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Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Section 2.106 of the	)	
Commission's Rules to Allocate	)	ET Docket No. 95-18
Spectrum for 2 GHz for Use	)	
by the Mobile Satellite Service	)	
	)	
To: The Commission	)	

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

March 4, 1999

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SUMMARY

The interests of fairness, precedent and the prevention of disruption to the essential services provided to the public by licensees in the Broadcast Auxiliary Service ("BAS") require that BAS incumbents be fully compensated for the costs of relocating to make spectrum available for Mobile-Satellite Services ("MSS"). Accordingly, throughout this long-running proceeding the Commission has repeatedly affirmed the application of the relocation compensation principle of the *Emerging Technologies* proceeding to the BAS relocation. Nonetheless, some MSS applicants continue to challenge the compensation requirement. Because the Commission has already considered and rejected all plausible arguments on the issue, it should summarily reject these repetitious efforts.

At this stage in the proceeding, the Commission's goal should be the establishment of a mechanism for effectively implementing the relocation compensation principle in a manner that will promote the fair and expeditious relocation of BAS incumbents upon payment of just compensation. The transition plan must ensure that *all* BAS incumbents are relocated as of a date certain, since sharing between BAS and MSS is not technically feasible and a graduated or staggered transition would significantly disrupt BAS services.

The Joint Broadcasters and most MSS commenters share some important common ground with respect to how the *Emerging Technologies* principle should be applied. For instance, most agree that mandatory negotiations should begin promptly, and that incumbents are entitled to compensation for relocation to "comparable facilities" in the new spectrum. Many also agree that the relocation compensation obligation should "sunset" as of a date certain on which BAS incumbents will be required to have vacated the spectrum

allocated for MSS, provided they have been fully compensated. However, some MSS commenters continue to urge BAS compensation at less than the full costs of relocating to comparable facilities. These proposals are clearly inconsistent with the *Emerging Technologies* compensation principle and should be rejected.

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The Association for Maximum Service Television, Inc. ("MSTV") and the National Association of Broadcasters ("NAB")[1] (collectively, "Joint Broadcasters") file these reply comments to stress that if the 2 GHz spectrum allocated for the Mobile-Satellite Service ("MSS") is to be made available for MSS in a timely manner, without materially disrupting the incumbent Broadcast Auxiliary Service ("BAS"), the Commission must adopt a relocation plan that both reflects the unique circumstances of this proceeding and effectively implements the relocation compensation principle the Commission embraced in the *Emerging Technologies* proceeding.

[1] MSTV is a non-profit trade association of local broadcast television stations committed to achieving and maintaining the highest technical quality for the local broadcast system. NAB is a non-profit, incorporated association of radio and television stations and networks that serves and represents the American broadcast industry.

I. BAS INCUMBENTS MUST BE COMPENSATED FOR THE COSTS OF RELOCATING TO DRAMATICALLY-REDUCED SPECTRUM.

The Commission has repeatedly affirmed that the *Emerging Technologies* relocation compensation principle applies to the BAS relocation contemplated here.[2] Despite the Commission's firm commitment to this fair and equitable principle and its request that the affected parties now address the question of *how* the compensation principle should be implemented here, some MSS operators continue to protest application of the principle to the BAS relocation.[3] Although all plausible arguments have been fully

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[2] *See, e.g.*, Memorandum Opinion and Order and Third Notice of Proposed Rulemaking and Order, *In re Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, FCC 98-309, ¶¶ 12-27 (released Nov. 27, 1998) ("*MO&O/Third NPRM*"); First Report and Order and Further Notice of Proposed Rulemaking, *In re Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, 12 FCC Rcd 7388, 7402, 7414 (1997) ("*First Report & Order/FNPRM*"); Notice of Proposed Rulemaking, *In re Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, ET Docket No. 95-18, 10 FCC Rcd 3230, 3232 (1995) ("*NPRM*"). The Commission has also affirmed the application of the *Emerging Technologies* principle to the relocation of fixed microwave services ("FS"), but these reply comments do not address that aspect of this proceeding.

[3] *See* Comments of ICO Services Limited, ET Docket No. 95-18, at 2-3, 6, 9-10 (Feb. 3, 1999) ("*ICO Comments*"); Comments of Inmarsat, ET Docket No. 95-18, at 4-6 (Feb. 3, 1999) ("*Inmarsat Comments*"); Comments of TMI Communications and Company, Limited Partnership, ET Docket No. 95-18, at 3 (Feb. 3, 1999) ("*TMI Comments*") (expressing "concern[] about the Commission's proposals regarding payment by MSS licensees of the costs of replacing or retuning [BAS and FS] equipment . . . to new frequency bands" and urging that relocation reimbursement "be kept reasonable"); *see also* Petition for Further Limited Reconsideration of ICO Services Limited, ET Docket No. 95-18 (Jan. 19, 1999).

