extension would result in slowing the implementation of advanced television in these markets.

68. We also seek comment on whether a waiver would be an appropriate way to address the issues of stations who can not afford to make the transition to digital. If commenters believe a waiver would be an appropriate mechanism, they should specify what factors the Commission should consider in granting such a waiver. They should also address ways to reduce the administrative burden of such a waiver process on the Commission and on licensees.

69. Finally, we seek comment on an alternative proposal which would allow the Commission to automatically extend the deadline for a licensee that has not built after the six-year period if no one else files for the ATV license. If, at the end of the six-year period, another party applies to construct the unbuilt ATV facility, should we permit the incumbent broadcaster to retain its preferential status if it makes a sufficient showing in this regard? Such a policy would recognize that in some markets economic factors may not support all of the stations introducing digital broadcast within the six-year time frame. If, however, there is a new entrant who can provide service immediately, then the public might be better served by the immediate initiation of service.

J. Noncommercial Stations.

70. Previous Decision In the Third Report/Further Notice we sought comment on whether some additional measures of relief or further action should be taken on behalf of noncommercial stations with respect to the presumptive six-year application/construction deadline.[71] We indicated that we would consider a wide array of alternatives to mitigate the problems faced by noncommercial broadcasters.[72]

71. Comments. Commenters addressing the difficulties of noncommercial broadcasters in converting to digital television chiefly seek relief with respect to the financial qualifications that they would have to demonstrate. The Association of America's Public Television Stations, Corporation for Public Broadcasting, and Public Broadcasting Service ("Public Television") argue that, because of funding constraints,[73] it will take substantially longer than three,[74] or even six years, for public stations to be able to obtain necessary funds

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[71] Third Report/Further Notice, supra at 6930, 6947-6948.

[72] Id. at 6948.

[73] Noncommercial broadcasters have noted the unique difficulties that they face in obtaining assured financing for the transition, since they rely on government appropriations, foundation grants, and corporate and viewer donations.

[74] As previously indicated, in the Third Report/Further Notice we extended the application period from two to three years.

to convert to ATV.[75] Public Television asks that noncommercial educational stations be allowed to file ATV applications without certifying or demonstrating financial qualifications on the filing date. Rather, it believes such licensees should be given three years after the filing of an ATV application to demonstrate, with a business plan, how they will raise matching funds and that public broadcasters should not have to make any showing with respect to having sufficient access to funds to meet their operating costs in the first 90 days of operation. Public Television asks that we accept no competing applications while that application is being processed. In this way, public broadcasters would be able to timely file and avoid the possibility of being able to obtain only a short-spaced UHF channel, a VHF transition channel, or no channel at all.

72. The National Association of College Broadcasters ("NACB") asks that the Commission reserve ATV channels in the same proportion as they are reserved on NTSC. Arizona State also urges that each vacant noncommercial allocation be kept in reserve for future public ATV use.[76] Both NACB and Arizona State ask that we provide noncommercial educational television stations with additional time in which to apply for, and construct ATV facilities.

73. Proposal and Request for Comments. It is clear from the comments that noncommercial licensees will face unique problems in their transition to ATV. These problems are chiefly in the area of funding, where noncommercial broadcasters appear to be subject to the vagaries of forces and parties beyond their control. Indeed, historically, we have recognized "that in making our statutory findings as to financial qualifications, greater leeway must be accorded the educational station because of its very nature." NTA Television Broadcasting Corp., 44 FCC 2563, 2574 (1961). (Citation omitted.) Thus, even though at the time of the NTA decision we required a "stringent" financial showing of commercial applicants, we found that for noncommercial applicants the public interest required only a showing that assurance of financial wherewithal to build and operate the station was "reasonable." Id. at 2574. To do otherwise, we said, "would preclude - unnecessarily and against the public interest - many worthwhile educational television endeavors." Id.

74. Commenters should address whether noncommercial broadcasters would obtain sufficient relief in the event that we adopt for all existing broadcasters a paired channel assignment scheme and requirements such as proposed above. If we do not adopt that proposal or, if adopted, it does not provide sufficient relief for noncommercial broadcasters, we ask for comment on what further relief would be appropriate and will permit them to participate in the channel assignment process on an equitable basis. In particular, commenters

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[75] Public Television Comments at 18.

[76] Arizona State at 5.

may address the implications of our system instead of a fixed channel scheme.[77]

75. A second problem that noncommercial broadcasters commented on was the length of the application/construction period. Both Arizona State and NACB express the belief that a six-year period is insufficient for noncommercial broadcasters. We have previously expressed our belief that to provide different schedules for commercial and noncommercial broadcasters would not be conducive to the goal of a speedy and smooth transition. It is still our preference to establish a firm transition schedule, but with the safeguard of having that schedule subject to periodic review. Additionally, unique problems can be dealt with on a case-by-case basis. We believe this may be preferable to establishing two separate classes of broadcasters, each with its own schedule, causing confusion to the public and additional administrative burdens to the Commission.

