ORIGINAL FILE
RECEIVED
JAN 19 1988
Federal Communications Commission
Office of the Secretary

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems and Their Impact on the Existing Television Broadcast Service	)	
	)	MM Docket No. 87-268
Review of Technical and Operational Requirements: Part 73-E, Television Broadcast Stations	)	RM-5811
	)	
Reevaluation of the UHF Television Channel and Distance Separation Requirements of Part 73 of the Commission's Rules	)	

REPLY COMMENTS OF TIME INCORPORATED

Brian Conboy
Vice President-Government Affairs
Time Incorporated
1050 Connecticut Avenue, N.W.
Suite 850
Washington, D.C. 20036-5334
(202) 861-4000

Dated: January 19, 1988

0+5

SUMMARY

The initial comments of parties in this proceeding demonstrate remarkable agreement in several areas:

1) with very few exceptions, parties did not urge Commission adoption of a single HDTV transmission standard for all media, broadcast and non-broadcast. This is consistent with Time Inc.'s position that each medium should be allowed to provide HDTV in a way that is optimal for that medium -- HDTV should not be artificially limited to that provided by the least capable distribution medium. The few parties that supported a single standard for all media offered little rationale beyond a transparent desire to insulate themselves from competition. Some parties urged the Commission to adopt a single standard for broadcast HDTV. Time Inc. would not oppose such a standard, assuming it met the requirements of low cost and high quality cable distribution without interference to other cable services;

2) the preferred enhanced NTSC system is one that can be transmitted within 6 MHz. The Commission should not take action that would prejudice the development of such a system;

3) an enhanced NTSC system must be compatible with existing NTSC receivers without modification; and

4) there is considerable research and development

necessary on HDTV -- the Commission should proceed cautiously and avoid making premature judgments.

Time Inc. supports these principles as well and urges the Commission to be guided by them as it makes the crucial decisions that will impact the introduction of this important new television technology for consumers.

TABLE OF CONTENTS

		Page
I.	Introduction	1
II.	The Commission Should Proceed Cautiously in Acting on HDTV Issues and Should Avoid Making Premature Judgments	3
III.	There Is General Agreement That the Preferred Enhanced NTSC System Is One That Can Be Transmitted Within 6 MHz	6
	A. The Commission Should Not Take Action That Would Prejudice Development of a 6 MHz Enhanced NTSC System	6
	B. Current Cable Television Systems Are Based on 6 MHz Channelization and Have Not Been Designed for Wider Signal Bandwiths	9
	C. The Court's Invalidation of the Must-Carry Rules Provides Another Reason for The Broadcast Industry to Attempt to Achieve Enhancements to NTSC Within 6 MHz	11
IV.	Consumer Benefits Will Be Maximized If Each Medium Is Allowed to Provide HDTV in the Most Efficient Manner For That Medium	12
V.	Enhanced NTSC Must Be Compatible with Existing NTSC Receivers Without Modification	24
VI.	Standardized Connectors Should Be Used to Attach Consumer Products to Receivers	26
VII.	Conclusion	27

ORIGINAL FILE
RECEIVED
JAN 19 1988
Federal Communications Commission
Office of the Secretary

Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of	)	
	)	
Advanced Television Systems and Their Impact on the Existing Television Broadcast Service	)	
	)	MM Docket No. 87-268
Review of Technical and Operational Requirements: Part 73-E, Television Broadcast Stations	)	RM-5811
	)	
Reevaluation of the UHF Television Channel and Distance Separation Requirements of Part 73 of the Commission's Rules	)	

REPLY COMMENTS OF TIME INCORPORATED

Time Incorporated ("Time Inc.") submits these reply comments to various positions filed in response to the Commission's Notice of Inquiry in the above-captioned proceeding, released August 20, 1987.

I. Introduction

Time Inc., through its affiliated companies, has taken an

active role in analyzing the technical, economic and consumer issues surrounding the development of high definition television ("HDTV"). Home Box Office, Inc. ("HBO"), a wholly-owned subsidiary of Time, Inc. and the premier satellite-delivered pay program service, and American Television and Communications Corporation ("ATC"), the nation's second-largest cable multiple system operator in which Time Inc. is the majority stockholder, are acknowledged leaders in HDTV.[1]

All parties acknowledged that HDTV will have a significant impact on television distribution and the American consumer. The television environment today consists of numerous alternative video distribution technologies -- broadcasting, cable television, satellites, MDS/MMDS, and through direct connection to receivers, VCRs and disc players. In making decisions on HDTV, the Commission must take into account the wide variety of ways in which consumers receive their television programming.

