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

In the Matter of	)	
	)	MB Docket No. 03-15
Second Periodic Review of the	)	
Commission's Rules and Policies	)	
Affecting the Conversion	)	
To Digital Television	)	

To: The Commission

COMMENTS OF THE ASSOCIATION FOR MAXIMUM SERVICE TELEVISION, INC. AND THE NATIONAL ASSOCIATION OF BROADCASTERS

April 21, 2003

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SUMMARY

The conversion to digital television promises to enhance greatly this country's free, over-the-air television broadcast service. Already, digital television broadcast service is available to viewers in 187 markets across the county that include 97.4 percent of U.S. television households. And more progress is being made every day. Broadcasters that have faced unique challenges in initiating DTV service continue to pursue aggressively their build-out, and more and more broadcasters come on air in digital each month. The Commission's considerate action to date has contributed greatly to this success.

In this second DTV biennial review, the Commission should take stock of the transition's progress, recognizing the challenges that broadcasters face and the role that consumers and other industries must play in bringing the transition to an effective and orderly close. As it considers new issues and adjustments to its existing DTV rules in this proceeding, the Commission should take into account the impact its decisions will have on the long-term viability of the DTV broadcast service. In particular, the Commission's decisions should be geared towards promoting a healthy over-the-air television broadcast service, preserving the integrity of the broadcast spectrum, and assuring optimized DTV service at the close of the transition.

To these ends, MSTV and NAB believe that in this second DTV biennial review proceeding the Commission should:

- establish a channel election deadline of May 1, 2005, and in establishing this deadline, the Commission should work with the industry to establish procedures and policies that will assure both an equitable election process and a spectrum-optimizing repacking process;
- not permit broadcasters to "swap" their DTV and analog channel allotments because of the potential for disruptive interference and because such swaps could circumvent the channel election process;

- establish a use-it-or-lose-it replication and maximization deadline that coincides with the end of the DTV transition in order to assure flexibility in the repacking process, avoid stranded investment, mitigate financial hardships on smaller broadcasters, mitigate interference to analog service during the transition, and, critically, preserve the future DTV broadcast service of the public in the post-transition world;

- not penalize broadcasters awaiting action on their properly filed DTV applications by requiring them to construct facilities pursuant to a minimum facilities STA;

- eliminate its simulcasting rule as unnecessary, untimely and unduly limiting of broadcaster flexibility in the DTV transition;

- permit smaller and smaller-market broadcasters additional flexibility to phase-in their hours of DTV operation;

- permit satellite stations to relinquish their DTV authorizations and "flash cut" to DTV on their analog channels, subject to the Commission's interference rules;

- establish technical standards that enhance the delivery and enjoyment of DTV for the benefit of the public; and

- interpret the statutory provisions on DTV extensions in a manner that gives meaning to the statutory language and Congress's intent to ensure that "a significant number of consumers in any given market are not left without broadcast television service" when analog service ceases.

MSTV and NAB believe that these policies will best promote Congress's and the Commission's goal of avoiding undue disruption to viewers or severe hardship to broadcasters as a result of the DTV transition and will assure that the public's over-the-air television service will be robust in the all-digital world. By taking these steps and addressing other continuing challenges in the DTV transition — such as cable carriage issues, the need to protect broadcast digital content via the broadcast flag, DTV receiver and consumer issues, continued tower siting problems, and international coordination issues — the Commission can continue to advance the DTV transition, to the ultimate benefit of the public.

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THE NATIONAL ASSOCIATION OF BROADCASTERS

The Association for Maximum Service Television, Inc. ("MSTV") and the National Association of Broadcasters ("NAB")[1] file these comments to address the many important issues raised by the Commission's Notice of Proposed Rulemaking (the "Notice") in its second DTV biennial review.[2] Tremendous progress toward a DTV conversion has been made in the six years since the Commission first established its DTV table of allotments. The Commission and the broadcast industry have concentrated their resources towards working through the many complexities of the DTV transition. Broadcasters have invested heavily in constructing digital facilities and delivering new DTV services to the public. Today, they continue to pursue aggressively the build out of their DTV facilities, to navigate the various

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[1] MSTV represents nearly 400 local television stations on technical issues relating to analog and digital television services. NAB serves and represents the American broadcast industry as a nonprofit incorporated association of radio and television stations and broadcast networks.

[2] Notice of Proposed Rulemaking, *In re Second Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Transition*, MB. Docket No. 03-15, FCC 03-8 (rel. Jan. 27, 2003). ("*Notice*").

challenges that arise in the transition, and to develop short-term and long-term DTV business strategies. Broadcast DTV service now is transmitted in 187 markets that include 97.4 percent of U.S. television households. Further, 75.7 percent of U.S. television households are in markets with five or more DTV signals on the air, and 44.6 percent are in markets with eight or more signals on air. These figures are powerful indicators of the laudable progress broadcasters have made in bringing new DTV service to the public.[3]

In this second DTV biennial review, the Commission must consider complex and interrelated issues, the resolution of which is critical to paving the way towards an effective and consumer-friendly transition to DTV. Channel election policies, use-it-or-lose-it replication and maximization policies, and implementation of the statutory provisions regarding the DTV transition deadline cannot be evaluated in a vacuum. Rather, they must be considered together and carefully weighed in terms of their impact on the public's free over-the-air broadcast service, both during the transition and after its conclusion. Specifically, the Commission must consider how its rulemaking on these issues will implicate its development of a post-transition DTV table. For example, the Commission must consider the coverage and interference impact of introducing the 17 stations with two out-of-core channels into the core, migrating 176 stations with out-of-core DTV channels to their in-core analog allotments, and potential issues with low VHF DTV operations. The Commission also must consider the priorities in determining final DTV allotments and assignments and the impact of the repacking process on existing DTV replication or maximized service. As the Commission evaluates the issues before it in this proceeding, these and other complexities must be taken into account to ensure that viewers ultimately reap the full

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[3] *See also id.* at ¶¶ 8-9 (discussing progress in DTV build-out to date).

benefits of digital television. To this end, it is vitally important that the Commission's rules continue to provide the flexibility broadcasters need to transition successfully to digital service and preserve the integrity of the television spectrum, both during and after the DTV transition, for the public whose over-the-air television service is at stake.

I. THE COMMISSION'S DTV POLICIES SHOULD REFLECT THE PARTICULAR CHALLENGES OF THE DTV TRANSITION AND ASSURE OPTIMAL POST-TRANSITION DTV SERVICE.

As the percentage of households that now have access to DTV service indicates, the Commission to date has done admirable work in promoting the DTV transition by broadcasters. In particular, the Commission's fair and reasoned approach in its rulemaking has enabled broadcasters to purse the transition successfully. For example, the Commission's decisions in the first biennial review to defer channel election and to permit stations to build out initially at lower power and later to "ramp up" to full DTV service have greatly advanced the goal of ultimately having an expedited, effective roll-out of DTV service. The transition, however, remains a complex process with some of the most critical and difficult issues still to be addressed.

In the midst of this fluid and complex transition, the most challenging issue facing the Commission is the establishment of the rules to govern the creation of the post-transition DTV table. The initial assignment to all full power broadcasters of an additional channel to launch digital television service was an extremely difficult and complex process — one that required close government/industry cooperation in order to achieve optimal DTV channel assignments and preserve the quality of over-the air broadcast service to viewers while still maintaining the integrity of the television spectrum during the transition. MSTV and NAB believe that the repacking process at the end of the transition will be complicated and will require

close cooperation between government and industry to protect against the creation of a sub-optimal DTV service and table that disenfranchises viewers.