In its Petition for Further Reconsideration, ICO makes an untimely and essentially unsupported argument that application of the relocation compensation principle effectively grants 2 GHz incumbents "property rights" in spectrum, in violation of the Communications Act. This argument is unavailing. The requirement that new MSS entrants compensate 2 GHz incumbents for relocating to new spectrum is a valid exercise of the Commission's authority to manage the electromagnetic spectrum in the public interest. The Commission determined that it would be in the public interest to make 2 GHz spectrum available for new technologies, but *only if* the services already making good use of the spectrum were not unduly disrupted. The decision to prevent such disruption by requiring new entrants to pay relocation costs as the price of doing business in the previously occupied spectrum is

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considered and resolved by the Commission, the MSS commenters plow the old ground once again, though they have not provided and cannot provide any justification for departing from the well-established compensation principle here.

As the Commission has explained, the compensation principle was developed to provide for the fair and equitable use of 2 GHz spectrum while preventing disruption to incumbent operations and minimizing the economic impact on incumbent licensees.[4] These goals are fully applicable to the BAS relocation.[5] BAS incumbents provide essential electronic newsgathering ("ENG") services in support of the public's free broadcast service, and those services should not be disrupted or economically imperiled to make way for an unproven new commercial service. Instead, "MSS operators should . . . be willing to bear [the cost of relocating BAS incumbents] in exchange for the guarantee of clear, unencumbered spectrum in a timely fashion and as of a date certain."[6]

The fact that a portion of the MSS band is currently allocated for global use does *not* warrant dispensing with the relocation compensation principle.[7] In the *MO&O*, the Commission acknowledged the "ever increasing demand for spectrum for satellite-based commercial telecommunications systems," but also noted that "most of the spectrum in the

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reasonable and assures only that existing valuable services continue to benefit the public, not that incumbent licensees receive spectrum "ownership" benefits. Therefore, the Commission should summarily deny ICO's Petition for Further Reconsideration.

[4] *MO&O*, ¶ 19.

[5] *Id.*

[6] Comments of Iridium LLC, ET Docket No. 95-18, at 4 (Feb. 3, 1999) ("*Iridium Comments*").

[7] *See ICO Comments*, at 9-10 (asserting that elimination of MSS operators' obligation to pay BAS and FS relocation costs would "demonstrate[] a sensitivity to the international implications" of the compensation principle).

lower bands in the United States is currently allocated and utilized" and that elimination of the relocation compensation principle for international satellite services could "directly, adversely impact[] [all incumbents]." Because such harm to valuable existing services would be contrary to the public interest, the Commission "decline[d] to deviate from established policy" and affirmed the application of the relocation compensation principle to the BAS relocation.[8] Neither ICO nor any other MSS operator has effectively challenged this reasoning.

Nor is the need for relocation compensation obviated by the fact that "the proposed BAS allocation . . . is included in the current allocation."[9] The transition of BAS licensees from seven 17-18 MHz channels at 1990-2110 MHz to seven 12-13 MHz channels at 2025-2110 MHz is a "relocation" for which compensation is required. As a result of the nearly one-third reduction in spectrum, all existing BAS equipment, which ordinarily operates intermittently on all seven channels, "will most likely need to be modified extensively or replaced with new digital equipment" to assure reliable operation with the same flexibility.[10] And these changes must take place in *all* U.S. markets. Although some BAS licensees in smaller markets may routinely operate on fewer than all seven channels, this does *not* mean that BAS spectrum in such markets can be reduced to five 17 MHz channels without causing "any reduction in spectrum access for existing licensees."[11] ENG services are mobile, and it is impossible to predict when a news event will necessitate

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[8] *MO&O*, ¶ 16.

[9] Comments of Constellation Communications, Inc., ET Docket No. 95-18, at 6 (Jan. 19, 1999) ("*Constellation Comments*").

[10] *MO&O*, ¶ 19.

