HIGH DEFINITION TELEVISION: A NEW BREED OF TELEVISION ENTERS THE REGULATORY JUNGLE

A new generation of television is emerging. It is high definition television ("HDTV"), and it promises to generate \$50 to \$250 billion in communications industry expansion.1 HDTV is an advanced concept of television technology2 that is at the forefront of the consumer electronics industry. It will offer approximately twice the vertical and horizontal resolution of the present NTSC system,3 thereby creating a higher quality picture approaching that of thirty-five millimeter film, while also providing wider pictures and audio quality equal to that of a compact disc.4 At a time when the United States electronics industry is lagging behind that of other competing nations, HDTV may provide the "recovery of our faith in the nation's capacity to discover and invent." Likewise, U.S. participation in HDTV could assist major segments of the country's electronics industry and its ability to compete in the new global marketplace.6

The term "HDTV" is often used interchangeably with "ATV," or advanced television, but the two terms should be distinguished. ATV broadly repre-

sents a major advance in television technology, and includes both HDTV and enhanced definition television, or EDTV.8 In each of the proposed HDTV systems, the number of scan lines utilized in the NTSC format9 was extended and, depending on the system, was increased by at least fifty percent to improve the vertical resolution.10

Not surprisingly, this significant breakthrough in television technology has generated controversy within the communications industry. There will be great costs associated with HDTV as it becomes either a domestic or international industry standard. Broadcasters face the prospect of having to replace their current studio and transmission equipment with HDTV apparatus. Such new equipment should eventually render the broadcasters' existing NTSC television systems obsolete. The issue thus becomes whether Federal Communications Commission ("FCC" or "Commission") policy decisions will facilitate an adequate transition to this technological expansion.

This Comment seeks to evaluate recent regulations

that results in improved television audio and video quality." FCC, Office of Public Affairs, Fact Sheet on Advanced Television, Fact Sheet, at 1 (Jan. 1992) [hereinafter ATV Fact Sheet].

¹ George E. Whitehouse, An HDTV Primer, COMM. LAW., Spr. 1989, at 14.

² Id.

³ "NTSC" is the acronym of the National Television Systems Committee, a committee that convened in 1940 to establish technical standards for production, transmission, and reception of an American monochromatic television system. In re Advanced Television Systems and Their Impact on the Existing Broadcast Service, Notice of Inquiry, 2 FCC Rcd. 5125 n.4 (1987) [hereinafter ATV Notice of Inquiry]. The NTSC system has served the American public for fifty years, but is now considered limited technologically and suffers from deficiencies in video and audio quality. Id. paras. 6, 8.

In re Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Second Report and Order and Further Notice of Proposed Rule Making, 7 FCC Rcd. 3340 n.1 (1992) [hereinafter ATV Second Report and Order].

⁵ Ervin S. Duggan, Remarks of Commissioner Ervin S. Duggan Before the HDTV World Conference, Las Vegas, Nevada (April 15, 1991) (transcript available at the Federal Communications Commission).

⁶ Alvin F. Lindsay, III, Comment, Tuning in to HDTV: Can Production Joint Ventures Improve America's High-Tech Picture?, 44 U. MIAMI L. REV. 1159, 1161 (1990).

^{7 &}quot;ATV" means "any system for distributing programming

⁸ Id.; ATV Second Report and Order, supra note 4. EDTV systems are an improvement over NTSC, yet less advanced than HDTV. ATV Fact Sheet, supra note 7, at 1. As the Commission is currently anticipating a final policy determination on an HDTV standard, it has stated that it would not be adopting an EDTV standard at this time. ATV Second Report and Order, supra note 4, at n.1.

The standard NTSC format is 525/60 resolution and 4:3 aspect ratio. The resolution consists of electrical images scanned 60 times per second (based on U.S. power line frequency of 60 hertz), which in turn traces 525 scan lines to produce each single frame of the picture. The aspect ratio consists of a picture screen size of 4 units wide by 3 units high. Whitehouse, *supra* note 1, at 14

¹⁰ The scan lines are extended so as to increase the aspect ratio from 4:3 to 16:9.

Whitehouse, supra note 1, at 14.

¹² Id. Depending on a broadcaster's circumstances or plans, a broadcaster may be required to invest in transmitters, tape players and studio equipment, resulting in costs estimated in the \$8 million to \$12 million range. Lloyd Covens, Local Spot Beams May Pave Way to HDTV, SATELLITE COMM., Apr. 1992, at 19.

drafted by the FCC that were designed as a framework for final implementation of HDTV. This Comment first provides background on congressional legislation and FCC policy that have served as the basis for future HDTV implementation. Next, it analyzes recent FCC proposals and rules on HDTV implementation. This Comment concludes by addressing the legal implications and industry concerns raised by the FCC's action with respect to HDTV policy.

88

I. FCC AND LEGISLATIVE POLICIES CON-CERNING HDTV PRIOR TO 1992

The current policies on HDTV are the result of steady, supportive efforts by both the FCC and Congress. Although HDTV was conceived in Japan in the mid-1970s, 13 it was not until 1987 that the United States' broadcasting industry tendered a Joint Petition for Notice of Inquiry that urged the Commission to initiate proceedings to explore the uses of advanced television systems. 14 As a result of that petition, the Commission initiated a wide-ranging inquiry to consider the technical and public policy issues surrounding the use of ATV technologies by television broadcast licensees. 15 Simultaneously, the Commission ordered a freeze on applications for new television stations and allotments in thirty major cities "in order to preserve the future possibility of allotting additional spectrum to existing television

While both Japan and Western Europe have made significant contributions to HDTV before U.S. involvement, emphasis was placed on analog systems. The Commission, however, recognized that the development of HDTV service in the United States was for terrestrial broadcasting and thus focused on digital HDTV service as opposed to the analog systems of both Europe and Japan. James H. Quello, Intelevent '92 Global Alliances in Telecommunications: Partnership for Progress Luncheon, Address by Commissioner James H. Quello, Cannes, France (Oct. 21, 1992) (available in Lexis, 1992 FCC Lexis 5956).

¹⁸ ATV Notice of Inquiry, supra note 3, para. 3.

broadcasters for use with advanced television systems."16

Furthermore, as part of its inquiry into the possible implementation of ATV systems, the FCC formed the Advisory Committee on Advanced Television Service that began work in November 1987.¹⁷ The purpose of the Advisory Committee was to apprise the Commission of the technical and public policy issues concerning ATV.¹⁸ In June 1988, the Advisory Committee submitted its first *Interim Advisory Report*, which recognized the public interest in maintaining the broadcasting industry and "asserted that Advanced Television is essential to our [broadcasting industry's] continued ability to compete with other media."¹⁹

On September 1, 1988, the Commission adopted and released a Tentative Decision and Further Notice of Inquiry in reference to ATV systems.²⁰ In that report, the Commission reached tentative decisions on six of the most fundamental issues for HDTV implementation.²¹ In addition, the FCC requested additional comments by industry members in order to better assist the Commission in addressing all of the remaining complex and interrelated technical, legal, economic and policy issues surrounding authorization of use of ATV technology by terrestrial broadcasters.²² The Commission also sought comment on a number of specific issues, including the accommodation of ATV within the existing television spectrum and the establishment of standards

¹⁴ Broadcast Regulations: A Review of '91 and a Preview of '92, NAB REPORT (National Association of Broadcasters, Wash., D.C.), 1992, at 191 [hereinafter Broadcast Regulations].