Ultimately, the creation of a DTV table that optimizes DTV service and ensures a smooth transition will require careful consideration not only of such issues as channel elections and whether in-core stations should be allowed to swap their analog and digital channels, but also, among others, the consequences of the "use-it-or-lose-it" deadline, whether to require an intermediate signal strength level, whether to retain simulcasting requirements, and whether satellite stations should be permitted to "flash cut" to DTV at the end of the transition. In its rulemaking on these issues, the Commission should adhere to policies that facilitate the delivery of digital television to core service and population areas, where it will drive DTV set penetration in the market, while remaining sensitive to the financial burdens of operating both analog and digital television facilities full time and at full power throughout the transition period. The Commission's policies also should encourage long-term investment in DTV by broadcasters and the public by assuring that the public's DTV service is enhanced, not diminished, in the all-DTV world.

A. Channel Election

As noted above, the successful migration of all broadcasters to digital depends to a large extent on how well the Commission establishes, addresses, and manages the process of developing the post-transition DTV table. In particular, the DTV transition presents complex issues regarding the amount of spectrum, if any, that will be available in a given market post-transition. Accordingly, to assure successful broadcaster migration to digital while preserving the quality of service to viewers, the Commission must craft its rules for the transition — including, especially, its rules on channel election — in a manner that assures spectrum integrity.

As a general matter, MSTV and NAB have no objection to the May 1, 2005 channel election deadline proposed by the Notice. MSTV and NAB also agree that "stations that begin service at lower power should be given an opportunity to increase power and to test for interference or other service problems at those higher power levels before they are required to decide which of their two channels is preferable for DTV operations."[4] However, establishing a channel election and repacking procedure to optimize the public's over-the-air DTV service in the long term presents numerous challenges with respect to all stations, whether they have two in-core channels or one or both channels out-of-core. For example:

- If not carefully coordinated, the election process could lead to excessive interference, resulting in sub-optimal DTV service. The controls that should be used to protect against this outcome include procedures for approving channel elections.

- There must be clarity on the order of election — for example, should it be presumed at the outset that stations with one in-core channel (whether analog or digital) will utilize their in-core channels and therefore will not make any election? Should stations with two in-core channels elect first, and then those with two out-of-core channels? What should happen if stations wish to change their elections based on the elections that others make simultaneously or in a subsequent election round?

- Stations that have one out-of-core channel may not wish for good reason to use their in-core channel allotment permanently, raising the question of how these stations should be treated for channel election purposes. For example, should they have an opportunity to elect a third channel? Should this opportunity be after the elections by stations with two out-of-core channels?

- Should the channel election rules and repacking process endeavor to maximize service, match DTV service being provided on the broadcaster's transitional DTV channel, or replicate the service that the broadcaster possesses in analog?

- What equities and priorities will be considered when parties make elections that adversely affect each other?

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[4] *Id.* at ¶ 25.

- How will the channel election process take into account stations that have pending rulemakings to change their DTV channels?

- How will the channel election process be sensitive to unique issues confronting stations operating in the low VHF band (channels 2-6) as well as to those confronting stations that will operate on channel 51, adjacent to post-auction users?[5]

In reaching the objective of the May 2005 date, it is imperative for the Commission to address and resolve these complexities head on, as they were when the Commission designed the initial DTV table of allotments, in order to assure both the public's access to optimal DTV service well into the future and the equities of all stations. To this end, there is an opportunity for the Commission and the broadcast industry to work hand-in-hand to establish proper priorities and policies. As they did in crafting the original DTV table, MSTV and NAB will work with the broadcast industry to develop a detailed proposal on these issues that will be presented to the Commission in a timely fashion. Accordingly, even if the Commission adopts its proposed date for channel election, it should defer taking action on the particular procedures for election until broadcasters have had the opportunity to develop these plans and present them to the Commission.

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[5] As part of the core television spectrum, channel 51 should continue to receive the same level of protection as other in-core channels, including from wireless entities and other new service providers. In the Notice, the Commission stated that "because channel 51 is adjacent to channel 52, we are concerned about possible interference between new wireless licensees on channel 52 and operations on channel 51." *Id.* at ¶ 60. MSTV and NAB share this concern and believe that, if anything, it suggests that channel 51 should be subject to greater interference protections than other in-core channels. Moreover, channel 51 could be a vital part of the transition to the in-core spectrum. When making channel elections, stations that have two out-of-core channels or that operate on analog channel 51 may choose to operate on channel 51, either out of necessity or preference (in order to provide better service). These stations should be entitled to no less interference protection than other in-core stations.

B. Swaps

In connection with its discussion of the channel election issue, the Notice solicits comment on whether stations with two in-core channels should be allowed through an application process to swap their analog and digital channels — *i.e.*, provide digital service on their current analog channel and vice versa.[6] Without question, the Commission should adhere to its current policy of requiring dual rulemakings to implement such a change. Channels swaps should not be allowed through the application process. Permitting swaps through an application process would effectively allow stations to circumvent the channel election process, thereby interfering with a repacking of the broadcast television spectrum that is optimized and equitable for all stations. Moreover, because of potential short-spacings and destructive interference resulting from operating an analog facility on a digital allotment and the different technical planning factors and interference criteria for analog and digital signals, a swap during the transition could result in excessive interference. Rulemakings for channel swaps afford important procedural protections that help guard against this outcome and that are not present in the application context.

C. Use-It-Or-Lose-It Deadlines and Pending DTV Applications

Both Congress and the Commission have recognized the central objective of assuring that viewers continue to have access in the digital world to the stations they received in analog. Therefore, regardless of the particular build-out decisions individual broadcasters make during the DTV transition, the Commission's goal should be to ensure that all broadcasters are afforded post-transition DTV facilities that fully replicate their historic analog service areas and, consistent with Commission rules, preserve the maximized coverage areas of stations, whether

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[6] *Id.* at ¶ 28.

they are remaining on their allotted DTV channel or migrating to another channel at the close of the transition. Seeking to preserve these service areas will assure both continuity and optimization of digital service for the public. To this end, the Commission should establish replication and maximization deadlines that coincide with the end of the transition. At the same time, the Commission should not punish broadcasters whose properly filed DTV applications remain pending through no fault of their own.

1. Use-it-or-lose-it deadlines for both in-core and out-of-core stations should coincide with the end of the transition.

The Notice proposes replication and maximization deadlines of July 1, 2005 for affiliates of the top four networks in the top 100 markets and July 1, 2006 for all other DTV licensees. It also queries whether broadcasters on out-of-core DTV channels should be subject to earlier deadlines in order to facilitate band clearing efforts. While MSTV and NAB understand the Commission's objectives in proposing use-it-or-lose-it deadlines during the DTV transition, they believe that a deadline for all stations (whether operating on in-core or out-of-core DTV channels) that coincides with the end of the DTV transition, when all broadcasters migrate to their final DTV channels, would both mitigate substantial difficulties during the transition and best maximize the service ultimately available to viewers in the post-transition DTV world.

First, extending the use-it-or-lose-it deadlines will have no adverse impact on the DTV transition. Given the Commission's construction schedule and operating rules, the vast majority of the major-network-affiliated broadcasters in the largest markets have constructed and are operating with full DTV facilities.[7] These are the broadcasters that the Commission has

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[7] The Commission's recent *Report and Order* and *Memorandum Opinion and Order on Reconsideration* regarding remedial actions for failure to meet construction deadlines will further ensure that broadcasters complete construction of their digital facilities as quickly as possible. (continued...)

relied on to drive the transition and those that, in fact, are doing so. Extending the use-it-or-lose-it deadlines will not impair the current service provided by these stations, nor will it delay the progress of the transition as driven by these stations or impair the core service provided by all other operating DTV stations.