[11] *Constellation Comments*, at 6.

coverage outside the smaller market or utilization within the market of all seven BAS channels.[12] When such an event occurs, all BAS licensees nationally must be operating on the same channel plan to facilitate coordination and sharing of the spectrum. Therefore, MSS entrants should not be relieved of responsibility for relocation costs in smaller markets or generally, and the Commission should once again affirm the application of the *Emerging Technologies* relocation compensation principle to the relocation of all BAS incumbents.

II. ALL BAS INCUMBENTS MUST BE RELOCATED OUT OF THE SPECTRUM ALLOCATED FOR MSS.

Several MSS commenters advance proposals to narrow the scope of the BAS relocation for which compensation must be paid. These include suggestions that some BAS incumbents will not need to be relocated because they will be able to share spectrum with MSS and staggered relocation proposals. The characteristics of the BAS service and the way in which BAS licensees use the spectrum make these proposals infeasible or impractical.

A. Relocation Is Necessary When Spectrum Sharing Is Precluded By Harmful Interference Caused To *Either* The Incumbent Or New Entrant.

The Commission, the Joint Broadcasters and at least one MSS commenter agree that it is not possible for BAS and MSS to share the spectrum allocated for MSS because of the interference BAS will cause to MSS.[13] Their conclusions are well-founded.

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[12] Smaller market stations often cover events in larger markets, such as state or presidential elections. Examples of situations in which a smaller market has become the site of a news event requiring extensive ENG coverage include the Oklahoma City bombing, the search and seizure of the Unabomber cabin and the FBI-Freemen standoff in Montana.

[13] *First Report & Order/FNPRM*, 12 FCC Rcd at 7401 ("[W]e indicated in the Notice, and the commenting parties agree, [that] BAS and MSS cannot share the spectrum without unacceptable mutual interference."); *NPRM*, 10 FCC Rcd at 3232 ("We have studied the

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The most common use of the BAS spectrum is for ENG and other remote transmission services. ENG signals are transmitted at much higher power than MSS transmissions, and their paths are not pre-engineered (and are therefore unpredictable). Thus, a BAS licensee cannot predict (or avoid) when one of its signals will cause interference to a MSS satellite transmission utilizing the same spectrum, regardless of whether the MSS system is operating in a geostationary or nongeostationary orbit. Accordingly, BAS incumbents must completely vacate the 1990-2025 MHz band, upon payment of compensation, in order to make the spectrum available for MSS use.

The ICO USA Service Group ("IUSG") suggests that the BAS relocation compensation requirement should be triggered only when harmful interference is caused *by* the new service providers *to* the incumbents, whereas here the interference would ordinarily be caused *by the incumbents* to the new MSS service.[14] IUSG's suggestion is inconsistent with the well-established test for when relocation – and compensation – is required. The Commission explained in the *First Report & Order/FNPRM* that the relocation principle

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feasibility of sharing between MSS and BAS at 1990-2025 MHz and have concluded that such sharing is not feasible because of the potential for interference between the two services."); Joint Comments of the Association for Maximum Service Television, Inc. and the National Association of Broadcasters, ET Docket No. 95-18, at 3-4 (Feb. 3, 1999) ("*MSTV/NAB Comments*"); *Inmarsat Comments*, at 3 ("Compatibility studies have shown that MSS satellites will suffer from severe co-channel interference resulting from the aggregate impact of multiple BAS emissions.").

[14] *IUSG Comments*, at 7 ("[T]he Commission should require accommodation of incumbent BAS systems only when these facilities *receive* harmful interference from MSS licensees. The overarching principles of the Commission's relocation policies, as applied to the 2 GHz bands designated for use by the MSS, should be that when coexistence in the spectrum is possible without harmful interference *to* incumbent BAS/FS licensees – that is, where MSS licensees and 2 GHz incumbents can share spectrum – no relocation of incumbent licensees should be necessary and *no payment by MSS licensees for such relocation will be required.*") (emphasis added).

"do[es] not require relocation of incumbents unless and until the incumbents will receive harmful interference from, *or cause harmful interference to*, a new technology service."[15] Thus, whenever the launch of a new service results in harmful interference to *either* the new service or an incumbent, the incumbent must be relocated to new spectrum, with the costs of relocation being borne by the new entrant that precipitated the relocation.

Some MSS operators argue that advanced technology may enable MSS to avoid harmful interference from BAS.[16] However, there is no evidence that a significant number of MSS systems will be able to avoid BAS interference,[17] and it is highly unlikely that the band plans of systems that could avoid interference would overlap precisely with incumbent BAS frequencies. That is, even if part of a 17 MHz BAS channel in the 1990-2025 MHz spectrum were used by a MSS system that could share with BAS, other MSS systems within the same BAS channel could not share, and the BAS licensee thus could not operate in the channel without causing interference to MSS. Thus, the BAS and MSS services cannot share spectrum, and all BAS incumbents must be relocated out of the 1990-2025 MHz allocated for MSS.

