

**Thomson Consumer Electronics, Inc.**

600 North Sherman Drive  
Post Office Box 1976  
Indianapolis, Indiana 46206

ORIGINAL  
FILE

CK

RECEIVED BY

JAN 20 1988

MAIL BRANCH

Mr. H. Walker Feaster  
Acting Secretary  
Federal Communications Commission  
1919 M. Street, NW  
Washington, D.C. 20554

Dear Mr. Feaster:

January 19, 1988

The Commission is respectfully requested to accept for late filing the attached Reply Comments of Thomson Consumer Electronics, Inc. relating to the Notice of Inquiry In the Matter of Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, MM Docket 87-268, RM-5811. The late filing occurred due to unavoidable circumstances. These comments are being deposited January 19, 1988 with the U.S. Postal Service as Express Mail, Post Office to Addressee, addressed to H. Walker Feaster, Acting Secretary, Federal Communications Commission, 1919 M Street, NW, Washington, D.C. 20554.

Yours truly,



Scott J. Stevens  
Attorney for  
Thomson Consumer Electronics, Inc.

0711

**Thomson Consumer Electronics, Inc.**

600 North Sherman Drive  
Post Office Box 1976  
Indianapolis, Indiana 46206

ORIGINAL

RECEIVED BY

JAN 20 1988

MAIL BRANCH

Mr. H. Walker Feaster  
Acting Secretary  
Federal Communications Commission  
1919 M. Street, NW  
Washington, D.C. 20554

Dear Mr. Feaster:

January 19, 1988

Enclosed please find the original and 11 copies of the Reply  
Comments of Thomson Consumer Electronics, Inc. relating to the  
Notice of Inquiry for MM Docket 87-268, RM-5811.

Yours truly,



Scott J. Stevens  
Attorney for  
Thomson Consumer Electronics, Inc.

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



RECEIVED BY

JAN 20 1988

MAIL BRANCH

In the Matter Of

Advanced Television Systems )  
and Their Impact on the ) MM Docket No. 87-268 ✓  
Existing Television Broadcast ) RM-5811  
Service )

87-268

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 )

Reply Comments  
Of  
THOMSON CONSUMER ELECTRONICS, INC.

## INTRODUCTION

Thomson Consumer Electronics, Inc. (TCE), successor company to the GE Consumer Electronics Business, hereby submits Reply Comments in the above-captioned proceeding. TCE is the current manufacturer and marketer of RCA and GE brand consumer electronics products. This proceeding seeks input on 1) advanced television systems and their impact on the existing broadcast service, 2) a review of technical and operational requirements; Part 73-E, television broadcast stations, and 3) a reevaluation of the UHF television channel and distance separation requirements of Part 73 of the Commission's Rules. Comments were filed by the GE Consumer Electronics Business, now TCE, on November 18, 1987 addressing these matters in great detail. In particular, TCE called for Commission leadership in establishing a single advanced television (ATV) system standard as a means for achieving acceptance of ATV.

## SPECIFIC COMMENTS

The comments submitted in response to the Notice of Inquiry included support for a variety of ATV systems. Several of the respondents proposed open architecture television receivers that would be capable of receiving signals encoded in accordance with a number of different ATV standards.

The TCE reply comments which follow address one crucial aspect discussed in the comments submitted in response to the Notice of Inquiry, namely, the need for an ATV standard compatible with existing terrestrial broadcast. Other aspects of the comments, including the advantages of and support for the ACTV (Advanced Compatible Television) System, are addressed in reply comments submitted by the David Sarnoff Research Center, Inc. and the National Broadcasting Company, in which TCE concurs.

TCE strongly supports the adoption of an ATV standard that is compatible with the existing NTSC broadcasting system in the United States. TCE is opposed to any action of the Commission that would allow or approve the coexistence of multiple noncompatible ATV standards. TCE feels that an environment inviting multiple ATV standards would be a disservice both to the public and to the broadcast and consumer electronics industries in the United States.