Second, as previously observed, the final DTV repacking process will be extremely complex. Forcing broadcasters to operate at full facilities during the transition understandably will create strong expectations that broadcasters — and their viewers — will continue to enjoy these service areas and facilities at the close of the transition. Yet, unavoidable, real world problems may arise in the repacking process that may alter or limit the service areas available to broadcasters after the transition. A premature use-it-or-lose-it deadline will impinge on the flexibility necessary to address these problems equitably.

Third, a use-it-or-lose-it deadline that is at the end of the transition will mitigate stranded investment in maximized facilities. In this regard, a use-it-or-lose-it deadline prior to the end of the DTV transition would be particularly inequitable for broadcasters that must change DTV channels at the end of the DTV transition. This is especially so for those stations with out-of-core DTV channels that have no option to remain on their DTV channels post-transition.

Report and Order and Memorandum Opinion and Order on Reconsideration, *In re Remedial Steps For Failure to Comply With Digital Television Construction Schedule*, MM Docket No. 02-113, FCC 03-77 (rel. April 16, 2003). Under this recent ruling, a station that fails to build out its DTV facilities within one year of the expiration date of its initial or extended construction deadline will be considered, absent extraordinary and compelling circumstances, to have an expired construction permit and will lose its digital authorization. *Id.* at ¶ 12. The Commission also declined to reconsider its earlier decision not to permit network-affiliated stations in the top 30 television markets (or any broadcaster that has licensed its facility regardless of network affiliation or market size) to take advantage of the Commission's minimum facilities special temporary authority ("STA") policy. *Id.* at ¶ 29; Letter Ruling, *In re Petition for Reconsideration of Post-Newsweek Stations, Florida, Inc.* (Dec. 18, 2002).

Indeed, the Commission correctly recognized in the *First DTV Periodic Review Report & Order* that for licensees not operating on core channels, "it would be inefficient to require them to construct full-replication facilities on the channel that they will soon vacate."[8] If the use-it-or-lose-it deadline takes effect prior to the close of the transition, stations that must migrate to a different channel would be forced either to construct facilities that may not ultimately be useful or else, potentially, lose the right to provide replicated or maximized coverage with their ultimate DTV channels.

Fourth, requiring broadcasters to ramp up to full facilities during the transition may exacerbate DTV-to-analog interference problems during the transition, to the detriment of viewers. A number of broadcasters and their viewers already have faced unanticipated interference problems as a result of other stations initiating full power DTV operations. While certain interference trade-offs were anticipated in designing the DTV table, these instances demonstrate that at times the interference DTV causes to existing analog service will be both unexpected and highly disruptive for viewers. Accordingly, broadcasters should have the opportunity to remain flexible in coping with the challenges of building out — for example, by having the ability to experiment with and adjust different coverage patterns to optimize the availability of DTV service without prematurely losing the opportunity to grow into the DTV service areas that replicate their existing analog services. This will help assure, to the maximum possible extent, that viewers are not disenfranchised during the transition — one of the principal goals of the DTV transition process. In contrast, a use-it-or-lose-it deadline before the transition,

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[8] Report and Order and Further Notice of Proposed Rule Making, *In re Review of the Commission's Rules and Policies Affecting the Conversion To Digital Televisions*, MM Docket No. 00-39, FCC 01-24, ¶ 21 (rel. Jan. 19, 2001). ("*First DTV Periodic Review Report & Order*").

by potentially exacerbating interference to existing television service, could deprive the public of the stations they historically have received and raise consumer resistance to the DTV transition.

Fifth, a premature deadline would disproportionately harm broadcasters in smaller markets and ultimately the service they provide to the public. Small market stations typically have fewer resources to build out their DTV facilities, and their markets are likely to have lower and slower DTV set penetration. Stations that undertake to fully construct and operate DTV facilities by the use-it-or-lose-it deadline may suffer a draining of resources that will siphon funds away from programming, promotion or other more valuable investments that might more effectively expedite the transition. Moreover, because the DTV transition will take longer in smaller markets due to lower and slower DTV set penetration, the burdens of operating two full power television facilities — one analog and one digital — will extend the longest in the smallest markets. Financial hardship could result in a trade-off between the expense of operating the station's DTV facility at full facilities in order to preserve the station's ultimate DTV service area (even when the market has low DTV set penetration) and investment in the station's DTV capital plant, such as purchase of an HDTV encoder, that would result in superior DTV service long term. Moreover, if stations are unable to finance the construction and operation of full digital facilities prior to the deadline, a use-it-or-lose-it deadline during the transition could result in a permanent loss of service to the public post-transition. The public should be assured that a premature use-it-or-lose-it deadline will not deprive it of maximum DTV service both during and at the close of the DTV transition.

These factors support a use-it-or-lose-it deadline coinciding with the end of the DTV transition for all broadcasters, regardless of their DTV channel. That a broadcaster may have a DTV channel outside the core during the transition should not affect the application of

these principles. Out-of-core stations are confronted with the undesirable burden of having to build out digital facilities on channels that they know they ultimately will lose. Nonetheless, build-out of replicating facilities on out-of-core DTV channels has progressed, and, in addition, out-of-core broadcasters "have applied for facilities to expand . . . their coverage as well as to make other changes that alter the area they serve."[9] In light of the burden shouldered by out-of-core stations and in order to encourage continued build-out, out-of-core broadcasters should receive the same interference protections and be subject to the same deadlines as stations fortunate enough to have in-core channels. MSTV and NAB understand, in addition to protecting the authorized and/or applied for facilities of out-of-core DTV channels, the requirement that wireless operators and other services protect the "actual" parameters of existing stations requires protection of the DTV full replication and/or maximization facilities of out-of-core stations regardless of whether the DTV station is currently operating, or has filed an application to operate, pursuant to those facilities.[10] Further, fairness and equity require that out-of-core broadcasters in both the upper and lower 700 MHz band receive this protection until the end of the transition (*e.g.,* on the same basis as in-core channels) when they will be forced to give up their out-of-core channels.[11]

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[9] *Notice* at ¶ 54.

[10] *See id.* at ¶ 52-53.

[11] In the Notice, the Commission also notes the possibility of incumbent broadcasters relocating their DTV facilities to channels 52-58 during the DTV transition, for example, to resolve interference problems or conflicts, though it observes that this circumstance is likely to be rare. *Id.* at ¶ 59. As a general matter, the Commission should give primacy to the public's over-the-air television service. Accordingly, incumbent broadcasters seeking to use channels 52-58 during the transition should have primacy over new entrants, and should not receive any less protection or shoulder any additional burden of proof than broadcasters seeking to utilize channels inside the core. If exceptional circumstances dictate that this general principle should not apply, they would be accommodated most effectively by waivers rather than elaborate and speculative exceptions built into the general rules.

2. The Commission should not penalize broadcasters whose properly filed DTV applications remain pending.

The Commission proposes to require broadcasters that have filed a DTV application but not yet received an initial DTV construction permit to build out and operate on digital facilities that are different from what they have applied for, pursuant to a grant of special temporary authority ("STA").[12] MSTV and NAB oppose a requirement that broadcasters build out facilities that deviate from those that they have sought, in good faith and in order to better service the public, through properly filed DTV applications. The Commission states that its proposal is intended "[t]o ensure that all licensees that have been awarded digital spectrum begin to provide digital service."[13] But a station facing the uncertainty of a pending DTV application, which may have been delayed by international coordination issues, zoning requirements or other problems beyond the station's control, will lack the information about its ultimate DTV authorization necessary to make a reasonable business decision about the facilities that it will construct. Requiring broadcasters in this situation to build out DTV facilities pursuant to an STA simply would be unfair and ultimately could drive broadcasters to settle for inferior DTV facilities rather than incur the costs of constructing a second set of facilities once the pending DTV application is granted.