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[15] *First Report & Order/FNPRM*, 12 FCC Rcd at 7406 (emphasis added).

[16] *See, e.g.*, Comments of Celsat America, Inc., ET Docket No. 95-18 at 2-3 (Feb. 3, 1999) ("*Celsat Comments*"); *ICO Comments*, at 11. We take no position on whether those MSS operators that otherwise might be able to share with BAS should be required to contribute to the costs of relocation, except to stress that any relocation cost allocation the Commission adopts must assure BAS incumbents full compensation for their reasonable and actual relocation costs.

[17] Celsat describes its technology as "patented" and "unique." *Celsat Comments*, at 2.

B. A Graduated Transition Out Of The 1990-2025 MHz Spectrum Band Is Not A Viable Option.

The Joint Broadcasters explained in their initial comments that the manner in which BAS licensees use the 2 GHz spectrum makes it impossible for BAS incumbents to vacate the 1990-2025 MHz band in a graduated or staggered fashion.[18] Nonetheless, several MSS commenters (though not all) propose a gradual transition.[19] Only one commenter attempts to argue that such a transition would be feasible for BAS incumbents, however, and its arguments are unsupported and factually incorrect. IUSG baldly asserts that "BAS licensees have never shown that they need all channels that they are currently authorized to use in all markets," and that "incumbent 2 GHz BAS licensees rarely use all seven current BAS channels except in the largest markets."[20] To the contrary, broadcasters have repeatedly demonstrated the extensive use and overcrowding of the existing seven BAS channels,[21] and the Commission has acknowledged the heavy use of the band.[22]

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[18] *MSTV/NAB Comments*, at 7-8.

[19] *See ICO Comments*, at 7-8, App. A; *IUSG Comments*, at 7-8, 16-21, Ex. 1; Comments of Boeing Company, ET Docket No. 95-18, at 5-7 (Feb. 3, 1999) ("*Boeing Comments*"). *But see Iridium Comments*, at 3-4 ("Iridium supports the Commission's tentative conclusion to require simultaneous retuning or replacement of all BAS equipment nationwide on a date certain. Aside from the operational characteristics of the BAS service that the Commission believes support this course, the Commission's proposal would also provide MSS operators with valuable assurance that their assigned spectrum will be clear for entry at the time it is required. Moreover, such an approach is also competitively neutral because it assures that all MSS operators will have access to their assigned spectrum simultaneously and, therefore, will have an incentive to bring their respective services to the market as soon as possible."); Comments of Globalstar, L.P.. ET Docket No. 95-18, at 4 (Feb. 3, 1999) ("*Globalstar Comments*").

[20] *IUSG Comments*, at 17.

[21] *MSTV/NAB Comments*, at 2 & nn.3-4.

[22] *MO&O*, ¶ 19 ("[W]hen the Commission reallocated 220 MHz for emerging technology services, the BAS spectrum at 1990-2110 and 2150-2162 MHz was excluded from

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In light of broadcasters' use of the BAS spectrum, it is clear that a gradual relocation of BAS incumbents is not a viable option. A relocation that moves individual licensees in stages is neither technically nor operationally feasible because BAS licensees in the same market cannot operate under different channel plans.[23] And transition plans that propose clearing sub-bands of the 1990-2025 MHz band over time as spectrum is needed for MSS are similarly unacceptable. First, implementation of the proposed multi-stage relocations may be impossible. Many of the proposals assume that technology is or very soon will be available to enable all analog ENG applications to be carried out comparably in bandwidths as narrow as 12 MHz. But there is inadequate evidence to support this assumption.[24] Second, over the long term such plans are likely to be *more* expensive than relocation of all BAS incumbents by a date certain because they will require at least two rounds of equipment changes – most likely an analog modification followed by a digital replacement. Third, a gradual transition plan would lead to long-term operation of both analog and digital ENG equipment in channels of varying widths.[25] Such a dual-radio system would be extremely expensive and operationally cumbersome for broadcasters and would impair the quality of ENG services.

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reallocation for technical reasons of *heavy band use* and the lack of available relocation bands.") (emphasis added).

[23] *See MSTV/NAB Comments*, at 7-8.