¹⁶ In re Freeze on Applications to Amend TV Table of Allotments, 52 Fed. Reg. 28,346 (1987) [hereinafter Table Freeze Order]; In re Advanced Television Systems and Their Impact on the Existing Television Broadcast Service, First Report and Order, 5 FCC Rcd. 5627 n.4 (1990) [hereinafter ATV First Report and Order].

¹⁷ Broadcast Regulations, supra note 14, at 192.

¹⁸ ATV Fact Sheet, supra note 7, at 1.

Broadcast Regulations, supra note 14, at 192 (citing Interim Report of the FCC Advisory Committee (June, 1988));
The Advisory Committee has also submitted additional reports

including its "Second Interim Report" in April, 1989, its "Third Interim Report" in March, 1990, its "Fourth Interim Report" in March, 1991 and its "Fifth Interim Report" in March, 1992.

²⁰ In re Advanced Television Systems and Their Impact on the Existing Broadcasting Service, Tentative Decision and Further Notice of Inquiry, 3 FCC Rcd. 6520 (1988) [hereinafter ATV Tentative Decision].

²¹ ATV First Report and Order, supra note 16, para. 4. The Commission reached tentative decisions on six of the most fundamental issues in this report: (1) providing for terrestrial broadcast use of ATV techniques would benefit the public; (2) the benefits of ATV technology could be realized by the public most quickly if existing broadcasters were permitted to implement ATV; (3) any spectrum needed for a broadcast ATV system would be obtained from the spectrum currently allocated to broadcast television; (4) existing service to viewers utilizing NTSC receivers should be continued, irrespective of ATV service, at least during the transition period; (5) systems requiring more than 6 MHz to broadcast an incompatible signal could not be authorized for terrestrial broadcast service; (6) it would be in the public interest not to retard the independent introduction of ATV in other services or on nonbroadcast media. Id.; see also ATV Tentative Decision, supra note 20.

²² ATV First Report and Order, supra note 16, para. 5.

for ATV service.23

In 1989, in an effort to ensure the role of the U.S. in producing HDTV technology, members of the 101st Congress proposed several bills that would specifically aid the HDTV industry.24 Those legislative endeavors indicated congressional support in the areas of research and government funding for HDTV systems. More importantly, the bills illustrated that "HDTV [was] indeed becoming the paradigm of American competitiveness [and was] a test of the country's ability to survive under rival pressure."25 Shortly thereafter, on August 24, 1990, the Commission adopted its First Report and Order26 in which several policy decisions concerning the introduction of ATV service were adopted.27 While the First Report and Order addressed only a limited number of issues, the FCC indicated that additional issues would be pursued through subsequent actions.²⁸ On May 8, 1992, the Commission adopted its Second Report and Order and Further Notice of Proposed Rule Making that decided the most critical issues relating to HDTV, as well as requested comments on additional FCC proposals for HDTV implementation.29

II. CURRENT POLICY DECISIONS BY THE COMMISSION ON HDTV

Recently, the FCC issued a Third Report and Order that addressed the most substantive policy decisions concerning HDTV in the U.S.³⁰ The Third

Report and Order fixed the time frame and other broadcasting requirements that broadcasters were to adhere to for HDTV implementation.³¹ In reaching its determinations, the Commission analyzed and reconciled such issues as spectrum allocation, frequencies assignment, simulcasting, and conversion.³²

Consistent with Commission proposals in prior proceedings, the *Third Report and Order* specified that HDTV would utilize 6 MHz bandwidths that had been previously allotted for the NTSC system.³³ For the first time, the Commission indicated that it might limit those HDTV allotments to the ultrahigh frequency ("UHF") band.³⁴ An HDTV system would be selected that could coexist with the preexisting NTSC technology so that consumers would not prematurely lose the benefits of their existing NTSC television receivers.³⁵

The Third Report and Order clarified the Commission's preliminary decision regarding the simulcasting of HDTV and NTSC.³⁶ First, in an effort to provide flexibility for television broadcasters, the Commission defined simulcasting for HDTV purposes as twenty-four hour broadcasting of the same basic program material broadcast on the NTSC systems, excluding advertisements and promotions.³⁷ Second, the Commission adopted a phased-in simulcasting requirement which obliged stations to simulcast at least fifty percent of their programming on NTSC and HDTV channels within one year after the six-year application and construction period, and to move to 100 percent simulcasting within two years thereafter.³⁸ At the point of full conversion to

Nang; FCC Extends HDTV Deadline and Eases Simulcasting Rules, COMM. DAILY, Sept. 18, 1992, at 5.

²³ Id. (citing ATV Tentative Decision, supra note 20, para.

<sup>5).

24</sup> Lindsay, supra note 6, at 1160-61. Bills relating to HDTV which extrapolate on the congressional policy issues and sentiment regarding support for HDTV and government funding can be found at S. Rep. No. 952, 101st Cong., 1st Sess. (1989); H.R. Rep. No. 1516, 101st Cong., 1st Sess. (1989); H.R. Rep. No. 1267, 101st Cong., 1st Sess. (1989).

²⁵ Id. at 1189.

²⁶ ATV First Report and Order, supra note 16.

²⁷ Id

²⁸ Action in Docket Case—FCC Decision on ATV Explained and Discussed (MM Docket 87-268), FCC News, Aug. 28, 1990, at 5.

²⁹ ATV Second Report and Order, supra note 4, para. 1.

³⁰ In re Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service, ATV Third Report and Order and Third Further Notice of Proposed Rule Making in MM Dkt. No. 87-268, FCC 92-438 (October 16, 1992) [hereinaster ATV Third Report and Order]. The ATV Third Report and Order analyzed issues arising out of comments and petitions made in response to the Commission's decisions on HDTV which are sound in the ATV Second Report and Order, 7 FCC Rcd. 3340 n.1 (1992); see also Digital Da

³¹ See generally ATV Third Report and Order, supra note 30.

³² See generally In re Review of the Commission's Regulations Governing Television Broadcasting, Notice of Proposed Rule Making, 7 FCC Rcd. 4111 (1992) [hereinafter TV Broadcasting Notice of Proposed Rule Making].

³³ ATV First Report and Order, supra note 16, para. 8. To better understand this process, note the following clarification: "spectrum space is 'allocated' to a particular service . . . [a]llocated channels are then 'allotted' to specific geographic areas, and allotted channels are then 'assigned' to a licensee." ATV Third Report and Order, supra note 30, at 27 n.106.

³⁴ ATV First Report and Order, supra note 16, para. 8.

³⁶ Broadcast Services; Advanced Television Systems, *Policy Decision*, 57 Fed. Reg. 21,744, 21,749 (1992).