D. Intermediate Signal Strength Requirement

MSTV and NAB are sympathetic to the Commission's desire to ensure that broadcasters provide a sufficient level of service to drive DTV investment by consumers in their markets. For that reason, they do not oppose an intermediate signal strength requirement that

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[12] *Id.* at ¶ 61. The Commission proposes to require construction pursuant to an STA within one year of a report and order in this proceeding. *Id.*

[13] *Id.* at ¶ 62.

would take effect prior to an end-of-transition use-it-or-lose-it deadline. For example, the Commission might adopt a contour based requirement, such as providing a reliable digital signal over the station's City Grade or Grade A contour, or might establish a requirement that stations operate at a certain percentage of their full authorized power. If the Commission establishes an intermediate signal strength requirement, it also may want to consider varying that requirement based on market size to be sensitive to the challenges facing broadcasters in the smallest markets.

The Commission notes that its "goal is to ensure that the maximum number of consumers is able to receive digital television as quickly as possible while providing broadcasters a realistic timetable for increasing to full power."[14] An intermediate signal strength requirement, coupled with a use-it-or-lose-it deadline at the close of the transition, would accomplish the Commission's goal of ensuring that DTV service is available to the great majority of Americans so as to drive consumer investment in DTV sets, while at the same time ensuring that viewers enjoy widespread, interference-free over-the-air digital television service once the transition ends.

E. Simulcasting

As with the other issues addressed thus far, the issue of simulcasting demonstrates the need for the Commission's rules to facilitate the delivery of digital television service while protecting the interests of viewers and remaining sensitive to the realities of the DTV transition. The Commission's simulcasting policy was premised initially on the concern that, at the end of the transition, and in the absence of such a requirement, the most desirable programs would be shown only in digital and analog viewers would be disenfranchised. This concern never had any

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[14] *Id.* at ¶ 36.

empirical foundation, and experience over the past several years has shown that this theoretical concern has never materialized in reality and shows no sign of ever doing so. The Commission's simulcast policy was ultimately adopted for putative benefits *near the end of the transition.*[15] These benefits were continuity of programming for the consumer and consequent easier termination of analog broadcasting.[16] Whatever the actual merits of such a policy *for the end of the transition*, it is clearly acknowledged in all quarters that we are not in the last years of the transition and thus the current simulcasting dates would not serve the intended purpose of the rule. The simulcast requirement, therefore, should be abandoned as unnecessary at this time.[17] It can be revisited closer to the end of the transition.

Indeed, notwithstanding that the first simulcast requirements did not kick in until this month, simulcasting has been the general practice of broadcasters as the transition has progressed. Where broadcasters have deviated from the simulcast approach, it has been to present special events particularly suited for the HDTV format — such as Olympic events and other sports events for which the viewing experience is greatly enhanced by HDTV. There can be no doubt (if there ever was) that broadcasters have sufficient incentives to broadcast almost all their programs, especially their most desired and important ones, in both analog and digital

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[15] Fifth Report and Order, *In re Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, MM Docket No. 87-268, FCC 97-116, ¶ 56 (April 21, 1997).

[16] *Id.*

[17] The repeal of the simulcasting requirement should be complete, which would render moot the Commission's proposal to define the requirement as "[w]ithin a 24-hour period, the broadcast on a digital channel of the same programming broadcast on the analog channel, excluding commercials and promotions and allowing for enhanced features and services." *Notice* at ¶ 67. It should be noted, though, that while the definition proposed would permit some time-shifting of programming, it fails to provide broadcasters with flexibility in other ways.

format, and to showcase particular events on their digital signals in a manner that promotes consumer interest in DTV.

At the end of its simulcasting discussion, the Commission requests comment on "how simulcast requirements and the definition of 'simulcasting' relate to the substantial duplication decisions in the must carry portion of the Act."[18] The straightforward response to this inquiry is that they do not. As is clear from the plain language of Section 614(b)(5) of the Communications Act, the substantial duplication provisions of the must-carry statute apply where "the signal of any local commercial television station . . . substantially duplicates the signal of *another local commercial television station* which is carried on the system" or where there is "*more than one local commercial television station* affiliated with a particular broadcast network . . . ."[19] They do *not* apply with respect to the analog and digital signals originating from a *single* station. The statutory language is plain and unambiguous and, accordingly, the Commission's simulcast decision has no relationship to this provision.

Notwithstanding the benefits to be gained from removing the simulcasting requirement, one particular byproduct of the Commission's current simulcast approach should be preserved. Specifically, the Commission should retain a phased-in minimum hours-of-operation requirement for smaller and smaller–market broadcasters that currently is coincident with the Commission's simulcasting schedule. When the Commission determined that smaller broadcasters would be permitted to phase in their DTV operating schedule, it recognized that reducing their minimum hours of operation would substantially mitigate the burden of operating

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[18] *Id.*

[19] 47 U.S.C. § 534(b)(5) (emphasis added); *see also* 47 U.S.C. § 535(b)(3)(C) (applying substantial duplication rules in context of local noncommercial television stations as well).

DTV facilities throughout the transition while assuring that the DTV content most likely to attract consumers to DTV — that offered during prime time — was made available in markets across the country.[20] At this stage of the transition, requiring smaller and smaller–market broadcasters to operate their digital facilities full time would substantially drain the resources of these stations and divert such resources away from more effective investments, without significantly advancing the goal of increased DTV set penetration. Accordingly, the Commission's decision to permit smaller broadcasters to phase in their hours of operation was a good one.

On April 1, 2003, smaller market broadcasters and smaller stations in larger markets were required to increase their hours of operation from prime time hours to 50% of their analog operating schedule. MSTV and NAB concur with this 50% requirement, which will allow broadcasters to operate in digital during the most significant portions of the broadcast day (*e.g.*, a station could provide morning programs, early evening news and prime access, prime time programming, and late night using a 50% schedule). However, MSTV and NAB urge the Commission to allow additional time before increasing these minimum hours. Specifically, to ensure that the minimum hours of operation requirement is not unduly burdensome to smaller broadcasters, the Commission should allow these broadcasters to operate at a 50% schedule until at least April 1, 2005, at which time the minimum hours of operation could be increased to 75% of the station's analog schedule. At 75%, a station on air in analog full time would provide digital service 18 hours a day, leaving only the station's least demanded hours of operation, such

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[20] *See* Memorandum Opinion and Order on Reconsideration, *In re Review of the Commission's Rules and Policies Affecting the Conversion To Digital Televisions*, MM Docket No. 00-39, FCC 01-330, ¶ 11 (rel. Nov. 15, 2001).

as the overnight hours, without DTV service. Such a 75% schedule would alleviate financial hardships associated with operating full time without having any material impact on the appeal of digital service to viewers. The Commission should maintain the DTV operating schedule for these stations at 75% until the end of the transition, when a full time operating requirement would kick in.[21]

F. Satellite Stations

Finally, MSTV and NAB support the Commission's proposal to permit satellite stations to turn in their digital authorizations and "flash cut" to DTV transmission at the end of the transition period. As the Notice points out, "satellite stations, by definition, operate in small or sparsely populated areas which have insufficient economic bases to support full-service operations."[22] This economic reality makes it prohibitively expensive for many satellite stations to run concurrently analog and digital stations. Flash-cut is the logical and fair solution, and one that would not slow the digital transition since satellite stations serve low population areas that are unlikely to impact the 85% threshold for digital penetration. This solution may also help alleviate the problem of spectrum congestion that is a necessary byproduct of the transition period. In order to ensure clarity and certainty in the channel election process, a station's decision to flash cut should be made prior to the channel election deadline.[23] So as not to be

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[21] Further, the Commission may want to consider the more general applicability of this approach. Moreover, when stations first come on the air — for example, those that have had extensions of their DTV construction deadlines because of unforeseen or uncontrollable delays — they should be given some opportunity to ramp up to this schedule.

