prescribed by Congress'" (quoting Thompson v. Hubbard, 131 U.S. 123, 151 (1889)).

RIAA's assertion that the FCC's 1972 syndicated program exclusivity rules constitute a "similar regulatory system" to that which it is proposing, and that they were based on a similar rationale, is specious. The FCC's 1972 syndex rules were promulgated pursuant to its powers to implement communications policy and its ancillary jurisdiction over cable by remedying a situation in which "the broadcasting industry spent billions of dollars to create and purchase programming, [while] cable operators could retransmit those programs at their operating cost without making any payments to their program suppliers." Malrite TV of New York v. FCC, 652 F.2d 1140, 1145-1146 (2d Cir. 1981). Specifically, the rules were designed to give "program owners and broadcasters the ability to contract to exhibit their material on an exclusive basis"[43] or, in other words, to promote freedom of contract by allowing parties to enforce the exclusivity provisions of their contract. RIAA, on the other hand, is proposing that the FCC require a digital audio broadcaster to obtain a license, not required under the copyright laws, from a supplier which currently often provides his product gratis in the hopes the broadcaster will play it, and that the broadcaster be limited in the number of cuts it can play sequentially.

RIAA has provided no communications policy rationale to support its proposed new financial burdens on broadcasters, or which would justify placing new

[43] See Notice of Inquiry and Notice of Proposed Rule Making in Gen. Docket No. 87-24, 2 FCC Rcd 2393, 2395 (1987).

limitations on broadcasters' programming discretion. In short, RIAA has established neither the jurisdictional basis nor the factual predicate for such regulation.

RIAA's mandatory licensing and "one cut" proposals also raise serious First Amendment questions. In this regard, RIAA is required to demonstrate that its proposals would promote "an important or substantial governmental interest . . . which translates in the rulemaking context into a record that convincingly shows a problem to exist and that relates the proffered solution to the statutory mandate of the agency." Home Box Office, Inc. v. FCC, 567 F.2d 9, 50 (D.C. Cir. 1977). As previously noted, RIAA has not related its proffered solutions to the FCC's statutory mandate. More significantly, it has failed totally to show that, in fact, a problem exists. Rather, its prayer for regulation rests solely on conjecture and speculation about the imminent demise of a multi-billion dollar industry resulting from a proposed technology for which spectrum has not yet been allocated. Accordingly, RIAA's proposals should also be rejected on the grounds that they are extraordinarily premature.

NAB also acknowledges that similar issues have been raised, on behalf of the RIAA, at the United States Copyright Office[44] and in the Congress.[45] In the Copyright Office Notice of Inquiry, soliciting comments by December 15, 1990, the public is asked to comment on seven specific questions relating to the copyright-related consequences of a move toward digital audio broadcasting. The Copyright Office also asks a series of questions concerning cable-related carriage of digital audio, the

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[44] See Notice of Inquiry in Docket No. RM 90-6, 55 Fed. Reg. 42,916 (Oct. 24, 1990).

[45] See, e.g., S. 2358 and companion bill H.R. 4096, each titled the "Digital Tape Recorder Act of 1990." The bills were pending as the 101st Congress came to a close.

"scrambling" of broadcast signals and the possible imposition of "royalties" on the sale of blank tape and/or digital recording equipment.

The move toward digital audio broadcasting, while significant, is but another potential enhancement of the broadcast service. We do not view this enhancement as providing any foundation whatsoever for revisiting long-standing communications and copyright policies. Indeed, in both the near and long term, there undoubtedly will be other such technological improvements of broadcast services. But the FCC should not -- and cannot -- undertake an independent analysis of the copyright implications of each of these new technologies.

In particular, and although RIAA has not raised this proposal in the instant FCC inquiry, we strongly oppose the notion that digital audio broadcasting should operate only on an "encryption" or "scrambled" basis. To adopt such restrictions, the Commission would move in a direction completely opposite to that which the Communications Act directs it to proceed. This country's over-the-air broadcast service is based upon an advertising-supported and "free" system. To require the American public to pay directly for enhanced quality audio would appear strongly at odds with these basic statutory requirements. Moreover, any such limitations, be they of a quasi-copyright nature or otherwise, would pose serious implications not only for American broadcasting, but for the Commission's overall communications policy. That is, the matters raised by RIAA are not simply "copyright" issues. They go to the very heart of the domestic system of over-the-air broadcasting. Any adoption of the RIAA's principles here would have a direct adverse impact not only on broadcasters, but also on the listening public and on the Commission's statutory responsibilities.

As a further reason for rejecting RIAA's proposals, we note that bills recently pending in the Congress have addressed many of these concerns[46] and, based upon a recording industry and receiver manufacturer industry compromise, have proposed a copy code, technological mechanism to ensure reasonable limits on duplication of copyrighted works. Such a legislative solution -- which would allow limited copying, either from digital audio tape, over-the-air broadcasting, or other sources -- seems far preferable than to have the Federal Communications Commission adopt a contorted set of new regulations that (1) only would inhibit the establishment of a digital audio service and (2) would place untoward and unconstitutional limits on the broadcast of information to the American audience.[47]

VII. CONCLUSION

For the reasons stated above, NAB urges the Commission to give a thorough assessment to the various policy and technical issues arising in this DAB inquiry. During the pendency of this inquiry and the Commission's inquiry involving preparations for the 1992 World Administrative Radio Conference, the Commission should not inaugurate any DAB services, until appropriate rules and policies have been adopted. Were the Commission to decide, following this inquiry and the completion of appropriate rulemaking proceedings, to inaugurate digital radio service in this country,

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[46] See id.

[47] Also, it appears that RIAA has advanced yet another plan that would impose a 7.5% royalty on receiving equipment and a 1.2 cent per minute royalty on the sale of blank digital audio tapes and other recording media. See "Silence on Taping Fees," Television Digest, Nov. 5, 1990, at 16. Thus, it would seem that RIAA, and those whom it represents, have a series of alternatives that would be far preferable to the involvement of the FCC in areas totally beyond its jurisdiction and expertise.

then we strongly urge that this service be on a terrestrial basis with existing AM and FM radio licensees being given the first opportunity to pioneer and implement this technology.

Respectfully submitted,

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