³⁶ ATV Third Report and Order, supra note 30, para. 64; see also Digital Da Nang, supra note 30, at 5.

³⁷ ATV Third Report and Order, supra note 30, para. 72. "Program" is defined as material excluding commercials and promotion, for simulcasting purposes. *Id.* para. 73.

³⁸ Id. para. 64. The phased-in simulcasting requirement results in 50 percent simulcasting by the seventh year and 100 per-

HDTV, the Commission would then recoup the 6 MHz NTSC channel.³⁹ The Commission indicated that this simulcast system would help protect the value of NTSC equipment until final conversion to HDTV.⁴⁰ In addition, the flexible time frame would provide television broadcasters with an opportunity to explore the creative potential of the ATV market, to convert to ATV programming properly, and to adjust to the new demands of ATV.⁴¹

Furthermore, as the Commission had recognized in its First Report and Order and affirmed in its Third Report and Order, the simulcast system would be spectrum efficient. The simulcast system, with its paired channel characteristics, would provide broadcasters with the flexibility needed to handle any implementation issues that might arise once ATV service commenced. In addition, simulcasting would ease consumer worries about the wisdom of purchasing an HDTV receiver, thus increasing the market penetration of HDTV.

The Third Report and Order also indicated that the FCC would set aside specific HDTV channels for noncommercial broadcasters. Such reserve channels would ensure the availability of HDTV channels for qualified noncommercial broadcasters, thus avoiding possible competition for channels between noncommercial and commercial television entities. The Commission recognized the unique services that noncommercial entities provide to the public and the reliance of those entities upon government appropriations for their survival. As a result, the Commission sought comment on whether it should exercise greater flexibility in regard to the application of its licensing and construction periods to noncommercial television broadcasters. The

Commission deferred announcement of an assignment methodology because it had not yet determined its overall allotment approach for ATV channels.⁴⁹

In the Third Report and Order, the Commission discussed appropriate assignment procedures for the aforementioned 6 MHz allocations. 50 Existing broadcasters⁵¹ would have first priority in obtaining the paired NTSC/ATV channels if they elected to implement HDTV service. The Commission would issue existing broadcasters a three-year application deadline for the licensing of a guaranteed ATV channel, which would commence with the adoption of either an ATV allotment table or an ATV standard, whichever came later.⁵² Furthermore, existing broadcasters would have an additional three-year period for construction of an ATV facility capable of emitting ATV signals.53 Broadcasters would therefore be given a total of six years for both the application and construction processes.⁵⁴ The Third Report and Order modified the earlier, narrower deadline proposals in order to provide broadcasters with some flexibility in coping with any unforeseen problems that might arise during HDTV implementation.⁵⁵

The Third Report and Order created a "use or lose" application/construction deadline. If a broad-caster failed to construct an adequate ATV facility in the limited time frame, it would forfeit its right to the assigned set-aside channel. The broadcaster could then apply for any channel at a later time, but on an equal basis with other applicants. The FCC essentially wanted to deter television broadcasters from "warehousing" spectrum, since warehousing was inconsistent with the Commission's goal of bringing HDTV to the public as expeditiously as

cent simulcasting by the ninth year of HDTV implementation. Id .

³⁹ 57 Fed. Reg. 21,744, 21,749.

⁴⁰ See id.

⁴¹ ATV Third Report and Order, supra note 30, paras. 65, 69.

⁴² Id. para. 64; ATV First Report and Order, supra note 16, para. 8.

⁴³ ATV Third Report and Order, supra note 30, para. 64.; ATV First Report and Order, supra note 16, para. 8.

⁴⁴ ATV First Report and Order, supra note 16, para. 8.

⁴⁸ See ATV Third Report and Order, supra note 30, paras. 6, 34; see also Digital Da Nang, supra note 30, at 5.

⁴⁶ Digital Da Nang, supra note 30, at 5; ATV Third Report and Order, supra note 30, para. 34.

⁴⁷ ATV Third Report and Order, supra note 30, para. 28.

⁴⁸ Id. paras. 28-29.

⁴⁹ *Id.* para. 34.

⁵⁰ Id.

⁵¹ In the event of spectrum shortfall, existing broadcasters

will be ranked in the following order: "(1) licensees and permittees with program test authorization as of the date ATV applications are accepted; (2) other permittees; and (3) all parties with applications for a construction permit on file as of October 24, 1991." ATV Third Report and Order, supra note 30, para. 10.

⁶² ATV Third Report and Order, supra note 30, paras. 5, 16.; see also Digital Da Nang, supra note 30, at 5.

⁵³ ATV Third Report and Order, supra note 30, para. 5.

Those that apply before the end of the three-year period will still have a total of six years to start broadcasting from the time the Commission sets an HDTV standard. Digital Da Nang supra note 30, at 5. The Commission noted that it will review both the application and construction deadlines at the time the ATV standard or Allotment Table is effective, whichever is later. ATV Third Report and Order, supra note 30, para. 19.

⁵⁵ ATV Third Report and Order, supra note 30, para. 18.

⁵⁸ Id. at para. 21; see also ATV Third Report and Order, supra note 30, para. 16.

⁶⁷ ATV Third Report and Order, supra note 30, para. 21.

possible.⁵⁸ Once the assignment of HDTV licenses was complete, no one would be able to apply for new NTSC licenses, thus further discouraging any expansion of NTSC service.⁵⁹

The Third Report and Order reiterated the Commission's decision in its Second Report and Order to limit initial license eligibility to existing broadcasters. In its Second Report and Order, the FCC recognized that existing broadcasters had invested heavily in the current NTSC system and therefore possessed the know-how and experience to implement HDTV efficiently. According to the Commission, the continued involvement of existing broadcasters in ATV was the "most practical, expeditious, and non-disruptive way to bring improved service to the American public."

Under the Third Report and Order, the FCC announced that it would award existing NTSC broadcasters a second license for each 6 MHz ATV channel.63 Thus, a broadcaster would have separate licenses for its NTSC and ATV channels, which would simplify enforcement and administration of those varied and distinct services. 64 Moreover, the Commission would issue HDTV licenses for periods similar to current NTSC licenses.65 The Commission determined that this assignment procedure would be spectrum efficient because it would enable the Commission to "award existing broadcasters an additional 6 MHz 'conversion channel' on an interim basis, giving existing broadcasters the opportunity to move to ATV technology."66 Thereafter, "[at] the time of conversion to ATV, [the Commission would be able to reclaim one of the two 6 MHz

channels—the 'reversion channel'—without abruptly disenfranchising television broadcast licensees." The Commission would "not permit an NTSC license to be transferred independently of the associated ATV license, or vice versa." 8

A noteworthy element of the Second Report and Order was the Commission's pronouncement that if either a broadcaster's NTSC or ATV license was revoked or not renewed, then the broadcaster's remaining license would automatically be revoked. The rationale behind that policy was the Commission's desire to ensure the preservation of the additional allotment of spectrum, as well as the efficient conversion to HDTV. However, the FCC would consider, on a case-by-case basis, the surrender or loss of an NTSC channel by a broadcaster and would analyze factors such as ATV receiver penetration in the market in order to determine whether such a surrender or loss would deprive communities of their NTSC systems. The surrender or loss would deprive communities of their NTSC systems.

