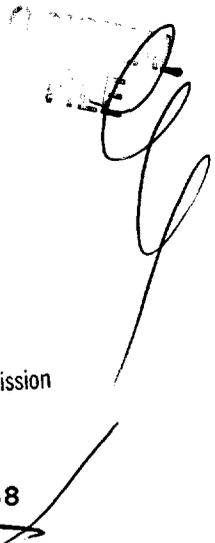


Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554



In the Matter of)
)
Advanced Television Systems)
and Their Impact on the)
Existing Television Broadcast)
Service)
)
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
Office of the Secretary

MM Docket No. 87-268

COMMENTS OF THE AMERITECH OPERATING COMPANIES

The Ameritech Operating Companies^{1/}, as suppliers of television distribution facilities, submit these comments on the Commission's tentative decision and further notice of inquiry in this docket.^{2/} The Ameritech Operating Companies do not have any

1/ The Ameritech Operating Companies are: Illinois Bell Telephone Company, Indiana Bell Telephone Company, Incorporated, Michigan Bell Telephone Company, The Ohio Bell Telephone Company, and Wisconsin Bell, Inc.

2/ In the Matter of Advanced Television Systems and Their Impact on the Existing Television Broadcast Service; Review of Technical and Operation 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, MM Docket No. 87-268, Tentative Decision and Further Notice of Inquiry, FCC 88-288 (released September 1, 1988) ("FNOI").

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comments on the issues raised in the FNOI in so far as they relate solely to terrestrial broadcast matters. However, the Ameritech Operating Companies are deeply concerned that no action taken by the Commission reduce the benefits of high definition television ("HDTV") technology that would otherwise be available to consumers from non-broadcast media.

As the Commission noted in the FNOI, significant issues are involved in determining the manner in which any form of advanced television ("ATV") signal is terrestrially broadcast, given existing spectrum utilization patterns and the desirability of backward compatibility with NTSC receivers.^{3/} These issues, however, should not cause the Commission to attempt to define a video display standard that is constrained by the limitations of the broadcast medium. As the Commission's Advisory Committee on Advanced Television Service noted in its interim report:

Each of these [distribution] technologies should deliver to the customer the highest quality signal based on optimizing both prudent business and technical factors. Thus, proponents of each technology should be free to determine what is the best transmission format for its customer base.^{4/}

Indeed, it is questionable whether the Commission has authority to limit the display characteristics of a viewing monitor that is used to view material supplied by media other than

^{3/} NTSC stands for the National Television System Committee which established technical standards for broadcast television that are utilized in the United States today.

^{4/} Interim Report of the FCC Advisory Committee on Advanced Television Service, June 16, 1988, at p. 20.

telecommunications -- such as video tape or disc players. Moreover, there is no need to limit that standard to the extent that the display information can be supplied by satellite, cable or other telecommunications methods with sufficient bandwidth to transmit signals compatible with HDTV formats currently considered by the industry.

The Commission may determine that the dictation of a display standard is appropriate to provide common industry direction and ultimately national marketplace stability. This would facilitate the quicker introduction of HDTV technology into this country as well as increasing the likelihood that the United States' standard would be taken into consideration by the worldwide industry. The Commission, however, should be mindful that whatever standard is adopted is likely to be operational well into the next century, just as current TV technology including cable television, VCRs, and home video cameras are tied to the less than adequate NTSC standard developed in the 1940s.

The current variety of sources of video "information" as well as the wide array of configurations that those sources might take in the future argue against the creation of a single standard that confines display characteristics to the limitations of a particular information source or transmission medium. Rather, a set of standards would be appropriate. The lead standard of the set would be the display standard. Here the Commission could adopt two standards, NTSC and an HDTV standard that would allow the consuming public to receive the highest quality video signal regardless of the limitations of any

particular transmission medium. Similarly, interface standards could then be adopted consistent with the display standard and the characteristics of individual transmission media. These interfaces could be based on the existing red -- blue -- green signal components or other appropriate signals. Finally, a terrestrial broadcast standard could be established consistent with both the display and interface standards.

Except to the extent that the Commission may determine otherwise in the case of terrestrial broadcasting as a "free" source of video programming, the issue of compatibility of existing NTSC receivers with the next generation television technology should not be a major problem. As long as there is a substantial embedded base of NTSC receivers, marketplace factors will result in a continued supply of video programming in the NTSC format from cable television companies and other sources such as video tape/VCRs. With 140-160 million NTSC TV sets in place, it is abundantly clear that there will be business opportunities in supplying programming output compatible with NTSC receivers for a substantial period of time into the future. Certainly, cable TV operators, if they wish to maintain their revenue streams, will not require their subscribers to immediately purchase new HDTV monitors. Rather, it is likely that cable operators will supply two signals to their customers, one NTSC and one HDTV. Similarly, there will be a lingering market for VCRs and video tapes compatible with NTSC display. The phase-in to HDTV by the consuming public will be gradual, thus assuring a supply of programming in the "old" format.

On the other side, market forces will probably render it wise to include NTSC conversion capability in HDTV display sets. Manufacturers will want to encourage the public to buy HDTV sets before HDTV programming has completely arrived. In the start-up phase, customers will be more likely to purchase HDTV sets if they can be used with existing NTSC program sources such as cable systems that have not yet converted to HDTV, "old" VCRs and home video cameras, and the NTSC broadcasts of stations that have not converted to HDTV.

In the past, some have argued that a set of standards, rather than a single standard that ties display to the transmission media, is not desirable because it will increase the cost of manufacturing. However, that argument ignores the current state of electronics technology. Complexity is not an issue. Once the standards are set, with today's "chip" technology, volume will reduce manufacturing costs to a minimum, just as it did for digital watches and pocket calculators.

In establishing an HDTV set of standards, the Commission should discount the arguments of those who would have the Commission set a unique standard for the United States solely to offer U.S. industry an opportunity to achieve a competitive position. That view is short sighted. It ignores the fact that foreign manufacturers currently supply the bulk of our country's NTSC viewing hardware. In fact, there is no reason to believe that foreign manufacturers will adapt any less quickly than domestic manufacturers to the new technology. Rather, the Commission should articulate a set of standards based on quality

-- one that will bring the greatest benefit to the consuming public from the widest variety of transmission media and program sources.

In summary, in dealing with issues surrounding the terrestrial broadcast of ATV signals, the Commission should refrain from any action that would constrain HDTV display standards because of limitations of the broadcast medium. If the Commission determines that setting standards other than terrestrial broadcast standards is appropriate to encourage the development and availability of HDTV in this country, the Ameritech Operating Companies encourage the Commission not to adopt a single standard that ties the display to the transmission medium. Rather, it should adopt a set of standards that includes an HDTV display standard that offers the public the highest quality that technology can deliver regardless of the transmission medium or program source. The Commission can then define interface standards consistent with the display standard and various transmission media.

Respectfully submitted,

By Michael S. Pabian
Floyd S. Keene
Michael S. Pabian
Attorneys for the Ameritech
Operating Companies
30 South Wacker Drive, Floor 38
Chicago, Illinois 60606

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