76. Additionally, commenters should address other things that the Commission can do to assist them in their conversion to ATV. For instance, the broadcast of "advertisements" is currently prohibited by Section 399B of the Communications Act. Commenters may want to address whether this should be viewed as applying only to one program service or, if to all program services broadcast by noncommercial broadcasters, whether it would be desirable for the Commission to seek legislative alteration of this prohibition. We also ask commenters to discuss whether the transition to digital by noncommercial broadcasters might be facilitated through re-defining what "noncommercial" means. If the Commission mandated only that the minimum required broadcast programming must be "noncommercial," would it be possible for noncommercial broadcasters to finance the transition through commercial and flexible uses of the spectrum that would not interfere with the noncommercial broadcast stream? Is there other relief that we can grant noncommercial broadcasters to minimize restrictions on their operations and allow them greater flexibility?

K. All-Channel Receiver Issues

77. Previous Decision. Traditionally, we have not regulated broadcast receivers except insofar as they incidentally radiate energy.[78] In 1962, Congress adopted the All

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[77] GHTV, Inc., SCI Television, Inc., and Busse Broadcasting Corp., in joint comments, support relief for noncommercial broadcasters who, they fear, will be unable to meet the "aggressive timetable" the Commission has set for ATV transition. However, they ask that if the Commission grants noncommercial licensees relaxed filing or financial requirements, we extend the same treatment to commercial licensees. As indicated above, there is longstanding precedent for granting noncommercial licensees special consideration particularly with respect to financial showings. The action we are taking will continue that precedent. We see, however, no reason to extend the same treatment to commercial licensees whose financial environment is so much different from that of noncommercial broadcasters.

[78] See 47 C.F.R. §§ 15.101 et seq.

Channel Receiver Act, which authorizes us to require that television receivers "be capable of adequately receiving all frequencies allocated by the Commission to television broadcasting."[79] Pursuant to this authority we required that all TV receivers be capable of UHF channel reception and adopted standards to make reception of UHF channels comparable with reception of VHF channels.[80] We previously determined in this proceeding that the All Channel Receiver Act does not mandate the manufacture of dual-mode (ATV and NTSC) receivers. We expressed concern that such a requirement might overly or prematurely burden consumers, and sought comment on whether there is any need to require that manufacturers produce receivers capable of both NTSC and ATV reception during the period prior to full conversion to ATV.[81]

78. Changed Circumstances and Request for Comments. With ATV now considered to include both HDTV and SDTV, we request comment on whether SDTV receivers should be required to have the ability to receive an HDTV signal or vice versa, and whether we should regulate how such a signal must be displayed. We understand that companies are working on receiver designs that would display the Grand Alliance HDTV signal as a lower resolution SDTV picture. Such a conversion could result in relatively inexpensive receivers or converter boxes for NTSC receivers, compared with the projected HDTV receiver costs. We seek comment on whether permitting the manufacture and sale of receivers that display only NTSC, SDTV, or HDTV signals, or a combination of two but not all three, would be consistent with the All Channel Receiver Act or otherwise would be in the public interest. Should we require that, during the transition period, all sets be capable of receiving and displaying NTSC and SDTV signals? Should we require "all-format" receivers capable of receiving and displaying NTSC, SDTV and HDTV signals, and, if so, how should we require HDTV signals to be displayed in a true HDTV fashion or as a lower resolution SDTV picture? What impact should a decision not to require HDTV broadcasting have on whether we should require all receivers to have HDTV reception and display capabilities? Should a decision on one be coupled with the other? What impact should a decision to adopt only minimal broadcast SDTV requirements have on this question? Would limiting the sale of NTSC equipment help consumers by assuring that they do not purchase equipment that will soon be obsolete, or harm them by, for example, depriving them of access to equipment they may need to obtain the benefit of other video equipment they have, such as VCRs? If we permit the sale of NTSC equipment, should we require a visible label warning that, as of a date certain, it will no longer be able to provide over-the-air broadcast reception? Or, if we permit the sale of NTSC equipment after the specified date, should we require that the sale of such equipment be accompanied by the provision of or ability to use a digital converter? We believe that the All Channel Receiver Act provides us with adequate authority to address these issues. We ask for comment on how we should exercise it.

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[79] 47 U.S.C. §303(s).

[80] See 47 C.F.R. §15.117

[81] Third Report/Further Notice, supra at 6984.

L. Must Carry and Retransmission Consent

79. Statutory Must Carry and Retransmission Consent Requirements. We have not previously addressed the impact of ATV on cable television carriage or retransmission consent obligations. Sections 614 and 615 of the Communications Act of 1934 contain the cable television "must carry" requirements. Section 325 contains revised "retransmission consent" requirements, pursuant to which cable operators may be required to obtain the consent of broadcasters before retransmitting their signals. Within local market areas broadcasters have an option to proceed under either the retransmission consent or the mandatory carriage requirements. These provisions were added by the Cable Television Consumer Protection and Competition Act of 1992,[82] subsequent to the adoption of our last decision in this proceeding.