In its Comments, Time Inc. advanced four principal positions: (1) the marketplace, not the Commission, should be relied upon to establish any HDTV standard or standards; (2) each distribution medium should be permitted to use an HDTV standard that is optimal for that medium without artificial constraints imposed due to less capable modes of distribution; (3) the

[1] HBO President Joseph Collins and ATC Chairman and Chief Executive Officer Trygve Myhren are members of the FCC's Industry Advisory Committee on HDTV.

current NTSC standard should be enhanced, compatible with existing television receivers and cable retransmissions; and (4) any mandated broadcast standard for HDTV must permit low cost, high quality cable distribution without interference to other cable services. As demonstrated below, no party in this proceeding has effectively refuted the arguments supporting these positions.

The enormous benefit of HDTV to consumers, like the development of color TV, lies in its ability to make television a higher quality means for entertainment, news and information. Time Inc. is committed to bringing this next age of television to consumers and urges the Commission to create an environment which fosters the maximum potential development of HDTV.

II. The Commission Should Proceed Cautiously in Acting on HDTV Issues and Should Avoid Making Premature Judgments

Several parties make clear that precipitous Commission action in this proceeding would be detrimental to all involved in the television business -- manufacturers, cable operators, broadcasters, programmers and, particularly, viewers. The issues surrounding HDTV are complex. The Commission does not yet have the information it needs to make decisions, and will not have sufficient information until significant additional research and

development are undertaken. Representatives of virtually every segment of the television business have urged the Commission to proceed slowly and deliberately in this matter.

For example, the National Cable Television Association ("NCTA") stated that, "as the Commission has acknowledged,"[2] it is "difficult at this early stage"[3] of HDTV development to make definitive decisions. Rather, NCTA urged the Commission to "proceed cautiously."[4] The National Association of Broadcasters ("NAB") noted that the Commission's task will be "an arduous [and] extended" one.[5] And Zenith Electronics Corporation emphasized that, "The Commission should not be stampeded into adopting any particular timetable or self-imposed deadline. Patience, not urgency, should be the watchword."[6]

Parties stressed that the number and complexity of issues inherent in implementing HDTV make it mandatory that considerable analysis be undertaken before even tentative decisions are reached. The array of competing systems still under

---

[2] Comments of National Cable Television Association in MM Docket No. 87-268, at 6(Nov. 18, 1987). (All references to Comments are to those submitted Nov. 18, 1987, in MM Docket 87-268.)

[3] Id.

[4] Id. at 15.

[5] Comments of National Association of Broadcasters at 2.

[6] Comments of Zenith Electronics Corporation at 3.

development,[7] the question of whether the MUSE system can be adapted to broadcast or cable use,[8] the issue of additional spectrum for broadcasters to offer HDTV or another form of advanced television,[9] matters of compatibility[10] and receiver manufacturing questions[11] all counsel the Commission to take a cautious approach.

To deal with these multi-faceted and interrelated matters, the Commission must await the results of further research and development, such as that currently being undertaken by several companies, academic institutions and industry associations. The Advanced Television Systems Committee ("ATSC") urged the Commission to "await the availability of additional data which the ATSC is now working assiduously to develop"[12] before "decisions on certain issues raised in the Commission's inquiry" are made.[13] NCTA suggested that the Commission should "permit

---

[7] See, e.g., Comments of North American Phillips Corporation; Comments of David Sarnoff Research Center, Inc.; Comments of William F. Schreiber.

[8] See, e.g., Comments of Association of Maximum Service Telecasters at 34.

[9] See, e.g., id. at Appendix; Comments of Capital Cities/ABC, Inc. at 3-4.

[10] See, e.g., Comments of CBS Inc. at 41-47.

[11] See, e.g., Comments of GE Consumer Electronics Business at 6-9; Comments of Zenith Electronics Corporation at 4-6.

[12] Comments of Advanced Television Systems Committee at 2.

[13] Id. at 1.

the industry-wide technical committees ...and the technical and policy arms of particular industry organizations, to continue their study and assessment of ATV systems" as a means of gaining "input from all facets of the television industry" prior to taking action.[14] As Time Inc. stated, "Only research and development...unhampered by premature standard-setting" will bring the benefits of HDTV to American television viewers.[15]

It is incumbent upon the Commission to recognize that, while the awareness of HDTV's benefits to consumers may have dawned quickly on the United States television industry's consciousness, significant time is required before enough information will be available to allow considered decisionmaking. Hasty actions by the Commission are not in the public interest.