[24] For example, IUSG bases its conclusion that analog BAS equipment can operate in 12 MHz channels on a reference to a NuComm study in the record of this proceeding. *IUSG Comments*, at 24, 31. However, nowhere does the NuComm study discuss analog ENG operations in 12 MHz channels. The only 12 MHz tests involved digital equipment, and the only analog operations discussed were those in the current 17 MHz channels.

[25] Indeed, the IUSG proposal contemplates a permanent dual analog-digital channel plan. *IUSG Comments*, at Ex.1.

III. ALTHOUGH SOME MODIFICATION OF THE *EMERGING TECHNOLOGIES* RELOCATION COMPENSATION SCHEME IS APPROPRIATE, MODIFICATION SHOULD NOT UNDERMINE THE BASIC COMPENSATION PRINCIPLE.

MSS commenters for the most part agree with the Joint Broadcasters that the circumstances of this proceeding differ in important respects from the *Emerging Technologies* proceeding and that the Commission should take those differences into account in developing a framework for applying the compensation principle here. Some of the MSS commenters' proposed modifications are consistent with the compensation principle and accordingly merit careful consideration. On the other hand, proposals that undermine the compensation principle should be rejected.

A. The Commission Should Adapt The Relocation Compensation Scheme Where Appropriate To This Proceeding And Consistent With The Compensation Principle.

Although there are significant differences even among the MSS commenters, BAS and MSS commenters do share some common ground as to how the *Emerging Technologies* relocation compensation scheme should be adapted for this proceeding. To the extent that the overlapping proposals are consistent with the essential compensation principle, the Commission should take them into account in establishing the relocation compensation scheme for BAS:

1. No Voluntary Negotiation Period.

Like the Joint Broadcasters, several MSS commenters object to a voluntary negotiation period on the ground that it would unduly delay the relocation process.[26] While

[26] *Iridium Comments*, at 6-7 (arguing that staggered "voluntary" and "mandatory" negotiation periods would be "inefficient and unworkable in the MSS context"); *IUSG Comments*, at 37-38 (arguing that "voluntary negotiation" has already been taking place through "sporadic talks" since 2 GHz MSS applications were first accepted for filing, so that (continued . . .)

the Joint Broadcasters proposed a two-year mandatory negotiation period to allow adequate time to determine what type of equipment changes will be needed to carry out the relocation,[27] at least one MSS commenter would prefer a one-year mandatory negotiation period.[28] The Joint Broadcasters are amenable to a shorter mandatory negotiation period, provided that BAS incumbents will not be required to relocate until (i) they have been compensated and (ii) modified or replacement equipment is available in sufficient quantities to enable a seamless transition.

Other MSS commenters argue that relocation compensation negotiations should not begin until MSS licenses have been granted and spectrum has been assigned.[29] The Commission should reject this suggestion. The MSS applicants are at varying stages of readiness to launch service, and thus will be seeking licensure and spectrum assignments at different times over the next several years. If the various MSS applicants were not obligated to negotiate with BAS incumbents until after they are licensed, negotiations would take place in fits and starts over a prolonged period. This would increase transaction costs and virtually eliminate the possibility of a comprehensive national relocation plan through which all incumbents will receive fair compensation. The relocation process will be much more

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all parties should be satisfied with commencing mandatory one-year negotiations upon release of Report and Order); *see also Globalstar Comments*, at 3-4 (suggesting that Commission "substantially shorten" negotiation period by setting earlier sunset date to encourage expedited negotiation and voluntary relocation).

[27] *MSTV/NAB Comments*, at 15-17.

[28] *See IUSG Comments*, at 37-38.

[29] *See Constellation Comments*, at 6; *Boeing Comments*, at 6-7.

efficient and fair if the affected parties engage in a collective negotiation process that begins and ends on dates specified by the Commission.