80. Under the mandatory carriage provisions, cable operators, subject to certain capacity based limitations, are generally required to carry the signals of local television stations on their cable systems.[83] Systems with more than 12 usable activated channels must carry the signals of local commercial television stations, "up to one-third of the aggregate number of usable activated channels of such system[s]."[84] In addition, cable systems are obliged to carry local noncommercial educational television stations according to a different formula, based upon a system's number of usable activated channels. These statutory requirements are reflected in Section 76.56 of the Commission's Rules.[85]

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[82] P.L. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 521 *et seq.*

[83] Included in the existing rules are the following types of obligations and responsibilities: 1) only a portion of channel capacity must be devoted to carriage of local signals; 2) stations are entitled to "on channel" carriage; 3) signals must be carried "without material degradation;" 4) stations not providing a defined level of signal quality to the system need not be carried; 5) all such signals must be on a basic service tier; 6) systems need only carry the "primary video" and certain defined programming that is broadcast on the vertical blanking interval; 7) rules requiring cable operators to provide a switch (input selector or A/B switch) to permit the viewing of over-the-air signals may not be adopted; 8) a cable operator "shall not be required to carry the signal of any local commercial television station that substantially duplicates the signal of another local commercial television station which is carried on the cable system;" and 9) a cable operator may not request or accept any consideration from a television station in fulfillment of these obligations (other than copyright payments and costs associated with delivering a good quality signal to the cable system's headend).

[84] 47 U.S.C. § 534(b).

[85] 47 C.F.R. § 76.56. Although we recognize that there is an ongoing challenge to the constitutionality of the existing requirements, Turner Broadcasting System v. FCC, 114 S. Ct. 2445 (1994), we assume for purposes of this discussion the validity of the existing statutory provisions. Parties are welcome to comment on the implications of any of the issues involved

81. Section 614(b)(4)(B) of the Act requires that, at the time we prescribe standards for advanced television, we "initiate a proceeding to establish any changes in the signal carriage requirements of cable television systems necessary to ensure cable carriage of such broadcast signals of local commercial television stations which have been changed to conform with such ... standards." While we have not yet prescribed standards for advanced television, in the sense of having defined or determined final standards, we believe it timely to begin our consideration of must-carry obligations at this point.

82. Request for Comment. Clearly, during the transition period, at least the station's NTSC channel will be subject to must carry obligations. During the transition period, when, under our original plan, the NTSC channel would have been carrying 100% of the HDTV programming being aired on the conversion channel, there did not appear to be a must-carry problem because, as long as the two were carrying duplicative programming, the NTSC and commonly owned HDTV stations would not both have had to have been carried.[86] But, if we change the simulcast requirement, programming on the NTSC and ATV channels might not be duplicative, and both might qualify for carriage. Additional issues are raised if the conversion channel is being used for the transmission of multiple SDTV program services. If carriage of all material being broadcast by the station were required, the dedication of, for instance, five cable channels (one for the NTSC programming and, for example, four multicast programs being offered on the conversion channel) might be required. Thus, a review of the must carry and retransmission consent rules now is an important component of this proceeding. In addition, it is necessary to clearly identify any issues regarding cable carriage that need to be factored into the ATV transitional rules, technical standards, and regulatory policies in order to facilitate the most productive possible interaction between ATV broadcasting and cable television service

83. We seek comment on any relevant differences in rules or policies that might be needed both during the transition and as a consequence of ATV having replaced NTSC broadcasting. For instance, how should channel capacity be defined in a digital environment, i.e., in terms of channels, bandwidth, or bits of data per second? Does "on-channel" carriage have the same meaning in a digital as it does in an analog environment? Should "substantially duplicates" include duplication of programming in different transmission formats? Will changes in station coverage require changes in carriage obligations? Additionally, what is the meaning of "primary video" in the context of digital broadcast transmission?[87] Is there an appropriate parallel to line 21 of the vertical blanking interval of

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in this proceeding in terms of the judicial sustainability of any future requirements.

[86] See Section 614(b)(5) of the Communications Act of 1934, as amended (47 U.S.C. § 534(b)(5)).

[87] Section 614 of the Act requires carriage of "the primary video, accompanying audio, and line 21 closed caption transmission" of each local commercial broadcast station carried on the cable system. Also required, to the extent technically feasible, is carriage of program-

NTSC stations for ATV stations? What, if any, flexibility does the Commission have under Section 614(b)(4)(B) to modify requirements applied by the Communications Act to NTSC signals in the new digital environment? For example, does the Commission have authority to address "A/B" switch issues to enhance subscriber access to signals or portions of signals that may not receive carriage notwithstanding the existing prohibition? Is a revised definition of "basic tier" needed? Is a common retransmission/must carry election required for all of the video programming from an individual broadcast licensee in a market or just for one "primary video" stream, as defined by the broadcast licensee? In the more flexible broadcast environment associated with digital transmission would changes be needed in the rules that mandate that local signals be carried in their entirety even if carried under the retransmission consent option?[88] Are there other issues relating to the retransmission consent process that would need to be addressed?

84. A second set of issues relates to the technical interface and associated cost and rate issues. We expect that there will be parallel development of both cable and broadcast digital video communications. At the same time, it is inevitable that particular cable systems and particular broadcast markets will progress on different time schedules. Accordingly, issues will arise as to how digital broadcasts may be carried on cable systems that are still entirely analog in their operations, are partially analog and partially digital, or that are entirely digital. With respect to each type of operation there are potential issues relating to headend equipment, transmission plant, subscriber premises equipment, and type of digital transmission system that may arise. Accordingly, we seek information on what technical modifications may be needed to enable cable systems to deliver ATV signals to subscribers and what costs may be associated with these modifications. How should digital broadcast programming be required to be carried? Should it be required to be carried digitally or would it be adequate to have it carried in whatever format the cable operator selects? Does "material degradation" in the statute require that HDTV signals be carried in an HDTV format? Further, we need to begin to consider and seek comment on what, if any, changes may be warranted in the rate regulation process, in the technical standards, or in other rules to account for the changes resulting from ATV carriage.

