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

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of )  
)  
Advanced Television Systems )  
and Their Impact Upon the )  
Existing Television Broadcast )  
Service )

MM Docket No. 87-268

Sixth Further Notice of )  
Proposed Rule Making )

REPLY COMMENTS OF THE  
ADVANCED TELEVISION SYSTEMS COMMITTEE

The Advanced Television Systems Committee ("ATSC") hereby replies to the comments filed on November 22, 1996 in response to the Commission's Sixth Further Notice of Proposed Rule Making ("NPRM") in its Advanced Television ("ATV") proceeding. The ATSC urges the Commission to complete the channel allotment and assignment process as expeditiously as possible so that implementation of a terrestrial digital television broadcasting system can proceed in earnest.

Composed of more than sixty corporations, associations, and educational institutions, including terrestrial and cable broadcasters, broadcast and consumer equipment

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manufacturers, and members from the motion picture, computer and telecommunications industries, the ATSC is engaged in developing and coordinating voluntary industry standards for Advanced Television Systems.<sup>1</sup> On December 24, 1996 in the Fourth Report and Order in this proceeding, the Commission adopted most elements of the ATSC Digital Television Standard as its standard for terrestrial digital television broadcasting.

The ATSC believes that with the extensive laboratory and field testing of the Grand Alliance HDTV system performed by the Commission's Advisory Committee on Advanced Television Service ("Advisory Committee"), and with the voluminous comments the Commission has received from broadcasters and others on its proposed channel allotment and assignment plan, the Commission has a fully adequate basis upon which to issue a table of DTV allotments and make DTV channel assignments to broadcasters. We urge the Commission to adopt an allotment and assignment plan as expeditiously as possible based on the record it has compiled, and to the extent necessary, to make modifications on a case-by-case basis according to the specific engineering issues in a particular market.

The Association of Federal Communications Consulting Engineers ("AFCCE") (at 13) recommends the reestablishment of the Television Allocations Study Organization, originally established by the FCC in 1956, to deal with technical issues on an ongoing basis, listing several possible "panels" to administer these activities. AFCCE (at 18) further recommends a two-month extension to the due date for reply comments in order to deal with these issues. Gateway Communications (at 2) urges adoption of a table of DTV allotments, but also asks the Commission to initiate a separate further rule making proceeding pertaining to technical issues such as planning factors, channel and station parameters.

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<sup>1</sup> The current members of ATSC are listed in Appendix A.

We agree with AFCCE that work needs to continue in several areas, but we believe that existing industry groups, including the ATSC, are fully able to address these issues and to develop required solutions. In particular, we see no need for the Commission to reestablish the Television Allocations Study Organization, since it appears that the functions contemplated for it by AFCCE have either already been fulfilled by the Advisory Committee, or are now being addressed by the ATSC Implementation Committee, the ATSC Broadcasters Caucus, or other industry groups. To the extent that additional standards become necessary, they can be developed by the ATSC itself or assigned by the ATSC to one of its member standards organizations, e.g., the Institute of Electrical and Electronics Engineers, the Electronic Industries Association/Consumer Electronics Manufacturers Association, or the Society of Motion Picture and Television Engineers.

Similarly, we respectfully disagree with AFCCE and Gateway Communications that the process should be delayed further, and we see no need for a new rule making proceeding on planning factors and other technical issues. These matters have been studied for years by the industry including the Advisory Committee. Further delay will serve neither the industry nor the public.

The AFCCE correctly points out the benefits of using approaches such as “smart” antennas and “intelligent” low-noise amplifiers to improve the ability of consumers in fringe areas to receive DTV signals. We believe that innovative approaches such as these will facilitate the transition to DTV, but we do not believe that the FCC should base its planning factors on the assumption that such devices will be used.

One area where additional necessary work is under way is the development of a transmission emission mask standard.<sup>2</sup> This work is being conducted within the ATSC Technology Group on Distribution, and is expected to be completed within the next three months. We believe the Commission should monitor this industry effort and upon its completion consider adoption of the ATSC Emission Mask Standard into its rules.

Responding to the Commission's inquiry regarding a scheme for labeling DTV channels, the Broadcasters (at 5, 66) do not comment on specific suggestions, but recommend the creation as soon as possible of an inter-industry committee, including representatives of the broadcasting, equipment manufacturing, and cable industries, to explore this very important issue. They note that the ATSC has recognized this need and may undertake the work. Public Television (at 42) concurs with the Broadcasters' recommendation to organize such a committee to recommend a frequency labeling scheme to the Commission.

