

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

In the Matter of )  
 )  
Assessment of the Viability of )  
Accommodating Advanced Mobile ) ET Docket No. 00-258  
Wireless (3G) Systems in the 1710- )  
1770 MHz and 2110-2170 MHz Bands )

To: The Commission

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

**I. Introduction.**

The Association for Maximum Service Television, Inc. (“MSTV”) and the National Association of Broadcasters (“NAB”)<sup>1</sup> (collectively, “Joint Broadcasters”) submit this response to the Commission’s request for comments on the National Telecommunications and Information Administration’s (“NTIA”) recent report (“*NTIA Report*”) that explores the viability of making all or part of the 1710-1770 MHz and 2110-2170 MHz bands available for advanced third generation (“3G”) wireless systems.<sup>2</sup> The *NTIA Report* is the result of interagency cooperation

---

<sup>1</sup> 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.

<sup>2</sup> *FCC Seeks Comment on the National Telecommunications and Information Administration’s Report “An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands*, Public Notice, ET Docket No. 00-258 (rel. July 24, 2002) (“*Notice*”).

and concludes that it is possible to allocate 90 MHz of federal spectrum from the 1710-1770 MHz and 2110-2170 MHz bands for 3G services.<sup>3</sup> Among other things, the *NTIA Report* proposes to make spectrum available by relocating Department of Defense (“DoD”) ground stations operating in that band to the 2025-2110 MHz band, which is used primarily by the Broadcast Auxiliary Service (“BAS”),<sup>4</sup> in addition to a limited amount of space science research.

As an initial matter, the Joint Broadcasters applaud NTIA and the FCC’s ongoing efforts to identify federal operations that can be transferred to accommodate consumer demand for new, flexible and innovative wireless services. Broadcasters are currently transitioning to digital television and will return broadcast channels 52-69 for new wireless and public safety services. Further, broadcasters have agreed to relocate part of the BAS to a narrower spectrum to make way for mobile satellite services (“MSS”) in the 2 GHz band.<sup>5</sup>

The Joint Broadcasters do not oppose the concept of relocating some federal operations to the BAS band, so long as broadcasters and the viewing public are not deprived of essential BAS services. Thus, the Joint Broadcasters’ comments are limited to issues regarding the relocation of federal operations to the 2025-2110 MHz and 2450-2483.5 MHz bands. As discussed below, because BAS provides the critical link between breaking news, emergency information and the public, it is essential that any relocation of DoD ground systems or other government services do not disrupt or diminish, in any manner, BAS operations.

---

<sup>3</sup> *An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands*, National Telecommunications and Information Administration, July 22, 2002.

<sup>4</sup> See 47 C.F.R. § 74.602.

<sup>5</sup> *Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service*, Second Report and Order and Second Memorandum Opinion and Order, ET Docket No. 95-18, 15 FCC Rcd. 12315 (2000) (“*2 GHz Relocation 2d R&O/2d MO&O*”)

## **II. Broadcast Auxiliary Service Is Vital to Broadcast Television Service.**

BAS is essential to an effective, free broadcast television service. Broadcasters intensively use the full seven 2 GHz BAS channels covering 120 megahertz of spectrum channels all over the country and at all hours for services including:

- **Electronic News Gathering (“ENG”):** Broadcasters use 2 GHz BAS spectrum on a shared, coordinated basis primarily to transmit live, “at the scene” news reports to local studios during and in preparation for local newscasts.
- **Special Events Coverage:** Broadcasters use 2 GHz BAS spectrum to transmit point-of-view (“POV”) camera transmissions to enhance special events coverage. Examples include blimp shots and “helmet-cam” views during sporting events, live remote coverage of news events, and shots from roving reporters on the floor of political conventions or along parade routes.
- **Studio-to-transmitter links (“STLs”) and Inter-City Relays (“ICRs”):** In more rural markets, local stations use point-to-point links in the 2 GHz band to relay programming from the station’s main studio to the transmitter facility and also to deliver signals to remote communities.

Consumers expect and demand ENG and other BAS-supported services from their local broadcasters and national networks. During the September 11 terrorist attacks, for example, viewers across the country flocked to their televisions for non-stop coverage of emerging developments. That comprehensive coverage was made possible largely by broadcasters’ effective sharing on a nationwide basis of 2 GHz BAS spectrum.<sup>6</sup> The news programs that Americans watch every day are dependent on the availability of BAS spectrum for electronic news gathering.