2. Compensation For "Comparable Facilities."

Several MSS commenters stress that they should pay only the reasonable costs necessary to relocate BAS incumbents to "comparable," not upgraded or enhanced, facilities.[30] The Joint Broadcasters do not disagree. BAS incumbents have never expressed an intention to pursue "premiums" or other enhancements in exchange for early relocation – they seek only the reasonable and actual costs incurred in relocating to facilities that will afford BAS services of the same high quality as existing facilities.[31]

However, the Joint Broadcasters do oppose MSS proposals that would reduce compensation *below* what may be necessary to ensure that facilities are "comparable." For example, Constellation Communications argues that "relocation cost reimbursements should be based on the minimum cost equipment and not include any additional features not required for operation under the new channelization plan."[32] But mere "operation" is not the test for comparability – the operation must meet certain technical criteria before it can be considered satisfactory. Thus, if additional "features" above the "minimum" are needed to

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[30] *See Constellation Comments*, at 6 ("Relocation costs should not cover any increase in capability, such as support of high definition television or novel transmission scenarios."); *Boeing Comments*, at 8 ("MSS licensees should not be required to pay to upgrade to digital BAS licensees' equipment if the BAS licensees can be relocated and provided comparable capabilities by retuning the equipment."); *IUSG Comments*, at 30 ("[T]he Commission should take steps to ensure that MSS licensees are required to pay only the just and reasonable costs of relocating any BAS licensees to new or narrower bands.").

[31] *See MSTV/NAB Comments*, at 18.

[32] *Constellation Comments*, at 6.

assure comparable robustness, reliability and equipment performance and functionality, the cost of those features must be covered.[33]

IUSG urges the Commission to hold that MSS operators are not required to provide digital replacement equipment because "BAS licensees that are to be relocated to a channel of 12 MHz or greater may continue to operate with analog equipment."[34] There is inadequate technical support for this argument.[35] Therefore, the Commission should not foreclose the possibility that digital equipment may be necessary to provide "comparable facilities" in the drastically-reduced spectrum allocated for BAS.

In sum, BAS incumbents seek compensation for only the reasonable and actual costs of relocating to new spectrum, but that compensation must be sufficient to assure that replacement facilities are "comparable" to current facilities. The Commission should specify the technical criteria for assuring comparability, and MSS entrants should be required to pay the reasonable costs incurred in relocating to facilities that satisfy those criteria.[36]

3. Modified Sunset Mechanism.

In their initial comments, the Joint Broadcasters urged that the proposed "sunset" mechanism be modified so that all BAS incumbents are required to vacate the 1990-2025 MHz spectrum by a date certain, provided that they first receive just compensation. BAS incumbents that are offered adequate compensation but do not relocate

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[33] *See MSTV/NAB Comments,* at 4-5.

[34] *IUSG Comments, at 31.*

[35] *See supra* note 24.

[36] *See MSTV/NAB Comments*, at 4-5, 18.

by the deadline would forfeit their compensation unless their failure to move was due to legitimate equipment or other technical problems.[37] Some MSS commenters propose a similar approach. For example, Iridium proposes that all BAS incumbents be required to relocate within three years from the grant of MSS licenses, and those that do so "should be reimbursed for the appropriate cost of retuning or replacing their equipment with comparable facilities to relocate them to new spectrum. By contrast, incumbents who fail to meet this deadline should generally be deemed to be ineligible for reimbursement."[38] Similarly, Globalstar endorses the Commission's conclusion that "the most efficient method to relocate . . . BAS stations is to pick a date certain on which all BAS stations must come into compliance with the new channelization plan," and proposes that "[a]ny obligation to reimburse individual BAS licensees for relocation costs should sunset as of the nationwide re-channelization date."[39] The Joint Broadcasters continue to support this approach, but *only if* by the sunset date BAS incumbents have been fully compensated *and* compensation has been sufficiently forthcoming to permit equipment manufacturers to develop and deploy the equipment needed for relocation.

4. MSS Cost-Sharing.

The MSS commenters suggest a number of approaches for allocating BAS relocation costs among MSS operators.[40] Although the Joint Broadcasters take no position

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[37] *MSTV/NAB Comments*, at 20.

[38] *Iridium Comments*, at 2-3.

[39] *Globalstar Comments*, at 4.

[40] For example, Iridium and Globalstar both propose the creation of a common relocation fund, funded by MSS contributions, to cover the costs of the BAS relocation. *See Iridium Comments*, at 4-5; *Globalstar Comments*, at 6.

on which of these approaches is preferable, we agree that the issue must be resolved by the Commission. We stress that such resolution should assure full compensation for BAS incumbents and avoid delay in the commencement of the relocation process. Because of the urgent need to begin the relocation process promptly, the Commission may need to consider the MSS cost-sharing issue in a separate proceeding if it cannot be resolved expeditiously here.