[22] *Notice* at ¶ 127.

[23] Given the Commission's proposal to permit satellite stations to flash cut to DTV transmission, it would of course be inequitable to require satellite stations to construct DTV facilities pending resolution of this issue. Therefore, satellite stations requesting an extension of the DTV construction deadline should be granted an extension until an appropriate period after the (continued...)

disadvantaged by having constructed their digital facilities in accordance with the Commission's requirements, satellite stations that already have shouldered the burden of building out their digital facilities — and continue to bear DTV operating expenses — should be granted flexibility in other ways. For example, the Commission might permit these stations to operate their DTV facilities with a reduced schedule until the end of the transition.

II. THE COMMISSION SHOULD INTERPRET SECTION 309(J)(14)(B) TO ENSURE, CONSISTENT WITH CONGRESSIONAL INTENT, THAT CONSUMERS WILL BE PROTECTED AGAINST A LOSS OF SERVICE WHEN THE TRANSITION ENDS.

Section 309(j)(14)(B) of the Communications Act, amended by the Auction Reform Act of 2002, effectively provides for three scenarios under which the Commission shall extend the December 31, 2006 deadline for reclaiming one of a broadcaster's channels:

> (i) if one or more stations in a market that are licensed to or affiliated with the big four networks are not broadcasting digitally;
>
> (ii) if digital-to-analog converter technology is not generally available in a market; or
>
> (iii) if 15% or more of the households in the relevant market do not subscribe to a multichannel video programming distributor ("MVPD") that carries at least one DTV program channel of each station in the market that is on-air in DTV *and* do not have either "at least one television receiver capable of receiving" DTV signals of the television stations licensed in such market or "at least one television receiver of analog television service signals equipped with digital-to-analog converter technology" capable of receiving such DTV signals.[24]

The Notice seeks comment on how the Commission should interpret certain aspects of this statutory requirement and, in particular, the provisions of the third exception (the "15% test").

Commission resolves this issue. Such satellite stations should not have to make an individualized showing to justify their failure to construct by the applicable deadlines.

[24] *See* 47 U.S.C. § 309(j)(14)(B).

As a general matter, the statute should be interpreted to ensure that consumers will be protected against loss of service when the DTV transition ends. In passing Section 309(j)(14)(B), Congress recognized "that not all consumers and broadcast stations will convert to the new digital services format at the same time."[25] Thus, Congress enacted Section 309(j)(14)(B) "to ensure that a significant number of consumers in any given market are not left without broadcast television service" on the date of the transition.[26] The first two exceptions listed in Section 309(j)(14)(B) focus on the broadcast signal of the big-four networks and the availability of digital converter technology and make clear that Congress intended viewers in a given market to have a substantial level of DTV service before the analog switch is turned off.

The key policy consideration should be whether consumers themselves have the ability to choose between viewing the signal in digital or analog format. For this to be an effective choice, the digital signal must be supplied "downstream" to a receiving device in the home, thereby creating the necessary incentives for consumers to purchase digital equipment at retail. A downconversion from digital to analog further "upstream" negates such an incentive, leading to delay in the DTV transition. Accordingly, the terms of the 15% test should be interpreted to require that viewers in a given market actually receive the undegraded digital signals of their local television stations, whether or not those signals ultimately are downconverted *at the viewer's home* for viewing on an analog set or viewed in digital format on a digital set.

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[25] H.R. CONF. REP. NO. 105-217, at 576 (1997).

[26] *Id.* at 576-77.

A. Market Definition

In order to ensure that the transition does not end before at least 85% of viewers in a market have access to their local digital television signals, the Commission should define the term "market" generally to be a station's designated market area ("DMA"). As the Notice points out, the Commission previously has recognized that DMA is more descriptive of a station's potential market because it is based on cable and over-the-air viewing and therefore more accurately captures actual viewership patterns.[27] In particular, DMAs will more accurately indicate the level of digital penetration in rural markets. Further, Congress's direction to grant an extension "to any station that requests such an extension in any television market"[28] does indeed contemplate markets containing more than one station, as would be the case with a DMA-based definition.

In certain circumstances, however, using a pure DMA definition could have anomalous results. For example, where a station is located at the edge of a DMA, its service area and viewer base may extend well beyond the DMA line and into one or more neighboring DMAs. Accordingly, while for Section 309(j)(14)(B) purposes the term "market" generally should be defined by reference to a station's DMA, the Commission should provide for a waiver of the DMA definition when it does not accurately reflect a station's real-world market.

In making market definition decisions, the Commission should take into account other factors particularly relevant to the DTV transition. For example, special consideration may

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[27] *Notice* at n. 100 (citing Report and Order, *Review of the Commission's Regulations Governing Television Broadcasting*, MM Docket No. 91-221, 14 FCC Rcd 12903, 12926, ¶ 48 (1999); *Second Further Notice of Proposed Rule Making*, MM Docket No. 91-221, 11 FCC Rcd 21655, 21663, ¶ 15 (1996)).

[28] 47 U.S.C. § 309(j)(14)(B).

be warranted for geographically dispersed hyphenated markets, which may involve multiple transmitters, satellite operations or other unique factors. MSTV and NAB note that because of the unique factors related to the DTV transition, market modifications appropriate in the DTV context may not be the same as those appropriate for purposes of cable carriage. For example, evidence that may be sufficient for the Commission to determine that a community should or should not be considered for purposes of Section 309(j)(14)(B) might be regarded differently (or not at all) in the cable carriage market modification process and vice-versa. Similarly, the Commission should not deviate from the DMA standard unless the station has requested a waiver.

Finally, with respect to the requirement that the 15% test take into consideration whether an MVPD is carrying "each" station broadcasting in a given market, "each" should be interpreted by reference to full power stations licensed in a given DMA that qualify as local television stations and hence are eligible for must-carry or retransmission consent status on such MVPD. Under this interpretation, the phrase "each" would mean *every local full power televisions station* in a DMA that qualifies as a local commercial television station or noncommercial educational television station under the 1992 Cable Act.[29]

B. Access

The Notice also solicits comment on a number of questions about what should qualify for access to DTV signals for the purpose of determining whether to grant an extension

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[29] Because broadcasters operating on both analog and digital channels currently are not afforded must-carry rights for their digital signals under the Commission's rules, the reference to must-carry eligible here refers to the *station* being eligible for must-carry on the cable system, and not the station's digital *signal* being eligible for must-carry. Thus, in light of the current must-carry regime, the digital signals of all television stations qualified for *analog* must-carry on the relevant system would need to be carried in order to meet the statutory requirement.

based on any of the three prongs in Section 309(j)(14)(B). Generally, a viewer should be considered to have access to a local broadcaster's digital signal for the purposes of Section 309(j)(14)(B) if he or she *actually receives an undegraded digitally originated signal* at his or her home, whether the viewer views the signal in digital format on a digital set or downconverts the signal at home for viewing on an analog set.[30] In order to establish the necessary DTV infrastructure and drive the transition, it has been the policy of Congress and the Commission to develop rules that, among other things, will build DTV sales and outfit viewers with the equipment they will need to receive digital programming in their homes. The Commission can only serve this policy if it assures that the local broadcaster's DTV signal reaches the viewer's home in a digital format. The Commission's actions, therefore, must protect against conversion of the signal prior to reaching the viewer's home, such as at the cable headend, which would create a disincentive to invest in DTV equipment and thereby inhibit the progress of the DTV transition and raise the potential for viewers to be stranded once the delivery of analog programming ceases.