Despite growing numbers of local broadcasters that provide local news in their markets and despite the current transition to digital television and digital BAS transmissions, broadcasters have agreed to be relocated to a narrower spectrum to make way for new services, provided the

costs are borne by new entrants and that there is no disruption to BAS operations.<sup>7</sup> Indeed, the Commission has consistently stated that the goal of its *Emerging Technologies* relocation principle is to make spectrum available for new services without materially disrupting or economically burdening the incumbents already using the spectrum to provide valuable services to the public.<sup>8</sup> The dissemination of late-breaking news, live coverage of events and emergency information is unequivocally a valuable, and at times, a life-saving public service.

### **III. The NTIA Report Does Not Fully Define the Technical Operating Parameters of DoD Ground Systems.**

The *NTIA Report* proposes to relocate certain DoD ground systems from the 1710-1755 MHz band to the 2025-2110 MHz band (“2 GHz band”). The *NTIA Report*, however, does not provide enough information to adequately assess the impact that those ground stations would have on BAS stations. For example, ground stations typically have an operational “protected area” or “exclusion zone.” These are areas of some specified radius around the ground station where other communications services are not allowed to operate because of the potential to cause harmful interference to the DoD ground station. A 5 km radius exclusion zone around the ground station at Vandenberg Station, Cape Canaveral, FL would likely have minimal impact on BAS operations in central Florida. However, a 250 km radius exclusion zone would likely preclude all BAS and ENG operations in much of the central part of the state. And although the

---

<sup>6</sup> See, e.g., *2 GHz Relocation 2d R&O/2d MO&O* at 12323 (“The BAS system is highly integrated, and ENG applications often operate both within markets and across market boundaries”).

<sup>7</sup> *Id.* at 12317.

<sup>8</sup> See *Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies* (“*Emerging Technologies*”), ET Docket No. 92-9, First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886 (1992); Second Report and Order, 8 FCC Rcd 6495 (1993); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993); Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994);

*NTIA Report* does specify the locations of the ground stations that could potentially be moved into the 2 GHz band,<sup>9</sup> without the disclosure of specific technical and operational information, at this time it is impossible to determine whether or not it is feasible to share the 2 GHz spectrum with these DoD ground systems. Further, it is entirely unclear from the *NTIA Report* which other DoD operations could operate “on a non-interference, coordinated basis in the 1350-2690 MHz band at all locations.”<sup>10</sup> Broadcasters who operate BAS in the 2 GHz band and in the 2450-2483.5 MHz band may (or may not be) be adversely affected by such operations. Simply stated, both the FCC and industry cannot make a meaningful assessment of the impact of the NTIA proposal until NTIA provides specific information on *all* DoD systems it has earmarked for relocation.

#### **IV. Relocation of DoD Systems to the 2 GHz Band Must Not Result in Constraints on BAS Operations.**

The *NTIA Report* notes that the National Aeronautics and Space Administration (“NASA”) and National Oceanic and Atmospheric Administration (“NOAA”) space sciences, Earth exploration satellite operations and space research service have very successfully coordinated with BAS and other users in the 2 GHz band.<sup>11</sup> The Joint Broadcasters agree. The success of full coordination has been based on two factors: first, there are very few NASA and NOAA sites with which broadcasters must coordinate their BAS operations. The technical and operational parameters of these facilities are known and the space science and broadcast communities have worked together over the years to develop coordination procedures to mitigate

---

Second Memorandum Opinion and Order, 9 FCC Rcd 7797 (1994), *aff’d*. *Association of Public Communications Officials-International, Inc. v. FCC*, 7 F.3d 395 (D.C. Cir. 1996).

<sup>9</sup> *NTIA Report* at 16.

<sup>10</sup> *Id.*

<sup>11</sup> *Id.*

potential interference. Second, even though the space sciences systems operating in the 2 GHz band are co-primary, they are not permitted to constrain the deployment of BAS in that band.<sup>12</sup>

The *NTIA Report* suggests that DoD ground systems' coordination would be similar in nature to that of NASA and NOAA operations because the DoD ground stations are usually in remote areas.<sup>13</sup> However, the *NTIA Report* presents no basis for this conclusion.

Coordination can only be similar in nature to the NASA and NOAA operations if the DoD systems are technically and operationally similar to these space science systems. Successful coordination can be achieved only if DoD operations in the 2 GHz band - whether co-primary or secondary - are also prohibited from, in any manner, constraining the deployment of BAS. Examples of such constraints would be limits on the number of ENG and BAS facilities, limits on ENG transmitted power, a requirement to protect DoD satellites, or a complex coordination procedure which would impede a broadcaster's ability to provide coverage of breaking news events.