B. The Commission Must Reject Any Proposals That Would Undermine The Compensation Principle.

MSS commenters advance certain proposals that must be rejected as clearly inconsistent with the essential relocation compensation principle:

1. Limiting Compensation To Depreciation Costs.

Some MSS commenters argue that MSS entrants should be required to reimburse BAS incumbents only for the depreciated value of the BAS equipment requiring modification or replacement, plus transaction costs (*e.g.*, engineering and installation costs) capped at 2% of "hard costs."[41] However, as the Commission concluded in the *Microwave Cost-Sharing* proceeding, "compensation for the depreciated value of old equipment would not enable [incumbents] to construct a comparable replacement system without imposing costs on the incumbent, *which would be inconsistent with [the Commission's] relocation rules*."[42] Thus, the proposals to reimburse only depreciation costs must be rejected.

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[41] *ICO Comments*, at 14-15; *IUSG Comments*, at 33-35.

[42] First Report and Order and Further Notice of Proposed Rulemaking, *In re Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation*, 11 FCC Rcd 8825, 8844 (1996) (emphasis added).

2. BAS Payment of Digital Conversion Costs.

Several MSS commenters propose that BAS incumbents be held responsible for most or all of the costs of relocating to the reduced spectrum allocation because the conversion to digital facilities that will make such relocation possible was (or should have been) inevitable even in the absence of the allocation of spectrum to MSS. For example, ICO suggests that all BAS licensees be required, at their own expense, to convert to digital by May 1, 2002, the date by which all commercial television stations are required to have constructed digital television ("DTV") facilities.[43] Constellation Communications and Inmarsat both suggest that BAS licensees should be required to convert to digital at their own expense to improve spectrum efficiency generally.[44]

These proposals are inconsistent with the compensation principle because they would burden incumbents with the lion's share of the costs of a relocation that would *not* have taken place but for the new entrants' occupation of the spectrum to be vacated. First, the Commission has made clear that the conversion of BAS services to digital need not and likely would not coincide with the advent of digital broadcast transmission: "There is nothing in our *DTV Proceeding* which requires the transition of BAS to a digital format. Further, a digital TV distribution system does not necessitate digital contribution signals from BAS remote units to the studio."[45] In fact, the significant capital outlays that broadcasters are facing as they roll out DTV make it even less likely that the broadcast industry would have expended the resources necessary to convert all ENG services to a

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[43] *ICO Comments*, at 7-8.

[44] *Constellation Comments*, at 5; *Inmarsat Comments*, at 4-5.

[45] *MO&O*, ¶ 18.

digital channel plan within the timeframe required by the allocation of the 1990-2025 MHz band to MSS.

Second, it has not been shown that a voluntary conversion to digital would have enabled BAS incumbents to move to a significantly reduced spectrum allocation. BAS licensees already use the spectrum very efficiently, and they have made clear that *more* BAS spectrum is needed to satisfy consumer demand and the DTV transition.[46] Therefore, any voluntary conversion of BAS to digital likely would have resulted in the availability to the public of more and better BAS services, not the relinquishment of spectrum for new services. The particular conversion contemplated here, *i.e.* to seven 12-13 MHz channels at 2025-2110 MHz, thus almost certainly would not have occurred in the absence of the allocation of spectrum to MSS at the behest of the MSS applicants. Accordingly, MSS applicants should be required, in accordance with the *Emerging Technologies* principle, to pay the costs of any digital conversion necessary to enable BAS to operate in the reduced spectrum allocation.

3. MSS Determination Of Acceptable Replacement Facilities

Some MSS commenters argue that they should be permitted to select the "lowest cost alternative" for relocation or to choose between (i) retuning or refitting existing equipment under an interim channel plan or (ii) purchasing equipment to convert BAS operations to digital.[47] But under the *Emerging Technologies* principle new entrants do not have the right to determine replacement equipment. The rule is that relocation facilities are adequate only if they are "comparable" to the old facilities. Where there is a dispute

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[46] *See MSTV/NAB Comments*, at 2.

[47] *IUSG Comments*, at 30-35; *Constellation Comments*, at 6-7.

between the parties as to what constitutes "comparable facilities," it is the Commission, not the new entrant, that makes the determination of comparability.[48]

IV. THE COMMISSION SHOULD NOT FREEZE BAS LICENSE APPLICATIONS OR CONDITION LICENSE RENEWAL ON SELF-RELOCATION.

Several MSS commenters urge the Commission to freeze BAS license applications in the 1990-2025 MHz band, effective as early as January 1995.[49] Some also ask the Commission to condition licenses or renewals granted after the release of the *First Report & Order/FNPRM* in this proceeding on the licensee's payment of its own relocation expenses.[50] Similarly, Boeing suggests that MSS operators be required to compensate only for BAS equipment that was in service at the time the Commission announced that 2 GHz spectrum would be reallocated to emerging technologies (presumably either 1992 or 1997).[51] The primary rationale for these proposals appears to be that such mechanisms to limit MSS liability for relocation costs would be fair because BAS licensees have been on notice that they would have to relocate out of the 2 GHz spectrum.

