

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

CONFIDENTIAL

In the Matter of)
)
Advanced Television Systems)
and Their Impact on the)
Existing Television Broadcast)
Service)
)
Review of Technical and)
Operational Requirements:)
Part 73-E, Television Broadcast)
Stations)
)
Reevaluation of the UHF Television)
Channel and Distance Separation)
Requirements of Part 73 of the)
Commission's Rules)

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Federal Communications Commission
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MM Docket No. 87-268

**REPLY COMMENTS OF THE
NATIONAL ASSOCIATION OF BROADCASTERS**

The National Association of Broadcasters ("NAB")¹ hereby replies to comments filed in response to the Commission's Tentative Decision and Further Notice of Inquiry in the above-captioned proceeding.²

I. INTRODUCTION AND SUMMARY.

The comments filed in this proceeding have near unanimity in their call for the Commission not to act prematurely in deciding spectrum requirements or allotment issues relating to terrestrial broadcasting of an advanced television (ATV) system. NAB joins these commentators in urging, again, that the Commission refrain from taking decisive action on these allotment and spectrum issues until the critical testing and evaluation of the various ATV systems is completed and the

¹NAB is a nonprofit incorporated association of radio and television broadcast stations and networks. NAB membership includes more than 900 television stations plus the major commercial broadcast networks.

²Tentative Decision and Further Notice of Inquiry, MM Docket No. 87-268, FCC 88-288, adopted and released September 1, 1988 ("Further Inquiry").

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results of those studies can support the Commission's proposals.

Similarly, the comments uniformly support Commission adoption of a single, mandatory technical standard for ATV broadcasting, developed through industry efforts to recommend such a standard. NAB supports this approach as the correct one to further the interest in the rapid and uniform implementation of ATV.

NAB further responds to a number of miscellaneous issues raised in other comments -- private land mobile radio service use of broadcast spectrum, protection of LPTV, protection of vacant reserved allotments, digital audio spectrum requirements, receiver susceptibility standards, and those issues regarding "open-architecture," multipoint, and common baseband and display standards.

NAB concludes that the industry-wide efforts to devise and implement an ATV broadcast service deserve both recognition and accommodation by the Commission -- recognition that these efforts are proceeding as rapidly and as thoroughly as possible, and accommodation of the time that these efforts will take by not rushing to judgement before a technical record is developed to support Commission action.

II. IT IS PREMATURE TO DECIDE ATV SPECTRUM REQUIREMENTS AND ALLOTMENT ISSUES AT THIS TIME.

The Further Inquiry expressed the view that the Commission:

intend[s] to conclude [its] technical analyses quickly, to develop a variety of channel assignment plans, and to present these plans for public comment as expeditiously as possible. At this juncture, [the Commission] see[s] little benefit in deferring spectrum decision until [it] reach[es] a decision on technical standards issues.³

ATV spectrum requirements and allotment issues will undoubtedly become two of the more important decisions that the Commission will make in this proceeding.

³Further Inquiry, *supra*, n.2 at para. 94.

However, the comments express the near unanimous view that haste in making these decisions disserves the public interest.⁴ NAB strongly agrees with the comments of the Corporation for Public Broadcasting/National Association of Public Television Stations ("CPB/NAPTS") at 34 where they state:

[P]remature decisions on the sufficiency of available spectrum or on allotments of that spectrum may result in long term spectrum costs far greater than those occurring during the short term pendency of these proceedings. The Commission should also avoid raising hypothetical controversies that may become moot in the course of choosing an ATV broadcast transmission standard, and thereby minimize potential litigation and hasten the transition to ATV in the United States.

NAB recognizes that there are spectrum opportunity costs in preserving or holding spectrum in reserve for potential ATV use, in the form of loss of use by other potential services. However, we believe that these costs will be short term since the real ATV spectrum requirements will be known within the next few years. Further, those costs pale in comparison to the long-term costs to the television broadcast service and to the public should the broadcast service not achieve parity in an ATV environment because of premature Commission action.⁵

III. THE ADOPTION OF A SINGLE, MANDATORY ATV TRANSMISSION STANDARD IS REQUIRED.

The comments express the widespread opinion that the public interest is best served by Commission adoption of a single, mandatory standard for terrestrial

⁴See, for example, the comments of: CBS, Inc. at 7-12 and 48; Capital Cities/ABC, Inc. at 2-5 and 7; NBC at 4 and 26; Group W at 5; Zenith at 28; Sony Corp. at 39-40, PBS/NAPTS at 5-10; MST at 2-8; CPB/NAPTS at 6 and 25-30; EIA ATV Committee at 2-4; Sarnoff at 6-8 and 15-16.