The Joint Broadcasters are concerned that as DoD seeks to fulfill future mission requirements, it may wish relocate and/or add additional stations to the 2 GHz band, or change the technical and/or operational requirements for one or many of the existing DoD ground

---

<sup>12</sup> 47 C.F.R. § 2.106, US346 states that: "Except as provided by footnote US 222, the use of the band 2025-2110 MHz by the Government space operation service (Earth-to-space), Earth exploration-satellite service (Earth-to-space), and space research service (Earth-to-space) shall not constrain the deployment of the Television Broadcast Auxiliary Service, the Cable Television Relay Service or the Local Television Transmission Service. To facilitate compatible operations between non-Government terrestrial receiving stations at fixed sites and Government earth station transmitters, coordination is required. To facilitate compatible operations between non-government terrestrial transmitting stations and Government spacecraft receivers, the terrestrial transmitters shall not be high-density systems (see Recommendations ITU-R SA. 1154 and ITU-R F.1247)."

<sup>13</sup> *NTIA Report* at 16.

systems. Such changes are inherently problematic, because without full FCC and industry coordination, BAS operations may be reduced or eliminated due to alterations of the DoD ground systems. Alternatively, such changes may result in unintended and harmful interference to sensitive DoD satellites or ground based system equipment.

Moreover, as a result of the reallocation of portions of the 2 GHz band to accommodate MSS, the ENG service is in the process of migrating to digital technology. The operating parameters of that technology, however, have not yet been finalized, and may not be for a few years. This, coupled with the fact that the 2 GHz reallocation is a multi-year, multi-phased transition, may affect DoD ground based systems and BAS coordination, particularly in rural and remote locations. As the Joint Broadcasters have pointed out,<sup>14</sup> the multi-phase relocation plan already will result in coordination difficulties in the BAS band, as well as reduce for substantial periods the number of BAS channels available in medium and small markets. Relocation of DoD facilities should not be permitted to increase these burdens on BAS.

In addition, as the Commission has recognized, there are several pending proceedings to examine possible reallocation of part of the spectrum broadcasters are vacating or possible additional uses for MSS spectrum.<sup>15</sup> Indeed, one potential use for part of this band is for 3G service. Whether these services and BAS could co-exist with DoD ground systems in the same

---

<sup>14</sup> See *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service*, Petition for Partial Reconsideration of the National Association of Broadcasters and the Association for Maximum Service Television, Inc., ET Docket No. 95-18 (Sept. 6, 2000).

<sup>15</sup> *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service*, Order, ET Docket No. 95-18 (Aug. 2, 2002).

or adjacent spectrum is a matter which the Commission must examine in detail before authorizing relocation of the DoD ground systems.

Thus, the Joint Broadcasters strongly caution both the FCC and NTIA against viewing the 2 GHz band as a dumping ground for a wholesale relocation of DoD ground based systems. We urge that any relocation of such operations to the 2 GHz band be conditioned on the following factors: (1) the relocation of DoD ground systems to the 2 GHz band be restricted to a limited and finite number; (2) that their operating and technical parameters be fully disclosed; and (3) any changes or alterations to DoD ground systems be fully studied by the FCC and the affected industries to ensure that there is no disruption to BAS and other incumbent services.

#### **V. Conclusion.**

For the reasons stated above, the Joint Broadcasters do not oppose NTIA's recommendation to relocate DoD ground systems to the 2 GHz band, so long as there is no disruption to BAS service, which is essential to the dissemination of breaking news and emergency information. Further, we urge NTIA to disclose the technical parameters of all DoD ground systems slated for relocation in the 2025-2110 MHz and the 2450-2483.5 MHz bands so that an assessment of their effects on BAS operations can be adequately assessed. Finally, the Joint Broadcasters strongly urge both NTIA and the FCC not to alter the limited number of DoD

operations without full FCC and industry coordination. We look forward to working with both agencies to ensure a smooth transition for these federal operations.

Respectfully submitted,

**NATIONAL ASSOCIATION  
OF BROADCASTERS**

**ASSOCIATION FOR MAXIMUM  
SERVICE TELEVISION, INC.**



Henry L. Baumann  
Jack N. Goodman  
Ann W. Bobeck  
1771 N Street, NW  
Washington, D.C. 20036  
(202) 429-5430 (tel.)  
(202) 775-3526 (fax)



David Donovan  
President  
Victor Tawil  
Senior Vice President  
1776 Massachusetts Avenue, NW  
Washington, D.C. 20036  
(202) 861-0344 (tel.)  
(202) 861-0342 (fax)

Lynn Claudy  
Senior Vice President,  
Science and Technology  
Kelly Williams, Senior Director  
of Engineering  
NAB Science and Technology

August 8, 2002