From the perspective of the public, a situation in which a number of different ATV standards are prevalent would result in increased cost of ATV receivers and confusion in the marketplace. The value presented to the consumer in consumer electronics products is historically well documented. High volumes of manufacture and sales have allowed economies of scale to work on the

public's behalf, both in terms of keeping cost of manufacture low and in rapidly advancing the learning curve of the design and manufacturing expertise of the industry. Multiple standard or open architecture television receivers would destroy those economies of scale, forcing higher costs and prices. That this will occur can easily be seen from a comparison of prices for single and multiple standard (NTSC, PAL, SECAM) receivers that are currently available.

The proposals that support multiple standards also fail to address the issue concerning accompanying equipment. The presence of multiple noncompatible ATV standards will also complicate the design and increase the cost of electronic components that interact with the television receiver, such as video cassette recorders, video disc players and any other home video equipment that will be developed in the future. Multiple coexistent standards for ATV would totally confuse and frustrate the marketplace.

It has also been shown historically that multiple noncompatible standard technologies are not accepted by the industry or in the marketplace on a permanent basis. There are many examples to support this position, for example, AM stereo broadcasting, VCR format, video disc format, and teletext broadcasting. In some instances, such as

VCR format, two standards, Beta and VHS, achieved general acceptance for several years. Over time, however, the normal pattern of acceptance resulted in a clear preference for one standard, in this case, VHS. In other circumstances, for example, AM stereo or teletext broadcasting, public confusion resulting in indecision and reluctance to purchase has caused an entire industry to suffer or fail. Even envisioning a situation in which one ATV standard eventually gained widespread acceptance over others, the investment costs to the industry and the public related to the obsoleted system or systems would be extremely high. The inefficient allocation of spectrum and the wasted resources would serve no useful purpose.

It is clear that when government and industry have selected or supported a single compatible standard, the associated technology and businesses have benefited greatly. Examples include the FM stereo system and the MTS broadcast system for stereo TV. It is also clear, as a further example, that broadcasters, cable TV companies, DBS system providers, consumer electronics manufacturers and the public have benefited from the uniform adoption of the NTSC television standard. Conversely, multiple noncompatible ATV standards would confuse and complicate the manner in which programming is transferred from one delivery medium to another.

A number of respondents cited the MUSE system as a possible ATV standard in their comments. Although MUSE is a significant technical accomplishment, it has severe limitations that recommend against its adoption as a standard for terrestrial broadcast ATV.

One major limitation of MUSE is its incompatibility with the existing NTSC terrestrial broadcast standard. Adoption of MUSE as an ATV standard would require a large amount of spectrum allocation. The spectrum required to accommodate both MUSE and existing NTSC would amount to 2 1/2 times the current NTSC channel bandwidth. The currently espoused ACTV (Advanced Compatible Television) system or ACTV I, on the other hand, is fully compatible with the NTSC system and would require no additional spectrum allocation. A compatible high definition ACTV system, or ACTV II, would in turn require correspondingly less additional spectrum allocation than a noncompatible ATV system, such as MUSE, when such additional spectrum becomes available.

#### CONCLUSION

Thomson Consumer Electronics, Inc. believes that multiple noncompatible ATV standards would confuse the public, greatly delay the acceptance of ATV and result in higher costs for all concerned.

Such a situation would result in low support of ATV by broadcasters and the consumer electronics industry, further exacerbating the problem of high costs due to low volume of manufacture and sale of ATV receivers and equipment. Uniform industry standards have been shown to be the basis for cost effectiveness, public understanding and ultimately public acceptance of a product, particularly in the consumer electronics industry. The success of ATV therefore requires a uniform compatible standard. To this end, TCE supports the adoption of the 6 MHz NTSC-compatible ACTV system as a single standard, as it represents the most efficient and cost effective means to achieve wide public and industry acceptance of ATV.

Respectfully submitted,  
Thomson Consumer Electronics, Inc.



By: /s/ D. Joseph Donahue  
Dr. D. Joseph Donahue,  
Vice President, Senior Scientist  
600 N. Sherman Drive  
Indianapolis, Indiana 46201

January 19, 1988