The problem with this rationale is that BAS licensees were only "on notice" that they would be relocated *upon payment of their relocation costs by the new MSS*

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[48] *See MSTV/NAB Comments*, at 19.

[49] *See IUSG Comments*, at 29-30 (urging freeze effective November 25, 1998, July 22, 1997 or January 31, 1995; suggesting that it would be appropriate to freeze BAS applications because Commission at one point sought comment on whether freeze should be imposed during negotiations and "sporadic discussions between MSS and BAS licensees are in fact already taking place"); *ICO Comments*, at 7 (urging freeze effective March 14, 1997); *Inmarsat Comments*, at 3-4 (urging no additional BAS licenses or modifications or extensions of existing licenses); *TMI Comments*, at 5-6 (urging freeze on all future BAS applications or secondary status for all BAS facilities in 1990-2025 MHz licensed after January 1999).

[50] *IUSG Comments*, at 27-29; *ICO Comments*, at 7.

[51] *Boeing Comments*, at 2.

entrants. Moreover, the fact that BAS licensees may have had notice of the possibility of a freeze or conditional licensing as of the *First Report & Order/FNPRM* does not justify imposing such measures in the absence of any showing that they would reasonably facilitate the relocation process.

A freeze on BAS applications would completely paralyze the expansion of a valuable service on which the public has come to rely for local news and sports programming. Because most BAS licensees are authorized to use the entire 1990-2110 MHz band. a freeze on applications for 1990-2025 MHz would effectively freeze *all* BAS license applications. And any attempt to limit new licensees to only five of the seven channels in the existing channelization plan during the transition to the narrower allocation would seriously complicate and often frustrate frequency coordination in an already overcrowded band. Thus, at a time when new broadcast networks are emerging and the public is demanding more and better live coverage of news and other events, such action would unreasonably limit broadcasters' ability to offer ENG services.[52]

In addition, requiring BAS incumbents to pay their own relocation costs for licenses obtained or equipment deployed in spectrum allocated for MSS would be unfair because broadcasters who were aware that they would eventually have to relocate their BAS facilities to accommodate MSS did not have the option of applying for licenses or deploying

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[52] Similarly unreasonable is ICO's and IUSG's proposal that all BAS license renewals granted after a freeze is implemented be conditioned on the licensee's converting to secondary status as of January 1, 2000. *ICO Comments*, at 7; *IUSG Comments*, at 30. In light of the significant delays in this proceeding occasioned by intervening congressional action, it would be unfair (and inconsistent with both the compensation principle and the public interest, which demands continued ENG services) for the Commission to make BAS licensees secondary to MSS at a point in time when they cannot reasonably be expected to have made the equipment changes necessary to begin operations in the dramatically-reduced 2025-2110 MHz band.

equipment in alternative BAS spectrum. For example, broadcasters could not apply for licenses to operate only in the spectrum that would be retained for BAS because it was not clear what that spectrum would be and, in any event, BAS licensees ordinarily must be able to operate in the entire BAS band to facilitate coordination and efficient spectrum use.

Finally, there is no evidence that broadcasters are applying for new licenses and "enter[ing] into [BAS] operations in the existing bands with minimally adequate equipment – in anticipation of reaping a windfall benefit in the form of upgraded and relocated equipment furnished by MSS entrants."[53] And given the anticipated complexity of the BAS relocation, it is unlikely that broadcasters would engage in such activities. However, if it ever appears that any broadcasters are seeking to exploit the relocation process, the Commission can address the issue at that time. In the meantime, the Commission should not disrupt efforts to improve public information services by freezing BAS applications or conditioning new licenses on the licensee's payment of its own relocation costs.

CONCLUSION

In accordance with the foregoing and the Joint Broadcasters' initial comments, the Commission should affirm the application of the *Emerging Technologies* relocation compensation principle to the BAS relocation and adopt a relocation plan that effectively implements the compensation principle while taking into account circumstances unique to the BAS relocation. The Commission should not freeze BAS license applications or condition new licenses on the licensees' payment of their own relocation costs.

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[53] *Inmarsat Comments*, at 3.

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