III. There Is General Agreement That the Preferred Enhanced NTSC System Is One That Can Be Transmitted Within 6 MHz

A. The Commission Should Not Take Action That Would Prejudice Development of a 6 MHz Enhanced NTSC System

In its Comments, Time Inc. supported broadcasters'

---

[14] Comments of NCTA at 11-12.

[15] Comments of Time Inc. at 40.

efforts to develop enhancements to NTSC.[16] Broadcast programming is an essential component of cable offerings, and an enhanced NTSC signal compatible with cable delivery will be of great benefit to broadcasters, cable operators and television viewers. This most likely will be achieved by developing an enhanced NTSC system within the current 6 MHz spectrum allocation plan.

Despite the Comments of some parties,[17] Time Inc. believes that a very acceptable enhanced NTSC system can be developed which can be transmitted in 6 MHz. Based on Time Inc.'s review of research and development programs underway both in the United States and internationally, there is a good reason to believe that significantly better quality images can be presented to consumers based on enhancements to the NTSC system which will be compatible with, and remain within the confines of, the current 6 MHz channel allocations.

Notable examples of this work, which have been described to the Commission in the Comments, include: 1) the ACTV system being proposed by David Sarnoff Research Center,[18] 2)

---

[16] Id. at 11-15.

[17] See, e.g., Comments of ATSC; Comments of Association of Independent Television Stations, Inc. at 4; Comments of Capital Cities/ABC, Inc. at 7; Comments of NAB at 12.

[18] See Comments of National Broadcasting Company, Inc. at 6-10; Comments of David Sarnoff Research Center, Inc.

Faroudja Laboratories' improved NTSC products,[19] 3) the Japanese Broadcast Technology Association's EDTV work[20] and 4) NHK's NTSC-MUSE-6 system.[21] In each of these cases, significant improvements to the current NTSC standard through the development of compatible signals are being promised.

Most consumers rarely view video programming which approaches current studio quality levels (the exception being the new Super VHS home systems). The enhanced NTSC systems being developed propose to deliver studio or higher quality images to the home viewer. In addition, Sarnoff/NBC proposes to increase the aspect ratio of its improved NTSC signal ("ACTV") to that which is normally associated with HDTV (5:3 or 16:9). Scientific-Atlanta argued in its filing that the most important improvement for viewers is the wider aspect ratio, followed by elimination of NTSC artifacts and increased horizontal resolution.[22]

Time Inc. encourages the Commission to carefully study these systems as part of their overall investigation into HDTV technology. As pointed out by the David Sarnoff Research

---

[19] See Comments of Faroudja Laboratories.

[20] See Comments of Broadcasting Technology Association, Japan.

[21] See Comments of NHK -- The Japan Broadcasting Corporation at 1.

[22] See Comments of Scientific-Atlanta at 2.

Center's filing, significant improvements can be made to the current television broadcasting system, and still leave open the option of a second, later round of improvements leading to a true HDTV level of performance when it is required by the marketplace.[23]

B. Current Cable Television Systems Are Based on 6 MHz Channelization and Have Not Been Designed for Wider Signal Bandwidths

The current configuration of cable systems means operators may face considerable technical difficulties in carrying signals greater than 6 MHz channels. Cable systems are designed to fully utilize as many 6 MHz channels as can be carried within the bandwidth limits of the system.[24] At present, many cable systems are in the process of upgrading or rebuilding older plants to increase channel capacity for existing NTSC-based programming services. The very reason that cable is expending significant capital to upgrade is that there are more programming services available, and sought by cable subscribers, than most systems have channel capacity to provide. Zenith is wrong in stating that there are "plenty of extra channels

[23] Comments of David Sarnoff Research Center, Inc. at 3, 4.

[24] For example, a 330 MHz system (carrying video in the 50-330 MHz range) carries up to 40 channels of programming.

available in a cable TV system, so that conservation of spectrum space is immaterial."[25] Even after upgrading and rebuilding, most cable systems still will not have sufficient spectrum for all their needs.

A careful balancing of signal levels is maintained throughout all portions of a cable television distribution system so as to preserve video quality when received by the consumer. Within a cable system, there may be a variety of signal distribution techniques, including AM and FM modulation techniques transmitted over coaxial cable, microwave and fiber media. In addition, it is necessary to combine local signals with satellite delivered programming. Many cable channels may be scrambled using a variety of baseband and radio frequency techniques. These and other system elements which have been developed over a number of years are focused on 6 MHz NTSC channelization standards. Additionally, specialized techniques such as HRC (harmonically related carriers) channel plans have been developed to further improve system performance.