85. Assuming that an appropriate set of rules can be developed for application at the end of the transition period, an interim process is still needed to govern the transition from NTSC to ATV broadcasting. During the period when broadcast licensees are broadcasting in

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related material carried in the vertical blanking interval or on subcarriers. Similar requirements are found in Section 615 with respect to noncommercial educational stations. However, "[r]etransmission of other material in the vertical blanking interval or other nonprogram-related material (including teletext and other subscription and advertiser supported information services) shall be at the discretion of the cable operator."

[88] See Memorandum Opinion and Order in Docket 92-259, 9 FCC Rcd 6723, paras 96-107 (1994).

both the existing NTSC analog mode and in the new ATV mode, what should the carriage obligations be? Must both signals be carried and if not should the change from NTSC to the ATV signals be at the discretion of the cable operator or the broadcaster? Alternatively, should it be based on a fixed transition schedule or on an external event such as the market penetration of digital television receivers or the system operator's transmission of its own digital video programming? Given the complex economic and technical interrelationships between broadcasters and cable operators during this transitional period, are there market mechanisms that can be incorporated into the rules to facilitate cooperation?

V. THIRD NOTICE OF INQUIRY

86. Over 400 MHz of spectrum in the VHF and UHF bands is currently allocated to television broadcasting. As part of our long-term plans to promote spectrum efficiency, we are considering reducing the amount of spectrum allocated to television broadcasting, which, as explained above, could be accomplished in the digital environment without reducing the number of broadcasters in any market due to the inherent efficiencies of the proposed "Grand Alliance" system. If we were to readjust channel assignments, we would need to know where in current broadcast spectrum broadcasters would eventually be located. Although we previously preliminarily viewed UHF as the part of the spectrum to which all television broadcasting would be moved,[89] we now question that tentative conclusion. Accordingly, at this time, we ask parties to comment on the best place for broadcasting. Specifically, we seek comment on which parts of the VHF and UHF bands are most highly valued for broadcast use (e.g., VHF, lower UHF, middle UHF, upper UHF). We also request commenters to identify the costs associated with placing television broadcasting in each of the four possible locations.

87. Today, TV broadcasters have over 400 MHz assigned to them, but because of interference and market forces, on average only 80 MHz is used per market. In the top markets, around 120 MHz is used. Digital broadcasting will allow much more efficient and intensive use of this spectrum During the transition period, however, digital TV stations must operate alongside NTSC stations. The digital TV system will enable us to authorize these stations under controlled circumstances (each channel will be available only at certain locations with limits on radiated power and effective antenna height) to minimize interference to NTSC and digital TV service. While these digital stations allow for the development of many new broadcast services, they would be of limited value for other users because they generally would not occupy a contiguous block of channels, there would be no common nationwide channels, and their use would be restricted by the need to avoid interference with NTSC analog television sets. When the transition to digital is completed, however, and the analog NTSC stations are turned off, we have an opportunity to create contiguous blocks of spectrum nationwide. Some or all of this spectrum could be reallocated and auctioned. We ask commenters to provide estimates of the total amount of contiguous spectrum blocks that

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[89] Second Further Notice of Proposed Rule Making, supra at 5379.

could be created following recovery of the NTSC channels. We also seek estimates of the total market value of these contiguous blocks of spectrum. What services would be most efficiently provided using contiguous blocks of spectrum? We request that commenters explain the methodology and analysis used to derive estimates of the amount and value of contiguous spectrum. In addition to the broadcast industry, we solicit comment from other industries (e.g., land mobile and computer) that may have an interest in providing services using these blocks of spectrum.

VI. CONCLUSION

88. By this Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry, we request comments on the many issues pertinent to the conversion by television broadcasters to digital technology. The speedy conversion to digital technology will have profound public interest benefits, permitting efficient spectrum use, optimizing the development of new technologies and services to consumers, and fostering diversity and competition. We intend to conduct a searching and thorough review of the issues to ensure that the rules we adopt serve us well in fashioning a digital television broadcast system for the twenty-first century. To that end, we invite commenters to give serious and thoughtful consideration to the important issues raised herein and to provide us their views on these issues, as well as supporting data and analysis.

ADMINISTRATIVE MATTERS

89. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. Sections 1.415 and 1.419, interested parties may file comments on or before October 18, 1995, and reply comments on or before December 4, 1995. To file formally in this proceeding, you must file an original plus five copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original plus nine copies. You should send comments and reply comments to Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center (Room 239), 1919 M Street, N.W., Washington, D.C. 20554.

90. This is a non-restricted notice and comment rulemaking proceeding. Ex parte presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed as provided in the Commission Rules. See generally 47 C.F.R. Sections 1.1202, 1.1203, and 1.1206(a).