Furthermore, both the Second Report and Order and the Third Report and Order maintained that once initial ATV allotments and licenses were issued to all existing broadcasters that submitted timely applications, any unassigned channels would then be open to qualified new entrants.⁷² The Commission deferred determining the assignment procedures applicable to that new class of broadcasters, as it has still not decided the details of the assignment methodology to be used for existing broadcasters.⁷³

In mid-1992, the Commission proposed a draft ATV table of allotments which it hoped to finalize prior to the adoption of a definitive ATV standard.⁷⁴

⁵⁸ ATV Third Report and Order, supra note 30, para. 17; ATV Second Report and Order, supra note 4, para. 21.

ATV Third Report and Order, supra note 30, para. 12.

⁶⁰ Id. paras. 6, 8.

⁶¹ ATV Second Report and Order, supra note 4, para. 6.

⁶² Id. The Commission believes limiting initial eligibility is consistent with Ashbacker Radio Corp. v. FCC, 326 U.S. 327 (1945), which is discussed in ATV Third Report and Order, supra note 30, n.9.

⁶³ ATV Second Report and Order, supra note 4, para 11.

⁶⁴ Id.

⁶⁵ Id. para. 16.

⁶⁶ *Id.* para. 7.

er Id

⁶⁸ Id. para. 11. It is the Commission's belief that transfer of either an NTSC or ATV license would threaten spectrum efficiency and thwart the Commission's adopted conversion procedures. Id.

⁶⁹ Id. para. 12.

⁷⁰ Id.

⁷¹ *Id.* paras. 5, 13.

⁷² Id. para. 7; ATV Third Report and Order, supra note 30 para. 9. Qualified new entrants are considered:

⁽¹⁾ parties ultimately awarded a construction permit based on an allotment petition pending as of the date of the *Notice*, regardless of whether or not permittee has filed the original allotment petition; (2) parties awarded waivers of the current freeze on television broadcast applications in major markets and who are subsequently awarded an NTSC authorization; and (3) any other parties authorized to construct NTSC facilities in the interim period after adoption of the *Notice*.

ATV Third Report and Order, supra note 30, para. 9 n.11. "Similarly, if [an existing] broadcaster has failed to apply for and construct an ATV facility within the specified time, that broadcaster will lose initial eligibility for the assigned channel, which would then be open to competing applicants." ATV Second Report and Order, supra note 4, para. 7.

⁷³ ATV Third Report and Order, supra note 30, para. 9.
⁷⁴ Action in Docket Case; Methods for Allotting Channels for ATV Service and Draft ATV Table of Allotments Proposed, (MM Dkt. No. 87-268), FCC News, July 16, 1992, at 1 [hereinafter ATV Channel Allotment]. The Commission proposed four broad ATV allotment objectives:

To accommodate all existing NTSC stations, e.g., provide a second channel for ATV service for all existing broad-

Prior to completion of the table of allotments, broad-casters will have an opportunity to negotiate amongst themselves for assignments and to thereafter submit all negotiation determinations to the Commission for its consideration in the preparation of its final ATV table of allotments. Furthermore, all qualified parties will have the opportunity, through the filing of petitions for rulemaking, to modify the ATV table of allotments. Of course, the Commission has assumed ultimate responsibility for ensuring additional ATV channel availability.

The Third Report and Order set a final date for full conversion to ATV. Indeed, it stated that broadcasters would have fifteen years for total transition to HDTV from NTSC,78 which would commence with the effective date of the selection of an ATV system or with the adoption of the final table of allotments, whichever is later. 79 During this fifteen-year interim period, the FCC would permit a broadcaster that had been awarded a 6 MHz ATV channel to utilize their second, paired channel for NTSC transmissions.80 However, after the expiration of the fifteenyear period and full conversion to ATV, broadcasters would have to discontinue all broadcasting in the NTSC format and surrender their 6 MHz reversion channel.81 Such a schedule would enable consumers to obtain full use of their NTSC equipment before final conversion to HDTV and would allow for a significant decline in retail prices for HDTV equipment.82 The Commission rejected the adoption of a "staggered" deadline for total conversion, stating that it would be difficult to determine specific conversion

casters; to maximize the service areas of all ATV stations to the extent possible, and ensure that all ATV stations have a minimum service area of at least 85-90 km (55 miles) from the station transmitter; to allot all ATV channels to UHF spectrum; and to prefer ATV allotments in situations where a choice must be made between providing greater service area for a new ATV allotment or additional protection for an existing NTSC allotment.

Id. at 1-2.

92

Under this proposal, at the time the Commission issues a Further Notice proposing the Final Table of Allotments, broadcasters would have a fixed period of time to negotiate with each other and submit plans for pairing NTSC and ATV channels either nationwide or on a market-by-market basis. Both commercial and noncommercial stations would be permitted to participate in this negotiation. Once the period for such industry negotiation ends, if there are markets remaining where broadcasters are unable to agree on a pairing plan, the channels in those markets would be assigned on a first-come, first-served basis. In the case of simultaneously filed applications, [the Commission] would apply a 'random ranking' procedure, so that the top-ranked applicant would be granted its first

needs for each market.⁸³ Finally, the Commission contended that the "establishment of a firm date for conversion would keep administration simple, assure progress toward freeing spectrum on a timely basis, and give affected parties the benefits of a clearly defined planning horizon."⁸⁴

III. LEGAL IMPLICATIONS OF HDTV

Generally, there has been widespread support in the broadcasting community for HDTV. However, while the introduction of such advances could bring television broadcasters to the forefront of technology, there are several issues that the Commission has had to reconcile in its treatment of HDTV. Indeed, HDTV-related issues such as spectrum allocation, frequency assignment, construction deadlines, and conversion deadlines could have serious implications for the broadcasting industry as a whole.

A. Simulcasting: Will It Deprive Broadcasters of Spectrum Use?

Throughout the mid-1980s, the Commission reiterated its belief that sufficient spectrum must be preserved to allow all broadcasters to upgrade to HDTV⁸⁵ and, later, that such spectrum allocation should be allotted to the UHF band.⁸⁶ In an effort to preserve spectrum needed to advance HDTV implementation, the Commission issued a Freeze Order in 1987 which prohibited acceptance of any new peti-

choice, and the next-ranked applicant its highest choice that would not conflict with the first-ranked applicant.

Id.; see Broadcast Services; Advanced Television Systems, 57 Fed. Reg. 21,755, 21,759 (1992) (proposed May 22, 1992); see also ATV Third Report and Order, supra note 30, para. 32. In the Third Report and Order, the Commission stated it would defer in deciding on an assignment methodology, as it has not yet determined the allotment methodology. ATV Third Report and Order, supra note 30, para. 32.