The compatibility with existing cable systems of new television standards which require signal formats of greater than 6 MHz, or which significantly change the energy distribution within 6 MHz, is unknown. Mixtures of new and existing formats may produce as yet unknown interactions which may degrade both

---

[25] Comments of Zenith Electronics Corporation at 2.

the new and existing signals. Channelization plans which have evolved in technical sophistication over the past 20 years may not be able to accommodate new technical requirements without significant and costly redesign of existing systems.

Time Inc. strongly urges that the Commission carefully consider the unique characteristics of cable television systems. Consumers will be best served by the adoption of systems which are practical for use within existing cable environments.

C. The Court's Invalidation of the Must-Carry Rules Provides Another Reason for The Broadcast Industry to Attempt to Achieve Enhancements to NTSC Within 6 MHz

The D.C. Circuit has, for a second time, struck down the Commission's must-carry rules.[26] The court held that, "although the FCC has eliminated the more extreme demands of its initial set of regulations,...we invalidate as incompatible with the first amendment this latest incarnation of the FCC's must-carry rules."[27] Under these circumstances, it is highly unlikely that the court would uphold a requirement to carry signals of greater than 6 MHz as part of any new rules the Commission might

---

[26] Century Communications Corporation v. FCC, No. 86-1683, slip op. (D.C. Cir. Dec. 11, 1987).

[27] Id. at 4.

adopt.

The absence of must-carry rules, the near certainty that cable will not be mandated to carry signals of more than 6 MHz and the undoubted existence of the technical concerns discussed above are compelling incentives for broadcasters and cable operators to cooperate to achieve enhanced NTSC within 6 MHz. As Time Inc. stated in its Comments, it "will continue to work with television broadcasters to achieve this result."[28]

IV. Consumer Benefits Will be Maximized If Each Medium Is Allowed to Provide HDTV in the Most Efficient Manner For That Medium

As noted, Time Inc. supports the efforts of the broadcast industry to improve the current NTSC signal and to ultimately offer consumers the highest quality broadcast signal achievable. We believe each medium should be permitted, in fact encouraged, to reach its maximum technical quality. Regulations that prevent a medium from delivering the best quality picture to consumers by definition deny public benefits.

This principle applies with force to HDTV. Each medium

[28] Comments of Time Inc. at 15.

should be allowed to provide HDTV in a way that is optimal for that medium -- HDTV quality should not be artificially limited to that provided by the least capable distribution medium. Consumer benefits will be maximized by the development of a "family" of HDTV transmission standards with television sets capable of displaying those multiple standards. Under this scenario, consumers will have access to the highest quality HDTV standards achievable. Commission adoption of a single, lowest common denominator standard will harm the public interest by condemning American consumers to an inferior quality television picture.

Notwithstanding the logic and obvious consumer benefits of this approach, a very few parties advocated a single HDTV transmission standard for all media, broadcast and non-broadcast.[29] Cox Enterprises, Inc. ("Cox"), for example, urges the Commission to adopt "a single national HDTV standard for use by all domestic delivery media."[30] Similarly, the Tribune

---

[29] Some parties urge the Commission to adopt a single, mandated transmission standard for broadcast HDTV. Time Inc. does not oppose a mandated standard for broadcast HDTV, so long as that standard permits low cost and high quality cable distribution without interference to other services. However, such a standard should not be imposed on other media. The National Telecommunication and Information Administration, for example, supports a mandated broadcast HDTV standard, but has made clear its view that such an approach does "not mean that the FCC should establish an HDTV transmission standard for any other video distribution systems." Letter from Alfred C. Sikes, Assistant Secretary for Communications and Information, U.S. Department of Commerce, to Joseph Collins, President, Home Box Office, Inc. (December 24, 1987).

[30] Comments of Cox Enterprises, Inc. at 4.

Broadcasting Company states its belief that "whatever ATV system finally is implemented in the United States, it should be a single system, adopted by the Commission, for use both by broadcast and nonbroadcast media."[31] The David Sarnoff Research Center, Inc., which is developing an extended definition television system for NBC, likewise proposes a "uniform standard for broadcast and non-broadcast ATV."[32]

However, the analytical framework to support this position is virtually nonexistent. Instead, the parties rely on their conclusory and self-serving judgment that the lack of a single, Commission-mandated standard will cause them a competitive disadvantage.