⁵The comments of Zenith at 28 state that "[ATV] spectrum needs will be directly driven by the technical transmission standards adopted." NAB agrees since spectrum requirements depend upon the ATV transmission system to be used. We suggest that, until the testing and evaluation of proponent ATV systems has been completed, and the results thoroughly analyzed, the Commission should withhold decisive action on ATV spectrum requirements and allocations issues.

broadcasting of ATV.⁶ NAB strongly urges the Commission to adopt this approach as "fundamental to the furthering of broadcasting as a mass-medium."⁷ The ultimate goal of industry-wide activities in testing and evaluating ATV systems is a final recommendation of an ATV technical standard for Commission adoption. Such a recommendation is not expected to occur until mid-1991.

IV. OTHER ISSUES

Some comments express viewpoints with which NAB takes issue, but are incidental, in our view, to the major considerations expressed above. These matters are discussed below.

A. Land Mobile Communications Council (LMCC)

The comments of LMCC suggest that the Commission should 1) require that ATV be provided only in the existing 6 MHz channel bandwidth with NTSC-compatibility, and 2) require that supplemental spectrum allocated for ATV should be allocated on a temporary but fixed (10 year) basis for non-ATV use by land mobile radio users.⁸ NAB responds below.

First, it has yet to be demonstrated whether or not a competitive picture quality can be provided by an ATV system that uses the existing channel width and still be compatible with existing NTSC receivers -- that must await the critical testing efforts now underway. The Commission's deferral of action in Gen. Docket

⁶See comments of: CBS, Inc. at 33-36; Capital Cities/ABC, Inc. at 6; NBC at 17; Media Access Project at 6; Group W at 2; North American Philips at 8 and 26-31; Zenith at 30-32; Sony Corp. at 17; PBS/NAPTS at 25; CPB/NAPTS at 37-41; EIA ATV Committee at 4 and 17; Sarnoff at 22; IEEE United States Activities Board at 4; and the Joint Comments of MST, NAB, INTV and seventy other broadcast organizations and companies at 13-16.

⁷See Comments of NAB at n. 35.

⁸See Comments of LMCC at 4-11.

No. 85-172, and the continued freeze of existing vacant television allotments correctly recognizes the possibility that additional spectrum may be required for ATV. Until that possibility is proved unnecessary, making such an arbitrary and unsupportable limitation on the method of broadcasting ATV, as LMCC would have the Commission do, is unjustified.

Second, the allotment, post allotment and transitional spectrum use issues are premature to decide at this time. Non-ATV transitional spectrum use should be approached cautiously, if at all.⁹ Requiring a 10-year transitional "allotment" of non-ATV supplemental spectrum to the private land mobile radio service at this time is completely unjustified and, in NAB's opinion, unrealistic and not to be taken seriously.

B. Digital Audio Spectrum Requirements

The comments of National Public Radio suggest that advanced (digital) radio technologies will require more spectrum and that the Commission should include consideration of new audio options in this "comprehensive review of spectrum usage."¹⁰ NAB believes that the Commission is hard pressed enough to consider the many broad and complex issues on how best to implement ATV for terrestrial broadcasting. The undocumented spectrum needs for advanced radio technologies are beyond the scope of this proceeding, and should therefore be considered, if at all, at a later stage in the Commission's deliberations.

C. Protection of LPTV

The comments of Channel America LPTV Holdings ("CALH") at 5 urge the Commission to require a total 6 MHz limitation on ATV systems such that low power television stations may continue to exist. It views ATV spectrum

⁹See Comments of PBS/NAPTS at 33, MST at 9, and NAB at 17-23.

¹⁰See Comments of National Public Radio at 5.

requirements in excess of the existing 6 MHz channel width as a potential threat to the continued viability of the LPTV service: as a service with secondary spectrum priority, affording full service television stations with additional spectrum for ATV broadcasting from the existing VHF and UHF television bands would deplete channels available for LPTV use.

As discussed supra, a 6 MHz limitation for proponent ATV systems would be premature. CALH is correct in its assessment, and subsequent concerns, that continued LPTV use of the broadcast spectrum is a secondary spectrum priority. While NAB realizes the potential adverse impact allotting further spectrum to full service television stations for ATV use would have on LPTV, we must insist that complete ATV implementation for full service television stations have priority over the needs of secondary LPTV stations.

Further, the spectrum availability studies by the Commission and the ATV Advisory Committee do not consider protecting secondary spectrum users from ATV implementation. These studies show that barely enough spectrum, if that, exists in allocated broadcast bands to support ATV broadcasting. Should the Commission now consider any form of LPTV "protection" from potential ATV allotments, this would severely undermine the ability to implement an ATV broadcasting service in a timely manner.