- ⁷⁶ ATV Second Report and Order, supra note 4, para. 14.
- ⁷⁷ Id. at n.76.
- ⁷⁸ ATV Third Report and Order, supra note 30, para. 3.
- ⁷⁹ Id. para. 44.
- 80 Id. para. 56.
- 81 Id. paras. 41, 56.
- 82 Id. paras. 49, 50.
- ⁸³ Id. para. 27; see also Digital Da Nang, supra note 30, at 5.
 - 84 ATV Third Report and Order, supra note 30, para. 41.
- ⁸⁶ In re Applications of Greater Utica-Rome TV Services, Inc and Mohawk Valley Telecasters, Inc., 7 FCC Rcd. 2252, 2253 n.3 (1992) [hereinafter Mohawk].
 - 88 ATV Channel Allotment, supra note 74, at 2.

tions for amendments to the TV table of allotments.⁸⁷ The Freeze Order also barred approval of applications for construction permits for vacant spectrum allotments within the minimum co-channel distance of 189.5 miles⁸⁸ in or around certain metropolitan cities.⁸⁹ The Commission initiated the "freeze" so as to preserve additional spectrum for use by advanced television systems.⁹⁰ However, the Commission maintained that it "would consider waiver requests on a case-by-case basis for noncommercial educational channels, or for applicants which provided compelling reasons why the freeze should not apply to their particular situation or class of stations."⁹¹

The Freeze Order set up new obstacles for existing television broadcasters in their attempts to secure channel allotments. Fortunately, the order provided for the continuance of normal processing procedures with respect to applications for vacant allotments already on file and the tendering of "applications mutually exclusive with TV applications already announced as acceptable for filing on 'cut-off' lists."92 Nevertheless, some broadcasters in major metropolitan areas found that, even after timely filing, the Commission had denied their applications in its zealous effort to preserve ATV spectrum for simulcasting.93 Moreover, since 1987, broadcasters have found that obtaining waivers of the freeze on allotments in congested metropolitan areas has been difficult. This is due, in part, to the limited availability of spectrum in those regions and the possible threat that conventional broadcasting would pose to effective and efficient ATV service.94

The Freeze Order was aimed at preventing potential harmful interference between NTSC and ATV stations. In addition, during mid-1992, the Commission considered further proposals for specific minimum spacing requirements between such stations. The Commission contended that "[s]trict adherence to the spacing requirements reflected in the Table [of allotments] is necessary . . . in order to

provide a consistent, reliable and efficient scheme of [allotments]."96 Thus, if an applicant fails to demonstrate a compelling need for departure from established interstation separation standards, the Commission will not grant a waiver of the minimum spacing rules for allotment purposes. 97 Grounds such as expended costs on construction permit applications, productive use of an already vacant channel, and serving the public interest through the advent of a new service have all failed to result in a waiver of the Freeze Order. 98 Thus, many applicants have failed to secure channel allotments as a result of the Freeze Order, which, as noted, was instituted to further the widespread implementation of ATV.

Of course, broadcasters have also been extremely concerned about the FCC's restriction of HDTV stations to the UHF band.99 In a recent filing, at least 105 broadcast groups joined together and insisted that access by broadcasters to the VHF band was necessary for successful HDTV implementation, as it would allow eighty-five percent of current television stations to serve their audiences as opposed to only 48.5 percent audience coverage capability with restriction to the UHF band. 100 The broadcasters indicated that a viable table of allotments might need to include at least 100 to 200 VHF allotments and that the absence of such allotments would increase interference problems. 101 Those points have not been confirmed by definitive studies nor has the FCC concurred in them. However, the FCC has argued that other services could make more efficient use of VHF allotments, and it tentatively has no plans to use VHF spectrum for HDTV implementation.

It is the position of the Commission that the simulcasting requirement during the transition from NTSC to HDTV will produce efficient use of spectrum and will maintain fair consumer competition between NTSC and HDTV broadcasters. Moreover, according to the Bureau of Economics of the Federal Trade Commission ("FTC"), 102 broadcasting of the same program material on the two different systems

⁸⁷ In re Freeze on Applications to Amend TV Table of Allotments, 52 Fed. Reg. 28,346 (July 29, 1987).

⁸⁸ In re Amendment of Section 73.606(b), Table of Allotments, Memorandum Opinion and Order, 1992 FCC Lexis 5169, para. 6 (Sept. 9, 1992) [hereinafter Allotment Memorandum Opinion].

^{89 52} Fed. Reg. 28,346.

⁹⁰ Id.

⁹¹ Mohawk, supra note 85, at 2252 (citing 52 Fed. Reg. 28,346).

^{92 52} Fed. Reg. 28,346.

⁹³ See generally Mohawk, supra note 85, at 2252.

⁸⁴ See id. at 2253.

ATV Channel Allotment, supra note 74, at 1.

⁹⁶ Allotment Memorandum Opinion, supra note 88, para. 8 (Sept. 9, 1992) (citing Millington, Maryland, 45 Rad. Reg. 2d (P & F) 1689 (1979)).

⁹⁷ See generally id.

⁹⁸ Mohawk, supra note 85, para. 5.

⁹⁹ Broadcasters Attack FCC Plan to Pack all HDTV into UHF Band, COMM. DAILY, Nov. 18, 1992, at 3.

¹⁰⁰ *Id.*

¹⁰¹ Id.

[&]quot;The FTC is an independent regulatory agency responsible for maintaining competition and safeguarding the interests of consumers." *In re* Advanced Television Systems, Comments of

could "allow broadcasters to take advantage of the comparative strengths of both types of broadcasting, potentially providing increased choice to viewers."103 As consumers will likely be skeptical of the initial transition into HDTV, it is the FCC's position that simulcasting will be a necessity during the early stages of HDTV in order to ensure adequate program availability. However, once HDTV penetration increases, broadcasters will have less need to continue maximum simulcasting requirements because they will find it economically inefficient to continue such diverse programming on both channels.104

Despite the foregoing, the FTC has argued that proposals for the eventual discontinuance of NTSC programming may not take into account potential consumer support of HDTV, or the lack thereof. 105 Future television viewers may choose to continue receiving programming from their NTSC sets despite the availability of superior-quality HDTV programming.106 FCC Commissioner Ervin S. Duggan, however, has rejected suggestions by broadcasters that they be allowed to retain their NTSC channel beyond the fifteen-year phase-in period or until consumer demand can be ascertained.107 In a recent statement, Duggan contended that such a plan would "encourage warehousing of spectrum and [might] deter broadcasters from throwing themselves fully into the conversion process."108

In essence, Congress has given broad discretion to the Commission in technical and policy matters relating to frequency management. 109 As a result, the Commission has the power to define, in advance, conditions for license issuance and to confine applicants in given communities to specified frequencies. 110 The Freeze Order is an example of the Commission's authority to limit spectrum availability and illustrates the stringent regulatory approach that the Commission has followed in order to preserve spectrum for the future implementation of HDTV.