Provided this background, the Commission should implement the statutory language and intent as follows:

- Broadcasting pursuant to a DTV STA should qualify as "broadcasting a digital television service signal,"[31] whether or not the broadcaster's DTV signal reaches the entire area encompassed in the DTV allotment.

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[30] MSTV and NAB recognize that the statute as drafted refers to TV households and not TV sets. They note, however, that relying on TV households alone to determine the end of the DTV transition will strand millions of analog sets. MSTV and NAB therefore suggest that the Commission make appropriate legislative recommendations that address this important consumer issue.

[31] *Notice* at ¶ 79.

- The definition of "digital-to-analog converter" should exclude a unit that is not capable of displaying in analog all authorized digital formats. Converters meeting this definition should be able to convert all ATSC formats.[32]

- To be "generally available," converters should be available for sale at reasonable cost at retail outlets throughout the market.[33]

- The 15% threshold should be calculated, as the Notice proposes, by reference to households that (i) are not subscribers to an MVPD carrying the required DTV signals; and (ii) lack the ability otherwise to receive the DTV signals over-the-air.

- Customers should count as "subscribers" to an MVPD only to the extent they actually receive the digitally originated broadcast signals carried on the MVPD. Viewers who subscribe to an MVPD that carries the digital broadcast signals of stations in the market but that do not either subscribe to the tier of service or have the equipment that allows them to view the digitally originated signals of the local stations should not count toward 85% market penetration. The Commission is correct that the 15% test requires viewers to be able actually to view the digitally originated signal.[34]

- A signal that is carried via an MVPD and that is downconverted should count toward 85% market penetration under the third prong of Section 309(j)(14)(B) *only* if it is downconverted at the television set and not at the headend. Downconverting a digital signal at the headend fails to equip viewers with equipment capable of decoding DTV signals and is inconsistent with the goals of the DTV transition. Accordingly, access to these signals would be lost altogether once the MVPD stopped converting at the headend.

C. Process

Finally, the legislative history of Section 309(j)(14) makes clear that the Commission should bear the primary responsibility for demonstrating whether an extension is warranted. As the Notice points out, the Conference Report states:

> [T]he conferees recognize that [the analysis of whether a household should count toward the 15% threshold] will impose additional burdens on the Commission. Consequently, the

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[32] *Id.* at ¶ 82.

[33] *Id.*

[34] *Id.* at ¶ 89.

> conferees expect that the Commission will pursue this analysis only if it first concludes that a station does not qualify for an extension under the network digital television broadcast test or the converter technology test.
>
> In establishing the requirements for the 15 percent test, the conferees sought to establish objective criteria that could be determined by "yes" or "no" answers obtained from consumers surveyed in the relevant market. *The conferees expect that the Commission will perform its own analysis* . . . . A broadcast television licensee requesting the extension and other interested parties *are to be afforded an opportunity* to submit information and comment on the Commission's analysis.[35]

In determining whether an extension is warranted, the Commission should make a market-by-market determination. Where the extension criteria are met, all stations in that market should be entitled to an extension, pursuant to the statute.

The process for determining whether a market reaches the 15% threshold should not, however, be exclusive to the Commission. As Congress indicated, broadcast licensees are expected to have the opportunity to comment upon the Commission's determination. Accordingly, a reasonable rule would provide that at least six months prior to the transition deadline, the Commission should issue a list indicating the status of each market in the country under each of the three extension criteria, including the 15% test. Broadcasters then should have the opportunity to challenge the Commission determination and/or apply for an extension. With respect to the length of the DTV extensions and the frequency with which the Commission should re-evaluate whether a market continues to be eligible for an extension, MSTV and NAB suggest deferring resolution of these issues until the next DTV biennial review. Similarly, the Commission should defer consideration of the specific timing and procedures for migrating to final DTV channels until its next biennial review.

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[35] H.R. CONF. REP. NO. 105-217, at 577-78 (1997) (emphasis added).

MSTV and NAB note that the statutory criteria established by Congress for extending the DTV transition make cable carriage of digital signals *during the transition* essential. Because cable penetration is so high, a market will never be able to achieve the 85% threshold absent cable carriage of the digital broadcast signals in the market. Yet, because cable operators currently are subject to no obligation to carry broadcasters' digital signals during the DTV transition, few are carrying broadcasters' digital signals. Where digital signals are carried, they almost exclusively are those of the big four television networks — not all of the must-carry eligible stations in the market, as required by even the narrowest reading of the statutory requirement. Without a requirement that cable systems must carry the broadcast digital signals of local stations during the DTV transition, the 85% benchmark will be unachievable in all or virtually all circumstances.

III. THE COMMISSION'S RULES ON TECHNICAL STANDARDS AND OTHER ISSUES SHOULD ENHANCE DELIVERY OF DTV TO CONSUMERS.

One of the many benefits of digital television is the ability to improve the technology as documented in the standards over time, without negatively impacting already deployed products. MSTV and NAB appreciate the Commission's willingness to consider such changes when they have been vetted by the industry-driven standards development process. ATSC has developed a number of voluntary standards for various applications. While NAB and MSTV believe that compliance with most of these standards should be voluntary, there are some that are critical to the successful implementation of DTV in the United States and therefore should be required by the Commission.

In requiring the most critical standards, the Commission should bear in mind that the DTV system is much too complex to allow different manufacturers and broadcasters to make separate assessments of what are truly the critical elements that need to be implemented. DTV

broadcast operations and receivers need to work together to maximize the consumer experience and the speed of the transition. While marketplace forces may act to discover and correct implementation misunderstandings, such misunderstandings may result in less functionality and flexibility as well as years of confusion. To avoid these problems, the Commission should require broadcasters to transmit the critical information upon which all receiver manufacturers then can rely.

A. ATSC Standards – PSIP

As indicated in earlier comments,[36] MSTV and NAB believe that the Commission should require use of the ATSC Program and System Information Protocol ("PSIP") Standard (A/65B). PSIP provides the key linkages within the DTV transport that facilitate easy access by viewers to DTV services offered by broadcasters and are necessary elements for reliable, real-world operation. Accordingly, the PSIP Standard contains key elements of the DTV System that are essential to the success of the DTV transition. Its use in particular will improve and/or better enable channel navigation and identification, closed captioning, and content advisories. For this reason, most broadcasters now recognize and support the use of PSIP.[37] The current version of PSIP (A/65B, March 18, 2003) is available from the ATSC.

With respect to the Commission's concern about which elements of PSIP should be mandatory and which should be optional, the standard itself is the result of careful

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[36] *See, e.g.,* Reply Comments for the Association of Maximum Service Televisions, Inc., in response to the *Notice of Proposed Rulemaking* (rel. March 8, 2000), *In re Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television*, MM Docket No. 00-39, at ¶ 11 (June 16, 2000).