INITIAL REGULATORY FLEXIBILITY ACT STATEMENT

I. Reason for Action

The Commission seeks comment not only on a variety of new issues central to the

development of advanced television service in the United States, but on several of the tentative decisions made earlier in this proceeding because of the rapidly changing nature of digital television. Advanced television, at the time this proceeding was initiated was envisioned primarily as a system for improving higher picture and sound quality, limited to transmitting/receiving a single channel of television. The emergence of digital technology with its extensive flexibility and the approach of the National Information Infrastructure require that the Commission review the issues surrounding high definition television from a new, more expansive perspective.

II. Objectives of the Action

The Fourth Further Notice of Proposed Rulemaking portion of this decision solicits comment on a variety of issues, several of which are being revisited, in order to establish an accurate, comprehensive, reliable record on which to base the Commission's ultimate decisions in this proceeding. The record established from comments filed in response to this decision, as well as other Commission decisions, and the combined efforts of the Commission, the affected industries, the Advisory Committee on Advanced Television Service, and the ATV testing process, will lead to implementation of ATV in the most harmonious fashion and to selection of the most desirable ATV system.

III. Legal Basis

Authority for this action may be found at 47 U.S.C. §§154 and 303.

IV. Reporting, recordkeeping and other compliance requirements

Such requirements are not proposed in this phase of the proceeding, but may be raised and comment sought in future decisions in this proceeding.

V. Federal rules which overlap, duplicate or conflict with these rules.

There are no rules which would overlap, duplicate, or conflict with these rules.

VI. Description, potential impact and number of small entities involved.

There are approximately 1,539 UHF and VHF, commercial and educational television stations, 2,509 UHF translator stations, 2,261 VHF translator stations, and 1,648 UHF and VHF low power television stations which would be affected by decisions reached in this proceeding. The impact of actions taken in this proceeding on small entities would ultimately depend on the final decisions taken by the Commission. However, the Commission, in taking future action will continue to balance the need to provide the public with affordable, flexible, accessible high definition television service with the economic and administrative interests of the affected industries.

VII. Any significant alternatives minimizing the impact on small entities consistent with stated objectives.

In re-examining issues discussed in past decisions, the Commission is seeking not only to establish a more comprehensive, reliable record, but, with that intent, is soliciting comments and suggestions that hopefully will represent the views of all of the industries concerned, and thus the Commission will be better able to minimize whatever negative impact might face small entities as a result of our decisions.

Ordering Clause

91. Accordingly, IT IS ORDERED that pursuant to the authority contained in Sections 4 and 303 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154 and 303, this Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry IS ADOPTED.

92. Additional Information: For additional information regarding this proceeding, contact Saul Shapiro (202-418-2600) or Roger Holberg (202-776-1653), Mass Media Bureau.

93. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. The IRFA is set forth above. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the Notice, but they must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Secretary shall send a copy of this Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act. Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. Section 601 et seq (1981).

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

Statement of Chairman Reed E. Hundt
Advanced Television Systems
and Their Impact Upon the Existing Television Broadcast Service
MM Docket No. 87-268

This is an immensely important proceeding. It is now clear that the transition to digital broadcasting is different in kind, not just degree, from the transition from black and white to color.

One could not have said that in 1992 when we issued our last order in this proceeding, which assumed that this venture was simply about whether broadcasters could provide a prettier, eye-popping, high definition picture. But one cannot avoid that now. The flexibility that the digital broadcast standard will allow -- the opportunity for broadcasters to provide not only high definition programs, but also multiple standard definition programs and other services -- makes it unavoidable that television broadcasting in the 21st century will be vastly different from television broadcasting of the 20th.

So this proceeding marks the beginning of the end of the analog chapter of television's history, and the beginning of the beginning of the digital chapter.

At this watershed, the Commission has an obligation to review all of the major policy issues that the transition to digital broadcasting presents. And the Notice of Proposed Rule Making that we adopt today quite appropriately seeks comment on all of those issues, especially including the question of what public interest obligations are appropriate for the digital broadcasting world.

This proceeding gives the Commission an opportunity to ensure that free over the air television finally fulfills the vision of one of my predecessors, Chairman Paul Porter, who in 1945, at the dawn of the analog television era, expressed the hope that television would truly "inform, educate and entertain an entire nation."

I look forward to the participation in this proceeding of everyone it affects -- representatives of industry as well as viewers, people on both sides of the television screen. I especially look forward to the participation of parents, educators and others who can speak for America's children, because it is our kids who stand the most to gain, and the most to lose, from our decisions in this proceeding.

Separate Statement

of

Commissioner James H. Quello

Re: Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service

Underlying my analysis of every aspect of this item is one vitally important proposition: that the preservation of a universal, free, over-the-air television service is critical to the health of our democratic society. The promises of a high definition pictur exciting; the many channels of a digital system are enticing; and the potential ancillary u of the spectrum are alluring. Nonetheless, without the backbone of a free, over-the-air broadcast system, these service enhancements, and, more importantly, the underlying programming produced, will be available only to those in our society who can afford to In my judgment, this result would not serve the overall public interest and therefore sho not be contemplated.