B. HDTV License Eligibility Standards Do Not Provide Equal Opportunity for New **Broadcasters**

The FCC is responsible for issuing broadcasting licenses and permits for operation of television and radio stations. The Communications Act of 1934 ("Act")111 authorized the FCC to grant construction permits and operation licenses for television stations when "public convenience, interest, or necessity will be served thereby."112 The Commission was also authorized to prescribe qualifications for station operators and to issue licenses to those operators deemed to be so qualified.113

The current HDTV policy gives existing broadcasters priority over new entrants in applying for ATV licenses on a set of reserved channels. The rationale behind giving incumbents preference is based on the expertise and investments that existing broadcasters have in the television arena. 114 Furthermore, the FCC desired to protect existing broadcasters from "unfettered competition from new entrants who might have a strong economic interest in speeding ATV development and who would thereby create pressure for broadcasters to keep pace."118

However, in Ashbacker Radio Corp. v. FCC, 116 the U.S. Supreme Court held that "where two bona fide applications are mutually exclusive, the grant of one without a hearing to both deprives the loser of the opportunity for a hearing to which he is entitled under Section 309."117 Section 309(a) of the Act, which provides for equitable treatment of mutually exclusive applicants, states:

If upon examination of any application for a station license or for the renewal or modification of a station license the Commission shall determine that public interest, convenience, or necessity would be served by the granting thereof, [the Commission] shall authorize the issuance, renewal or modification thereof in accordance with said finding. In the event the Commission . . . does not reach such decision, it shall notify the applicant thereof, shall fix

the Federal Trade Commission, 1992 FCC Lexis 656 at 4 (January 31, 1992) [hereinafter ATV FTC Comment].

¹⁰³ *Id.* at 35.

¹⁰⁴ Id.

¹⁰⁵ Id. at 31-32.

The average U.S. household currently owns two television sets. As a result, many purchasers of ATV receivers will most likely have multiple television sets and will have a strong desire to receive both NTSC and HDTV programming. See id.

¹⁰⁷ Action in Docket Case—Certain ATV Issued Resolved; Further Comment Sought on Other Issues, (MM Dkt. 87-268), Opinion, FCC News, Sept. 17, 1992, at 16 (statement by Commissioner Ervin S. Duggan).

¹⁰⁸ Id.

¹⁰⁹ 47 U.S.C. § 303(c) (1989); Springfield Television of Utah, Inc. v. FCC, 710 F.2d 620 (10th Cir. 1983).

¹¹⁰ 47 U.S.C. § 303(c); Logansport Broadcasting Corp. v. United States, 210 F.2d 24 (D.C. Cir. 1954).

¹¹¹ Pub. L. No. 73-416, 48 Stat. 1064 (codified as amended in scattered sections of 47 U.S.C. §§ 301-399(b) (1988)).

^{112 47} U.S.C. §§ 307(a), 309(a); see also Lamprecht v. FCC, 958 F.2d 382, 383 (D.C. Cir. 1992).

⁴⁷ U.S.C. § 303(l)(1).

¹¹⁴ ATV Second Report and Order, supra note 4, para. 6.

¹¹⁵ ATV Third Report and Order, supra note 30, para. 22.

¹¹⁶ Ashbacker Radio Corp. v. FCC, 326 U.S. 327 (1945).

¹¹⁷

and give notice of a time and place for hearing, and shall afford such applicant an opportunity to be heard.¹¹⁸

The central issue thus becomes whether the FCC, by shying away from traditional license eligibility standards in regard to HDTV, has acted contrary to the public interest.¹¹⁹ In the past, the Commission recognized that the Ashbacker doctrine guaranteed unlicensed and licensed broadcasters equal opportunity for licenses;120 however, with respect to HDTV, it might be argued that the Commission has turned its back upon the notion of equal treatment of unlicensed and licensed broadcasters. 121 In defense of the Commission, the Supreme Court in U.S. v. Storer Broadcasting Co. 122 found that "section 309(b) does not withdraw from the Commission the rulemaking authority necessary for the orderly conduct of its business, nor does it bar rules that declare a present intent to limit the number of stations consistent with a permissible 'concentration of control.' "123

Hence, criticism of the FCC for its HDTV licensing policy may not be warranted. After all, the Commission acted in accord with its mandate to promote the public interest in formulating its HDTV policy. For example, when the FCC amended its rules in 1989 to allow licensees or permittees of television stations to petition to amend the table of allotments for new communities of license, it conducted itself in a manner consistent with perceived public interest. 124 As the FCC noted at that time, "This amendment is not precluded by the Ashbacker doctrine. The Commission can promulgate rules limiting eligibility to apply for a newly allotted channel when such action promotes the public interest, convenience and neces-

C. The Dual Channel Allotment Invalidates the Multiple Ownership Rule and the Dual Network Rule

Section 73.3555 of Title 47 of the Code of Federal Regulations limits multiple ownership of broadcasting stations. ¹²⁹ It states, in part, that "[n]o license for . . . [a] TV broadcast station shall be granted to any party (including all parties under common control) if such party directly or indirectly owns, operates, or controls one or more broadcast stations" which serve substantially the same service area. ¹³⁰ The Storer Court found that the "rules provide that licenses for broadcasting stations will not be granted if the applicant, directly or indirectly, has an interest in other stations beyond a limited number" because overconcentration of broadcasting facilities in a particular

sity."¹²⁵ Furthermore, the Ashbacker doctrine does not give unlicensed broadcasters special rights with regard to HDTV, since the doctrine applies only "to parties whose applications are mutually exclusive and not to prospective applicants" for broadcast licenses. ¹²⁶ Thus, it is clear that the hearing requirement of Section 309 does not preclude the Commission from promulgating singular rules concerning licensee eligibility for HDTV outlets. ¹²⁷ The Commission may take such actions as limiting license eligibility or revoking a station license, as well as imposing additional regulatory requirements in issuing a construction permit, if the Commission determines the policy is in furtherance of the public interest. ¹²⁸

¹¹⁸ 47 U.S.C. § 309(a) (1992). Although Section 319(b) regulates the issuance of construction permits for broadcasting stations, Section 309 is also referred to when regulating construction permits, since similar procedures under Section 309(a) are followed in applications for construction permits. *Ashbacker*, 326 U.S. at 327 n.1.

¹¹⁹ ATV Second Report and Order, supra note 4, para. 6.
¹²⁰ Unesteemed and Unloved; Wiley Says FCC Shouldn't Switch to Multichannel NTSC from HDTV, COMM. DAILY, Oct. 1, 1991, at 3.

¹²¹ ATV Second Report and Order, supra note 4, para. 6.

¹²² United States v. Storer Broadcasting Co., 351 U.S. 192

(1956)

¹²³ Id. at 193.

Modification of FM and TV Authorizations to Specify a New Community of License, Report and Order, 4 FCC Rcd. 4870, para. 22 (1989) [hereinafter FM and TV License Report and Order]. "The procedure is limited to situations in which the new allotment would be mutually exclusive with the existing allotment and will not apply to nonadjacent channel upgrades." Id. "This rule will apply to adjacent upgrades and co-channel

changes for FM stations and to co-channel, adjacent channel, and UHF taboo channels in the television service." *Id.* at 4876 n.14; see 47 CFR §§ 73.207, 73.610, 73.698 (1992).