The ATSC agrees that an inter-industry committee ought to develop a DTV channel labeling scheme, and because the ATSC includes representatives of the broadcasting, equipment manufacturing, and cable industries, as well as other industries that may well have an interest, we believe that the ATSC is ideally suited to undertake this effort. Indeed, on January 14, 1997 the ATSC initiated such a project which we intend to complete within the next few months. The project will be conducted within the Transport Specialist Group of the Technology Group on Distribution, the ATSC working party intimately familiar with the options for carriage of this type of data in the bit stream of the ATSC DTV Standard. Elements of this effort are likely to include: 1) a determination of the appropriate location in

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<sup>2</sup> The Broadcasters (at 22, 64) conclude that the transmission emission mask proposed in the Fifth NPRM will not be stringent enough to protect adjacent NTSC channels adequately, and state that they will propose a

the ATSC bit stream for carriage of this channel labeling information; 2) technical requirements for this data; and 3) representation of the channel label data to the consumer.

The ATSC will work to ensure that the channel labeling standard allows broadcasters to change assigned transmission channel in a way that is transparent to viewers, in order to facilitate channel reassignments that the Commission may require at the end of the transition to digital television. This committee will also evaluate and recommend to the Commission the extent to which the DTV channel labeling scheme can be developed and implemented as a voluntary industry standard as opposed to being embodied in the Commission's rules. We urge the Commission to monitor the work of this committee and to evaluate whether its recommendation fully meets the public's needs.

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tighter emission mask after the ATSC completes its work in this area.

Accordingly, the Commission should complete the channel allotment and assignment process as expeditiously as possible so that implementation of a terrestrial digital television broadcasting system can proceed in earnest, and the American public can begin to reap the benefits of this fertile new technology.

Respectfully submitted,



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Robert K. Graves  
Chairman



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Mark S. Richer  
Executive Director

Advanced Television Systems Committee

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January 24, 1997

## APPENDIX A

# ADVANCED TELEVISION SYSTEMS COMMITTEE

### MEMBERS

ABC  
Adv. Broadcasting Systems of Canada, Inc.  
Baylor University - Telecommunications  
Bell Communications Research  
CBS Broadcast Group  
Canadian Broadcasting Corporation  
Canadian Research Centre \*  
COMARK Communications, Inc.  
Complete Post  
Consumer Electronics Manufacturers Assn.  
David Sarnoff Research Center  
Digital Multimedia Compression, Inc.  
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Dolby Laboratories, Inc.  
Eastman Kodak Company  
Florida Atlantic University  
Fox Inc.  
France Telecom \*  
GTE Telephone Operations  
General Instrument Corporation  
Harris Corporation  
Hitachi America, Ltd.  
Home Box Office  
IBM Telco & Media ISU  
Ikegami Electronics USA, Inc.  
Institute of Electrical & Electronics Engineers  
Intel Corporation  
Koichi Sadashige & Associates  
Liberty Imaging  
Lucent Technologies  
Microsoft  
MIT Advanced TV & Signal Processing Group  
Maximum Service Television  
Mitsubishi Consumer Electronics America  
Motion Picture Association of America  
National Association of Broadcasters  
National Broadcasting Company  
National Cable TV Association  
Pacific Bell  
Panasonic ATVL

Panasonic Broadcast Systems Company  
Philips Electronics North America Corp.  
Pioneer New Media Technologies, Inc.  
Public Broadcasting Service  
SBCA  
Scientific Atlanta  
Sharp Electronics Corporation  
Snell & Wilcox  
Society of Broadcast Engineers  
Society of Cable Telecommunications Engineers  
Society of Motion Picture & Television Engineers  
Sony Advanced Systems Company  
Sony Pictures Entertainment  
TV/COM International  
Tektronix, Grass Valley Products  
Tele-TV Systems  
Texas Instruments  
Thomson Consumer Electronics  
Titan Information Systems  
Toshiba America Consumer Products, Inc.  
Tribune Broadcasting Company  
Universal City Studios, Inc.  
VLSI Technology Inc.  
Viacom International Inc.  
WHD-TV  
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\* Application being processed.