[37] A NAB survey conducted in late 2002 showed that over three-quarters (77.6%) of respondents were currently broadcasting in PSIP. For those who are not, nearly one-third (31.7%) plan to before May 1, 2003, which would bring the total to 84.4% of all respondents that plan to use PSIP.

consideration and contains both kinds of elements. As an example, Commission adoption of A/65B would require transmission of the System Time Table ("STT") with an accurate time, but make optional transmission of the Extended Text Table ("ETT"). Although transmission of certain tables and descriptors are optional, it is important that the Commission adopt the complete PSIP Standard so that to the extent optional tables and descriptors are used, there is a uniform approach within the industry.

1. Channel Navigation and Identification

As an initial matter, PSIP enables faster channel changes. Acquisition of a DTV channel not transmitting PSIP requires reading and processing more data resulting in significantly slower acquisition of a channel. As viewers "surf" DTV channels by using the up-and-down controls, slow acquisition of any channel will negatively affect the viewer's overall experience and, in turn, be a detriment to consumer acceptance of DTV.

One of the most important benefits obtained from PSIP is that it provides viewers with a uniform approach to selection of DTV services. This will only be possible, however, if broadcasters implement PSIP as specified in A/65B.[38] The PSIP Standard defines specific requirements for use of "major channel numbers" to provide viewers with a uniform methodology to access DTV services and to avoid conflict with duplicative numbers in a market. Interference rules in the digital age must extend to the digital transport aspects since, after reception, the set of data used to select a channel must uniquely map to the components needed.[39]

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[38] The Commission should note that ATSC has developed the Recommended Practice "PSIP Implementation Guidelines for Broadcasters" (A/69) and the Consumer Electronics Association ("CEA") has developed a complementary recommended practice (CEB-12) for consumer receiver manufacturers to further guide implementations.

[39] *See* Attachment G, NAB comments in CS 98-120, October 13, 1998, Section V at 11.

The major channel number also allows broadcasters to maintain their local brand identification. Regardless of the actual RF channel used for DTV transmission, PSIP states that a broadcaster's major channel number will be the same as its NTSC RF channel number. This may be particularly important if the final channel plan results in changed channels for a significant number of stations.

To illustrate how PSIP will impact channel identification, a broadcaster who operates an NTSC service on channel "26" and a DTV service on channel "27" would use the major channel "26." The PSIP "minor channel number" is used to identify programs and other services, which are apart of the DTV service. For example, channel 26.1 may be an HDTV program service and it may be multiplexed with an SDTV service, which is channel 26.2. The viewer can now easily 'surf" from 26.0 (NTSC) to 26.1 (HDTV) to 26.2 (SDTV).

During the development of PSIP, it was recognized that in some situations broadcasters may need to deviate from the rule that the major channel number is the same as the broadcaster's NTSC channel number. These exceptions are detailed in Annex B of A/65B and summarized in the ATSC filing in this docket. MSTV and NAB believe that the exceptions in A/65B provide broadcasters with the necessary flexibility to address most circumstances. Further, MSTV and NAB note that in the unlikely event a broadcaster has a unique situation that is not provided for in PSIP, the Commission exception process is available.

2. Closed Captioning

Effective implementation of closed captioning also requires implementation of PSIP and proper use of the Caption Service Descriptor. The Caption Service Descriptor informs the viewer that closed captioning is available. Because caption data itself, which is carried in an area of the video data, does not carry a description of the type of captioning that it is (*e.g.*, English or Spanish), receivers must rely on the Caption Service Descriptor in PSIP to provide

that data, to indicate to the viewer that the program is captioned and to activate the caption display on a program by program basis. The program guide in PSIP also enables consumers to know if a future program will be provided with captioning. The Caption Service Descriptor also contains important control information needed by the receiver for proper display of captioning. Without the adoption of the format of the Caption Service Descriptor and requiring its carriage, captions can be present but consumers may not be able to see them or even be aware that they exist.

3. Content Advisories

The PSIP standard allows consumers to block programs that they find undesirable. Parental advisory information is carried in the Content Advisory Descriptor, which is required to be placed in the Event Information Table. When the parental advisory information then is transmitted, the PSIP Standard requires the Content Advisory Descriptor to be in the Event Information Table ("EIT"). This not only enables its use for the current program, but also enables its use in an open-standards-based EPG to show how future programs are labeled.

MSTV and NAB believe that receivers that are built compliant with CEA standards and recommended practices are required[40] to support an additional new system with one or more independent categories, each with a series of levels as could be defined by a new Regional Rating Table ("RRT"). If such a capability is deemed to be needed, a requirement to detect and download a new rating region table could be added seamlessly.

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[40] The standards and recommended practices are voluntary except to the degree portions have been incorporated in the Commission's rules.

4. TV Translators

DTV translators, like so many other parts of the conversion to digital, should not follow the analog paradigm. To this end, PSIP enables direct use of the transport stream contents and re-broadcasting without alteration. Specifically, PSIP provides that the major/minor channel numbers shall remain the same as the original broadcast station unless the major channel conflicts with a broadcaster operating in the service area of the translator.[41]

Although PSIP provides a mechanism for providing a TV translator carrier frequency information different from the main channel, its use is strongly discouraged.[42] DTV receivers are expected to recognize the Transport Stream ID ("TSID") and make note of the associated channel frequency. Use of TSID data in the receiver actually makes it possible for the receiver to display correctly channel data and perform navigation even if the carrier frequency information in PSIP is incorrect. If a broadcast translator shifts the frequency of a transmitted signal without modifying the PSIP data, DTV receivers will find the signal and memorize the frequency at which a particular TSID was found.

B. A/53B Amendments

ATSC is in the process of finalizing Amendment 2 to A/53B, which would revise the transport section of the ATSC Digital Television Standard, Annex C, to update normative references in order to avoid conflicts and to establish a common methodology for carriage of private data in the ATSC Transport Stream. The keys aspects of Amendment 2 are as follows:

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[41] In that case, the translator can utilize a different major number as long as it does not conflict with another broadcasters DTV service.

[42] Although A/65B currently allows use of the carrier frequency field its use is deprecated and it will not be allowed after January 1, 2010.

- The amendment defines the ATSC Private Information Descriptor for the carriage of private descriptor-based data and clarifies rules for use of the MPEG-2 Registration Descriptor mechanism for management of private data in the digital multiplex. In doing so, the amendment provides a method to ensure there is not interference among private uses of the transport.

- To be consistent with the current version of the ATSC A/52 Digital Audio Compression Standard, Amendment 2 revises the way audio language is signaled in the ATSC system and specifies the use of ISO-639 language encoding to identify written and spoken languages.

- Amendment 2 specifies certain requirements that had been implemented in transmission and receiving equipment but not properly specified in A/53B. These include the requirement that each service having an audio component must include at least one "complete main" audio service, and the requirement that the video Elementary Stream component must be identified with MPEG-2 stream_type value 2.

Upon final approval of the ATSC membership, MSTV and NAB suggest that the Commission incorporate Amendment 2 to A/53B into its rules.

C. Distributed Transmission Technologies

Finally, with respect to distributed transmission technologies, the Commission should recognize first the importance of such technology being implemented and rolled out quickly. Simply put, time is of the essence. Accordingly, whether the Commission addresses the issue of distributed transmission technologies in this rulemaking or in a separate proceeding, it should do so in a manner that best ensures the issue will come to closure quickly.

As a general matter, MSTV and NAB support implementing technologies that enable the use of distributed transmission techniques to overcome a variety of transmission difficulties and further enhance the broadcast service to the viewing public. Distributed transmission can improve the reliability of service for viewers in hilly or mountainous areas or areas where a station is unable to deliver adequate signal level to reach its audience. It also offers broadcasters the flexibility to locate their main transmitters at locations optimized to serve their DMA and rural audience. MSTV and NAB believe that broadcasters should be able to use

such technology as soon as it becomes available in the marketplace and urge the Commission to keep the issue within the current Biennial Review process or establish a separate "fast track" proceeding.