¹²⁶ FM and TV License Report and Order, supra note 124, para. 23; see also Storer, 351 U.S. 192 (1956).

¹²⁶ FM and TV License Report and Order, supra note 124, para. 23.

n.10; see also Storer, 351 U.S. 192 (1956).

¹²⁸ Ashbacker Radio Corp. v. FCC, 326 U.S. 327, 332 (1945).

¹²⁹ FCC Multiple Ownership Rule, 47 C.F.R. § 73.3555(a) (1991).

broadcast stations that result in an applicant directly or indirectly owning, operating or controlling (1) two TV stations with overlapping grade B contours, (2) more than 14 television stations, or 12 stations which are not minority-controlled and (3) TV stations which have an aggregate national audience reach exceeding 30 percent, or which reach exceeds 25 percent and are not minority-controlled." ATV Second Report and Order, supra note 4, para. 17 n. 35.

geographic area is not desirable.¹³¹ Traditionally, it has been the Commission's position that providing the public with a diversity of viewpoints is in the public interest.¹³²

However, the paired channel allotment proposed for HDTV broadcasting will necessitate suspension of application of the television multiple ownership rule for a limited period of time. As a result, a broadcaster could temporarily hold an NTSC and ATV permit or license in the same broadcast area, despite the existence of overlapping signals. According to the Commission, the "limited suspension of the multiple ownership rules is an essential component of the Commission's regulatory approach to ATV implementation." 136

In general, broadcasters support the modification or elimination of the multiple ownership rule. They contend that with increased group ownership comes an incentive to produce new, diverse, and locallyproduced video programming. 136 However, notwithstanding HDTV, the alleviation of the multiple ownership restriction could present possible antitrust implications, inasmuch as smaller geographic areas with fewer broadcasters could have less competition and could, in effect, monopolize spectrum. In contrast, antitrust implications are at a minimum in larger geographic regions with a larger broadcasting community.137 Nevertheless, the suspension of the multiple ownership rule may allow owners who wish to operate multiple stations that are close in proximity to make efficient use of the unused stations and to provide additional service to the public.

The dual network rule¹³⁸ prohibits television stations from affiliating "with a network that operates simultaneously and serves substantially overlapping geographic areas."¹³⁹ The Commission, in its desire to eliminate unfair competition, recognized that the operation of two same-network affiliates in substantially the same geographical areas would constitute excessive control over affiliates.¹⁴⁰ However, despite

the Commission's prohibition against dual networking, television networks have ample opportunities to provide or to participate in multiple networks which are distributed over cable, satellite technology and associated video.141 Furthermore, with respect to HDTV, the dual network restriction could fail to serve the public interest by hampering the advancement of innovative technology and program diversity. Thus, the Commission has suspended the dual network rule in relation to HDTV programming, thereby allowing networks to operate both an NTSC and an ATV network during the transition to HDTV.142 However, in lieu of the dual network rule, the Commission will require that "any second feed transmitted by a network in a given community be destined for a station broadcasting in the ATV mode."143

D. Construction Deadlines Might Not Promote Economic Efficiency

The FCC's decision to employ a "use or lose" application/construction deadline has concerned the broadcasting industry. Under that procedure, broadcasters must complete construction of their proposed ATV facilities or forfeit the right to use their assigned channels.144 Under the FCC's definition of "construction," a broadcaster has constructed an ATV facility if the facility is capable of emitting ATV signals.145 Prior to the Third Report and Order, which extended the construction deadline to three years, comments filed in opposition to proposed licensing requirements provided arguments against making awards contingent upon construction of an ATV facility within two years of receiving the construction permit. Indeed, the FTC asserted that the two-year requirement would "encourage construction but [might] result in excessively rapid or inappropriate construction."146 The FTC suggested an extension of the construction period due to the un-

¹³¹ United States v. Storer, 351 U.S. 192, 193 (1956).

¹³² TV Broadcasting Notice of Proposed Rule Making, supra note 32, para. 23.

ATV Third Report and Order, supra note 30, para. 14.
Broadcast Services; Advanced Television Systems, Policy

Decision, 57 Fed. Reg. 21744, 21,746; see ATV FTC Comment, supra note 102, at 7.

¹³⁵ 57 Fed. Reg. 21,744, 21,746.

¹⁸⁶ See TV Broadcasting Notice of Proposed Rule Making, supra note 32, para. 9.

¹⁸⁷ See ATV FTC Comment, supra note 102, at 20.

¹³⁸ 47 C.F.R. § 73.658(g) (1991); TV Broadcasting Notice of Proposed Rule Making, supra note 32, para. 29.

¹³⁹ TV Broadcasting Notice of Proposed Rule Making,

supra note 32, para. 29.

¹⁴⁰ Id.

¹⁴¹ Id. at paras. 32, 33.

¹⁴² ATV Third Report and Order, supra note 30, para. 15; Digital Da Nang, supra note 30, at 5; see also Broadcast Regulations; Advanced Television Systems, 57 Fed. Reg. 21,755 (1992) (proposed May 22, 1992). The Commission will review this temporary suspension of the dual network rule in 1999. ATV Third Report and Order, supra note 30, para. 6.

¹⁴³ ATV Third Report and Order, supra note 30, para. 15.

ATV Second Report and Order, supra note 4, para. 17.

¹⁴⁵ Broadcast Services; Advanced Television Systems, *Policy Decision*, 57 Fed. Reg. 21,744, 21,746 (1992).

¹⁴⁶ ATV FTC Comment, supra note 102, at 2.

certainties surrounding the implementation of HDTV in the U.S.¹⁴⁷ According to the FTC, an extension of the construction deadline would allow firms to experiment with different methods of transmission in order to find the most cost-effective mode.¹⁴⁸

Under the current ATV construction deadline of three years, a licensee could be forced to undertake premature and economically inefficient attempts to meet the deadline.149 Furthermore, in the event a small broadcaster failed in its attempt to implement HDTV, the broadcaster could be forced to shut down. According to Capital Cities/ABC President and CEO Daniel Burke, the result would be "a nation of urban haves and small-community havenots."150 The loss of affiliates would result in the loss of a significant portion of the national audience and would thus have serious implications for the networks since affiliates connect networks to a substantial portion of the national audience. 151 Thus, many argue that the Commission has failed to recognize the financial pressures that HDTV construction/ conversion procedures have placed on the broadcasting industry.