It will be with this overriding principle in mind that I will decide the many issue before us in this proceeding. For example, I am at this time inclined toward: (1) requi that the predominant use of the ATV spectrum be for free over-the-air broadcasting, an a two- to four-hour per day minimum HDTV requirement be imposed; (2) concluding t existing broadcasters have primary eligibility for the ATV spectrum; (3) finding that cu public interest obligations remain in place; (4) determining that a transition period shou based on the realities that will likely face broadcasters in constructing new and expensi facilities, as well as the consumer acceptance of this new technology; (5) devising som for small market/small station broadcasters and noncommercial broadcasters; and (6) attaching must carry obligations and retransmission consent rights to all free programm streams provided by broadcasters.

In structuring this new digital world, we must also be ever-vigilant against the t to free, over-the-air broadcasting posed by any "social contract" between broadcasters the Federal government. The social contract envisioned by some would slowly and painfully extract from broadcasters control over the content of the programming that t in exchange for the ATV spectrum. My response to this proposal is threefold: (1) H the public interest be "contractually" reduced into a simple, standard pablum for a div industry? (2) What evidence is there that the current public interest requirements appli to broadcasters are not working and that Big Brother needs a new regulatory mechanis restrictive as a "social contract"? (3) What about the First Amendment?

The public interest is not now, and has never been, a static, isolated concept. Rather, the public interest was designed as a mechanism for reflecting the public's ever-changing moods and interests, as well as the complexion of the marketplace. The marketplace today is very different from the marketplace of ten years ago. Broadcasting today is a single-channel medium in an ever-growing, multichannel, multimedia world.

Also, why should we be imposing additional regulatory burdens on broadcasters, the only universal free medium which is facing more and more multichannel competition from 100+ cable channels, DBS, MMDS, VCRs and now even the Internet? We are now in an era of more competition and less, not more, regulation, particularly in the area of program content.

Perhaps as important, if not more important, than the issues we address in the proceeding before us today is an issue that is not currently before us. Some parties have suggested that the Commission should auction this spectrum rather than give it to existing broadcasters in exchange for their analog channel. There are several fatal flaws with this proposal. First, auctioning the spectrum would threaten to change the fundamental nature of free, over-the-air broadcasting by putting the spectrum into the hands of those with the most money, rather than those that are the most interested in serving the public interest. Second, auctioning the spectrum in less than 6 MHz blocks would spell the death of HDTV, which is technically incapable of operating with less than 6 MHz of contiguous spectrum. Third, auctioning the spectrum would substantially impede the ability of broadcasters to compete with their multichannel competitors. How could broadcasters of the future, with one channel, possibly compete with the hundreds of channels provided by its multichannel competitors?

We should remember that HDTV and digital compression were developed primarily by the communications industry over a period of seven years, not by the government. In my opinion, current broadcast licensees who undergo the expense and risks of implementing HDTV and compression techniques with their assigned frequencies should be entitled to use their new channels to improve and expand free over-the-air service. If broadcasters are allowed to use some of the capacity for nonbroadcast subscription services, broadcasters should pay reasonable spectrum fees.

The importance of the decisions we will ultimately reach in this proceeding cannot be overstated. This proceeding marks the evolution of television broadcasting beyond black and white, beyond color, to a digital world in which the potential exists for the public to receive much, much more than just one channel of free programming. However, if the fundamental nature of our free, over-the-air broadcasting service changes, digital television will become a technology of haves and have-nots. Those who have money will receive all of the exciting new services this technology offers; those without money will receive nothing. I cannot support any decisions by this Commission that would lead to that outcome.

SEPARATE STATEMENT

OF

COMMISSIONER ANDREW C. BARRETT

RE: Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service (Fourth Further Notice of Proposed Rule Making and Third Notice of Inquiry) (MM Docket No. 87-268).

Today the Commission has taken another step toward the development of a digital television era. By our action, we reaffirm our commitment to the public to improve the quality of television service by giving broadcast licensees the opportunity to transition from their existing analog channels to an advanced digital environment. We make these strides with the benefit of improved technical advancements that have developed since we initiated this proceeding.

In the Commission's 1992 proceeding, I supported our decision to foster the development of high definition television ("HDTV") by requiring that broadcasters ultimately use their transition channel primarily for the simulcasting of broadcasters' NTSC programming in HDTV. Indeed, technical advancements allowing for a more flexible use of the spectrum have driven the Commission to reconsider its prior decision. We are now compelled to consider a more flexible digital broadcast television technology--one that may encompass a myriad of services including those that may be nonvideo and/or subscription-based in nature. Our prior decisions did contemplate the use of ancillary services in conjunction with HDTV (as we currently do with the analog signal) to incorporate developments; however, the Commission must address the flexible uses that are now available to broadcasters.

Consequently, while we surge forward to expedite the implementation of these technical developments in order to achieve a rapid conversion to digital television, I hope that we do not lose sight of one of the Commission's overarching goals--to ensure that free, over-the-air broadcasting remains available to all consumers while ensuring that digital television fully serves the public interest. With that statutory mandate in mind, I am committed to preserving and promoting universal, free, over-the-air television as broadcasters make the transition into the digital television era. In that way, the public will be assured that broadcasters will continue to air programming that is responsive to its community needs and interests.[1] Though admittedly consumer demand for HDTV is unknown, I firmly believe

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[1] Service to the community of license is also considered in determining whether a broadcaster's license should be renewed. See, e.g., Cowles Broadcasting, Inc., 86 FCC 2d 993 (1981).

that broadcasters' failure to use the 6 MHz of transition spectrum for at least some portion of the day for HDTV will ensure its demise.