In terms of the specific technology itself, ATSC has developed a Candidate Standard "Synchronization Standard for Distributed Transmission" (CS/110A) that specifies how one should synchronize multiple transmitters emitting 8-VSB signals in accordance with A/53B. CS/110A also provides for adjustment of transmitter timing and other characteristics through additional information carried in the transport structure. Because emitted signals from transmitters operated according to this candidate standard comply fully with ATSC A/53B, its use does not per se require Commission action. However, implementation of distributed transmission technology and systems will require the Commission to adopt rules regarding power levels, interference, spacing and other parameters.

IV. THE COMMISSION SHOULD TAKE ACTION TO ADDRESS CONTINUING CHALLENGES IN THE DTV TRANSITION.

MSTV and NAB applaud the Commission for the steps that it has taken through its rules, its pending proceedings and its policies, including Chairman Powell's voluntary plan, to drive the DTV transition. For their part, broadcasters have invested tremendous efforts and resources to convert to digital television and have made and continue to make substantial progress in facing the various challenges posed by the DTV transition and advancing the transition. Nonetheless, some practical obstacles remain that are impairing a timely and successful transition to digital. Resolving these issues will ensure that progress continues to be made in providing the public with access to the full benefits of DTV service.

A. Cable Carriage

The Commission should help broadcasters resolve a number of outstanding issues involving cable carriage of DTV signals, including cable operators' obligation to carry multicast streams, technical requirements related to the carriage of DTV signals, the definition of "program-related" material, and the obligation not to degrade the DTV signals that they carry. These issues should be addressed as to their applicability during the transition, as well as after it has been concluded. Uncertainty with respect to cable carriage issues inhibits investment in new DTV services by broadcasters unsure that their viewers will have access to these services, deters the development and investment in DTV equipment by equipment manufacturers and consumers, injects uncertainty into the retransmission consent negotiation process between broadcasters and cable operators, and, critically, delays and even jeopardizes the likelihood that the 85% statutory DTV penetration threshold will be met in markets across the country.

B. Broadcast Flag

The Commission should ensure that high quality, high definition content remains a part of the free, over-the-air digital television service by adopting the broadcast flag. The desire for high quality HDTV programming is a key driver of consumer investment in DTV that will be jeopardized or lost entirely without the Commission's adoption of adequate protections as a result of its current proceeding on the broadcast flag.

In addition to the elements of PSIP discussed above, PSIP implements the redistribution descriptor — the marker commonly called the broadcast flag — which together with obligations for detection and response would protect digital broadcasts from unauthorized retransmission, including retransmission over the Internet. Therefore, MSTV and NAB encourage the Commission to swiftly adopt and implement the broadcast flag solution. Broadcast stations are currently providing a significant amount of high definition content, but as

the digital transition progresses, the lack of a broadcast flag is becoming an increasing matter of concern, especially as the unauthorized distribution of broadcast content continues to accelerate. MSTV and NAB urge the Commission to resolve this issue as soon as possible.

C. Receiving Devices

The Commission has recognized correctly that consumer expectations are critically important to the digital transition. This is especially true as it applies to consumer equipment. As the Commission observed in the *DTV Tuner* decision:

> It has now been almost forty years since ACRA's enactment. During that time every broadcast television receiver sold in the U.S. has had the ability to receive every frequency assigned to broadcast television, despite the fact that a growing number of TV households subscribe to a multichannel video service and thus may only need a set that tunes to channel 3 or 4. Nevertheless, consumers generally still expect the television they purchase to be able to receive over-the-air broadcast signals.[43]

The Commission has rightly noted that consumer awareness of DTV service and the migration away from analog is a critical component to advancing the DTV transition and avoiding consumer dissatisfaction. Given these overwhelming expectations and the current level of uncertainty surrounding the capabilities of DTV equipment at the retail level, the Commission should consider whether its traditional approach to labeling will be sufficient to meet consumer expectations. As the Notice indicates, the lack of consumer appreciation of this issue is too high — the large majority of the public does not know that current analog television sets will require a converter box to keep working after the transition, and an even greater number are not

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[43] Second Report and Order and Second Memorandum Opinion and Order, *In re Review of the Commissions Rules and Policies Affecting the Conversion to Digital Television*, MM Docket No. 00-39, ¶ 44 (rel. Aug. 9, 2002).

"very familiar" with the difference between analog and digital televisions.[44] A label that informs consumers about the limitation of a receiver's functionality may simply not go far enough to put consumers on notice about the coming digital transition. In this unique context, labeling by itself may not be a sufficient substitute for including all of the expected features into a receiving device. MSTV and NAB do not suggest that the Commission should abandon its approach to labeling, but rather observe that given the current lack of sophistication by consumers and retail sales staffs, labeling may be insufficient to achieve effectively the Commissions desire policy objectives. Such a labeling policy, however, is a "second best" approach to the problem. Including full functionality and reception capabilities in television receivers is the best way to insure progress in the digital transition.

D. Tower Siting

Some broadcasters continue to face difficult siting issues as they seek to construct their digital facilities. For example, broadcasters in New York City continue to face siting problems as a result of the loss of World Trade Center, and broadcasters in Denver likewise remain delayed in the construction of their DTV facilities on Lookout Mountain because of a siting dispute. These are major markets where delay of the DTV roll-out compromises the transition nationwide. Accordingly, the problems faced by broadcasters require a new sense of urgency by the Commission. Problems in other markets, such as Burlington, Vermont, and Honolulu, Hawaii, deserve similar attention.

E. Canadian Issues

Finally, for broadcasters seeking to initiate digital service in areas close to the borders of the United States — and in particular, close to the Canadian border — approval of

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[44] *Notice* at ¶ 95.

digital facilities has proven problematic. Like stations in other parts of the country, broadcasters in border states want to exploit the benefits of joint tower arrangements, maximize their service areas and take other steps to enhance the DTV service they will provide to their viewers — all of which may require modifications of the facilities granted to them in the original DTV table of allotments. Canadian authorities, in particular, continue to move slowly in evaluating broadcasters' DTV proposals and have denied many proposals without adequate explanation. Indeed, notwithstanding Canada's Letter of Understanding with the United States establishing policies for approval of DTV modifications,[45] broadcasters and their consulting engineers have been unable to gain a clear picture of how these policies are being applied by Canada in practice. As a result, many DTV applications for border stations remain pending, notwithstanding broadcasters' desire to initiate DTV service. The Commission should take whatever steps necessary, including involving other U.S. governmental officials, to ensure that the Canadian authorities expedite the processing and clearance of pending DTV applications in accordance with the Letter of Understanding.

V. CONCLUSION

The Commission's decisions in this second biennial review must continue to advance the DTV transition. To this end, the Commission should adopt a report and order that, consistent with the proposals and principles above, protects spectrum integrity, ensures an optimal and equitable repacking process, preserves broadcasters' ability to implement the

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[45] Letter of Understanding Between the Federal Communications Commission of the United States of America and Industry Canada Related to the Use of 54-72 MHz, 76-88 MHz, 174-216 MHz, and 470-806 MHz Bands for the Digital Television Broadcasting Service Along the Common Border.

transition flexibly, and enhances the delivery of DTV services to consumers both during the DTV transition and, long term, after the transition ends.

Respectfully Submitted,

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