Before addressing what little rationale these parties offer to support their position, it is interesting to note that none of them even raise the impact a single, lowest common denominator standard would have on consumers. The Commission has over the years encouraged development of several video delivery alternatives and, in fact, there are now a variety of media competing to bring video programming to consumers. Having nurtured these competing media, if the Commission is to mandate a single HDTV standard, it will have to select a standard that can be delivered by all of these media. However, all of these media

---

[31] Comments of Tribune Broadcasting Company at 6.

[32] Comments of David Sarnoff Research Center, Inc. at 26.

do not have the same technical characteristics or capabilities. Some media are capable of delivering a higher quality HDTV picture than others. A mandated single standard ignores this reality. By necessity, a single standard will encompass a picture quality only as high as the least capable medium.

The consequence of such an approach for consumers is obvious. All American television viewers would be forced to accept an inferior quality picture. They would, in effect, become second class citizens with substandard television service, as the Europeans and Japanese implement a higher quality HDTV that would easily exceed anything we could achieve under the yoke of a single, lowest common denominator standard.

Such a situation is unacceptable and inexcusable for American consumers. It is also unnecessary. If the Commission permits the development of multiple transmission standards and encourages the manufacture of television sets that can display multiple signals, as outlined in Time Inc.'s initial Comments, consumers will have access to very high quality HDTV signals.

The primary argument that single standard proponents offer appears to be that a multiple standard approach will cause them competitive harm. Certainly, regulation should not restrict technological development in a way that prohibits a medium from competing with other media. It is a very different concept,

however, to argue that the Commission should use regulation to hold all competitive media to the technical quality achievable by the least capable medium. That is the antithesis of competition. It is this latter approach that the single standard proponents urge. They do not seek to be free of regulation so that they may be able to compete to the best of their ability. They seek a Commission regulation that would prohibit competitors from reaching their maximum technical capabilities. Consumers are the obvious losers under such an approach.

Cox argues that technical quality is not an element on which alternative media compete. It apparently believes that the Commission should force all media to the same technical capability in order to focus the competition: "With a single HDTV standard, competition can focus on diversity in program services rather than on technical issues."[33] This misses the essential point that technical quality is an important aspect of competition. The initial reason for cable television was its technological ability to bring better picture quality to geographic areas where broadcast reception was poor.[34] In fact, the whole HDTV debate is about technical quality, not "diversity in program services." Cox acknowledges that technical quality is a factor to which consumers attach great weight. "Experience

---

[33] Comments of Cox Enterprises, Inc. at 7.

[34] See CATV and TV Repeater Services, 26 FCC 403, 408-409 (1959).

demonstrates," Cox admits, "that consumers will demand better quality program service as it becomes available."[35] Clearly, technical quality is an important competitive factor and the Commission should reject any contrary contention.

Moreover, single standard proponents make much of their own competitive concerns, but ignore the concerns of other media. The cable industry competes vigorously with video cassettes. That competition is particularly acute for pay services such as HBO which offer a heavy volume of movies. The consumer's comparison between video cassettes and pay service is therefore very direct. Video stores soon will provide consumers with enhanced, "super VHS" cassettes. HDTV VCRs will be available by 1990. The video cassette industry is not regulated and therefore can offer the highest picture quality the medium can achieve. The cable industry must be able to respond to that competition. It can only do so if the Commission resists adoption of a single, lowest common denominator standard that would force cable to operate below its technical capability.

Single standard proponents also attempt to support their position by asserting that failure to adopt a single standard will lead to the ruination of local programming.[36] This is

---

[35] Comments of Cox Enterprises, Inc. at 4.

[36] Comments of NAB at 4, 7, 8; Comments of Association of Independent Television Stations at 3; Comments of the National Telecommunications and Information Administration at 2-4.

essentially an offshoot of their argument that a single standard is necessary to protect them from competition. Multiple HDTV standards, they argue, will cause them to suffer competitively and that will reduce revenues. The reduction in revenues will reduce the amount of money available to spend on producing local programming.