Finally, I acknowledge that one of the Commission's objectives is to recover the NTSC channels of existing broadcasters so as to promote spectrum efficiency. Yet, if we ultimately decide to allow fully flexible use of the spectrum, I would have to question our original rationale for limiting initial eligibility to existing broadcasters and its potential impact on the Commission's long standing policy of fostering programming and ownership diversity. Furthermore, if we modify our decision with respect to the 6 MHz of spectrum so as to eliminate the requirement that broadcasters transmit a minimum amount of HDTV, I will be forced to consider (i) alternative methods that will allow new entrants to acquire this portion of the spectrum without disrupting our goal of spectrum recovery and (ii) whether I would continue to support giving broadcasters the 6 MHz of transition spectrum at no charge.

SEPARATE STATEMENT
OF
COMMISSIONER SUSAN NESS

Re: *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service (MM Docket No. 87-268)*

Today we begin a crucial phase of our proceeding on advanced television (ATV). Our attention centers on the ramifications of permitting broadcasters to employ digital advanced television technology. I believe it essential that broadcasters have the ability to compete in the increasingly crowded digital multimedia marketplace.

The video world has changed dramatically since the black-and-white NTSC standard was adopted in 1941 and modified for color in 1953. The broadcasters saw these changes coming when they petitioned to initiate this proceeding in 1987. They were right that the world was changing. The surprise is in how substantial those changes are.

Today, cable delivers a multitude of channels, both broadcast and exclusively cable programming, to two-thirds of US households. Direct broadcast satellite (DBS) has trailblazed with its superior quality digital picture. Wireless cable is planning to convert to digital transmission. Local multipoint distribution service (LMDS) and video dialtone (VDT) promise to become additional providers of innovative programming services. (There are even experiments using the Internet as a program delivery medium.) Each of these systems has the potential also to offer high definition television with its significantly enhanced picture and compact disk-quality sound.

Competitors to broadcasting can move into the digital multichannel world -- and offer HDTV -- without FCC action. For broadcasters to remain competitive, however, the FCC must act to provide them with the tools to compete. The necessary tools include temporary additional spectrum to enable digital conversion while continuing to serve the analog community; a market-responsive conversion schedule; a digital transmission standard that can dynamically deliver both HDTV and multiple streams of standard definition programming (or some form of future programming that may or may not resemble interactive media); and reasonable flexibility in product offerings to generate additional revenue to pay for the cost of digital and HDTV conversion. Today, and in upcoming proceedings, we propose such tools.

For the American public, this new technology holds the promise of substantially more

and, I hope, better quality programming. Broadcasting is the only video delivery system that is offered free of charge, universally available and, therefore, accessible to all, young or old, rich or poor. Advanced television assures the future viability of free over-the-air television.

The American public also will continue to benefit from the public interest obligations required of broadcasters by law. These mandates include airing educational and informational children's programming, making time available for political debate, and preventing the broadcast of indecent or obscene programming. In return, broadcasters are not charged for use of the public's airwaves. With multiple channels and vastly improved quality through digitization, broadcasters will have ample resources to better fulfill these public obligations. The Commission and the public should demand no less.

In addition to new service offerings, the American public will gain a significant amount of valuable spectrum for other uses. That spectrum will be reclaimed from the broadcasters in the next decade without cost to the taxpayer. Our proposal requires existing broadcasters to return their original channels once conversion to digital transmission is substantially completed. The obligation to return their original spectrum after a reasonable transition period is the underpinning of this proceeding, justifying the decision to allow incumbent broadcasters temporary access to an additional channel for the transition. If the obligation to return that channel is not carved in stone, the public interest in providing the tools for conversion to digital is seriously undermined.

For broadcasters, the cost of the transition to ATV is considerable. During the temporary transition period, they will have to run two separate stations, one digital and one analog. They will have to replace much of their studio equipment and obtain a new transmitter and antenna.

The cost to the American consumer is also considerable. For the first time, advances in television transmission will not be backward compatible. Our old TV sets won't receive the new signals. Consumers eventually will need to buy new television sets or decoder boxes or rent such equipment. If this is to succeed, consumers must be able to see the benefits of conversion; it will not be free. For both the broadcaster and the consumer, we seek a transition procedure couched in market realities, yet sensitive to the needs of the consumer.

There is no template for dealing with flexible spectrum use in a digital world. Nor is there a template for determining how best to assure that the public reaps the benefit of this new digital marketplace. I am certain, however, that whatever regime we ultimately establish for transitioning broadcasters from analog to digital must assure that the original spectrum is returned and that broadcasters' public interest obligations are reaffirmed.

In short, broadcasters must continue to play a leading role in the video marketplace as we move from analog to digital technology. The considerable value of free over-the-air broadcasting must be preserved -- and enhanced. Today's action sets the stage.

SEPARATE STATEMENT OF

COMMISSIONER RACHELLE CHONG

Re: Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, MM Docket No. 87-268

There are times when the pace of technology overtakes all else, including the pace of regulations. Advances in digital technology have brought us to a stage where it is prudent for the Commission to look at our past advanced television ("ATV") decisions with a fresh eye. We must ensure that our path is still true – that is, it is the one that serves the public interest best.