D. Protection of Vacant Reserved Allotments

The comments of PBS/NAPTS at 17, and CPB/NAPTS at 15, urge the Commission to consider vacant noncommercial reserved television allotments as "existing" stations in its ATV allotment studies -- both protecting them from interference and providing them with ATV augmentation spectrum.

The ATV allotment/spectrum availability studies so far conducted are in their relative infancy -- using many unproven assumptions about ATV

implementation. We will not know the full impact of PBS/NAPTS's or CPB/NAPTS's requests until further spectrum availability studies incorporate more "hard" information about ATV systems performance in an interference environment. However, protecting vacant reserved allotments definitely precludes allotting ATV channels on those frequencies. The Commission's freeze on all vacant television allotments, including vacant reserved allotments, is an appropriate measure to protect various options to implement ATV broadcasting until more facts are known. NAB urges the Commission to not "relax" this freeze nor to consider protecting vacant reserved allotments until such time as the record fully supports such action.¹¹

E. Receiver Susceptibility Standards

Many comments have questioned the viability of relaxing or ignoring the existing UHF "taboos" in determining ATV spectrum availability.¹² Clearly, this is a major consideration that must be approached cautiously. NAB has suggested in its previous comments in this proceeding that the Commission might well consider devoting a separate stage of this proceeding to the UHF "taboos" and the possibility of relaxing or eliminating them through the adoption of receiver susceptibility standards.¹³ We again urge the Commission to adopt this approach so that focused attention can be given these issues.

F. "Open Architecture" vs. Multiport Receivers

Many comments have addressed the issue of developing "open architecture" receivers, designed to accept multiple ATV systems, or of adopting "multiport"

¹¹See also Joint Comments at 10-12.

¹²See Comments of Zenith at 26-27 and Appendix C; Capital Cities/ABC, Inc. at 3-4 and Exhibit B; CBS at 20-22; NBC at 9-10; CPB/NAPTS at 16; and NAB at 6-8.

¹³See also Comments of NAB at 8.

interface standards with common baseband and display parameters.¹⁴ NAB opposes policies or regulations that encourage development of open architecture receivers for the reasons discussed in our comments at 14-16. This concept is simply an escape from the paramount critical need to adopt a single standard for terrestrial ATV broadcasting. NAB urges the Commission to accept the widespread opposition to OAR requirements presented in the comments of receiver manufacturers and broadcasters alike.

Regarding multiport receiver standards, NAB agrees with the comments of Zenith at 36, and the conclusions of the Further Inquiry at Para. 133, that "when [ATV] systems are defined the marketplace will provide interoperability and stimulate any necessary industry standards." This is the case with today's NTSC system. The marketplace has provided, de facto, interface devices among cable, satellite, and microwave delivery systems. NAB believes this to be a manufacturing issue, and not an issue of principal concern to the Commission. The overriding objective should be the adoption of a broadcast ATV standard. Interoperability among various media will be better addressed after that step is successfully completed.

¹⁴See comments of South Western Bell Telephone Company at 4-5, Bell Atlantic at 2, Bell South at 3-4, Pacific Bell at 5, Tele-Communications, Inc. Engineering Report at 15, Ameritech Operating Companies at 4, Fiber Optics Division of the Telecommunications Industry Association at 4, Group W at 4, North American Philips at 9 and 23-26, Zenith at 35-36, Capital Cities/ABC, Inc. at 6, CBS at 38, Sony Corp. at 26, NBC at 19, Time, Inc. at 4 and 11-13, EIA ATV Committee at 22-27, NCTA at 15.

VI. CONCLUSIONS

For the reasons expressed in these reply comments, NAB urges the Commission to not rush to premature decisions on ATV spectrum requirements or allotment issues until such action is supported by the results of the industry-wide testing efforts underway. We agree with widespread opinion of comments calling for Commission adoption of a single mandatory technical standard for ATV broadcasting, and urge the Commission to accept and act on that opinion.

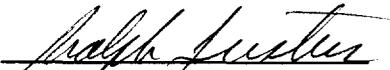
NAB suggests that the Commission recognize that efforts to devise and implement an ATV broadcast service are proceeding as rapidly and as thoroughly as possible but, by necessity, this process is expected to take at least two years, and probably more, to conclude. We therefore urge the Commission to accommodate this process by not taking precipitous actions, particularly on ATV spectrum requirements and allotment matters, until a supporting record exists.

Respectfully submitted,

NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street, N.W.
Washington, DC 20036
(202) 429-5346



Michael C. Rau
Vice President, Science & Technology



Ralph H. Justus
Director, Engineering, Regulatory and
International Affairs

Valerie Schulte
Of Counsel

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