Broadcasters have been responding to competition with this argument about localism virtually since their first competitor arrived on the scene.[37] The thinly veiled attempt to prohibit competition in the name of localism has been derided by the courts. In Quincy Cable T.V., Inc. v. FCC, the court characterized it as "the broadcast industry's inevitable refrain that regulation is essential to protect it from the deleterious effects of new video technologies."[38]

The Commission also has increasingly rejected arguments that competition should be prevented or hindered in order to protect broadcasters and therefore local programming.[39] This is

---

[37] See, e.g., Frontier Broadcasting Co. v. Collier, 24 FCC 251 (1958); Rules re Microwave-Served CATV, 38 FCC 683, 685-99, recon. in part on other grounds, 1 FCC 2d 524 (1965), aff'd sub nom., Black Hills Video Corp. v. FCC, 399 F. 2d 65 (8th Cir. 1968).

[38] Quincy Cable T.V., Inc. v. FCC, 768 F. 2d 1434, 1458 (D.C. Cir. 1985), cert. denied, 106 S. Ct. 2889 (1986).

[39] See, CATV Syndicated Program Exclusivity Rules, 79 FCC 2d 663 (1980), aff'd sub nom., Malrite TV of New York v. FCC, 652 F. 2d 1140 (2d Cir. 1981), cert. denied, 454 U.S. 1143 (1982); Direct Broadcast Satellites, 90 FCC 2d 676 (1982), recon. denied, 94 FCC 2d 741 (1983), aff'd sub nom., National Association of

particularly true where there is no evidence or inconclusive evidence that competition will harm local programming. In Direct Broadcast Satellites, for example, the Commission refused to simply accept the localism argument in the absence of "hard evidence" that DBS "will have a critically adverse effect on existing broadcast service."[40] The Commission made clear its view that "speculative allegations concerning possible reductions in service from other sources," will not support an argument to prohibit or hinder competition.[41]

The courts have steadfastly supported the view that an unproven fear of competition does not justify protecting entrenched media. In Quincy Cable T.V., Inc. v. FCC, the court rejected the must carry rules in large part because "the Commission has failed adequately to demonstrate that an unregulated cable industry poses a serious threat to local broadcasting."[42]

Even if it could be proven that multiple HDTV standards would create a competitive challenge for broadcasters, that alone would not be enough to justify limiting that competition by

---

Broadcasters v. FCC, 740 F. 2d 1190 (D.C. Cir. 1984); Subscription TV Service, 90 FCC 2d 341 (1982).

[40] Direct Broadcast Satellites, 90 FCC 2d 676, 689.

[41] Id. at 691.

[42] Quincy Cable T.V., Inc. v. FCC, supra at 1459.

mandating a single standard. In the Direct Broadcast Satellites, the Commission found that "even if DBS systems were likely to affect the availability of programming from other [broadcast] sources...their potential benefits are sufficiently great to outweigh some loss of other programming."[43] That principle would apply here as well. The record in this proceeding is replete with evidence that the benefits of HDTV are "sufficiently great" to outweigh any competitive impact on local broadcasters.

Proponents of a single HDTV standard are once again trying to use threats to local programming as an excuse to insulate themselves from competition. They fail to recognize, however, that the Commission and the courts have rejected this argument, particularly when it is supported by no more than bald assertions of harm without any convincing evidence that such harm will actually result. The Commission again should reject this argument. The record is conspicuously devoid of even any serious attempt to demonstrate that multiple HDTV standards would result in harm to local programming.

Some parties make a related argument that AM radio is experiencing a "rapid decline" as a result of technical inferiority to FM radio.[44] These parties point to the lack of a

---

[43] Direct Broadcast Satellites, supra at 692.

[44] Comments of The Association of Independent Television Stations, at 3; Comments of NAB at 4; Comments of The National Telecommunications and Information Administration at 4-5;

Commission mandated AM stereo standard as a further roadblock to the ability of AM radio to respond to the FM challenge. However, reliance on the AM stereo example to support a single HDTV standard is misplaced for several reasons.

Most importantly, in the AM stereo situation, proponents of a single stereo standard were attempting to facilitate technical improvement of AM to allow it to compete more effectively with FM. Proponents of a single HDTV standard, however, have a very different goal. They seek a single standard not to allow competitors to reach maximum technical efficiency, but to hold competitors down to the lowest technical quality that can be achieved by any particular competitor. The Commission should reject this approach because, unlike the AM stereo example, the result and indeed the purpose of a single HDTV standard would be to limit the quality of television signals for American consumers.

Also, if AM radio is facing a decline, it is clearly a function of many factors. It ignores the complexities of the marketplace to place the blame solely on the lack of a stereo standard. The National Telecommunications and Information Administration recognized this in its 1987 report "AM Stereo and the Future of AM Radio." In that report, NTIA pointed out a number of reasons why AM radio stations declined to purchase

---

Comments of Cox Enterprises at 6.