In the coming digital world, information – whether it be data, voice or video – will consist of digital bits flowing effortlessly across wired or wireless transmission pipelines. Digital encoding and transmission technology will give broadcasters the potential to send on a simultaneous basis not only video, but voice and data too. Thus, licensees of ATV channels can look forward to substantially increased technical capabilities due to this advanced technology. The public can look forward to a broad panoply of benefits from this advanced technology: (1) sharper, brighter and bigger pictures through high definition television ("HDTV"); (2) more channel options; and (3) and innovative services such as the ability to choose a different camera angle while watching a live sporting event. I am proud to be one of the facilitators bringing on this new digital age.

We have posited four revised goals in this Fourth Further Notice: (1) preserving a free, universal broadcasting service; (2) fostering an expeditious and orderly transition to digital technology which would allow the public to receive the benefits of digital television while taking account of consumer investment in analog television sets; (3) managing the spectrum to permit the recovery of contiguous blocks of spectrum; and (4) ensuring that the spectrum – both ATV channels and recovered channels now assigned to NTSC service – will be used in a manner that best serves the public interest. I believe these are the right goals, and that we must balance them carefully as we continue to make the challenging transition.

Preserving Free Universal Broadcasting

I write separately to highlight my staunch belief that our overarching goal in this proceeding should be to ensure that we preserve a free, universal over-the-air television broadcasting service for Americans. I believe that free, over-the-air broadcasting is

fundamental to the health of a democratic society. Broadcasters help safeguard freedom of speech and of the press. Broadcasters bring us a wide variety of entertainment, news, election updates, educational fare and other public service information. Television has become an integral part of the American life, giving us shared national experiences, inspiring and entertaining us, and sometimes disgusting and horrifying us. But always, television gives us ways to experience the broader world from the comfort of our own homes.

In a digital world, there will be a continuing and vital role for broadcasters. The chararacteristic that separates commercial broadcasters from other communications industries is the fact that broadcasting is advertiser-supported and is freely available to anyone who owns a television set. Broadcasters have successfully built mass audiences and therefore wield significant influence among our citizenry.

Advances in digital technology since our last major decisions in this docket have enabled broadcasters to consider new horizons beyond just a single high definition digital channel. The Grand Alliance has promised a transmission standard that may provide either one channel of HDTV, multiple streams of Standard Definition Television ("SDTV") services, or a host of other nonbroadcast services alone or in combination with broadcast services.

This promise of flexibility has tremendous appeal. Broadcasters have voiced interest in providing new nonbroadcast services, utilizing their digital spectrum. Some believe that broadcasters should be completely unfettered and granted total flexibility as to use of its new digital channel, so long as, at a minimum, a single SDTV channel is delivered free to audiences.

At this time, it is my view that the spectrum at issue in this proceeding should be used primarily for free, over-the-air broadcasting, consistent with the notion that broadcasters are public trustees of the airwaves. As such, they may use the public's spectrum so long as they provide in return free, over-the-air broadcasting and a variety of public service offerings. As they do now with their analog channels, I believe that broadcasters should be able to make some ancillary or concomitant uses of their new digital channels for nonbroadcast uses, so long as such uses do not interfere with or detract from the main broadcast services provided by the licensees. Should broadcasters desire greater flexibility than this, I welcome their input as to what extent and how this is consistent with their special status as broadcasters. Should a broadcaster desire to use its new ATV spectrum for a primary purpose other than free broadcast, I would ask whether such ATV spectrum ought to be given without charge to someone who is not committed to free, over-the-air broadcasting. In such a case, should such spectrum be returned to the government and relicensed to someone who is dedicated to the primary delivery of free broadcasting?

Fostering an Expeditious and Orderly Transition to Digital

I support our goal to foster an expeditious and orderly transition to digital broadcasting. While we naturally wish to make the transition in a speedy manner, I caution us not to disenfranchise those Americans who rely on their analog TV sets for over-the-air broadcast service. I hope that we can provide incentives for the industry (broadcasters, manufacturers, and programmers) to make the switch to digital TV more rapidly, while still safeguarding consumer interests.

I am especially concerned about how to effectively assist small and noncommercial broadcasters who may face challenging financial issues in making the digital transition. I am keenly interested in ideas about how the Commission can help such broadcasters make the transition, while ensuring that the spectrum assigned to them during the transitional period does not lie fallow.

Managing Spectrum to Recover Contiguous Blocks

I also believe that we must be mindful of spectrum efficiency issues as we review our decisions to date. Spectrum is a hot commodity. I am particularly interested in hearing from commenters about whether we have modeled our transition to digital broadcasting in the most spectrally efficient way. Further, if we are able to "repack" the existing broadcasters into a smaller amount of overall spectrum at the end of this transition period and free up contiguous blocks of spectrum, how can we optimize use of this spectrum?

Flexible Regulatory Frameworks

Finally, I note how rapidly the pace of technology in this proceeding has made our last set of decisions in this docket potentially passé. This underscores the importance of this Commission putting in place a flexible framework of regulations. We must keep our eye on our goals to ensure they remain valid. We must not be afraid to put aside decisions that have been overtaken by advances in technology, and be forward looking to a new age in which we adapt proven successes like free, over-the-air broadcasting to new technologies like digital.