The Commission, for its own part, has disagreed with the notion that the deadline could promote premature and inefficient construction. In fact, in the Third Report and Order, the FCC contended that even if existing broadcasters failed to meet the construction deadline and subsequently forfeited their initial eligibility in the marketplace, new entrants would certainly not be ready for ATV implementation. 152 The Commission has argued that if existing broadcasters were not able to meet the construction requirements within the specified period with their substantial resources, it would be unlikely that other parties would apply for and construct an ATV facility in such an area. 153 Thus, while the Commission has decided to permit broadcasters to determine the appropriate time for full studio conversion for their respective facilities in order to successfully "'phasein' full ATV implementation as their individual circumstances and markets permit,"¹⁵⁴ it has remained generally intransigent with respect to the ATV construction deadline. According to the Commission, the adoption of the three-year construction deadline will ensure the availability of HDTV to the public and avoid pre-allotted spectrum to remain unused.¹⁵⁵

Furthermore, the Commission emphasized that the absence of a construction deadline would allow for the possibility of broadcasters delaying construction, as some broadcasters might choose to postpone converting their studios in order to monitor the potential success of ATV systems implemented by other pacesetting broadcasters. 156 While broadcasters are not obligated to construct ATV facilities and may elect to defer construction, such wary broadcasters would assume the risk of foregoing a construction permit if HDTV was proven successful and eventually implemented. Moreover, any delays in ATV construction by broadcasters might prove to be damaging to the expeditious implementation of HDTV. The adherence to an adopted construction deadline for an ATV facility could therefore help avoid potential market failure of HDTV. As many consumers are generally wary of new technologies until it is clear there has been widespread acceptance in the market, an ATV construction deadline would alert the public to the eventual arrival of HDTV in the marketplace. 167 According to the Commission, the deadline would thus notify consumers when to purchase HDTV systems and, consequently, would provide a smooth transition to HDTV programming.158

IV. CONCLUSION

Implementation of HDTV will be a costly process that raises many serious legal issues, some of which were heretofore addressed. Stringent FCC rules have broadcasters concerned about the costs they will incur to implement an HDTV service. The Commission maintains that "ATV implementation should be structured to protect the existing invest-

¹⁴⁷ Id.

¹⁴⁸ Id. at 26.

¹⁴⁹ Id.

¹⁶⁰ FCC and Broadcasters Battle Toward Flexible HDTV Conversion, Broadcasting, Oct. 5, 1992, at 4.

¹⁶¹ See Sikes Backs Multichannel; Burke Calls HDTV Threat to Small Broadcasters and Networks, COMM. DAILY, Oct. 2, 1992, at 2.

See ATV Third Report and Order, supra note 30, para.
21.

¹⁵³ Id.

¹⁶⁴ 57 Fed. Reg. 21,744, 21,746.

¹⁵⁵ See id.

¹⁵⁶ ATV Second Report and Order, supra note 4, para. 21.

See ATV FTC Comment, supra note 102, at 23.

See ATV Third Report and Order, supra note 30, para. 25.

Several additional legal issues would be raised with the implementation of HDTV, including production issues involving programming for simulcasting, labor and contract issues regarding rights to showings, syndication contracts, local broadcasting issues regarding networks and affiliates and patent rights. Joe Flint, *Programming Big Question in HDTV*, BROADCASTING, Oct. 5, 1992, at 41.

ment in consumer equipment so that consumers are not prematurely forced to purchase new receivers to enjoy top quality over-the-air television."160 Nevertheless, FCC Commissioner Duggan has realized the need to strike a balance between a smooth and expeditious conversion process and "giving broadcasters the flexibility they need in the interim to respond to uncertain consumer demand, to evolving program availability and to changing equipment costs."161 Thus, the FCC has created a timetable for review of HDTV deadlines to allow for periodic adjustments after balancing the needs of the broadcasters with those of consumers. 162 The Commission has indicated that it expects to adopt an ATV standard and a final table of allotments by late 1993.163 That date is, of course, subject to change and depends heavily on the successful development of a prototype HDTV system.

HDTV implementation involves substantial risk, as decisions to regulate this new technology will affect the very existence of an industry that enters virtually every home in the United States. ¹⁶⁴ In 1987,

when broadcasters approached the Commission to consider providing spectrum for HDTV, the economy was prospering and broadcasters were optimistic about the success of HDTV.165 However, in these intervening years of economic recession, it is the broadcasters who face difficulty in financing the sizable costs of HDTV in the absence of new revenue sources, if they choose to implement HDTV. 166 Understandably, in recent months, broadcasters have expressed less enthusiasm and more pessimism about effective HDTV implementation.¹⁶⁷ Nevertheless, the FCC appears confident about the future success of HDTV and the recognition the United States will receive as the leader in this emerging technology. Indeed, HDTV promises to be the next generation of television. As Commissioner Ervin S. Duggan recently stated: "The 21st century motto of consumers will mimic the slogan of cable's most successful music video channel: 'I want my HDTV.' "168

Susan R. Athari

¹⁶⁰ 57 Fed. Reg. 21,744, 21,749.

¹⁶¹ Action in Docket Case—Certain ATV Issues Resolved; Further Comment Sought on Other Issues, (MM Dkt. 87-268), Opinion, FCC News, Sept. 17, 1992 (statement by Commissioner Ervin S. Duggan).

See ATV Third Report and Order, supra note 30, para.

¹⁶³ Id. The Commission is awaiting the results of the extensive tests taken on each of the five proposed HDTV systems under review at the Advanced Television Testing Center (ATTC), in order to assist the Commission in determining an appropriate HDTV standard. The proposed systems include: two digital systems by General Instrument and MIT; one digital system by AT&T and Zenith; one digital system by the Advanced Television Research Consortium, which consists of NBC, North American Philips Corporation, Thomsen Consumer Electronics, Sarnoff Research Center, and Compression Labs; and one analog system by Japan-based NHK. As of March 1, 1993, four prototype systems remain under review. NHK Eliminated From HDTV Competition, More Testing Recommended for Others, COMM. DAILY, Feb. 16, 1993, at 2. The NHK model was been eliminated for further testing by ATTC, since it was the only analog HDTV system and was considered clearly inferior in quality. Id. Additional testing will be done on the remaining four digital systems, as ATTC determined that each proposed system contained some flaws. Id. There has been

discussion of a possible merger or "grand alliance" between all the remaining companies, in an effort to combine their resources to create a superior-quality system that combines the merits of each of the four proposed systems. Serious Talks Underway Aimed at Forming HDTV 'Grand Alliance', COMM. DAILY, Feb. 22, 1993, at 2. Selection of the winning system should be made in late 1993, although there is the possibility of additional testing after that date.

See Action in Docket Case, supra note 107 (statement by Commissioner Ervin S. Duggan).

¹⁶⁵ Alfred C. Sikes, Remarks of Alfred C. Sikes, Chairman, Federal Communications Commission, before the MSTV Sixth Annual HDTV Update Conference, Washington, D.C., Oct. 1, 1992 (available in 1992 FCC Lexis 5555 at 3).

However, television broadcasters should be aware that HDTV may be implemented by CATV and Direct Broadcast Satellite (DBS) operators once HDTV is underway. Furthermore, it appears that HDTV is being promoted in competing foreign countries, which appear to be in the process of developing new electronic devices for use with HDTV systems. Thus, broadcasters should strive to further HDTV implementation in order to evolve as the forerunner of this new technology.

¹⁶⁷ Remarks of Sikes, supra note 165.

¹⁶⁸ ATV Third Report and Order, supra note 30 (statement of Commissioner Ervin S. Duggan).